REGULATIONS AND CURRICULUM GOVERNING

BHMS PROGRAM

As Amended up to December - 2018, December - 2022 (CBDC)

YENEPOYA HOMOEOPATHIC MEDICAL COLLEGE AND HOSPITAL

Deralakatte, Mangalore, Karnataka.

REGULATIONS AND CURRICULUM GOVERNING

B.H.M.S PROGRAM

(As Amended up to December, 2018)

Deralakatte, Mangalore, Karnataka.

Name of the Constituent Unit/Centre:

YENEPOYA HOMOEOPATHIC MEDICAL COLLEGE AND HOSPITAL,

FACULTY OF HOMOEOPATHY

Ordinance Governing Regulations and Curriculum of

HOMOEOPATHY DEGREE B.H.M.S. COURSE

(Bachelor of Homoeopathic Medicine & Surgery)

In conformity with

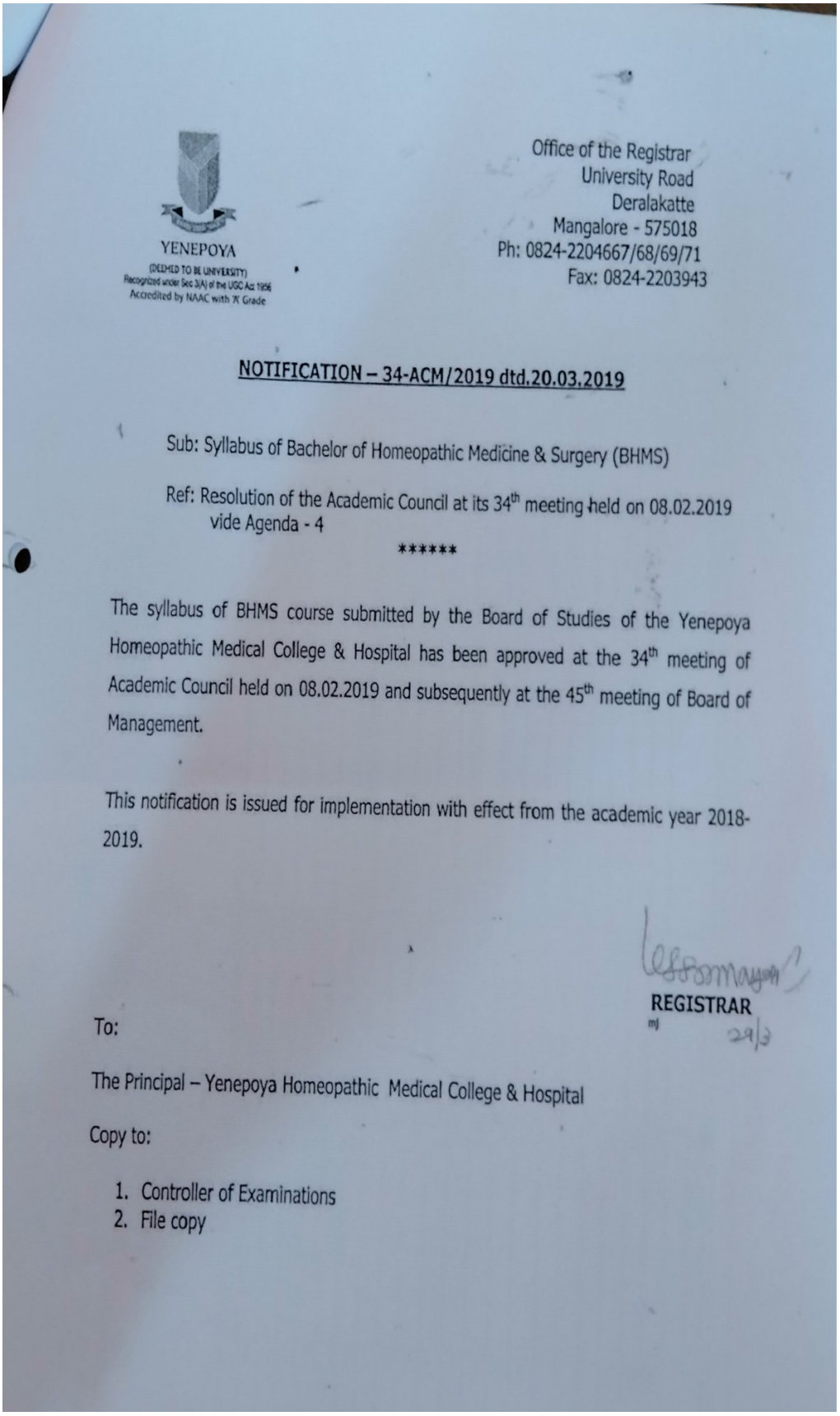
Homoeopathy (Degree Course) B.H.M.S. Regulations, 1983

(As Amended up to December, 2018)

Central Council of Homoeopathy, New Delhi

2026

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

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Mangalore - 575018
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NOTIFICATION – 34-ACM/2019 dtd.20.03.2019

Sub: Syllabus of Bachelor of Homeopathic Medicine & Surgery (BHMS)

Ref: Resolution of the Academic Council at its 34th meeting held on 08.02.2019 vide Agenda - 4

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The syllabus of BHMS course submitted by the Board of Studies of the Yenepoya Homeopathic Medical College & Hospital has been approved at the 34th meeting of Academic Council held on 08.02.2019 and subsequently at the 45th meeting of Board of Management.

This notification is issued for implementation with effect from the academic year 2018-2019.

REGISTRAR

To:

The Principal – Yenepoya Homeopathic Medical College & Hospital

Copy to:

1. Controller of Examinations
2. File copy

BHMS - Syllabus Approval in 34th AC Meeting - Agenda 4

08.02.2019

Minutes of 34th meeting of the Academic Council, Yenepoya(Deemed to be University) held on 08.02.2019 at 10.00 am at the Indoor Auditorium

The 34thMeeting of the Academic Council of Yenepoya(Deemed to be University) was held on Friday, the 8th February 2019 at 10.00 a.m in the Indoor Auditorium.

Members

Vice-Chancellor	Chairman	Present
Pro-Vice Chancellor	Member	Present
Prof. M.I. Savadatti, Former Vice- Chancellor, Mangalore University	Member	Granted leave of absence
Dr. C.P. Habeeb Rahman, Chair Person, Unity Hospital, Mangalore	Member	Granted leave of absence
Dr. S. Ramananda Shetty, Former Vice Chancellor of RGUHS &Nitte University, 186, Amar Jyothi Layout 5th Main, East Wing, Domlur, Bangalore – 560 071.	Member	Present
Dr. Vishwa Mohan Katoch, MD, FNASc, FASc, FAMS, FNA NASI – ICMR Chair on Public Health Research Rajasthan University of Health Sciences (RUHS), Jaipur Former Secretary, Department of Health Research, Govt. of India andDirector – General, Indian Council of Medical Research, Sector 18, Kumbha Marg, Pratap Nagar Jaipur – 302 033 (Rajasthan)	Member	Granted leave of absence
Dr. D.K. Srinivas, Former Dean, JIPMER Advisor to RGUHS	Member	Present
Dr. C. Ramesh, Professor & Head of Epidemiology & Biostatistics, Kidwai Memorial Institute of Oncology, Bengaluru	Member	Present
Dr. U.T. Ifthikar Ali, Eminent Physiotherapist and member of Syndicate Rajiv Gandhi University of Health Sciences	Special Invitee	Present
Dean, Dental Faculty	Member	Present
Dean, Medical Faculty	Member	Present
Dean, Nursing Faculty	Member	Present
Dean, Faculty of Allied Health & Basic Sciences	Member	Present

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Section - I: INTRODUCTION

Basic objectives of education and training in a Homoeopathic Institution are to prepare a competent Homoeopathic Physician, who is capable to provide effective Health Care by way of Homoeopathic mode of treatment to all sectors in a scientific way.

a. Foundation

To function effectively as a Homoeopathic physician. A thorough grasp over all the aspects of medical science is essential. For this, the education process shall be perceived as an integrated evolving process to give out efficient medical personal.

A Student shall have to pass through a training procedure, which encompasses the above, right from I BHMS to IV BHMS and also during the internship period. He / she shall undergo an education process wherein learning of facts and concepts right from I Year are in continuity, in an evolutionary and progressive pattern. In I BHMS, students shall study the fundamental principles of Homoeopathy and will also learn and understand basic subjects of medical science related to normal structure and functions of human body.

In II BHMS, a student shall be exposed to very vital concepts of susceptibility and symptomatology with Analysis – Evaluation and details of the Homoeopathic concepts and logic of Homoeopathy. These will attain much deeper significance conjointly study of Homoeopathic approach correlated with pathology and microbiology and other clinical subjects.

In II BHMS, there is opportunity to fortify the foundation at the best by correlating between theory of chronic diseases and the Patho –Physiological facts of Gynecology, Surgery and Medicine. Teaching and Learning should be such that students can study the diseases with application of Knowledge to the Homoeopathic concept of chronic diseases which will help to apply the knowledge to treat scientifically on the guidelines of Homoeopathic Principles.

The above knowledge and approach will be correlated further with reportorial mechanism to ease the process of treatment. Theory of Genus Epidemics shall be taught to deeper level which will help to contribute in the service of Community Medicine.

b. Execution

Maximum emphasis shall be placed on the applied aspects of all the subjects. Thus teachings of Anatomy, Physiology and Biochemistry will demand greater emphasis on applied aspects. Teaching of Pathology will demand sharp focus on General Pathology, while Regional Pathology will come up as an application. It shall require correlation with Medicine, Surgery and Gynecology.

All these need to be studied from Homoeopathic perspectives, with emphasis on applied aspects of Organon Philosophy & Homoeopathic Therapeutics, representing application to all other subjects.

c. Inter- Departmental Coordination

Essentially, the entire approach becomes integrated. All departments shall develop a cohesive well- defined programme of inter departmental coordination. It is

therefore desirable to have teaching programs wherein, by rotation each department participates in the other faculties with constant updating and evaluation. This will ensure fundamental and exceptional clarity.

d. Objective Oriented Teachings

In order to import the integrated medical education, Patient has to be the Centre of learning. Always practical training is to be given prime importance at preclinical, Para- clinical and clinical level with sound theoretical knowledge.

Importance of social factors in relation to the problem of health and disease, shall receive proper emphasis throughout the course and to achieve this objective, the educational process shall be community as well as hospital based. Based on the above concepts, the course of studies as laid down in these regulations will help to fulfil these needs.

Section – II: GOALS

1) The curriculum should enable the students to play the role of a competent Homoeopathic Physician and fulfil the responsibilities of a medical graduate at every sector confidently and effectively.
2) Emphasis in the course should be demonstrate to the students;
    a) Application of Homoeopathic Principles.
    b) Scope and limitations of Homoeopathy.
    c) Role of Homoeopathy in the present and future context.
    d) Skills in clinical diagnosis.
    e) Techniques of individualization.
    f) Evolution of constitutional totality.
    g) Miasmatic analysis of the patient.
3) Teaching programme should be an integrated one, avoiding compartmentalization of disciplines. The teaching of Pre-clinical subjects, Para-clinical subjects, Clinical subjects and should be done with a homoeopathic perspective. All the departments should jointly develop a teaching programme so that the students are presented with an integrated and cohesive knowledge and skills both vertically and horizontally. A uniform method of clinical approach that blends the tenets of Homoeopathy and contemporary developments in the field of medicine to meet the requirements of effective Homoeopathic practice should be evolved and adopted by all the clinical departments.
4) The educational experience should provide community orientation in addition to mere hospital orientation. The scope of Genus epidemics should be fully tapped in the field of preventive medicine.
5) Every effort should be made to use learner- oriented methods that encourage cultivation of the values like logical thinking, clarity of expression and action, independence of judgement, scientific habits, problem- solving abilities, self-initiated and self- directed learning, purity of purpose and other necessary values.

6) Reduction of theoretical and class-room lectures and increasing use of the methods of active learning like group discussions, seminars, role modelling, field visits, clinical case-demonstration etc. should be attempted by all departments to develop the inter-personal and communicative skills and to provide an integrated learning.
7) As education without character and discipline is futile, more so in the field of medicine, educational institution should also be a centre for character building than a mere centre for learning. Examination should be an avenue not merely to assess the student's extent and depth of knowledge and skills but also to assess his dedication, integrity, habits, behaviour, values and other essential expressions of affective domain.
8) Regular periodic internal assessment of the student should be done throughout the course. It may be with written and viva / voce tests. Maintenance of records, participation in seminars and group discussions, clinical case study, participation in other projects and assignments should also have a bearing on the internal assessment. These may be evaluated objectively.
9) Teachers shall expand their role from mere imparting of knowledge to that of facilitator, motivator and role model for students learning and practice during the entire course.
10) Medical education unit (cell) of the institution shall evolve for faculty development, preparation of learning resource materials, evolving standardized techniques in teaching, case- study, mode of treatment, evaluation of teaching methods etc.
11) Students should be taught to appreciate the scope of other systems of medicine and utilize this knowledge for the optimal benefit of human being, sick or healthy person.
12) The educational experience should result in appreciation of the effects of social, psychological, cultural, economical and environmental factors on health and resolution of these with a human concern.
13) The curriculum should create an interest in the student for continuous learning, updating the knowledge and indulge in research. He / She should be open to all developments in the field of medicine and accept them after critical analysis and adopt them for furthering his/her professional competence.
14) The teaching programme should facilitate the development of personal characteristics and attitude acquired for professional life such as personal integrity, sense of responsibility and dependability and ability to relate to or show concern for other individual and society.

Section-III: OBJECTIVES

The goals of BHMS course have been stated II. In this Section the general objectives are given. It is desired that in consonance with the goals and objectives, each medical college should evolve institutional objectives in accordance with University.

At the end of undergraduate programme, the medical student shall:

1. Be competent in Homoeopathic mode of Medical practice for various health problems of individual and the community.
2. To achieve the target of competency to practice promotive, preventive, curative and rehabilitative medicine respect to the commonly encountered health problems.
3. To develop ability to deal with the social –psychological, cultural, economic and environmental factors affecting health and diseases.
4. Develop human attitude towards the discharging of one's professional responsibilities.
5. Be familiar with the basic factors which are essential for the implementation of the National Health Programmes including practical aspects of the following:
    a) Family Welfare and Maternal and Child Health (MCH).
    b) Sanitation and water supply.
    c) Prevention and control of communicable and non-communicable disease.
    d) Immunization.
    e) Health Education.
    f) National Health Mission.
6. Acquire basic management skill in the area of human resources, material resources management related to health care delivery.
7. Be able to work as leading partner health care items and acquire proficiency in communication skills.
8. Be competent to work in a variety of health care setting commensurate with his/her position as a member of the health team at the primary, secondary or tertiary levels, using his/her clinical skills.
9. Have personal characteristics and attitude for professional life such as personal integrity, sense of responsibility and dependability and ability to relate to or show concern for other individuals.

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SECTION –IV: REGULATIONS
BHMS DEGREE COURSE
ORDINANCE AS PER CCH NOTIFICATION
NO.F.12-13/2006-CCH (PT-V) 12990 DT.10-08-2015
Amendement Regulations, 1983

1. Eligibility for Admission:

In the Homoeopathy (Degree Course) Regulations, 1983 (hereinafter referred to as the said regulations), in regulation 4, -

a. In sub-regulation (i), the following provision shall be inserted, namely: - "Provided that-
   i. The candidate must have passed in the subjects of Physics, Chemistry, Biology and English individually and must have obtained a minimum of fifty per cent. Marks taken together bin Physics, Chemistry, Biology at the qualifying examination mentioned above for unreserved candidates and forty per cent. Marks in respect of the Scheduled Castes, Scheduled Tribes and Other Backward Classes;
   ii. The candidate with benchmark disabilities as specified under the Rights of Persons with Disabilities Act, 2016 (49 of 2016), the minimum qualifying marks in qualifying examination in Physics, Chemistry and Biology shall be forty per cent. for general category and forty per cent. for the Scheduled Castes, Scheduled Tribes and Other Backward classes."

b. For sub- regulation (ii), the following sub-regulation shall be substituted, namely:-
   "(ii) No candidate shall be admitted to B.H.M.S. Degree Course unless he has attained the age of seventeen years on or before the 31st December of the year of this admission in the first year of the course and not older than the age of twenty-five years on or before the 31stDecember of the year of admission in the first year of the course:
   Provided that the upper age limit may be relaxed by five years to the Scheduled Castes, Scheduled Tribes, Other Backward Classes and Physically handicapped candidates".

1. In the said regulations, in regulation 4A, for sub-regulation (i), the following sub-regulation shall be substituted namely:-
   i. There shall be a uniform entrance examination to all medical institutions at the undergraduate level, namely the National Eligibility Entrance Test (NEET) for admission to undergraduate course in each academic year and shall be conducted by an authority designated by the Central Government;
   ii. In order to be eligible for admission to undergraduate course for an academic year, it shall be necessary for a candidate to obtain minimum of marks at 50th percentile in the 'National Eligibility Entrance Test for undergraduate course' held for the said academic year:

Provided that in respect of-

   a. The Candidates belonging to the Scheduled Castes, Scheduled Tribes and Other Backward Classes, the minimum marks shall be at 40th percentile;

b. The Candidates with benchmark disabilities specified under the Rights of Persons with Disabilities Act, 2016 (49 of 2016), the minimum marks shall be at 45th percentile for General Category and 40th percentile for the Scheduled Castes, Scheduled Tribes and Other Backward Classes.

Explanation – The percentile shall be determined on the basis of highest marks secured in the all India common merit list in the National Eligibility Entrance Test for undergraduate courses:

Provided further that when sufficient number of candidates in the respective categories fail to secure minimum marks in the National Eligibility Entrance Test, as specified above, held for any academic year for admission to undergraduate courses, the Central Government in consultation with Central Council may at its discretion lower the minimum marks required for admission to undergraduate course for candidates belonging to respective categories and marks so lowered by the Central Government shall be applicable for that academic year only.

iii. An all India common merit list as well as State- wise merit of the eligible candidates shall be prepared on the basis of the marks obtained in the National Eligibility Entrance Test and the candidates, within the respective categories, shall be admitted to undergraduate course from the said merit lists only.

iv. The seat matrix for admission in the Government, Government –aided Institutions and Private Institutions shall be fifteen per cent. for the all India quota and eighty-five per cent. for the States and Union territories quota.

v. The designated authority for counselling for all admissions to undergraduate course in all Homoeopathy educational institutions in the States and Union territories including institutions established by the States Government, University, Deemed University, Trust, Society, Minority Institution, Corporation or Company shall be respective State or Union territory in accordance with the relevant rules and regulations of the concerned State or Union territory Government, as the case may be.

vi. The counselling for all admissions to undergraduate course for seats under the all India quota as well as for all Homoeopathy educational institutions established by the Central Government shall be conducted by the authority designated by the Central Government.

vii. No candidate who has failed to obtain the minimum eligibility marks as specified above shall be admitted to undergraduate course in the said academic year.

viii. No authority or institution shall admit any candidate to the undergraduate course in contravention of the criteria or procedure as laid down by these regulations in respect of admissions and any candidate admitted in contravention of the said criteria or procedure shall be discharged by the Central Council forthwith.

ix. The authority or institution which grants admission to any student in contravention of the aforesaid criteria or procedure shall be liable to face action in terms of the

provisions of the Act.

x. For foreign national candidates any other equivalent qualification to be approved by the Central Government may be allowed and entrance examination for admission to undergraduate course namely the National Eligibility Entrance Test (NEET) shall not be applicable for foreign national candidates.

2. Course of Study

i. The bachelor of Homoeopathic medicine and Surgery degree course shall comprise a course of study spread over a period of 5 ½ years including a compulsory rotary internship of one year duration after passing the IV BHMS examinations.

Note:

A candidate shall be permitted to join II BHMS only if he has passed Anatomy and Physiology including Biochemistry (Cary over facility is provided the for the subject of Homoeopathic Pharmacy), for which he /she will be permitted in not more than for chance including original examination.

I BHMS-1Year
II BHMS -1 Year
III BHMS-1Year
IV BHMS-1 ½ Year

ii. As mentioned above i.e., Every candidate after passing IV BHMS examination shall undergo a compulsory internship for a period of twelve (12) months as per the procedure laid down in these regulation,.

iii. On successful completion of internship and on the recommendation of the principal of the Homoeopathic College concerned the university shall issue degree certificate to such candidates.

Every candidate shall complete the course including the passing of all the examination in all the subjects and complete the compulsory internship within a period eleven years from the date of admissions to I BHMS degree course in the college concerned failing which his name shall be removed from the rolls of the college and consequently the university.

3. Subjects & Hours of Teaching

First Year BHMS (Duration 1 Year)

Table I:

Subjects prescribed and distribution of teaching hours for theory and practical classes.

SI No	Subject	Theory	Practical/Tutorial/Seminar	Total
1.	Anatomy	200 Hrs (including 10 hours each for histology and embryology)	275 Hrs. (including 30hours for histology and embryology)	475 Hrs.
2.	Physiology	200 Hrs. (Including 50 hrs for Bio chemistry)	275 Hrs. (including 50 hours for Bio chemistry)	475 Hrs.
3.	Homoeopathic Pharmacy	100 Hrs.	70 Hrs.	170 Hrs.
4.	Homoeopathic Materia Medica	35 Hrs.	--	35 Hrs.
5.	Organon of Medicine with Homoeopathic Philosophy	35 Hrs.(including 10 Hrs. of Logic)	--	35 Hrs.
	TOTAL	570 Hrs.	620 Hrs.	1190 Hrs

Second Year BHMS (Duration I Year) Table II:

Subjects prescribed and distribution of teaching hours for theory and practical classes.

Sl.No	Subject	Theoretical Lectures (In Hours)	Practical or Clinical or Tutorial or Seminar (In Hours)	Total
1.	Pathology	200	80	280
2.	Forensic Medicine and Toxicology	80	40	120
3.	Organon of Medicine with Homoeopathic Philosophy	160	60	220
4.	Homoeopathic Materia Medica	160	60	220
5.	Surgery	80	60 (One term of three months in surgical ward and outpatient department)	140
6.	Gynaecology and Obstetrics	40+40 = 80	60 (One term of three months in surgical ward and outpatient department)	140
	TOTAL	**760**	**360**	**1120**

Note: Clinical Postings: Monday to Friday of 3 hrs. duration.

Third Year BHMS (Duration 1 Year)

Table III:
Subjects prescribed and distribution of teaching hours for theory and practical classes.

Sl.No.	Subject	Theoretical lecture (In Hours)	Practical or clinical or tutorial or seminar (In Hours)	Total
1.	Surgery including ENT, Ophthalmology dentistry & Homoeopathic Therapeutics	100+50 Total : 150 Hrs.	75 Hrs. (Three months clinical postings in ward and OPD)	225 Hrs.

2.	Obstetrics and Gynaecology, Infant Care and Homoeopathic Therapeutics	100+50 Total : 150 Hrs.	75 Hrs. (Three months clinical postings in ward and OPD)	225 Hrs.
3.	Homoeopathic Materia Medica	100 Hrs.	75 Hrs.	175 Hrs.
4.	Organon of Medicine	100 Hrs.	75 Hrs.	175 Hrs.
5.	Practice of Medicine and Homoeopathic Therapeutics	50+25 Total: 75 Hrs.	75 Hrs.	150 Hrs.
6.	Repertory	50 Hrs.	25 Hrs.	75 Hrs.
7.	Community Medicine	35 Hrs.	15 Hrs.	50 Hrs.
	TOTAL	**660 Hrs.**	**415 Hrs.**	**1075 Hrs.**

Note: Clinical Postings: Monday to Saturday of 3 hrs. duration.

Fourth Year BHMS (Duration 1 ½ Year)

Table IV:

Subjects prescribed and distribution of teaching hours for theory and practical classes.

Sl.No.	Subject	Theoretical Lectures (In Hours)	Practical or Clinical or Tutorial or Seminar (In Hours)	Total
1.	Practice of Medicine and Homoeopathic Therapeutics	120+60 Total: 180 Hrs.	300 Hrs.	480 Hrs.
2.	Homeopathic Materia Medica	180 Hrs.	110 Hrs.	290 Hrs.
3.	Organon of Medicine	180 Hrs.	110 Hrs.	290 Hrs.
4.	Repertory	100 Hrs.	200 Hrs.	325 Hrs.
5.	Community Medicine	100 Hrs.	100 Hrs.	200 Hrs.
	Total	**740 Hrs.**	**820 Hrs.**	**1560 Hrs.**

Note:

1) Clinical classes in the subjects of Homoeopathic Materia Medica, Organon of Medicine, Principles of Homoeopathic Philosophy, Case taking and Repertory have to be accommodated within Surgery, Obstetrics and Gynaecology and Medical OPD / IPD Postings during 2nd to 4th BHMS Courses.
2) One term of three months each in outpatient department and in patient department respectively for case taking analysis, evaluation and provisional prescription just for case presentation on 10 cases per month.

4. Attendance

Every candidate shall have attendance of not less than 75% of the total classes conducted in theory and practicals separately in each academic year calculated from the date of commencement of the term to the last working day as notified by the university in each of the subjects prescribed to be eligible to appear for the university

examination.

The Principal should notify at the college, the attendance details of all the students at the end of each term without fail under intimation to the university.

A candidate lacking in attendance and satisfactory progress in any of the subject(s) in theory or practicals / clinical in the first appearance shall not be permitted to appear for the examination in that subject(s).

5. Scheme of Examination

Subjects: Subjects for study and examination for the BHMS Degree Course shall be under namely;

Sl. No.	Name of the subject	Subject taught during	Holding of Examination
1.	Anatomy	First BHMS	At the end of first BHMS
2.	Physiology	First BHMS	At the end of first BHMS
3.	Homoeopathic Pharmacy	First BHMS	At the end of first BHMS
4.	Organon of Medicine with Homoeopathic Philosophy	First BHMS, Second BHMS, Third BHMS, Fourth BHMS	At the end of Second, Third and Fourth BHMS
5.	Homoeopathic Materia Medica	First BHMS, Second BHMS, Third BHMS, Fourth BHMS	At the end of Second, Third and Fourth BHMS
6.	Pathology	Second BHMS	At the end of Second BHMS
7.	Forensic Medicine and Toxicology	Second BHMS	At the end of Second BHMS
8.	Practice of Medicine	Third BHMS and Fourth BHMS	At the end of Fourth BHMS
9.	Surgery	Second BHMS and Fourth BHMS	At the end of Third BHMS
10.	Gynaecology and Obstetrics	Second BHMS and Third BHMS	At the end of Third BHMS
11.	Community Medicine	Third BHMS and Fourth BHMS	At the end of Fourth BHMS
12.	Repertory	Third BHMS and Fourth BHMS	At the end of Fourth BHMS

6. University Examination:

The University shall conduct two examinations annually with an interval of not less than four to six months between the two examinations.

a) Schedule of Examination:

I BHMS – The first year BHMS examination shall be at the end of 12 months (One Year) after admission.

II BHMS – The second year BHMS examination shall follow One year of course of study after the I BHMS examination.

III BHMS – The third year BHMS examination shall follow One year of course of study after the II BHMS examination.

IV BHMS – The fourth year BHMS examination shall follow one and half year of course of study after the III BHMS examination.

All examinations shall be held as per notification issued in the calendar of events by the university from time to time.

b) Particulars of subjects for university examination:

The subjects, the number of theory papers, practical and viva-voce examination shall be as follows.

I BHMS:

1) **Anatomy including Histology and Embryology:** There shall be two theory papers, one practical and one viva-voce examination.
2) **Physiology including Biochemistry:** There shall be two theory papers, one practical and one viva-voce examination.
3) **Homoeopathic Pharmacy:** There shall be one theory, one practical & one viva-voce examination.

II BHMS:

1) **Pathology and Microbiology:** There shall be two theory papers, one practical & one viva-voce examination.
2) **Forensic Medicine and Toxicology;** There shall be one theory paper, one practical and one viva-voce examination.
3) **Organon of Medicine with Homoeopathic Philosophy:** There shall be one theory paper, one practical and one viva-voce examination.
4) **Homoeopathic Materia Medica:** There shall be one theory paper, one practical and viva-voce examination.

III BHMS:

1) **Organon of Medicine, Principles of Homoeopathic Philosophy and Psychology:**

   There shall be one theory paper, one practical and one viva-voce examination.

2) **Surgery:** shall be two theory papers, one practical and one viva-voce examination. The

practical Examination shall consist of clinical examination and oral. In the clinical examination the students shall be examined on his skill on the surgical instruments, bandages and general measures related to surgery, scope of Homoeopathic therapeutics and examination and diagnosis of surgical disease through clinical examination X-ray and other common diagnostic techniques. The case studies reports of the students carried out during the course shall also be considered for the oral examination**.**

3) **Obstetrics & Gynaecology including infant care:** There shall be theory papers, one practical and one viva-voce examination. The practical examination shall consist of clinical examination and oral. In the clinical examination the students shall be examined on his one the specimens, models, instruments and general appliances related to Obstetrics, scope of Homoeopathic Therapeutics and examination and diagnosis of Gynaecological disease through clinical examination, X-ray and other common diagnostic techniques. The case studies reports of the students carried out during the course shall also be considered for the oral examination.

4) **Homoeopathic Materia Medica:** There shall be one theory paper, one bedside practical and one viva-vice examination. The bedside examination shall be on two acute cases with special reference to their nosological diagnosis & therapeutic diagnosis from Homoeopathic point of view

IV BHMS:

1) Practice of Medicine including paediatrics, Psychiatry and Dermatology. There shall be two theory papers one bedside practical and one viva-voce examination. The practical examination shall consist of clinical examination and oral. In the clinical examination the students shall be examined on his skill on the nosological and therapeutic diagnosis, through clinical examination, X-Ray and other common diagnosis techniques and detailed case takings on long and short cases. The case reports of the students carried out during the course shall also be considered for the oral examination.
2) Repertory: There shall be one theory paper, one practical and one viva-vice examination. The practical examination shall consist of the Homeopathic principles on case taking of one long case and one short case and the methods of arriving the reportorial totality, through case analysis and actual repertorisation. The skill of finding rubrics from Kent and Boenninghausen Repertories, the case reports of the students carried out during the course shall be considered for the oral examination.
3) **Homoeopathic Materia Medica:** There shall be two theory papers, one bedside practical and one viva-voce examination. The bedside examination shall be one long

case and one short case with special reference to their nosological diagnosis and therapeutic diagnosis from Homeopathic point of view. The case reports of the students carried out during the course shall be considered for the oral examination.

4) Organon of Medicine with Homoeopathic Philosophy: There shall be two theory papers one practical and one viva-voce examination. The practical examination consists of two theory papers and one practical examination. The practical examination shall be on the Homoeopathic orientation of cases in relation to miasmatic diagnosis, general management, posology, second prescription etc.
5) Community Medicines: There shall be one theory paper, one practical and one viva-voce examination. The practical examination shall be on spotting and identification of specimen and matters related to the community oriented problems.

7. Distribution of Marks
   a. Distribution of Marks for internal assessment is given in Tables V to VII. Particulars of subjects, number of papers, duration and distribution of marks for the University examinations are given in Tables IX TO XII.
   b. Topic wise distribution of marks is theory is given in concerned subjects. These are suggestive. Some validations may occur.

The Scheme of Examination in BHMS Course

- Subject for Examination for the BHMS (Degree) Course shall be as under.
- Full marks for each subject and minimum marks required for pass as follows.
- As per Regulation 13(iv) Each Theory paper shall be of three hours duration.

Exam Year	**Name of the Subject**	**Written**		**Practical/ Clinical including Oral**		**Total**	
		Full Marks	**Pass Marks**	**Full Marks**	**Pass Marks**	**Full Marks**	**Pass Marks**
1st Year	Homoeopathic Pharmacy(Sec 1&2)	100	50	100	50	200	100
	Anatomy Paper 1	100	100	200	100	400	200
	Anatomy Paper 2	100					
	Physiology Paper 1	100	100	200	100	400	200
	Physiology Paper 2	100					
	Total Marks	**500**	**250**	**500**	**250**	**1000**	**500**
2nd Year	Pathology Paper 1	100	100	100	50	300	150
	Pathology Paper 2	100					

	Forensic Medicine and Toxicology	100	50	100	50		
	Homoeopathic MATERIA Medica	100	50				
	Organon of Medicine	100	50				
	Total Marks	**500**	**250**	**400**	**200**	**900**	**450**
3rd Year	Surgery Paper 01	100	100	200	100	400	200
	Surgery 02	100					
	Gynaecology and Obstetrics Paper 01	100	100	200	100	400	200
	Gynaecology and Obstetrics Paper 02	100					
	Homoeopathic Materia Medica	100	50	100	50	200	100
	Oganon of Medicine	100	50	100	50	200	100
	Total Marks	**600**	**300**	**600**	**300**	**1200**	**600**
4th Year	Practice of Medicine Paper 01	100	100	200	100	400	200
	Practice of Medicine Paper 02	100					
	Homoeopathic Materia Medica Paper 01	100	100	200	100	400	200
	Homoeopathic Materia Medica Paper 02	100					
	Organon of Medicine with Homoeopathic Philosophy Paper 01	100	100	100	50	300	150
	Organon of Medicine with Homoeopathic Philosophy Paper 02	100					
	Repertory	100	50	100	50	200	100
	Community Medicine	100	50	100	50	200	100
	Total	800	400	700	350	1500	750

8. Eligibility for University Examination:

I BHMS - A student shall be eligible to appear for I BHMS examination provided he/she has pursued the course satisfactorily and has requisite attendance as per regulation.

II BHMS- No candidate shall be eligible to appear in II BHMS examination unless he/she has passed in the first BHMS examination in the subjects of Anatomy and Physiology including Biochemistry one year before second year examination and pass in Homoeopathic Pharmacy at least 6 months before appearing II year BHMS examination and has required attendance as per regulation.

III BHMS- No candidate shall be eligible to appear in III BHMS examination unless he/she has passed in the second BHMS examination and has required attendance as per regulation.

Note: To consider as pass in second BHMS examination, a candidate has to pass in all the subjects prescribed for the University examination. In case a candidate has failed in one or more subjects in II BHMS examination he/she shall have to pass in these failed subject(s) at least one term (6 months) before he/she is allowed to appear in the III BHMS examination.

IV BHMS- No candidate shall be eligible to appear in IV BHMS examination unless he/she has passed in the third examination and he/she has requisite attendance as per regulation.

Note: To consider as pass in third BHMS examination, a candidate shall have to pass in all the subjects prescribed for the University examination. In case a candidate has failed in one or more subjects in third BHMS examination, he/she shall have to pass in the failed subject(s) at least one term (6 months) before he/she is allowedto appear in the IV BHMS examination.

9. Criteria for pass in a subject

1) A candidate to be declared as pass in any subject shall secure separately, in Theory and Practicals/ Clinicals including Viva- voce examination, not less than 50% of maximum marks prescribed for the University examination.

A candidate who has passed in a subject or subjects need not appear in that subject(s) in the subsequent examination if he/she has failed in other subject or subjects.

1) Criteria for pass in I year, II year, III year and IV year BHMS examination.

To consider as pass in BHMS examination a candidate has to pass in all the prescribed subjects of the University examination for the concerned year.

10. Facility to keep term:

Not with standing with forgoing regulations, the student shall be allowed to keep term on the following conditions:

1. The candidate must pass First BHMS examination in all the subjects at least one term(6months) before he is allowed to appear in Second year examination provided that he has passed in the subjects of Anatomy and Physiology (including Biochemistry) examinations two term (12 months) before he is allowed to appear in the Second BHMS examination.
2. The candidate must pass the second year BHMS Examination at least one term (6 months) before he is allowed to appear Third year BHMS examination.
3. The candidate must pass the Third year BHMS Examination at least one term (6 months) before he is allowed to appear Fourth year BHMS Examination.

11. Number of Attempts:

The candidate fails to pass in all the subjects within four chances I or II or III BHMS examination, he/she shall be required to prosecute a further course of study of all the subjects and in all parts for one year to the satisfaction of the head of the college and appear for examination in all the subjects. Provided that if a student appearing for the Fourth BHMS examination, has only one subject to pass at the end of prescribed chances, he shall be allowed to appear at the next examination in that particular subject and shall complete the examination with this special chance.

12. Declaration of Class:

a. A candidate having appeared in all the subjects in the same examination and passed that examination in the first attempt and secures 75% of marks or more of grand total marks prescribed will be declared to have passed the examination with distinction.
b. A candidate having appeared in all the subjects in the same examination and passed that examination in the first attempt and secures 65% of marks or more but less than 75% of grand total marks prescribed will be declared to have passed the examination in First Class.
c. A candidate having appeared in all the subjects in the same examination and passed that examination in the first attempt and secures 50% of marks or more but less than 65% of grand total marks prescribed will be declared to have passed the examination in Second Class.
d. A candidate passing a University examination in more than one attempt shall be placed in Pass class irrespective of the percentage of marks secured by him/her examination.

(Please note fraction of marks should not be rounded off for clauses (a), (b)and (c)

13. Results and Re-admission to Examination.

i. The examination body shall ensure that the results of the examination are published at the maximum within one month of the last date of examination so that students can complete the course in $5^1/_2$ years after admission.
ii. Candidates who have passed in one or more subjects need not appear in that subject or those subjects again in the subsequent examinations if the candidate

passes the whole examination within four chances including the original examination.

iii. A candidate who appears at First B.H.M.S examination, Second B.H.M.S examination, Third B.H.M.S examination but fails to pass in the subject or subjects shall be re-admitted to the examination in the subject or subjects (theory and practical or clinical including oral or practical or clinical wherein he has failed)

iv. Special classes, seminars, demonstration, practical, tutorials etc., shall be arranged for the repeaters in the subject in which they have failed they are allowed to appear at the next examinations, in which attendance shall be compulsory.

v. If a candidate fails to pass in all the subjects within four chances in examinations, he shall be required to prosecute a further course of studying all the subjects. Provided that if a student appearing for the Fourth BHMS examination has only one subject to pass at the end of prescribed chances, he shall be allowed to appear at the next examination in that particular subject and shall complete and shall complete the examination with this special chance.

vi. The University may under exceptional circumstances, partially or wholly cancel any examination conducted by it under intimation to the Central Council of Homoeopathy and arrange for conducting re-examination in those subjects within a period of thirsty days from the date of such cancellation.

vii. The University shall have the direction to award grace marks at the maximum to ten (10) marks in total and not more than five (5) marks for an individual subject, if a student fail in one or more subjects.

14. Examiners

a) No person other than the holder of qualification prescribed for the teaching staff in the Homoeopathy Central Council (Minimum Standard Requirement of Homoeopathic Colleges and attached Hospitals) Regulations, 2013 (as amended from to time) shall be appointed as an Internal or External examiner or paper-setter or moderator for the B.H.M.S Degree Course:

Provided that:

1. No such person shall be appointed as an examiner unless he has at least three years continuous regular teaching experience in the subject concerned, gained in a degree level Homoeopathic Medical College.
2. Internal examiners shall be appointed from amongst the teaching staff of the Homoeopathic Medical College to which the candidate or student belongs.

b) The criteria for appointing the Chairman or paper-setter or moderator shall be as follows;

1. Chairperson: Senior most person from amongst the examiners or paper-setters appointed for theory and oral or practical or clinical examinations shall be appointed as Chairman and the eligibility qualification for the Chairman shall be same as for appointment of a Professor.

2.Moderator: A Professors or Associate Professor or Reade shall be eligible to be appointed as moderator. Provided that an Assistant Professor or Lecture with five years experience as an Examiner shall be eligible be appointed as moderator.

3.Paper-setter: A Professor or Associate Professor or Reader shall be appointed as a paper-setter. Provided that an Assistant Professor or Lecture with five years' experience as an Examiner shall be eligible to be appointed as Paper-setter.

15. General Guidelines for Admission to Examination and Scheme of Examination.

1) The University shall ensure that the minimum number of hours for Lecture / Demonstration / Practical / Seminar etc. in the subjects in each BHMS examination as specified in respective regulations are followed before allowing any Homoeopathic Medical College to send the students for University examination.
2) The University shall ensure that the students of the Homoeopathic Medical Colleges, who do not fulfil the Homoeopathy (MSR) Regulations, are not sent for the University Examination.
3) 75% (Seventy five percent) attendance at the minimum in each of the subjects (in theory and practical including clinical) for appearing the University examinations shall be compulsory.
4) Each theory paper shall be of three months hour's duration.
5) The Practical / Viva voce examination shall be completed immediately after the theory examination.
6) That the examining body shall hold examinations on such date and time as the examining body may determine. The theory and practical examination shall be held in the premises of the Homoeopathic Medical College concerned.
7) There shall be a regular examination and a supplementary examination in a year and the supplementary examination shall be conducted within two months of declaration of result (including issue of mark sheets).
8) For non-appearance in an examination for any reason, a candidate shall not have any liberty for availing additional chance to appear in that examination.

16. Migration or transfer of students from college of another:

a) Migration from one college to other is not a right of a student.
b) Migration of students from the Homoeopathic College to another Homoeopathic College in India shall be considered by the Central Council of Homoeopathy only in exceptional cases on extreme compassionate grounds, provided following criteria's are fulfilled. Routine migration on other grounds shall not be allowed.
c) Both the colleges, i.e. one at which the student is studying at present and one to which migration is sought are recognized as per provisions of Homoeopathy Central Council Act.
d) The applicant shall have passed First B.H.M.S examination.

e) The applicant shall submit his/her application in the prescribed format for migration, complete in all respect, to the principal of his college within a period of one month of passing (declaration of result) the I BHMS examinations.

f) The applicant shall submit an affidavit stating that he shall pursue twelve months of prescribed study before appearing at II B.H.M.S examination at the transferee college, which he is seeking transfer and the transfer shall be effective only after receipt of the affidavit.

g) Migration during internship training shall be allowed on extreme compassionate grounds, provided that such migration shall be allowed only with the mutual consent of the concerned Colleges, where both the college, i.e. one at which the student is studying at present and one to which migration is sought are recognised as per provisions of Homeopathy Central Council Act.

Note 1:

a. All applications for migration shall be referred to Central Council of Homoeopathy by college authorities. No Institution or University shall allow migrations directly without the approval of the Central Council.
b. The Central Council of Homoeopathy reserves the right not to entertain any application except under the following compassionate grounds, namely:
    1. Death of a supporting guardian.
    2. Illness of candidate causing disability supported by medical grounds certified by a recognised hospital.
    3. Disturbed conditions as declared by concerned Government in the area where the college is situated.
c. A student applying for transfer on compassionate ground shall apply in relevant format and in complete manner with requisite documents.

17. INTERSHIP TRAINING

a. Each candidate shall be required to undergo Compulsory Rotating Internship of one year, after passing the final BHMS Examinations, to the satisfaction of the Principal of the Homoeopathic College. Thereafter only, the candidate shall be eligible for the award of Degree of Bachelor of Homoeopathic Medicine and Surgery (B.H.M.S) by the University.
b. All parts of the internship shall be undertaken at the hospital attached to the college and in cases where such hospital cannot accommodate all of its students for Internship then candidates/ Students shall be informed in writing by the college and it shall be the responsibility of the College to ensure that each of such students is put on internship training in a Homoeopathic Hospital or dispensary run by government or Local bodies.
c. To enable the state Board/ Council of Homoeopathy to grant provisional registration of minimum of one year to each candidate to undertake the internship, the University

concerned shall issue a Provisional Passed Certificate on passing the final BHMS examination to each successful candidate. Provided that in the event of shortage or unsatisfactory work, the period of compulsory internship and the provisional registration shall be accordingly extended by the State Board / Council.

d. Full registration shall only be given the State Board if the BHMS degree awarded by the University concerned is a recognised medical qualification as per Section 13(1) of the HCC Act, and the Board shall award registration to such candidates who produce certificate of completion or compulsory rotating internship of not less than on year duration from the Principal of College, where one has been a bonafide student which shall also declare that the candidate is eligible for it.

e. The internee students shall not prescribe the treatment including medicines, and each of them shall work under the direct supervision of Head of Department concerned and or a Resident Medical Officer. No intern student shall issue any medico-legal document under his/her signatures.

2. The internship training shall be regulated by the Principal in consultation with concerned Heads of Departments and the R.M.O as under:

   a. Each internee student shall be asked to maintain a record of work which is to be constantly monitored by the Head of Department and / or Resident Medical Officer under whom the internee is posted. The scrutiny of record shall be done in an objective way to update the knowledge, skill and aptitude of internee.

   b.

      i. The stress during the internship training shall be on case taking, analysis and evaluation of symptoms, nosological and miasmatic diagnosis. Totality of symptoms, repertorisation and management of sick people based on principles of Homoeopathy.

      ii. The Principal or Head of the College in consultation with heads of concerned clinical departments (including Organon of Medicine, Materia Medica and Repertory) shall make, medical units having integration of teaching faculty of concerned departments to regulate internship training to be given to each student.

      iii. Weekly seminars shall be conducted wherein interns in rotation be given a chance to present their cases for discussion an concerned teachers in conduct of weekly seminars.

   c. Rotation of intern students shall be as under:

      1. Practice of Medicine: 8 Months, wherein, internee will be rotated in each Psychology, Respiratory, Gastro- intestinal, Endocrinology, Skin and V.D, Loco-motor, Cardiology, Paediatrics sections.
      2. Surgery: 1 month.
      3. Obstetrics & Gynaecology: 2 Months (1 month each(including reproductive & child health care))
      4. Community Medicine (including PHC/CHC) – 1 Month.

   d. Each internee shall be exposed to clinic pathology work to acquire skill in taking samples and doing routine blood-examination. Student shall be trained to correlate laboratory findings with diagnosis and management of sick people.

e. Each internee shall be given opportunities to learn the diagnostic techniques like X- Rays, Ultrasonography, E.C.G., Spirometer and other forthcoming techniques and co-relate their findings with diagnosis and management of cases.

f. Each internee student shall be given adequate knowledge about issuing of medico-legal certificates including medical and fitness certificates, death certificates, birth certificates, court producers and all of such legislations be discussed which were taught in curriculum of Forensic Medicine.

g. Each internee shall maintain record of 40 acute and 25 chronic cases complete in all manner including follow up in Practice of Medicine, record of 5 antenatal check-up and 3 delivery cases attended by him/her in department of Obstetrics and 3 cases of Gynaecology, records of 5 surgical cases assisted by him (and demonstration of knowledge of dressings) in Surgery department, and records of knowledge gained in Primary Health Centres, Community Health Centres and various health programmes.

h. Each internee shall be given a liberty to choose an elective assignment on any subject, and complete out-put shall be furnished in writing by the internee in respect of elective assignment to the Principal of the college within internships duration.

i. Each intern shall be posted on duty in such manner that each of them attends at least 15 days in O.P.D. And 15 Days In I.P.D In each Month (Except For Duty In Community Medicine) and attend the other parts of duty including self-preparation in Library.

j. Each intern shall be posted be made to learn importance of maintaining statistics and records, intern student shall also be familiarized with research mythology.

3.

a. Each internee shall have not less than 80% of attendance during the internship training.

b. Each internee shall be on duty of at least 6 hours per day during the Compulsory Internship Training.

c. Each internee shall not avail more than ten days of leave during each postings.

18. EDUCATIONAL TOUR

Components

1. Number of Students.
2. Name of teacher accompanying students.

What the tour is about – an overview.

Prerequisites- What knowledge the students must know before going for tour how it will be organised.

Approaches to teaching or learning and assessment.

Aim and Objective

1. To provide the basic knowledge of practical aspects of Pharmacy / FMT/ Community

Medicine by exposure of students to Pharmaceutical Labs and HPL/ District courts /

Hospitals/ PC / I.D. Hospitals units/ sewage treatment plants/ water purification plants/ milk dairies, as the case may be.

2. To inspire students for their involvement in study during the said visits to learn the related procedures.
3. To provide the platform for evaluation of their skill and knowledge by interactive methodology.
4. To infuse confidence amongst students about Homoeopathy, its future and their carrier.
5. To provide interactive between students, induce decision making skills and to motivate them for better vision about their future.
6. To improve cognitive skills (thinking and analysis)
7. To improve communication skills (personal and academic).

Learning Outcomes

1. To be more than a wish list objectives, need to be realistic, pragmatic, understandable and achievable.
2. The focus should be on what students will be on what students will be able to do or how will show that they know, and how this will help in their carrier and individual growth.
3. Knowledge- we want the students to have by the end of the course.
4. Skills- we want the students to master by the end of the course.
5. Attitude- we want students to demonstrate at the ends of the course.

Note: It shall be an essential part of the journal on the subject a viva-voce can be put in respect of it.

Resources:

1. Essential and recommended text books.
2. Journals and other readings.
3. Equipment and apparatus.

Visit Record

1. Places visited with photograph
2. Programmes organised during visit.
3. Summary.

Assignment or project report.

1. Description of assignment.
2. Due dates of assignments.
3. Preparation method for the project report.
   a. Purpose
   b. Schedule
   c. Places visited

d. Details of visit
e. Summary of achievement or learning's.

SECTION- V: COURSE DESCRIPTION

I – B.H.M.S.

ANATOMY

Introduction:

I.

a. Instructions in anatomy should be so planned as to present a general working knowledge of the structure of the human body.
b. The amount of detail which a student is required to memorize should be reduced to the minimum.
c. Major emphasis should be laid on functional anatomy of the living subject rather than on the static structures of the cadaver, and on general anatomical positions and broad relations of the viscera, muscles, blood-vessel, nerves and lymphatic's and study of the cadaver is the only means to achieve this.
d. Students should not be burdened with minute anatomical details which have no clinical significance.

II. Though dissection of the entire body is essential for the preparation of the student of his clinical studies, the burden of dissection can be reduced and much saving of time can be effected, if considerable reduction of the amount of topographical details is made and the following points are kept in view:

1. Only such details as have professional or general educational value for the Medical Students.
2. The purpose of dissection is to give the students an understanding of the body in relation to its function and the dissection should be designed to achieve this goal.
3. Normal radiological anatomy may also form part of practical or clinical training and the structure of the body should be presented linking functional aspects.
4. Dissection should be preceded by a course of lectures on the general structure of the organ or the system under discussion and then its function. In this way anatomical and Physiological knowledge can be presented to students in an integrated form and the instruction of the whole course of Anatomy and Physiology and more interesting lively and practical or clinical.
5. A good part of the theoretical lectures on anatomy can be transferred to tutorial classes with the demonstrations.
6. Students should be able to identify anatomical specimens and structures displayed in the dissections.
7. Lectures or demonstrations on the clinical and applied anatomy should be arranged in the later part of the course and it should aim at demonstrating the anatomical basis of physical signs and the value of anatomical knowledge to the students.

8. Seminars and group discussions to be arranged periodically with a view of presenting these subjects in an integrated manner.
9. More stress on demonstrations and tutorials should be given; Emphasis should be laid down on the general anatomical positions and broad relations of the viscera, muscles, blood vessels, nerves and lymphatic's.
10. There should be joint seminars with the departments of Physiology and Bio-Chemistry which should be organised once a month.
11. There should be a close correlation in the teaching of gross Anatomy, Histology, Embryology and Genetics and the teaching of Anatomy, Physiology including Bio-chemistry shall be integrated.

A. Theory

a. A complete course of human Anatomy with general working knowledge of different Anatomical parts of the body.
The curriculum includes the following:
Namely:

1. General Anatomy:
   a. Modern concepts of cell and its components, cell division, types with their significance.
   b. Tissues
   c. Genetics
2. Developmental Anatomy (Embryology)
   a. Spermatogenesis
   b. Oogenesis
   c. Formation of germ layers
   d. Development of embryo genic disk
   e. Placenta
   f. Development of abdominal organs
   g. Development of cardio vascular system
   h. Development of nervous system
   i. Development of respiratory system
   j. Development of body cavities
   k. Development of uro-genital system
3. Regional Anatomy:
   This will be taught under the following regions:
   a. Head, Neck and Face, Brain
   b. Thorax
   c. Abdomen
   d. Upper and Lower Extremities
   e. Special Senses

Each of the above areas will cover:

a. Osteology

b.Syndesmology (joints)
c. Myology
d. Angiology
e. Neurology
f. Splanchnology (viscera and organs)
g. Surface Anatomy
h. Applied Anatomy
i. Radiographic Anatomy

4. Histology(Microanatomy)

B. Practical :

1) Dissection of the whole human body, demonstration of dissected parts.
2) Identification of histological slides related to tissues and organs
3) Students shall maintain Practical or Clinical journals and dissection cards.

C. Examination :

1. Theory:

The written papers in anatomy shall be in two papers, namely:

1.1. Paper-I

a. General Anatomy
b. Head, face and neck, Central nervous system, upper extremities and Embryology.

1.2. Paper-II

a. Thorax, abdomen, pelvis, lower extremities and Histology (micro- anatomy).

2. The Practical including viva voce or oral examination includes the following:

MARKS : 200	
Distribution of Marks	Marks
➢ Knowledge of Dissected parts	20
➢ Viscera	20
➢ Bones	20
➢ Surface Anatomy	10
➢ Spotting(including Radiology	20
➢ Maintenance of Practical record or Journals and Dissection Card	10
➢ Viva voce (Oral)	100
TOTAL	**200**

I – B.H.M.S.

PHYSIOLOGY

Introduction:

a. The purpose of a course in physiology is to teach the functions, processes and inter-relations of the different organs and systems of the normal disturbance in disease and to equip the student with normal standards of reference for use while diagnosing and treating deviations from the normal.
b. To a Homoeopath the human organism is an integrated whole of body life and mind and though life includes all the chemico-physical processes it transcends them.
c. There can be no symptoms of disease without vital force animating the human organism and it is primarily the vital force which is deranged in disease.
d. Physiology shall be taught from the stand point of describing physical processes underlying them in health.
e. Applied aspect of every system including the organs is to be stressed upon while teaching the subject.

II.

a. There should be close cooperation between the various departments while teaching the different systems.
b. There should be joint courses between the two departments of Anatomy, Physiology and Biochemistry should bring home the point to the students that the integrated approach is more meaningful.

A. Theory

The curriculum includes the following, namely:

1. General Physiology:
   a. Introduction to cellular physiology
   b. Cell Junctions
   c. Transport through cell membrane and resting membrane potential
   d. Body fluids compartments
   e. Homeostasis
2. Body Fluids:
   a. Blood
   b. Plasma
   c. Red Blood Cells
   d. Erythropoiesis
   e. Haemoglobin and Iron Metabolism
   f. Erythrocyte Sedimentation Rate
   g. Packed Cell Volume and Blood Indices
   h. Anaemia
   i. Haemolysis and Fragility of Red Blood Cells
   j. White Blood Cell
   k. Immunity
   l. Platelets
   m. Hemostasis
   n. Coagulation of Blood

o. Blood Groups
p. Blood Transfusion
q. Blood volume
r. Reticulo-endothelial System and Tissue Macrophage
s. Lymphatic System and Lymph
t. Tissue Fluid and Oedema

III. Cardio-Vascular System:

1. Introduction to cardiovascular system
2. Properties of cardiac muscle
3. Cardiac cycle
4. General principles of circulation
5. Heart sounds
6. Regulation of cardiovascular system
7. Normal and abnormal Electrocardiogram (ECG)
8. Cardiac output
9. Heart rate
10. Arterial blood pressure
11. Radial Pulse
12. Regional circulation – Cerebral, Splanchnic, Capillary, Cutaneous and Skeletal muscle circulation
13. Cardiovascular adjustments during exercise

IV. Respiratory system and Environment Physiology:

1. Physiological Anatomy of respiratory tract
2. Mechanism of respiration: Ventilation, diffusion of gases
3. Transport of respiratory gases
4. Regulation of respiration
5. Pulmonary function tests
6. High altitude and space physiology
7. Deep sea Physiology
8. Artificial respiration
9. Effects of exercise on respiration

V. Digestive system:

1. Introduction to digestive system
2. Composition and functions of digestive juices
3. Physiological Anatomy of stomach, PANCREAS, Liver and Gall bladder, Small intestine, Large intestine
4. Movements of gastrointestinal tract
5. Gastrointestinal Hormones
6. Digestion and absorption of carbohydrates, proteins and lipids

VI. Renal Physiology and Skin:

a. Physiological Anatomy of kidneys and urinary tract
b. Renal circulation
c. Urine formation: Renal clearance, glomerular filtration, tubular reabsorption, selective secretion, concentration of urine, acidification of urine.
d. Renal function tests
e. Micturition
f. Skin
g. Sweat
h. Body temperature and its regulation

VII. Endocrinology:

1. Introduction to endocrinology
2. Hormones and hypothalamus- hypophysealaxis
3. Pituitary gland
4. Thyroid gland
5. Parathyroid
6. Endocrine functions of pancreas
7. Adrenal cortex
8. Adrenal medulla
9. Endocrine functions of other organs

VIII. Reproductive System:

1. Male reproductive system- testis and its hormones, seminal vesicles, prostate gland, semen.
2. Introduction to female reproductive system
3. Menstrual cycle
4. Ovulation
5. Menopause
6. Infertility
7. Pregnancy and parturition
8. Placenta
9. Pregnancy tests
10. Mammary glands nd lactation
11. Fertility
12. Foetal circulation

IX. Central nervous system:

1. Introduction to nervous system
2. Neuron
3. Neuroglia
4. Receptors
5. Synapse
6. Neurotransmitters
7. Reflex
8. Spinal cord

9. Somato- sensory system and somato – motor system
10. Physiology of pain
11. Brainstem, Vestibular apparatus
12. Cerebral cortex
13. Thalamus
14. Hypothalamus
15. Internal capsule
16. Basal ganglia
17. Limbic System
18. Cerebellum- Posture and equilibrium
19. Reticular formation
20. Proprioceptors
21. Higher intellectual function
22. Electroencephalogram (EEG)
23. Physiology of sleep
24. Cerebrospinal fluid (CSF)
25. Autonomic Nervous System (ANS)

X. Special senses:

1. Eye: Photochemistry of vision, Visual pathway, Pupillary relaxes, colour vision, Errors of refraction.
2. Era: Auditory pathway, Mechanism of hearing, auditory defects.
3. Sensation of taste: Taste receptors, Taste pathways.
4. Sensation of smell: Olfactory receptors, olfactory pathways
5. Sensation of touch

XI. Nerve Muscle Physiology:

1. Physiological properties of nerve fibres.
2. Nerve fibre-types, classification, function.
3. Neuro- Muscular junction.
4. Physiology of Skeletal muscle.
5. Physiology of Cardiac muscle.
6. Physiology of Smooth muscle.
7. EMG and disorders of skeletal muscles.

XII. Bio-Physical Sciences:

1. Filtration
2. Ultrafiltration
3. Osmosis
4. Diffusion
5. Adsorption
6. Hydro trophy
7. Colloid
8. Donnan Equilibrium
9. Tracer elements

10. Dialysis
11. Absorption
12. Assimilation
13. Surface tension

B. Practical:

a) **Haematology**:

1. Study of the compound Microscope
2. Introduction to haematology
3. Collection of Blood samples
4. Estimation of Haemoglobin Concentration
5. Determination of Haematocrit
6. Haemocytometers
7. Total RBC count
8. Determination of RBC indices
9. Total Leucocytes Count (TLC)
10. Preparation and examination of Blood Groups
11. Differential Leucocyte Count (DLC)
12. Absolute Eosinophil Count
13. Determination of Erythrocyte Sedimentation Rate
14. Determination of Blood Groups
15. Osmotic fragility of Red cells
16. Determination of Bleeding Time and Coagulation Time
17. Platelet Count
18. Reticulocyte Count

b) Human experiments:

1. General Examination
2. Respiratory System- Clinical examination, Spirometry, Stethography
3. Gastrointestinal System – Clinical examination
4. CARDIOVASCULAR System – Blood pressure recording, redial pulse, ECG, Clinical examination.
5. Nerve and Muscle Physiology – Moosso'sErgography, Handgrip Dynamo meter
6. Nervous System- Clinical Examination
7. Special Senses – Clinical examination
8. Reproductive System – Diagnosis of pregnancy

YENEPOYA
(DEEMED TO BE UNIVERSITY)

I –B.H.M.S

BIO-CHEMISTRY

A. Theory:

1. Carbohydrate's: (Chemistry, Metabolism, Glycolysis, TCA, HMP, Glycogen synthesis and degradation, Blood Glucose Regulation)
2. Lipids: (Chemistry, Metabolism, Intestinal uptake, Fat transport, Utilization of stored fat, Activation of fatty acids, Beta oxidation and synthesis of fatty acids)
3. Proteins: (Chemistry, Metabolism, Digestion of protein, Transamination, Deamination, Fat of Ammonia, Urea cycle, Ed products of each amino acid and their entry into TCA cycle.
4. Enzymes: (Definition, Classification, Biological Importance, Diagnostic use, Inhibition)
5. Vitamins: (Daily requirements, Dietary source, Disorders and physiological role)
6. Minerals: (Daily requirements, Dietary Sources, Disorders and physiological role)
7. Organ function tests

B. Practical:

1. Demonstration of uses of instructions or equipment.
2. Qualitative analysis of carbohydrates, proteins and lipids
3. Normal characteristics of urine
4. Abnormal constituents of urine
5. Quantitative estimation of glucose, total proteins, uric acid in blood
6. Liver function tests
7. Kidney function tests
8. Lipid profile
9. Interpretation and discussion of results of Biochemical tests.

C. Examination:

Sl. No.	Particulars	Marks
1.	**Theory**	
	a. No.of. Papers- 02 b. Marks for Paper-I c. Mraks for Paper- II	 100 100
2.	**Practical including Viva voce or Oral**	
	Marks :200	
	Distribution of marks	
	a. Experiments	50
	b. Spotting	30
	c. Maintenance of Practical Record/Journal	20
	d. Viva Voce	100
	TOTAL	**200**

I – B.H.M.S.

HOMOEOPATHIC PHARMACY

Instructions:

Instruction in Homoeopathic Pharmacy shall be so planned as to present.

1. Importance of Homoeopathic Pharmacy in relation to study of Homoeopathic Materia Medica, Organon of Medicine and National economy as well as growth of Homoeopathic Pharmacy and Research.
2. Originality and speciality of Homoeopathic Pharmacy and its relation to Pharmacy of other recognised systems of medicine.
3. The areas of teaching shall encompass the entire subject but stress shall be laid on the fundamental topics that from the basis of Homoeopathy.

1) Theory

1. General concepts and orientation:
   a. History of Pharmacy with emphasis on emergence of Homoeopathic Pharmacy.
   b. Official Homoeopathic Pharmacopoeia (Germany, Britain, U.S.A, India).
   c. Important terminologies like scientific names, common names, synonyms.
   d. Definitions in Homoeopathic Pharmacy.
   e. Components of Pharmacy.
   f. Weights and measurements.
   g. Nomenclature of Homoeopathic drugs with their anomalies.
2. Raw Material: Drugs and Vehicles
   a. Sources of drugs (Taxonomic classification, with reference to utility).
   b. Collection of drug substances.
   c. Vehicles.
   d. Homoeopathic Pharmaceutical Instruments and appliances.
3. Homoeopathic Pharmaceutical
   a. Mother tincture and its preparation – old and new methods.
   b. Various scales used in Homoeopathic Pharmacy.
   c. Drug dynamisation or potentisation.
   d. External applications (focus on scope of Homoeopathic lotion, glycerol, liniment and ointment)
   e. Doctrine of signature.
   f. Posology (focus on basic principles, related aphorisms of Organon of Medicine).
   g. Prescription (including abbreviations).
   h. Concept of placebo.
   i. Pharmacology – routes of Homoeopathic drug administration.
   j. Dispensing of medicines.
   k. Basics of adverse drug reactions and pharmaco- vigilance.

4. Pharmacodynamics:
    a. Homoeopathic Pharmaco dynamics.
    b. Drug Proving (Related aphorisms 105-145 of Organon of Medicine) and merits and demerits of Drug Proving on Humans and Animals.
    c. Pharmacological study of drugs listed in Appendix.
5. Quality Control:
    a. Standardization of Homoeopathic Medicines, Raw materials and Finished Products.
    b. Good manufacturing Practices, Industrial Pharmacy.
    c. Homoeopathic Pharmacopoeia Laboratory- functions and activities, relations to quality control of drugs.
6. Legislations pertaining to Pharmacy:
    a. The Drugs and Cosmetics Act, 1940 (23 of 1940) (in relation to Homoeopathy);
    b. Drugs and Cosmetics Rules, 1945 (in relation to Homoeopathy);
    c. Poisons Act, 1919 (12 of 1919);
    d. The Narcotic Drugs and Psychotropic Substances Act, 1985(61 of 1985);
    e. Drugs and Magic Remedies (Objectionable Advertisements) Act, 1954 (21 of 1954);
    f. Medicinal and Toilet Preparations (Excise Duties) Act, 1995(16 of 1955).

2) Practical : Experiments

1. Estimation of size of globules.
2. Medication of globules and preparation of doses with sugar of milk and distilled water.
3. Purity test of sugar of milk, distilled water and ethyl alcohol.
4. Determination of specific gravity of distilled water and ethyl alcohol.
5. Preparation of dispensing alcohol and dilute alcohol from strong alcohol.
6. Trituration of one drug each in decimal and centesimal scale.
7. Succussion in decimal scale from Mother Tincture to 6X potency.
8. Succussion in centesimal scale from Mother Tincture to 3C potency.
9. Conversion of Trituration to liquid potency: Decimal scale 6X to 8X potency.
10. Conversion of Trituration to liquid potency: Centesimal scale 3C to 4C potency.
11. Preparation of 0/1 potency (LM scale) of 1 Drug.
12. Preparation of external applications – lotion, glycerol, liniment, ointment.
13. Laboratory methods – submission, distillation, decantation, filtration, crystallization.
14. Writing of prescription.
15. Dispensing of medicines.
16. Process of taking minims.
17. Identification of Drugs (Listed in Appendix B).
    a. Macroscopic and Microscopic characteristic of drug substances- minimum 05 drugs.
    b. Microscopic study of trituration of two drugs (up to 3X potency).
18. Estimation of moisture content using water bath.
19. Preparation of mother tincture- maceration and percolation.

20. Collection of 30 drugs for herbarium.
21. Visit to Homoeopathic Medicines (GMP Complaint). (Students shall keep detailed visit reports as per proforma at Annexure-B)

3) Demonstration
   a. General instructions for practical or clinical in Pharmacy.
   b. Identification and use of Homoeopathic Pharmaceutical instruments and appliances and their cleaning.
   c. Estimation of moisture content using water bath.
   d. Preparation of mother tincture- maceration and percolation.

APPENDIX-A

List of drugs included in the syllabus of Pharmacy for study of pharmacological action:

1. Acontium napellus
2. Adonis vernalis
3. Allium cepa
4. Argentum nitricum
5. Arsenicum album
6. Atropa Belladonna
7. Cactus grandiflorus
8. Cantharis vesicatoria
9. Cannabis indica
10. Cannabis sativa
11. Cinchona officinails
12. Coffea cruda
13. Crataegus oxyacantha
14. Crotalus horridus
15. Gelsemium sempervirens
16. Glonoinum
17. Hydrastis Canadensis
18. Hyoscyamus niger
19. Kali bichromicum
20. Lachesis
21. Lithium carbonicum
22. Mercurius corrosivus
23. Naja tripudians
24. Nitricum acidum
25. Nux vomica
26. Passiflora incarnate
27. Stannum metallicum
28. Stamonium
29. Symphytum officinale

30. Tabacum

APPENDIX-B

List of drugs for the identification.

I. Vegetable Kingdom

1. Aegle folia
2. Anacardium orientale
3. Andrographis paniculata
4. Calendula officinals
5. Cassia sophera
6. Cinchona officinalis
7. Cocculas indicus
8. Coffea cruda
9. Colocynthis
10. Crocus sativa
11. Croton tiglium
12. Cynodon dactylon
13. Ficus religiosa
14. Holarrhena antidysenterica
15. Hydracotyle asiatica
16. Justicia adhatoda
17. Lobelia inflate
18. Nux vomica
19. Ocimum sanctum
20. Opium
21. Rauwolfia serpentine
22. Rheum
23. Saraca indica
24. Senna
25. Stramonium
26. Vinca minor

II. Chemicals or Minerals

1. Aceticum acidum
2. Alumina
3. Argentum metallicum
4. Argentum nitricum
5. Arsenicum album
6. Calcarea carbonica
7. Carbovegetabilis
8. Graphites
9. Magnesium phosphorica

10. Natrum muriaticum
11. Sulphur

III. Animal Kingdom

1. Apis mellifica
2. Blatta orientalis
3. Formica rufa
4. Sepia
5. Tarentula cubensis

Note:

1. Each Student shall maintain Practical or Clinical record or journal and herbarium file separately.
2. College authority shall facilitate the students in maintaining record as per Appendix-C

Examination:

Sl. No.	Particulars	Marks
1.	Theory	
	a. Number of Paper - 01	
	b. Marks: **100**	
2.	Practical including viva voce or oral	
	a. Marks: 100	
	b. Distribution of marks	
	❖ Experiments	15
	❖ Spotting	20
	❖ Maintenance of Practical record or journal	10
	❖ Maintenance of herbarium record	05
	❖ Viva voce(Oral0	50
	TOTAL	**100**

I, II, III, IV – B.H.M.S.

I – B.H.M.S.

ORGANON OF MEDICNE WITH HOMOEOPATHIC PHILOSOPHY

Instructions:

I.

a. Organon of Medicine with Homoeopathic Philosophy is a vital subject which builds

up the conceptual base of the physician.

b. It illustrates those principles which when applied in practice enable the physician to achieve results, which he can explain logically and rationally in medical practice with greater competence.

c. Focus of the education and training should be to build up the conceptual base of Homoeopathic Philosophy for use in medical practice.

II. Homoeopathy should be taught as a complete system of medicine with logical rationality of its holistic, individualistic and dynamistic approach to life, health, disease, remedy and cure and in order to achieve this, integration in the study of logic, psychology and the fundamental of Homoeopathy becomes necessary.

III.

1. It is imperative to have grasped of inductive and deductive logic, and its application and understanding of the fundamental of Homoeopathy.
2. Homoeopathic approach in therapeutics is a holistic approach and it demands a comprehension of patient as a person, disposition, state of his mind and body, along with the study of the disease process and its causes.
3. Since Homoeopathy lays great emphasis on knowing the mind, preliminary and basic knowledge of the psychology becomes imperative for a Homoeopathic Physician and introduction to psychology will assist the student in building up his conceptual base in this direction.

IV. The department of Organon of Medicine shall coordinate with other departments where students are sent for the pre-clinical and clinical training and this will not only facilitate integration with other related departments, but also enhance the confidence of the students when they will be attending speciality clinics.

I B.H.M.S

A. Theory

1. Introductory Lectures.
   a. Evolution of medical practice of the ancients (Prehistoric Medicine, Greek Medicine, Chinese Medicine, Hindu Medicine and Renaissance) and tracing the empirical, rationalistic and vitalistic thoughts.
   b. Short history of Hahnemann's life, his contributions, and discovery of Homoeopathy, situation leading to discovery of Homoeopathy.
   c. Brief life history and contributions of early pioneers of Homoeopathy like C.V Boenninghausen, J.T. Kent, C.Hering, Rajendra Lal Dutta, M.L. Sircar.
   d. History and Development of Homoeopathy in India, U.S.A and European countries
   e. Fundamental Principles of Homoeopathy.
   f. Basic concept of:
      1. Health: Hahnemann's concept and modern concept.
      2. Disease: Hahnemann's concept and modern concept.
      3. Cure.

g. Different editions and constructions of Hahnemann's Organon of Medicine

2. Logic:
   To understand Organon of Medicine and Homoeopathic Philosophy, it is essential to be acquainted with the basics of Logic to grasp inductive and deductive reasoning's. Preliminary Lectures on inductive and deductive logic (with reference to Philosophy book of Stuart close Chapter 3 and 16)
3. Psychology:
   a. Basics of Psychology.
   b. Study of behaviour and intelligence.
   c. Basic concepts of Sensations.
   d. Emotion, Motivation, Personality, Anxiety, Conflict, Frustration, Depression, Fear, Psychosomatic Manifestations.
   e. Dreams.
4. Aphorisms 1 to 28 of Organon of Medicine.
5. Homeopathic Prophylaxis.

B. Examination: There shall be examination in the subject in subject in First B.H.M.S

II – B.H.M.S.

Instructions:

1)

a) Organon of Medicine with Homoeopathic Philosophy is a vital subject which builds up the conceptual base of the physicians.
b) It illustrates those principles which when applied in practice enable the physicians achieve results, which he can explain logically and rationally in medical practice with greater competence.
c) Focus of the education and training should be to build up the conceptual base of Homoeopathic Philosophy for use n Medical Practice.

2) Homoeopathy should be taught as a complete system of medicine with logical rationality of its holistic, individualistic and dynamistic approach to life, health, disease, remedy and cure and in order to achieve this, integration i n the study of logic, psychology and the fundamental of Homoeopathy becomes necessary.

3)

a) It is imperative to have clear grasp of inductive and deductive logic, and its application and understanding of the fundamental of Homoeopathy.
b) Homoeopathic approach in therapeutics is a holistic approach and it demands a comprehension of patient as a person, disposition, state of his mind and body, along with the study of the disease process and its causes.
c) Since Homoeopathy lays great emphasis on knowing the mind, preliminary and basic knowledge of the psychology becomes imperative for a Homoeopathic physician and introduction to psychology will assist the student in building up his conceptual base in this direction.

4) The department of Organon of Medicine shall coordinate with not only facilitate integration with other related departments, but also enhance the confidence of the students when they will be attending speciality clinics.

A. Theory

1) Aphorisms 29-104 including foot notes of Organon of Medicine (5th& 6th Editions translated by R.E. Dudgeon and W. Boericke).
2) Homoeopathic Philosophy:
   i. Chapter of Philosophy books of J.T. Kent (Chapters 1 to 17, 23 to 27, 31 to 33), Stuart close (Chapters- 8,9,11,12) and H.A. Roberts (Chapters - 3,4,5,6,8,9,11,17,18,19,20), related to Aphorisms 29-104 of Organon of Medicine.
   ii. Symptomatology: Details regarding Symptomatology are to be comprehended by referring to the relevant aphorisms of Organon of Medicine and Chapters of the books on Homoeopathic Philosophy.
   iii. Causations: Through comprehensive of the evolution of disease, taking into account pre-disposing fundamental, exciting and maintaining causes.
   iv. Case taking:
   The purpose of Homoeopathic case taking is not merely collection of the disease symptoms from the patient, comprehending the patient as a whole with the correct appreciation of the factors responsible for the genesis and maintenance of illness. Hahnemann's concept and method of case taking, as stated in his Organon of Medicine is to be stressed upon.
   v. Case Processing:
   This includes,
      a. Analysis of Symptoms,
      b. Evaluation of Symptoms
      c. Miasmatic diagnosis
      d. Totality of symptoms

B. Practical or Clinical:

1. Clinical posting of students shall be started from Second B.H.M.S onwards.
2. Each student shall maintain case records of at least ten acute cases.

C. Examination:

Sl. No.	Particulars	Marks
1.	**Theory**	
	1.1. No. of. Papers – 01	
	1.2.Marks ;100	
	1.3.Distribution of marks:	
	1.3.1. Logic	**15**
	1.3.2. Psychology	**15**
	1.3.3. Fundamentals of Homoeopathy and Aphorisms 1 to 104	**50**

	1.3.4. Homoeopathic Philosophy	**20**
	TOTAL	**100**
2.	Practical including viva voce or oral:	
	2.1.Marks :100	
	2.2.Distribution of marks:	
	2.2.1. Case taking and Case Processing	40
	2.2.2. Maintenance of Practical record or journal	10
	2.2.3. Viva voce (Oral)	50
	TOTAL	**100**

III – B.H.M.S.

Instructions:

I.

a. Organon of Medicine with Homoeopathic Philosophy is a vital subject which builds up the conceptual base of the physician.

b. It illustrates those principles which when applied in practice enable the physician to achieve results, which he can explain logically and rationally in medical practice with greater competence.

c. Focus of the education and training should be to build up the conceptual base of the Homoeopathic Philosophy for use in Medical Practice.

II. Homoeopathy should be taught as a complete system of medicine with logical rationality of its holistic, individualistic and dynamistic approach to life, health, disease, remedy and cure and in order to achieve this integration in the study of logic, psychology and the fundamental of Homoeopathy becomes necessary.

III.

a. It is imperative to have clear grasp of inductive and deductive logic and its application and understanding of the fundamentals of Homoeopathy.

b. Homoeopathic approach in therapeutics is a holistic approach and it demands a comprehension of patient as a person, disposition, state of his mind and body, along with the study of the disease process and its causes.

c. Since Homoeopathy lays great emphasis on knowing the mind, preliminary and basic knowledge of the psychology becomes imperative for a Homoeopathic physician and introduction to psychology will assist the student in building up his conceptual base in this direction.

IV. The department of Organon of Medicine shall coordinate with other departments where students are sent for the pre-clinical and clinical training and this will not only facilitate integration with other related departments but also enhance the confidence of the students when they will be attending specialty clinics.

A. Theory: In addition to revision of Aphorisms studied in First B.H.M.S and Second B.H.M.S, the following shall be covered, namely:

1. Hahnemann's Prefaces and Introduction to Organon of Medicine.
2. Aphorism 105 to 294 of Hahnemann's Organon of medicine, including foot notes 5th and 6th Editions translated by R.E. Dudgeon and W. Boericke).
3. Chapters of Philosophy books of J.T Kent (Chapters – 28,29,30,34 to 37), Stuart Close (Chapters 7,10,13,14,15) and H.A Roberts (Chapters – 7,10,12 to 19,21,34) related to 105 – 294 Aphorisms of Organon of Medicine.

B. Practical or Clinical:

Each Student appearing for Third B.H.M.S examination shall maintain records of 20 cases (10 acute and 10 chronic cases).

C. Examination:

Sl. No.	Particulars	Marks
1.	**Theory**	
	1.1. Number of Papers – 01	
	1.2. Marks :100	
	1.3.Distribution of Marks :	
	1.3.1. Aphorisms 1 to 294	60
	1.3.2. Homoeopathic Philosophy	40
	Total	**100**
2.	**Practical including Viva voce or oral**	
	2.1.Marks :100	
	2.2. Distribution of marks	
	2.2.1. Case taking and case processing	40
	2.2.2. Maintenance of Practical record or journal	10
	2.2.3. Viva Voce (Oral)	50
	Total	**100**

IV – B.H.M.S.

Instructions:

I.

a. Organon of Medicine with Homoeopathic Philosophy is a vital subject which builds up the conceptual base of the physician.
b. It illustrates those principles which when applied in practice enable the physician to achieve results, which he can logically and rationally in medical practice with greater competence.
c. Focus of the education and training should be to build up the conceptual base of Homoeopathic Philosophy for use in Medical Practice.

II. Homoeopathy should be taught as a complete system of medicine with logical

rationality of its holistic, individualistic and dynamistic approach to life, disease, remedy and cure and in order to achieve this integration in the study of logic, psychology and the fundamentals of Homoeopathy becomes necessary.

III.

a. It is imperative to have clear grasp of inductive and deductive logic and its application and understanding of the fundamentals of Homoeopathy.
b. Homoeopathic approach in therapeutics is a holistic approach and it demands a comprehension of patient as a person, disposition, state of his mind and body along with the study of the disease process and its causes.
c. Since Homoeopathy lays great emphasis on knowing the mind, preliminary and basic knowledge of the psychology becomes imperative for a Homoeopathic Physician and introduction to psychology will assist the student in building up his conceptual base in this direction.

IV. The department of Organon of Medicine shall coordinate with other departments where students are sent for the pre-clinical and clinical training and this will not only facilitate integration with other related departments but also enhance the confidence of the students when they will be attending speciality clinics.

A. Theory:

In addition to the syllabus of First B.H.M.S, Second B.H.M.S and Third B.H.M.S the following shall be covered, namely:

1. Evolution of Medical Practice of the ancients (Prehistoric Medicine, Greek Medicine, Chinese Medicine, Hindu Medicine and Renaissance) and tracing the empirical, rationalistic and vitalistic thoughts.
2. Revision of Hahnemann's Organon of Medicine (Aphorisms 1-294) including footnotes (5th& 6th Editions translated by R.E. Dudgeon and W. Boericke)
3. Homoeopathy Philosophy:
   Philosophy books of Stuart Close (Chapters- 1,2,4,5,6,8,17), J.T Kent (Chapters-18 to 22) and H.A Roberts (Chapters- 1 to 5, 20,22 to 33, 35), Richard Hughes (Chapters-1 to 10) and C. Dunham (Chapters-1 to 7).
4. Chronic Diseases:
   4.1. Hahnemann's Theory of Chronic Diseases.
   4.2. J.H. Allen's the chronic Miasms- Psora and Pseudo- psora, Sycosis

a. Emphasise should be given on the way in which each miasmatic state evolves and the characteristic expressions are manifested at various levels and attempt should be made to impart a clear understanding of Hahnemann's theory of chronic miasms.
b. The characteristics of the miasms need to be explained in the light of knowledge acquired from different branches of medicine.
c. Teacher should explain clearly therapeutic implications of theory of chronic miasms in practice and this will entail a comprehension of evolution of natural disease from miasmatic angle and it shall be correlated with applied Material Medica.

B. Practical or Clinical:

a. The students shall maintain practical records of patients treated in the outpatient department and in patient department of the attached hospital.
b. The following shall be stressed upon in the case records, namely:
   1. Receiving the case properly (case taking) without distortion of the patient's expressions.
   2. Nosological diagnosis.
   3. Analysis and ecaluation of the symptoms, miasmatic diagnosis and portraying the totality of symptoms.
   4. Individualisation of the case for determination of the similimum, prognosis, general management including diet and necessary restrictions on mode of life of the individual patients.
   5. State of susceptibility to formulate comprehensive plan of treatment.
   6. Order of evaluation of the characteristic features of the case would become stepping stone for the reportorial totality.
   7. Remedy selection and posology.
   8. Second prescription.

Note:

1. Each student has to maintain records of twenty thoroughly worked out cases (ten chronic and ten acute cases).
2. Each student shall present at least one case in the departmental symposium or seminar.

C. Examination

Sl. No.	Particulars	Marks
1.	Theory	
	1.1.Number of Papers- 02	
	1.2.Marks : Paper I : 100, Paper II : 100	
	1.3.Distribution of marks:	
	Paper I : Aphorisms 1-145	30
	Aphorisms 146-294	70
	Total	**100**
	Paper II: Chronic diseases	50
	Homoeopathic Philosophy	50
	Total	**100**
2.	Practical including viva voce or oral	
	2.1.Marks: 100	
	2.2.Distribution of marks	
	2.2.1. Case taking and case processing of a long	30
	2.2.2. Case taking and case processing of a short	10

	2.2.3. Maintenance of practical record or journal	10
	2.2.4. Viva Voce (oral)	50
	Total	**100**

I, II, III, IV – B.H.M.S.

HOMOEOPATHIC MATERIA MEDICA

Introduction

I.
a. Homeopathic Materia Medica is differently constructed as compared to other Materia Medica.
b. Homoeopathic considers that study of the action of drugs on individual parts or systems of the body or on animal or their isolated organs is only a partial study of life process under such action and that it does not lead us to a full appreciation of the action of the medicinal substance, the drugs substances as a whole is lost sight of.

II. Essential and complete knowledge of the drug action as a whole can be ascertained only by qualitative drug proving on healthy persons and this alone can make it possible to elicit all the symptoms of a drug with reference to the psychosomatic whole of a person and it is just such a person as a whole to whom the knowledge of drug action is to be applied.

III.
a. The Homoeopathic Materia Medica consists of a schematic arrangement of symptoms produced by each drug, incorporating no theories for explanations about their interpretation or inter- relationship.
b. Each drug should be studied synthetically, analytically and comparatively, and this alone would enable a Homoeopathic student to study each drug individually and as a whole and help him to be a good prescriber.

IV.
a. The most commonly indicated drugs for day today ailments should be taken up first so that in the clinical classes or outdoor duties the students become familiar with their applications and they should be thoroughly dealt with explaining all comparisons and relationship.
b. The most commonly indicated drugs for day today ailments should be taken up first so that in the clinical classes or outdoor duties the students become familiar with their

applications and they should be thoroughly dealt with explaining all comparisons and relationship.

V. Tutorials must be introduced so that students in small numbers can be in close touch with teachers and can be helped to study and understand Materia Medica in relation to its application in the treatment of the sick.

VI.

a. While teaching therapeutics an attempt should be made to recall the Materia Medica so that indications for drugs in a clinical condition can directly flow out from the proving of the drugs concerned.
b. The student should be encouraged to apply the resources of the vast Materia Medica in any sickness and not limit himself to memorize a few drugs for a particular disease and this Hahnemannian approach will not only help him in understanding the proper perspective of symptoms as applied and their curative value in sickness but will even lighten his burden as far as formal examinations are concerned.
c. Application of Materia Medica should be demonstrated from case records in the outdoor and the indoor.
d. Lectures on comparative Materia Medica and therapeutics as well as tutorials should be integrated with lectures on clinical medicine.

VII. For the teaching of drugs, the department should keep herbarium sheets and other specimens for demonstrations to the students and audio-visual material shall be used for teaching and training purposes.

VIII.

a. There is a large number of Homoeopathic Medicines used today and much more medicines being experimented and proved at present and more will be added in future and some very commonly used Homoeopathic Medicines are included in this curriculum for detail study.
b. It is essential that at the end of this course each student should gain basic and sufficient knowledge of – How to study Homoeopathic Materia Medica and to achieve this objective basic and general topics should be taught in all the classes.
c. The Medicines are to be taught under the following headings, namely:
    1. Common name, family, habitat, parts used, preparation, constituents (of source material)
    2. Proving data.
    3. Sphere of action.
    4. Symptomatology of the medicine emphasizing the characteristic symptoms (mental, physical generals and particulars including sensations, modalities and concomitants) and constitution.
    5. Comparative study of medicines.
    6. Therapeutic applications (applied Materia Medica).

I - B.H.M.S.

A. Theory.
   a. Basic Materia Medica-
      1. Basic concept of Materia Medica.
      2. Basic construction of various Materia Medica.
      3. Definition of Materia Medica.
   b. Homoeopathic Materia Medica-
      1. Definition of Homoeopathic Materia Medica.
      2. Basic concept and construction of Homoeopathic Materia Medica.
      3. Classification of Homoeopathic Materia Medica.
      4. Sources of Homoeopathic Materia Medica.
      5. Scope and Limitations of Homoeopathic Materia Medica.

Note: There shall be no examination in First B.H.M.S.

II – B.H.M.S.

Instructions:

1.
   a. Homoeopathic Materia Medica is differently constructed as compared to other Materia Medica.
   b. Homoeopathy considers that study of the action of drugs on individual parts or systems of the body or on animal or their isolated organs is only a partial study of life processes under such action and that it does not lead us to a full appreciation of the action of the medicinal substances, the drug substance as a whole is lost sight of.
2. Essential and complete knowledge of the drug action as a whole can be ascertained only by qualitative drug proving on healthy persons and this alone can make it possible to elicit all the symptoms of a drug with reference to the psychosomatic whole of a person and it is just such a person as a whole to whom the knowledge of drug action is to be applied.
3.
   a. The Homoeopathic Materia Medica consists of a schematic arrangement of symptoms produced by each drug, incorporating no theories for explanations about their interpretation or inter-relationship.
   b. Each drug should be studied synthetically, analytically and comparatively, and this alone would enable a Homoeopathic student to study each drug individually and as a whole and help him to be a good prescriber.
4.
   a. The most commonly indicated drugs for day ailments should be taken up first so that in the clinical classes or outdoor duties the students become familiar with their applications and they should be thoroughly dealt with explaining all comparisons and

relationships.

b. Students should be conversant with their sphere of action and family relationships and the rarely used drugs should be taught in outline, emphasizing only their most salient features and symptoms.

5. Tutorials must be introduced so that students in small numbers can be in close touch with teachers and can be helped to study and understand Material Medica in relation to its application in the treatment of the sick.

6.

a. While teaching therapeutics an attempt should be made to recall the Materia Medica so that indications for drugs in a clinical condition can directly flow out from the proving of the drugs concerned.

b. The student should be encouraged to apply the resources of the vast Materia Medica in any sickness and not limit himself to memorize a few drugs for a particular disease and this Hahnemannian approach will not only help him in understanding the proper perspective of symptoms as applied and their curative value in sickness but will even lighten his burden as far as formal examinations are concerned.

c. The medicines are to be taught under the following headings, namely:

(i) Common name, family, habitat, parts used, preparation, constituents (of source material).
(ii) Proving data.
(iii) Sphere of action.
(iv) Symptomatology of the medicine emphasizing the characteristic symptoms (mental, physical generals and particulars including sensations, modalities and concomitants constitution.
(v) Comparative study of medicines.
(vi) Therapeutic applications (applied Materia Medica).

II - B.H.M.S.

A. Theory

1. In addition to syllabus of First B.H.M.S Course, following shall be taught, namely:
   a. Science and Philosophy of Homoeopathic Materia Medica.
   b. Different ways of studying Homoeopathic Materia Medica (e.g. psycho-clinical. Pathological, physiological, synthetic, comparative, analytical, remedy relationships, group study, portrait study etc.)
   c. Scope and limitations of Homoeopathic Materia Medica.
   d. Concordance or remedy relationships.
   e. Comparative Homoeopathic Materia Medica, namely: Comparative study of symptoms, drug pictures, drug relationships.
   f. Theory of Biochemical system of Medicine, its history, concepts and principles according to Dr. Wilhelm Heinrich Schuessler. Study of 12 Biochemical medicines (Tissue remedies).
2. Homoeopathic Medicines to be taught in Second B.H.M.S as per Appendix- I

Appendix - I

1) Aconitum napellus
2) Aethusa cynapium
3) Allium cepa
4) Aloe socotrina
5) Antimonium crudum
6) Antimonium tratarícum
7) Apis mellifica
8) Argentum nitricum
9) Arnica Montana
10) Arsenicum album
11) Arum triphyllum
12) Baptisia tinctoria
13) Bellis perrenis
14) Bryonia alba
15) Calcarea carbonica
16) Calcarea fluorica
17) Calcerea phosphoric
18) Calcarea sulphurica
19) Calendula officinalis
20) Chamomilla
21) Cina
22) Cinchona officinalis
23) Colchicum autumnale
24) Colocynthis
25) Drosera
26) Dulcamara
27) Euphrasia
28) Ferrum phosphoricum
29) Gelsemium
30) Hepar sulph
31) Hypericum perforatum
32) Ipecacuanha
33) Kali muriaticum
34) Kali phosphoricum
35) Kali sulphuricum
36) Ledumpalustre
37) Lycopodium clavatum
38) Magnesium phosphoricum
39) Natrum phosphoricum
40) Natrum phosphoricum
41) Natrum sulphuricum
42) Nux vomica

43) Pulsatilla
44) Rhus toxicodendron
45) Ruta graveolens
46) Silicea
47) Spongia tosta
48) Sulphur
49) Symphytum officinale
50) Thuja occidentalis

B. Practical or Clinical ; This will cover

1) Case taking of acute and chronic patients
2) Case processing including totality of symptoms, selection of medicine, potency and repetition schedule.
   Each student shall maintain practical record or journal with record of five cases.

C. EXAMINATION: The syllabus covered in first B.H.M.S and Second B.H.M.S course are the following, namely:

Sl. No.	Particulars	Marks
1.	**Theory**	
	1.1. Number of Papers – 01	
	1.2. Marks :100	
	1.3.Distribution of marks:	
	1.3.1. Topics of I BHMS	50
	1.3.2. Topics of II BHMS	50
	TOTAL	**100**
2.	**Practical including Viva voce or oral**	
	2.1.Marks : 100	
	2.2.Distribution of marks	
	2.2.1. Case taking and Case processing of one long case	30
	2.2.2. Case taking of one short case	10
	2.2.3. Maintenance of Practical record or journal	10
	2.2.4. Viva voce (oral)	50
	TOTAL	**100**

III – B.H.M.S.

Instructions:

I.

a) Homoeopathic Materia Medica is differently constructed as compared to other Materia Medica Medicas.

b) Homoeopathy considers that study of the action of drugs on individual parts or systems of the body or on animal or their isolated organs is only a partial study of life processes under such action and that it does not lead us to a full appreciation of the action of the medicinal substance, the drug substance as a whole is lost sight of.

II. Essential and complete knowledge of the drug action as a whole can be ascertained only by qualitative drug proving on healthy persons and this alone can make it possible to elicit all the symptoms of a drug with reference to the psychosomatic whole to whom the knowledge of drug action is to be applied.

III.

a. The Homoeopathic Materia Medica consists of a schematic arrangement of symptoms produced by each drug, incorporating no theories for explanations about their interpretation or inter-relationship.
b. Each drug should be studied synthetically, analytically and comparatively and this alone would enable a Homeopathic student to study each drug individually and as a whole and help him to be a good prescriber.

IV.

a. The most commonly indicated drugs for day to day ailments should be taken up first so that in the clinical classes or out door duties the students become familiar with their applications and they should be thoroughly dealt with explaining all comparisons and relationship.
b. Students should be conversant with their sphere of action and family relationships and the rarely used drugs should be taught in outline, emphasizing only their most salient features and symptoms.

V. Tutorials must be introduced so that students in small numbers can be in close touch with teachers and can be helped to study and understand Materia Medica in relation to its application in the treatment of the sick.

VI.

a. While teaching therapeutics an attempt should be made to recall the Material Medica so that indications for drugs in a clinical condition can directly flow out from the proving of the drugs concerned.
b. The student should be encouraged to apply the resources of the vast Materia Medica in any sickness and not limit himself to memorise a few drugs for a particular disease and this Hahnemannian approach will not only help him in understanding the proper perspective of symptoms as applied and their curative value in sickness but will even lighten his burden as far as formal examinations are concerned.
c. Application of Materia Medica should be demonstrated from case-records in the outdoor and the indoor.
d. Lectures on comparative Materia Medica and therapeutics as well as tutorials should be integrated with lectures on clinical medicine.

a. For the teaching of drugs, the department should keep herbarium sheets and other specimens for demonstrations to the students and audio-visual material shall be used

for teaching and training purposes. There is a large number of Homoeopathic medicines used today and much more medicines being experimented and present and more will be added in future and some very commonly used Homoeopathic Medicines are included in this curriculum for detail study.

b. It is essential that at the end of this course each student should gain basic and sufficient knowledge of – How to study Homoeopathic Materia Medica and to achieve this objective basic and general topic of Materia Medica should be taught in details during this curriculum, general topics should be taught in all the classes.
c. The medicines are to be taught under the following headings, namely:
    1. Common name, family, habitat, parts used, preparation, constituents (of source material).
    2. Proving data.
    3. Sphere of action.
    4. Symptomatology of the medicine emphasizing the characteristic symptoms (mental, physical generals and particulars including sensations, modalities and concomitants and constitution).
    5. Comparative study of medicines.
    6. Therapeutic applications (applied Materia Medica).

In addition to the syllabus of First and Second B.H.M.S including the use of medicines for Second BHMS (Appendix-I) the following additional topics and medicines are included in the syllabus of Homoeopathic Materia Medica for the Third B.H.M.S. examination.

A. General Topics of Homoeopathic Materia Medica-
   In addition to the syllabus of First and Second B.H.M.S including the use of medicines for Second BHMS (Appendix-I) the following additional topics and medicines are included in the syllabus of Homoeopathic Materia Medica for the Third B.H.M.S. examination.
   a. Concept of nosodes- definition of nosodes, types of nosodes, general indications of dosodes.
   b. Concepts of constitution, temperaments, diathesis- definitions, various concepts of constitution with their peculiar characteristics, importance of constitution, temperaments and diathesis and their utility in treatment of patients.
B. Concepts of mother tincture.
C. Homoeopathic Medicines to be taught in Third BHMS as in Appendix-II

1.	Acetic acid
2.	Actea spicata
3.	Agaricus muscarius
4.	Agnus castus
5.	Alumina
6.	Ambra grisea
7.	Ammonium carbonicum
8.	Ammonium muriaticum

9.	Anacardium orientable
10.	Apocynum cannabinum
11.	Arsenicum Iodatum
12.	Asafoetida
13.	Aurum metallicum
14.	Baryta carbonica
15.	Belladonna
16.	Benzoic acid
17.	Berberis vulgaris
18.	Bismuth
19.	Borax
20.	Bovista Iycoperdon
21.	Bromium
22.	Bufo rana
23.	Cactus grandiflorus
24.	Caladium seguinum
25.	Calcarea arsenicosa
26.	Camphora
27.	Cannabis Indica
28.	Cannabis sativa
29.	Cantharis vesicatoria
30.	Carbo vegetabilis
31.	Chelidonium majus
32.	Conium maculatum
33.	Crotalus horridus
34.	Croton tiglium
35.	Cyclamen europaeum
36.	Digitalis purourea
37.	Dioscorea villosa
38.	Equisetum hyemale
39.	Ferrum metallicum
40.	Graphites
41.	Helleborus niger
42.	Hyoscyamus niger
43.	Ignatia amara
44.	Kali bichromicum
45.	Kali bromatum
46.	Kali carbonicum
47.	Kreosotum
48.	Lachesis muta
49.	Moschus
50.	Murex purpurea
51.	Muriatic acid
52.	Naja tripudians
53.	Natrum carbonicum
54.	Nitric acid
55.	Nux moschata
56.	Opium

57.	Oxalic acid
58.	Petroleum
59.	Phosphoric acid
60.	Phosphorus
61.	Phytolacca decandra
62.	Picric acid
63.	Platinum metallicum
64.	Podophyllum
65.	Secale cornutum
66.	Selenium
67.	Sepia
68.	Staphysagria
69.	Stramonium
70.	Sulphuric acid
71.	Syphilinum
72.	Tabacum
73.	Taraxacum officinale
74.	Tarentuala cubensis
75.	Terebinthina
76.	Theridion
77.	Thlaspi bursa pastoris
78.	Veratrum album

S. No.	**Group Studies**
1	Acid Group
2	Carbon Group
3	Kali Group
4	Ophidia Group
5	Mercurius Group
6	Spider Group

D. Practical or Clinical:
   1. This will cover:
      a. Case taking of acute and chronic patients.
      b. Case processing including selection of medicine, potency and repetition schedule.
   2. Each student shall maintain a journal having record of ten case takings.

E. Examination:

Sl. No.	Particulars	Marks
1.	**Theory**	
	1.1.Number of Papers-01	
	1.2.Marks :100	
	1.3.Distribution of marks	
	1.3.1. Topics of Second BHMS	50
	1.3.2. Topics of Third BHMS	50
2.	**Practical including viva voce or oral**	
	2.1.Marks: 100	
	2.2.Distribution of marks:	
	2.2.1. Case taking and case processing of one long case	30
	2.2.2. Case taking of one short case	10
	2.2.3. Maintenance of practical record or journal	10
	2.2.4. Viva voce or oral	50
	Total	**100**

IV - B.H.M.S.

In addition to the syllabus of First, Second and Third BHMS including the medicines taught as per the Appendices I and II, the following additional topics and medicines are included in the syllabus for the Syllabus for the Fourth BHMS examination.

A. General topics of Homoeopathic Materia Medica- Sarcodes- definition and general indications.

B. Medicines indicated in Appendix-III shall be taught in relation to the medicines of Appendices-I and II for comparison wherever required.

APPENDIX-III

1.	Abiescanadensis	60.	Coffeacruda
2.	Abiesnigra	61.	Glonoine
3.	Carboanimalis	62.	Melilotus
4.	Carbolic acid	63.	Millefolium
5.	Cundurango	64.	Jonosiaasoca
6.	Fluoricumacidum	65.	Justiciaadhatoda
7.	Hydrastics Canadensis	66.	Ocimum sanctum
8.	Raphanussativus	67.	Syzigiumjambolanum
9.	Magnesia muriatica	68.	Ratanhiaperuviana
10.	Anthracinum	69.	Collinsonia Canadensis
11.	Bacillinum	70.	Antimoniumarsenicosum
12.	Lac caninum	71.	Stictapulmonaria

13.	Lac defloratum	72.	Asteriasrubens
14.	Lyssin	73.	Iodium
15.	Medorrhinum	74.	Thyroidinum
16.	Psorinum	75.	Argentum metallicum
17.	Pyrogrnium	76.	Cuprum metallicum
18.	Vaccininum	77.	Plumbummetallicum
19.	Variolinum	78.	Zincummetallicum
20.	Variolinum	79.	Adonis vernalis
21.	Hydrocotyleasiatica	80.	Kalmia latifolia
22.	Mezareum	81.	Physostigmavenenosum
23.	Radium bromatum	82.	Mercuriuscorrosivus
24.	Urticaurens	83.	Mercuriuscyanatus
25.	Vinca minor	84.	Mercuriusdulcis
26.	Abrotanum	85.	Mercuriussolubilis
27.	Rhempalmatum	86.	Mercuriussulphuricus
28.	Sanicula aqua	87.	Causticum
29.	Acalyphaindica	88.	Bacillus No.7
30.	Coralliumrubrum	89.	Dysentery co
31.	Lobelia inflata	90.	Gaertner
32.	Mephitis puorius	91.	Morgan pure
33.	Rumexcrispus	92.	Morgan gaertner
34.	Sabadilla officinalis	93.	Proteus bacillus
35.	Sambucusnigra	94.	Sycotic bacillus
36.	Squilla maritime	Additional Medicnes	
37.	Barytamuriatica	95.	Aesculushippocastanum
38.	Crataegusoxyacantha	96.	Adrenalinum
39.	Lithium carbonium	97.	Artemesia vulgaris
40.	Rauwolfia serpentine	98.	Avenasativa
41.	Caulophyllum	99.	Blattaorientalis
42.	Cocculusindicus	100.	Carduusmarianus
43.	Crocus sativus	101.	Ceanothus
44.	Heloniasdioica	102.	Chininumarsenicosum
45.	Lilliumtigrinum	103.	Cholesterinum
46.	Sabina	104.	Coca erythroxylon
47.	Trillium pendulum	105.	Diphtherinum
48.	Viburnum opulus	106.	Erigeron Canadensis
49.	Cicutavirosa	107.	Malandrinum
50.	Ranunculusbulbosus	108.	Menyanthes
51.	Rhododendron chrysanthum	109.	Onosmodium
52.	Clematis erecta	110.	Passiflora incarnate
53.	Sabalserrulata	111.	Ustilagomaydis
54.	Sarsaparilla officinalis	112.	Stannummetallicum
55.	Coffeacruda	113.	Valeriana officinalis
56.	Glonoine	114.	X-Ray
57.	Melilotus		
58.	Millefolium		
59.	Sarsaparilla officinalis		

Sl. No	Group Studies
2.	Calcarrea Group
3.	Magnesia Group
4.	Natrum Group
5.	Compositae Family
6.	Ranunculacae family
7.	Solonacae family

C. Practical or Clinical: Each student shall maintain a journal having record of ten acute and ten chronic case takings.

D. Examination:

Sl. No.	Particulars	Marks
1.	**Theory**	
	1.1. Number of Papers -02	
	1.2. Marks : 200	
	1.1.1. Distribution of marks:	
	1.1.2. Paper- I : Topics of First, Second and Third B.H.M.S.	100
	1.1.3. Paper- II : Topics of IV B.H.M.S.	100
	TOTAL	**200**
2.	**Practical including viva voce or oral**	
	2.1. Marks: 200	
	2.2. Distribution of marks	
	2.2.1. Case taking and Case Processing of one long case	60
	2.2.2. Case taking of one short case	20
	2.2.3. Maintenance of Practical record or Journal	20
	2.2.4. Viva Voce (Oral)	100
	TOTAL	**200**

II – B.H.M.S.

PATHOLOGY

Instructions:

I.

a. Pathology and Microbiology shall be taught in relation to the concept of Miasmas as evolved by Samuel Hahnemann and further developed by JT Kent, H.A. Robert, J.H. Allen and other stalwarts, with due reference to Koch's postulate, correction with immunity, susceptibility and thereby emphasizing Homoeopathic concept of evolution of disease and cure.
b. Focus will be given on the following points, namely:
   1. Pathology in relation with Homoeopathic Materia Medica.
   2. Correlation of Miasmas and Pathology.
   3. Characteristic expressions of each Miasm.
   4. Classification of symptoms and diseases according to Pathology.
   5. Pathological findings of diseases, their interpretation, correction and usage in the management of patients under Homoeopathic treatment.
c. To summarize, all the topics in the general and systemic Pathology and Microbiology should be correlated, at each juncture, with Homoeopathic principles so that the importance of Pathology in Homoeopathic system could be understood by the students.

A. THEORY

a. General Pathology
   1. Cell Injury and cellular adaption
   2. Inflammation and repair (Healing)
   3. Immunity
   4. Degeneration
   5. Thrombosis and embolism
   6. Oedema
   7. Disorders of metabolism
   8. Hyperplasia and Hypertrophy
   9. Anaplasia
   10. Metaplasia
   11. Ischaemia
   12. Haemorrhage
   13. Shock
   14. Atrophy
   15. Regeneration
   16. Hyperaemia
   17. Infarction
   18. Pyrexia
   19. Necrosis

20. Gangrene
21. Infarction
22. Amyloidosis
23. Hyperlipidaemia and Lipidosis
24. Disorders of pigmentation
25. Neoplastic (Definition, variation in cell growth, nomenclature and taxonomy, characteristics of neoplastic cells, aetiology and pathogenesis, grading and staging, diagnostic approaches, interrelationship of tumour and host, course and management).
26. Calcification.
27. Effects of radiation.
28. Hospital function.

b. Systemic Pathology: In each system, the important and common diseases should be taught, keeping in view their evolution, audio-pathogenesis, mode of presentation, progress and prognosis, namely:
   1. Mal-nutrition and deficiency diseases.
   2. Diseases of Cardiovascular system.
   3. Diseases of blood vessels and lymphatic.
   4. Diseases of kidney and lower urinary tract.
   5. Diseases of male reproductive system and prostate.
   6. Diseases of the female genitalia and breast.
   7. Diseases of eye, ENT and neck.
   8. Diseases of the Respiratory system.
   9. Diseases of the oral cavity and salivary glands.
   10. Diseases of the G.I system.
   11. Diseases of liver, gall bladder and biliary ducts.
   12. Diseases of the pancreas (including diabetes mellitus).
   13. Diseases of the Haemopoetic system, bone marrow and blood.
   14. Diseases of glands-thymus, pituitary, thyroid and parathyroid, adrenals, parotid.
   15. Diseases of the skin and soft tissue.
   16. Diseases of the musculoskeletal system.
   17. Diseases of the nervous system.
   18. Leprosy.

c. Microbiology:
   1. General Topics:
      a) Introduction
      b) History and scope of medical microbiology
      c) Normal bacterial flora
      d) Pathogenicity of microorganisms
      e) Diagnostic microbiology

2. Immunology
    1. Development of immune system
    2. The innate immune system
    3. Non-specific defence of the host
    4. Acquired immunity
    5. Cells of immune system, T cells and Cell mediated immunity, B cells and Humoral immunity.
    6. The compliment system
    7. Antigen, Antibody, Antigen – Antibody reactions (Anaphylactic and Atopic), Drug Allergies
    8. Hypersensitivity
    9. Immuno- deficiency
    10. Auto-deficiency
    11. Transplantation
    12. Blood group antigens
    13. Clinical aspect of immuno- pathology
3. Bacteriology:
    1. Bacterial structure, growth and metabolism.
    2. Bacterial genetics and bacteriophage
    3. Identification and cultivation of bacteria
    4. Gram positive aerobic and facultative anaerobic cocci, eg. Streptococci, Pneumococci.
    5. Gram positive anaemic cocci, e.g. Peptostreptococci
    6. Gram negative aerobic cocci, e.g. Neisseria, Moraxella, kingella
    7. Gram positive aerobic bacilli, e.g. corynebacterium, aacillus anthrax, cereus subtitis, mycobacteriac tuberculosis, M. leprae, actinomycetes, nocardia, organism of enterrobacteriac group
    8. Gram positive anaerobic bacilli, e.g. Genus clostridium, lactobacillus.
    9. Gram negative anaerobic bacilli, e.g. Bacteroides, frailus, fusobacterium.
    10. Others like- choletae vibrio, spirochetes, leptospirae, mycoplasma, chlamydia, rickettsia, Yersinia and pasturella.
4. Fungi and Pararsties:
    a. Fungi
        1. True pathogens (cutaneous, sub-cutaneous and systemic infective agents)
        2. Opportunistic pathogens
    b. Protozoa
        1. Intestinal 9Entamoeba histolytic, Giardia lamblia, Cryptosporidium parvum)
        2. Urogential (Trichomonas vaginalis)
        3. Blood and Tissues (Plasmodium westermani, Schistosoma mansoni, Schistosoma haematobium.
    c. Helminths
        1. Cestodes (tapeworms) – Echinococcus granulosus, Taenia solium, Taenia saginata

2. Trematodes (Flukes) :Paragonimus westermani, Schistosoma mansoni, Schistosoma haematobium.
3. Nematodes – Ancylostomma duodenale, Ascaris lumbricoides, Enterobius vermicularis, Strongyloides, Strercoralis, Trichuris trichiura, Brugiamalayi, Dracunculus medinensis, Loa loa, Onchoceraca volvulus, Wuchereria bancroftii).

d. Virology:
   1. Introduction
   2. Nature and Classification of replication of viruses
   3. Morphology and replication of viruses
   4. DNA Viruses:
      a. Parvo virus
      b. Herpes virus, varicella virus, CMV, EBV.
      c. Hepadna virus (hepatitis virus)
      d. Papova virus
      e. Adeno virus
      f. Pox virus – variola virus, vaccinia virus, molluscum contagiosum etc.
   5. RNA Viruses:
      a. Orthomyxo virus:
         - ❖ Entero virus
         - ❖ Rhino virus
         - ❖ Hepato virus
      b. Paramyxo virus – rubeola virus, Influenza virus etc.
      c. Phabdo virus
      d. Rubella virus (german measles)
      e. Corona Virus
      f. Retro Virus
      g. Yellow fever virus
      h. Dengue, vhikungunya virus
      i. Miscellaneous virus.
         - ❖ Arena Virus
         - ❖ Corona Virus
         - ❖ Rota Virus
         - ❖ Bacteriiophages

e. Clinical Microbiology:
   1. Clinically important microorganisms
   2. Immuno prophylaxis,
   3. Antibiotic Sensitivity Test (ABST)

f. Diagnostic procedures in Microbiology:
   1. Examination of blood and stool
   2. Immunological examinations
   3. Culture methods
   4. Animal inoculation

g. Infection and Disease:
   1. Pathogenicity, mechanism and control
   2. Disinfection and sterilization
   3. Antimicrobial Pathogenicity

h. Histopathology:
   1. Teaching of histopathological features with the help of slides of common Pathological conditions from each system.
   2. Teaching of gross Pathological specimens for each system.
   3. Histopathological techniques, e.g. Fixation, embedding, sectioning and staining by common dyes stains.
   4. Frozen sections and its importance.
   5. Electron microscopy, phase contrast microscopy.

B. Practical or Clinical:

a. Clinical and Chemical Pathology: Estimation of haemoglobin (by acidometer) count of Red Blood Cells and White Blood Cells, bleeding time, clotting time, blood grouping, staining of thin and thick films, differential counts, Blood examination for parasites, Erythrocyte sedimentation rate.
b. Urine examination, Physical, Chemical microscopical, quantity of albumin and sugar.
c. Examination of Faeces: Physical, Chemical microscopical for ova and protozoa.
d. Methods of sterilisation, preparation of a media, use of microscope, gram and acid fast stains. Motility preparation, gram positive and negative cocci and bacilli. Special stains for corynebacterium gram and acid fast stains of pus and sputum.
e. Preparation of common culture Medias. E.g. nutrient agar, blood agar, Robertson's Cooked
f. Meal media (RCM) and Mac conkeys media.
g. Widely test demonstration.
h. Exposure to latest equipment, viz. auto-analyzer, cell counter, glucometer.
i. Histopathology
   - ❖ Demonstration of common slides from each system.
   - ❖ Demonstration of gross pathological specimens.
   - ❖ Practical or Clinical demonstration of histopathological techniques, i.e. fixation, embedding.
   - ❖ Sectioning, staining by common dyes and stain, frozen section and its importance.
   - ❖ Electron microscopy, phase contrast microscopy.

C. EXAMINATION:

Sl. No.	Particulars	Marks
1.	**Theory**	
	1.1.Number of Papers : 02	

	1.2.Marks : Paper I – 100, Paper II – 100	
	1.3.Contents:	
	1.3.1. Paper I Section A : General Pathology	50
	Paper II Section B – Systemic Pathology	50
	Total	**100**
	1.3.2. Paper II Section A	
	Bacteriology	25
	Fungi and Parasites	25
	Section B-	
	Virology	20
	Clinical Microbiology and Diagnostic procedure	10
	Microbiological control and mechanism of	10
	Pathogenicity	
	General Topics Immuno-Pathology	10
	Total	**100**
2.	**Practical including Viva Voce or Oral**	
	Marks:100	
	Distribution of Marks	
	1. Practicals	15
	2. Spotting	20 (4 Spotting)
	3. Histopathological Slides	10 (2 Slides)
	4. Journal or Practical Record	05
	5. Viva voce (oral)	50
	(Including 5 marks for interpretation of routine Pathological reports	
	TOTAL	**100**

II – B.H.M.S.

FORENSIC MEDICINE AND TOXICOLOGY

Introduction:

I.

a. Medico-legal examination is the statutory duty of every registered medical practitioner, whether he is in private practice or engaged in Government sector and in the present scenario of growing consumerism in medical practice, the teaching of Forensic Medicine and Toxicology to the students is highly essential.

b. This learning shall enable the student to be well informed about medio-legal responsibility in medical practice and he shall also be capable to make observations and infer conclusion by logical deductions to set enquire on the right track in criminal matters and connected medico-legal problems.

c. The students shall also acquire knowledge of laws in relation to medical practice, medical negligence and codes of medical ethics and they shall also be capable of identification, diagnosis and treatment of the common poisonings in their acute and chronic state and also dealing with their medico-legal aspects.

d. For such purposes students shall be taken to visit district courts and hospitals to observe court proceedings and post-mortem as per Annexure "B"

Forensic Medicine

A. Theory

1. Introduction
   a. Definition of forensic medicine.
   b. History of Forensic Medicine in India.
   c. Medical ethics and etiquette.
   d. Duties of registered medical practitioner in medio-legal cases.
2. Legal Procedure
   a. Inquests, courts in India, legal procedure.
   b. Medical evidence in courts, dying declaration, dying deposition, including medical Certificates and medico-legal reports.
3. Personal Identification
   a. Determination of age and sex in living and dead, race, religion.
   b. Dactylography, DNA finger printing, foot print.
   c. Medico-legal importance of bones, scars and teeth, tattoo marks.
   d. Handwriting, anthropometry.
   e. Examination of Biological stains and hair.
4. Death and its medico-legal importance.
   a. Death and its types, their medico-legal importance.
   b. Signs of death
   c. Immediate
   d. Early
   e. Late and their medico-legal importance
   f. Asphyxial death (mechanical asphyxia and drowning)
   g. Details from starvation, cold and heat etc.
5. Injury and its medico-legal importance.
   Mechanical, thermal, firearm, regional, transportation and traffic injuries, injuries from radiation, electrocution and lightening.

6. Forensic psychiatry
   a. Definition, delusion, delirium, illusion, hallucinations, impulse and mania, classification of Insanity.
   b. Development of insanity, diagnosis admission to mental asylum.
7. Post-morterm examination (autopsy)
   a. Purpose, procedure, legal bindings, difference between pathological and medico-legal autopsies.
   b. External examination, internal examination of adult, foetus and skeletal remains.
8. Impotence and sterility
   Impotence, Sterility, Sterilisation, Artificial Insemination, Test Tube Baby, Surrogate mother.
9. Virginity, defloration, pregnancy and delivery.
10. Abortion and infanticide
    a. Abortion: Different methods, complications, accidents following criminal abortion, MTP.
    b. Infant death, legal definition, battered baby syndrome, cot death, legitimacy.
11. Sexual Offences
    a. Rape, incest, sodomy, sadism, masochism, tribadism, bestiality, buccal coitus and other sexual perversions.

II. Toxicology

1. General Toxicology
   a. Forensic Toxicology and Poisons
   b. Diagnosis of poisoning in living and dead
   c. General principles of management of poisoning
   d. Medico-legal aspects of poisons
   e. Antidotes and types
2. Clinical Toxicology
   a. Types of Poisons:
      1. Corrosive poisons (Mineral acids, Caustic alkalis, Organic acids, Vegetable acids)
      2. Irritant poisons (Organic poisons- Vegetable and animal, Inorganic poisons- metallic and non-metallic, Mechanical ppoisons0
      3. Asphyxiant poisons (Carbon monoxide, Carbon dioxide, Hydrogen sulphide and some war gases)
      4. Neurotic poisons (Opium, Nux vomica, Alcohol, Fuels like kerosene and petroleum products, Cannabis indica, Dhatura, Anaethetics Sedatives and Hypnotics, Agrochemical compounds, Belladonna, Hyosyamus, Curare, Conium)
      5. Cardiac poisons (Digitalis purpurea, Oleander, Aconite, Nicotine)
      6. Miscellaneous poisons (Analgestics and Antipyretics, Anti histaminics)
      7. Tranquillisers, antidepressants, Stimulants, Hallucinogens, Street drugs etc.)

III. Legislations relating to medical profession

1. The Homoeopathy Central Council Act, 1973 (59 of 1973).
2. The Consumer Protection Act, 1986 (68 of 1923).
3. The Workmen's compensation Act, 1923 (8 of 1923)
4. The Employees State Insurance Act, 1923 (34 of 1948)
5. The Medical Termination of Pregnancy Act, 19711 (34 of 1971)
6. The Mental Health Act, 1987 (14 of 1987).
7. The Indian Evidence Act, 1872 (1of 1872).
8. The Prohibition of Child Marriage Act, 2006 (6 of 2007).
9. The Personal Injuries Act, 1963 (37 of 1963)
10. The Drugs and Cosmetics Act, 1940 (23 of 1940) and the rules made therein.
11. The Drugs and Magic Remedies (Objectionable Advertisements) Act, 1954 (21 of 1954) (1) TheTransplantation of Human Organs Act, 1994 942 of 1994).
12. The Pre-natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994 (57 of 1994).
13. The Homoeopathic Practitioners (Professional Conduct, Etiquette and Code of Ethics) Regulations, 1982.
14. The Drugs Control Act, 1950 (26 of 1950).
15. The Medicine and Toiletry Preparations (Excise Duties) Act, 1955 (16 of 1955).
16. The Indian Penal Code (45 of 1860) and the Criminal Procedure Code (2 of 1974) (relevant provisions).
17. The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 2010 (23 of 2010).

B. Practical:

1. Demonstration:
   a. Weapons.
   b. Organon and inorganic poisons.
   c. Poisonous plants.
   d. Charts, diagrams, photographs, models, x-ray films of medico-legal importance.
   e. Record of incidences reported in newspapers or magazines and their explanation of medico-legal importance.
   f. Attending demonstration of ten medico-legal autopsies.
2. Certificate Writing:

   Various certificates like sickness certificate, physical fitness certificate, birth certificate, death certificate, injury certificate, rape certificate, chemical analyser (Regional Forensic Laboratory), certificate for alcohol consumption, writing post-mortem examination report.

C. Examination:

Sl. No.	Particulars	Marks
1.	Theory	
	1.1.Number of papers- 01	
	1.2.Marks:100	
2.	Practical including viva voce or oral:	
	2.1.Marks: 100	
	2.2.Distribution of marks	
	2.2.1. Medico-legal aspect of 4 specimens	40
	2.2.2. Journal or practical records	10
	2.2.3. Viva voce (oral)	50
	TOTAL	**100**

II & III – B.H.M.S.

SURGERY

Instructions:

1)
   a. Homoeopathy as a science needs clear application on part of the physician to decide about the best course of action(s) required to restore the sick to health.
   b. Knowledge about surgical disorders is required to be grasped so that the Homoeopathic Physician is able to:
      - Diagnose common surgical conditions.
      - Institute Homoeopathic medical treatment wherever possible.
      - Organise Pre and Post-operative Homoeopathic medicinal care besides surgical intervention with the consent of the surgeon.

2) For the above conceptual clarity and to achieve the aforesaid objectives, an effective coordination between the treating surgeons and Homoeopathic Physicians is required keeping in view the holistic care of the patients and it will also facilitate the Physician in individualising the patient, necessary for Homoeopathic treatment and management.'

3) The study shall start in Second B.H.M.S and complete in Third B.H.M.S and examination shall be conducted in Third B.H.M.S.

4)
   a. Following is a plan to achieve the above and it takes into account about the Second and Third Year B.H.M.S syllabus and respective stage of development.
   b. Throughout the whole period of study, the attention of the students should be directed by the teachers of this subject to the importance of its preventive aspects.

5) There shall be periodical inter-departmental seminars, to improve the academic knowledge, skill and efficiency of the students and the study shall include training

on,-

1. Principles of Surgery.
2. Fundamentals of examination of a patient with surgical problems.
3. Use of common instruments for examination of a patient.
4. Physiotherapy measures.
5. Applied study of radio-diagnostics.
6. Knowledge of causation, manifestations, management and prognosis of surgical disorders.
7. Miasmatic background of surgical disorders, wherever applicable.
8. Bedside Clinical procedures.
9. Correlation of applied aspects, with factors which can modify the course of illness, including application of medicinal and non-medicinal measures.
10. Role of Homoeopathic treatment in pseudo-surgical and true surgical diseases. Second B.H.M.S.

II- B.H.M.S.

A. Theory

General Surgery:

a. Introduction to surgery and basic surgical principles.
b. Fluid, Electrolytes and acid-base balance.
c. Haemorrhage, haemostasis and blood transfusion.
d. Boil, abscess, carbuncle, cellulitis and erysipelas.
e. Acute and chronic infections, tumors, cysts, ulcers, sinus and fistula.
f. Injuries of various types, preliminary management of head injury.
g. Wounds, tissue repair, scars and wound infections.
h. Special infections (Tuberculosis, Syphilis, Acquired Immuno Deficiency Syndrome, Actinomycosis, Leprosy).
i. Burn
j. Shock
k. Nutrition
l. Pre-operative and Post-operative care.
m. General management, surgical management and Homoeopathic therapeutics of the above topics will be covered.

Examination: There will be no examination in the subject in Second B.H.M.S.

III- B.H.M.S

A. Theory

a. Systemic Surgery:
   1. Diseases of blood vessels, lymphatic's and peripheral nerves.
   2. Diseases of glands
   3. Diseases of extremities.

4. Diseases of thorax and abdomen
5. Diseases of alimentary tract
6. Diseases of liver, spleen, gall bladder and bile duct.
7. Diseases of abdominal wall, umbilicus, hernias.
8. Diseases of heart and pericardium.
9. Diseases of urinogenital system.
10. Diseases of the bones, cranium, vertebral column, fractures and dislocations.
11. Diseases of the joints.
12. Diseases of the muscles, tendons and fascia.

B. Ear
   1. Applied Anatomy and applied Physiology of ear.
   2. Examination of ear.
   3. Diseases of external, middle and inner ear

C. Nose
   1. Applied Anatomy and Physiology of nose and paranasal sinuses.
   2. Examination of nose and paranasal sinuses
   3. Diseases of nose and paranasal sinuses

D. Throat
   1. Applied Anatomy and applied Physiology of pharynx, larynx, tracheobronchial tree, and oesophagus.
   2. Examination of pharynx, larynx, trachea bronchial tree, oesophagus
   3. Diseases of Throat (External and Internal).
   4. Diseases of oesophagus.

E. Ophthalmology
   1. Applied Anatomy, Physiology of eye.
   2. Examination of eye.
   3. Diseases of eyelids, eyelashes and lacrimal drainage system.
   4. Diseases of Eyes including injury related problems.

F. Dentistry
   1. Applied Anatomy, Physiology of eye.
   2. Examination of eye.
   3. Examination of Oral cavity.
   4. Diseases of gums
   5. Diseases of teeth
   6. Problems of dentition

General management, surgical management and Homoeopathic therapeutics of the above topics will be covered. Practical or Clinical: (To be taught in Second and Third B.H.M.S)

1. Every student shall prepare and submit twenty complete histories of surgical cases, ten each in the Second and Third B.H.M.S Classes respectively.
2. Demonstration of surgical instruments, X-rays, specimens etc.
3. Clinical examinations in Surgery.

4. Management of common surgical procedures and emergency procedures as stated below:
   a. Wounds
   b. Abscesses: incision and drainage
   c. Dressings and plasters
   d. Suturing of various types
   e. Pre-operative and Post-operative care.
   f. Management of shock
   g. Management of acute haemorrhage
   h. Management of acute injury cases.
   i. Preliminary management of a head injury case.

Examination:

It will be conducted in Third B.H.M.S (not in Second B.H.M.S)

Sl. No.	Particulars	Marks
1.	Theory	
	1.1.Number of Papers -02	
	1.2.Marks: Paper I-100, Paper II-100	
	1.3.Contents:	
	1.3.1. Paper I	
	Section 1: General Surgery	50
	Section 2: Homeopathic Therapeutics relating to General Surgery	50
	TOTAL	**100**
	1.3.2. **Paper- II**	
	Section – 1: Systemic Surgery	50
	a. ENT	20
	b. Ophthalmology	20
	c. Dentistry	10
	TOTAL	**100**
	Section-2: Systemic Surgery Homoeopathic Therapeutics	**50**
	a. ENT Homoeopathic Therapeutics	20
	b. Ophthalmology Homeopathic Therapeutics	20
	c. Dentistry Homeopathic Therapeutics	10
2.	**Practical including viva voce or oral**	
	2.1. **Marks :200**	
	2.2.Distribution of marks:	
	2.2.1. One long Case	40
	2.2.2. Identification of instruments, X-rays	30
	2.2.3. Practical records, case records or journal	30
	2.2.4. Viva voce (oral)	100
	TOTAL	**200**

II & III – B.H.M.S.

GYNAECOLOGY AND OBSTETRICS

Instructions:

1.

a. Homoeopathy adopt the same attitude towards this subject as it does towards Medicine and Surgery, but while dealing with Gynaecology and Obstetrical cases, a Homoeopathic Physician must be trained in special clinical methods of investigation for diagnosing local conditions and individualising cases, the surgical intervention either as a life saving measure or for removing mechanical obstacles, if necessary, as well as their management by using Homoeopathic Medicines and other auxiliary methods of treatment.

b. Pregnancy is the best time to eradicate genetic dyscrasias in women and this should be speciality stressed and students shall also be instructed in the care of new born.

c. The fact that the mother and child from a single biological unit and that this peculiar close physiological relationship persists for at least the first two years of the child's life should be particularly emphasised.

2. A course of instructions in the principles and practice of gynaecology and obstetrics and infant hypience and care including the applied Anatomy and Physiology of pregnancy and labour, will be given.
3. Examinations and investigations in Gynaecological and Obstetrical cases shall be stressed and scope of Homoeopathy in this subject shall be taught in details.
4. The study shall start in Second B.H.M.S and shall be completed in Third B.H.M.S and examinations will be held in Third B.H.M.S and following topics shall be taught, namely:

II – B.H.M.S.

A. Theory:

1. Gynaecology:

a) A review of the applied Anatomy of female reproductive systems- development and malformations.
b) A review of the applied Physiology of female reproductive systems- puberty, menstruation and menopause.
c) Gynaecological examination and diagnosis.
d) Development anomalies
e) Uterine displacements.
f) Sex and intersexuality.
g) General Management and therapeutics of the above listed topics in Gynaecology.

2. Obstetrics

a) Fundamentals of reproduction.
b) Development of the intrauterine pregnancy- placenta and foetus.
c) Diagnosis of pregnancy – investigation and examination.
d) Antenatal care.
e) Vomiting in Pregnancy

f) Preterm labour and post maturity.
g) Normal labour and puerperium.
h) Induction of labour.
i) Postnatal and puerperal care.
j) Care of the new born.
k) Management and therapeutics of the above listed topics in Obstetrics.

III – B.H.M.S.

1. Gynaecology

a. Infections and ulcerations of the female genital organs.
b. Injuries of the genital tract.
c. Disorders of menstruation.
d. Menorrhagia and dysfunctional uterine bleeding.
e. Disorders of female genital tract.
f. Diseases of breasts.
g. Sexually transmitted diseases.
h. Endometriosis and adenomyosis.
i. Infertility and sterility.
j. Non-malignant growths.
k. Malignancy.
l. Chemotherapy caused complications.
m. Management and therapeutics of the above listed topics in Gynaecology.

2. Obstetrics

1. High risk labour, mal-positions and mal-presentations, twins, prolapse of cord and limbs, abnormalities in the action of the uterus, abnormal conditions of soft part contracted pelvis. Obstructed labour, complications of 3rd stage of labour, injuries of birth canal, foetal anomalies.
2. Abnormal pregnancies- abortions, molar pregnancy, diseases of placenta and membranes, toxaemia of pregnancy, antepartum haemorrhages, multiple pregnancy, protracted gestation, ectopic pregnancy, intrauterine growth retardation, pregnancy in Rh negative woman, intrauterine fatal death, still birth.
3. Common disorders and systemic diseases associated with pregnancy.
4. Pre-natal Diagnostic Techniques 9Regulation and Prevention of Misuse) Act, 1994.
5. Common Obstetrical operations-medical termination of pregnancy, criminal abortion, caesarean section, episiotomy.
6. Emergency obstetric care.
7. Population dynamics and control conception.
8. Infant care- neonatal hygiene, breast feeding, artificial feeding, management of premature child, asphyxia, birth injuries, common disorders of new-born.
9. Reproductive and child health care.

a. Safe motherhood and child survival.
b. Risk approach- MCH Care.
c. Maternal mortality and morbidity.
d. Perinatal mortality and morbidity.
e. Diseases of foetus and new born.

10. Medico-legal aspects in Obstetrics.
11. Homoeopathic Management and Therapeutics of the above listed Clinical conditions in Obstetrics.

B. Practical or Clinical:

Practical or Clinical classes shall be taken on the following topics both in Second and Third B.H.M.S.

a. Gynaecological case taking.
b. Obstetrical case taking.
c. Gynaecological examination of the patient.
d. Obstetrical examination of the patient including antenatal, intranatal and post-natal care.
e. Bed side training.
f. Adequate grasp over Homoeopathic principles and management.
g. Identification of Instruments and models record of ten cases each in Gynaecology and Obstetrics.

C. Examination:

Sl. No.	Particulars	Marks
1.	Theory	
	1.1.Number of Papers-02	
	1.2.Marks: Paper I-100, Paper II-100	
	1.3.Contents	
	1.3.1. Paper-I: Gynaecology and Homoeopathic Therapeutics	
	1.3.2. Paper-II: Obstetrics, infant care and Homoeopathic Therapeutics	
2.	Practical including viva voce or oral:	
	2.2.1. Marks :200	30
	2.2.2. Practical records, case records, journal	30
	2.2.3. Identification of instruments, models and specimens	40
	2.2.4. Viva voce (Oral)	100
	TOTAL	200

III & IV – B.H.M.S.

PRACTICE OF MEDICINE

INSTRUCTIONS:

i. Homoeopathy has a distinct approach to the concept of diseases.
ii. It recognises as ailing individual by studying him as a whole rather than in terms of sick parts and emphasizes the study of the man, his state of illness.

A. The study of the above concept of individualisation is essential with the a following background so that the striking features which are characteristic to the individual become clear, in contrast to the common picture of the respective disease conditions, namely:
1. Correlation of the disease conditions with basics of Anatomy, Physiology and Biochemistry and Pathology.
2. Knowledge of causation, manifestations, diagnosis (including differential diagnosis), prognosis and management of diseases.
3. Application of knowledge of Organon of Medicine and Homoeopathic Philosophy in dealing with the diseases conditions.
4. Comprehension of applied part.
5. Sound Clinical training at bedside to be apply the knowledge and Clinical skill accurately.
6. Adequate knowledge to ensure that rational investigations are utilised.

B.
a. The emphasis shall be on study of man in respect of health, disposition, diathesis, disease, taking all predisposing and precipitating factors, i.e. fundamental cause, maintaining cause and exciting cause.
b. Hahnemann theory of chronic miasma provides us an evolutionary understanding of the chronic diseases: psora, sycosis, syphilis and acute manifestations of chronic diseases and evolution of the natural disease shall be comprehended in the light of theory of chronic miasms.

C.
a. The teaching shall include Homoeopathic therapeutics or management in respect of all topics and Clinical methods of examination of patient as a whole will be given due stress during the training.
b. A through study of the above areas will enable a Homoeopathic Physician to comprehend the practical aspects of medicine.
c. He shall be trained as a sound Clinician with adequate ability of differentiation, sharp observation and conceptual clarity about diseases by taking help of all latest diagnostic techniques, viz. X-ray, ultrasound, electrocardiogram and commonly performed laboratory investigations.
d. Rational assessment of prognosis and general management of different disease conditions are also to be focused.
e. Study of subject: The study of the subject will be done in Third B.H.M.S and Fourth B.H.M.S, but examination shall be conducted at the end of Fourth B.H.M.S

III – B.H.M.S.

1. Applied Anatomy and applied Physiology of the respective system as stated below.
2. Respiratory diseases.
3. Diseases of digestive system and peritoneum.
4. Diseases concerning liver, gall-bladder and pancreas.
5. Genetic Factors (co-relating diseases with the concept of CHRONIC MIASMS.
6. Immunological factors in diseases with the concept of susceptibility (including HIV, Hepatitis- B)
7. Disorders due to chemical and physical agents and to climatic and environmental factors.
8. Knowledge of clinical examination of respective systems.
9. Water and electrolyte balance- disorders of.

Note: There will be no examination in the subject in Third B.H.M.S.

II- B.H.M.S.

A. Theory:

1. Nutritional and metabolic diseases.
2. Diseases of Haemopoietic system.
3. Endocrinal diseases.
4. Infectious diseases.
5. Diseases of cardio vascular system.
6. Diseases of urogenital Tract.
7. Disease of CNS and peripheral nervous system.
8. Psychiatric disorders.
9. Diseases of loco motor system (connective tissue, bones and joints disorders).
10. Diseases of skin and sexually transmitted diseases.
11. Tropical diseases.
12. Paediatric disorders.
13. Geriatric disorders.
14. Applied Anatomy and Applied Physiology of different organs and systems relating to specific diseases.
15. Knowledge of clinical examination of respective systems.
    a. General management and Homoeopathic therapeutics for all the topics to be covered in Third B.H.M.S and Fourth B.H.M.S shall be taught simultaneously and the emphasis shall be on study of man in respect of health, disposition, diathesis, disease, taking all predisposing and precipitating factors, i.e. fundamental cause, maintaining cause and exciting cause.
    b. Study of therapeutics does not mean simply list of specifics for the clinical conditions but teaching of applied Materia Medica which shall be stressed upon.

Practical or Clinical:

a. Each candidate shall submit of twenty complete case records (ten in Third B.H.M.S and ten in Fourth B.H.M.S).

b. The examination procedure will include one long case and one short case to be prepared. During clinical training, each student has to be given adequate exposure to,:
   1) Comprehensive case taking following Hahnemann's instructions.
   2) Physical examinations (General, Systemic and Regional)
   3) Laboratory investigations required for diagnosis of disease conditions.
   4) Differential diagnosis and provisional diagnosis and interpretation of Investigation reports.
   5) Selection of similimum and general management.

B. Examination

Sl. No.	Particulars	Marks
1.	Theory	
	1.1. Number of Papers- 02	
	1.2.Marks : Paper I – 100, Paper II -100	
	1.3.Contents:	
	1.3.1. Paper I : Topics of Third BHMS with Homoeopathic Therapeutics	
	1.3.2. Paper II : Topics of Fourth BHMS with Homoeopathic Therapeutics	
2.	Practical including Viva Voce or Oral:	
	2.1.Marks :200	
	2.2.Distribution of marks:	
	2.2.1. One short case	20
	2.2.2. One short case	20
	2.2.3. Practical records, case records, journal	30
	2.2.4. Identification of specimens (X-ray, E.C.G., etc.)	30
	2.2.5. Viva Voce (oral)	100
	TOTAL	**200**

Note: The case reports of the students carried out during the course shall also be considered for the oral examination.

III & IV – B.H.M.S.

Instructions:

I.

a) Repertorisation is not the end but the means to arrive at the simillimum with the help of Materia Medica, based on sound knowledge of Homoeopathic Philosophy.
b) Homoeopathic Materia Medica is an encyclopaedia of symptoms. No mind can memorize all the symptoms or all the drugs with their gradations.
c) The repertory is an index and catalogue of the symptoms of the Materia Medica, neatly arranged in a practical or clinical form, with the relative gradation of drugs, which facilitates quick selection of indicated remedy and it may be difficult to practice Homoeopathy without the aid of repertories.

II.

a) Each Repertory has been compiled on distinct Philosophical base, which determines its structure.
b) In order to explore and derive full advantage of each repertory, it is important to grasp thoroughly its conceptual base and construction and this will help student to learn scope, limitations and adaptability of each repertory.

II - BHMS

A. Theory:

1. Repertory: Definition, Need, Scope and Limitations.
2. Classification of Repertories
3. Study of different Repertories (Kent, Boenninghausen, Boger-Boenninghausen)
   a) History
   b) Philosophical background
   c) Structure
   d) Concept of repertorisation
   e) Adaptability
   f) Scope
   g) Limitation(s)
4. Gradation of Remedies by different authors.
5. Methods and techniques of repertorisation : Steps of repertorisation.

6. Terms and language of repertories (Rubrics) cross references in other repertories and Materia Medica.
7. Conversion of symptoms into rubrics and repertorisation using different repertories.
8. Repertory- its relation with Organon of Medicine and Materia Medica.
9. Case taking and related topics:
    a. Case taking.
    b. Difficulties of case taking, particularly in a chronic case.
    c. Type of symptoms, their understanding and importance.
    d. Importance of Pathology in disease diagnosis and individualisation in relation to study of Repertory.
10. Case processing
    a. Analysis and evaluation of symptoms.
    b. Miasmatic assessment.
    c. Totality of symptoms or conceptual image of the patient.
    d. Repertorial totality.
    e. Selection of rubrics.
    f. Repertorial technique and results.
    g. Repertorial analysis.

B. Practical or Clinical
1. Record of five cases each of Surgery, Gynaecology and Obstetrics worked out by using Kent's Repertory.
2. Rubrics hunting from Kent's and Boenninghausen's repertories.

Note: There will be no examination in the subject in Third B.H.M.S.

IV- B.H.M.S.

A. Theory:
1. Comparative study of different repertories (like Kent's Repertory, Boenninghausen's Therapeutic Pocket Book and Boger-Boenninghausen's Charactetristic Repertories, A synoptic key to Materia Medica).
2. Card repertories and other mechanical aided repertories- History, Types and Use.
3. Concordance repertories (Gentry and Knerr).
4. Clinical Repertories (William Boericke etc.)
5. An introduction to modern thematic repertories- (Synthetic, Synthesis and Complete Repertory and Murphy's Repertory).
6. Regional repertories
7. Role of computers in repertorisation and different softwares.

B. Practical or Clinical:

Students shall maintain the following records, namely:
1. Five acute and five chronic cases (each of Medicine, Surgery and Obstetrics and Gynaecology) using Kent's Repertory.
2. Five cases (pertaining to medicine) using Boenninghausen's therapeutics pocket book.

3. Five cases (pertaining to medicine) using Boger-Boenninghausen's characteristics repertory.
4. Five cases to be cross checked on repertories using Homoeopathic software's.

III & IV – B.H.M.S.

COMMUNITY MEDICINE

Introduction:

I.

a. Physician's function is not limited merely prescribing Homoeopathic Medicines for curative purpose, but he has wider role to play in the community.
b. He has to be well conversant with the national health problems of rural as well as urban areas, so that he can be assigned responsibilities to play an effective role not only in the field of curative but also preventive and social medicine including family planning.

II. This subject is of utmost importance and throughout the period of study attention of the student should be directed towards the importance of preventive medicine and the measures for the promotion of positive health.

III.

a. During teaching, focus should be laid on Community Medicine concept, man and society, aim and scope of preventive and social medicine, social causes of disease and social problems of the sick, relation of economic factors and environment in health and diseases.
b. Instructions in this course shall be given by lectures, practicals, seminars, group discussions, demonstration and field studies.

III - B.H.M.S.

A. Theory

1. Man and Medicine
2. Concept of health and disease in conventional medicine and Homoeopathy
3. Nutrition and health
   a. Food and nutrition
   b. Food in relation to health and disease
   c. Balanced diet
   d. Nutritional deficiencies and Nutritional survey
   e. Food Processing
   f. Pasteurisation of milk
   g. Adulteration of food
   h. Food Poisoning

4. Environment and health
    a. Air, light and sunshine, radiation.
    b. Effect of climate.
    c. Comfort zone
    d. Personal hygiene
    e. Physical exercise
    f. Sanitation of fair and festivals
    g. Disinfection and sterilization
    h. Atmospheric pollution and purification of air
    i. Air borne diseases
5. Water
    a. Distribution of water, uses, impurities and purification
    b. Standards of drinking water
    c. Water borne diseases
    d. Excreta disposal
    e. Disposal of deceased
    f. Disposal of refuse
    g. Medical entomology- insecticides, disinfection, Insects in relation to disease, Insect control.
6. Occupational health
7. Preventive medicine in paediatrics and geriatrics

Note: There will be no examination in the subject in Third BHMS

IV- B.H.M.S.

Instructions:

1.
    a. Homoeopathy has a distinct approach to the concept of disease.
    b. It recognises an ailing individual by studying him a whole rather than in terms of sick parts and emphasizes the study of the man, his state of health, state of illness.
2. The study of the above concept of individualisation is essential with the a following background so that the striking features which are characteristic to the individual become clear, in contrast to the common picture of the respective disease conditions, namely:
    1. Correlation of the disease conditions with basics of Anatomy, Physiology and Biochemistry and Pathology.
    2. Knowledge of causation, manifestations, diagnosis (including differential diagnosis), prognosis and management of diseases.
    3. Application of knowledge of Organon of Medicine and Homoeopathic Philosophy in dealing with the disease conditions.
    4. Comprehension of applied part.
    5. Sound Clinical training at bedside to be applying the knowledge and clinical skill

accurately.

6. Adequate knowledge to ensure that rational investigations are utilised.

3.

a. The emphasis shall be on study of man in respect of health, disposition, diathesis, disease, taking all predisposing and precipitating factors, i.e. fundamental cause, maintaining cause and exciting cause.

b. Hahnemann's theory of chronic miasms provides us an evolutionary understanding of the chronic diseases: psora, sycosis, syphilis and acute manifestations of chronic diseases and evolution of the natural disease shall be comprehended in the light of theory of chronic miasms.

4.

a. The teaching shall include Homoeopathic therapeutics or management in respect of all topics and clinical methods of examination of patient as a whole will be given due stress during the training.

b. A thorough study of the above areas will enable a Homoeopathic Physician to comprehend the practical aspects of medicine.

c. He shall be trained as a sound clinician with adequate ability of differentiation, sharp observation and conceptual clarity about diseases by taking help of all latest diagnostic techniques, viz. X-ray, ultrasound, electro diagram and commonly performed laboratory investigations.

d. Rational assessment of prognosis and general management of different disease conditions are also to be focused.

5. Study of Subject: The study of the subject will be done in two years in Third B.H.M.S and Fourth B.H.M.S, but examination shall be conducted at the end of Fourth B.H.M.S. Third B.H.M.S Theory:

a) Applied Anatomy and applied Physiology of the respective system as stated below.
b) Respiratory diseases.
c) Diseases of digestive system and peritoneum.
d) Diseases concerning liver, gall-bladder and pancreas.
e) Genetic Factors (co-relating diseases with the concept of chronic miasms)
f) Immunological factors in diseases with concept of susceptibility (including HIV, Hepatitis-B)
g) Disorders due to Clinical and Physical agents and to climatic and environmental factors.
h) Knowledge of clinical examination of respective systems.
i) Water and electrolyte balance – disorders of.

III & IV – B.H.M.S.

COMMUNITY MEDICINE

I.

a) Physician's function is not limited merely prescribing Homoeopathic Medicines for curative purpose, but he has wider role to play in the Community.
b) He has to be well conversant with the National Health problems of rural as well as urban areas, so that he can be assigned responsibilities to play an effective role not only in the field of curative but also preventive and social medicine including family planning.

II. This subject is of utmost importance and throughout the period of study attention of the student should be directed towards the importance of preventive medicine and the measures for the promotion of positive health.

III.

a) During Teaching, focus should be laid on Community Medicine concept, man and society, aim and scope of preventive and social medicine, social causes of disease and social problems of the sick, relation of economic factors and environment in health and disease.
b) Instructions in this course shall be given by lectures, practicals, seminars, group discussions, demonstration and field studies.

III- B.H.M.S.

A. Theory:
   1. Man and Medicine
   2. Concept of health and disease in conventional medicine and Homoeopathy.
   3. Nutrition and Health
      a. Food and nutrition
      b. Food in relation to health and disease
      c. Balanced diet
      d. Nutritional deficiencies and Nutritional survey
      e. Food Processing
      f. Pasteurisation of milk
      g. Adulteration of food
      h. Food Poisoning
   4. Environment and health
      a. Air, light and sunshine, radiation
      b. Effect of climate
      c. Comfort zone
      d. Personal hygience
      e. Physical exercise
      f. Sanitation of fair and festivals
      g. Disinfection and sterilization
      h. Atmospheric pollution and purification of air

i. Air borne diseases

5. Water
   a. Distribution of water, uses, impurities and purification
   b. Standards of drinking water
   c. Water borne diseases.
   d. Excreta disposal
   e. Disposal of deceased
   f. Disposal of refuse
   g. Medical entomology: Insecticides, disinfection, Insects in relation to disease, Insect control.
6. Occupational health
7. Preventive medicine in paediatrics and geriatrics.

IV - B.H.M.S.

A. Theory:

1. Epidemiology
   a. Principles and Methods of epidemiology
   b. Epidemiology of Communicable disease: General principles of preventive and control of communicable disease.
   c. Communicable diseases: Their description, mode of spread and method of prevention.
   d. Protozoan and helminthic infections: Lifecycle of protozoa and helminthic, their prevention.
   e. Epidemiology of non-communicable diseases: General principles of prevention and control of non-communicable diseases.
   f. Screening of diseases.
2. Bio-statistics
   a. Need of Biostatistics in medicine
   b. Elementary statistical methods
   c. Sample size calculation
   d. Sampling methods
   e. Test of significance
   f. Presentation of data
   g. Vital statistics
3. Demography and Family Planning, Population control, Contraceptive practices, National Family Planning Programme.
4. Health education and health communication.
5. Health care of community.
6. International Health.
7. Mental Health.
8. Maternal and Child Health.

9. School Health Services.
10. National Health Programs of India including RadhtriyaBalChikstsaKaryakram.
11. Hospital waste management.
12. Disaster management.
13. Study of aphorisms of Organon of Medicine and other Homoeopathic Literatures, relevant to above topics including prophylaxis.

B. Practicals:

1. Food additives, Food fortification, food adulteration, food toxicants
2. Balanced diet
3. Survey of nutritional status of school children, pollution and water purification
4. Medical entomology
5. Family planning and contraception
6. Demography
7. Disinfection
8. Insecticides

Field Visits

1. Milk dairy
2. Primary Health Centre
3. Infectious Diseases Hospital
4. Industrial unit
5. Sewage treatment plant
6. Water purification plant

Note:

1. For field visits, Annexure B has to be kept in view.
2. Students are to maintain practical records or journals in support of above practical or field visits.
3. Reports of the above field visits are to be submitted by the students.
4. Each student has to maintain records of at least ten infectious diseases.

C. Examination: There will be examination of the subject only in Fourth B.H.M.S (and not in III BHMS). Bedsides theory examination there shall be a Practical OR Clinical examination including viva – voce as per following distribution of marks.

Sl. No.	Particulars	Marks
1.	**Theory**	
	1.1. Number of Papers : 01	
	1.2.Marks :100	
2.	**Practical including viva voce (oral)**	
	2.1.Marks :100	
	2.2. Distribution of marks	
	2.2.1. Spotting	30

	2.2.2. Journal or Practical Records	20 (including field visit records)
	2.2.3. Viva voce (oral)	50
	TOTAL	**100**

THE SCHEME OF EXAMINATION IN BHMS COURSE IN FORCE FROM 2015-2016 as per CCH, F-12-13/2006, CCH (Pt.V) 12990, Dt.10-08-2015

- Subject for Examination for the BHMS (Degree) Course shall be under.
- Full Marks for each subject and minimum marks required for pass as follows.
- As per Regulation 13(iv) Each Theory Paper shall be of three hours duration.

Exam Year	Name of the Subject	Written		Practical /Clinical Including Oral		Total	
		Full Marks	Pass Marks	Full Marks	Pass Marks	Full Marks	Pass Marks
1st Year	Homoeopathic Pharmacy(Sec 1 & 2)	100	50	100	50	200	100
	Anatomy Paper 1 (Sec 1 & 2)	100	100	200	100	400	200
	Anatomy Paper 2 (Sec 1& 2)	100					
	Physiology Paper 1 (Sec 1 & 2)	100	100	200	100	400	200
	Physiology Paper 2 (Sec 1 & 2)	100					
	TOTAL MARKS	**500**	**250**	**500**	**250**	**1000**	**500**
2nd Year	Pathology Paper 1 (Sec1 &2)	100	100	100	50	300	150
	Pathology Paper 2 (Sec1 &2)	100					
	Forensic Medicine and Toxicology (Sec1 & 2)	100	50	100	50	200	100
	Homoeopathic Materia Medicine (Sec 1 &2)	100	50	100	50	200	100
	Organon of Medicine (Sec 1 & 2)	100	50	100	50	200	100
	TOTAL MARKS	**500**	**250**	**400**	**200**	**900**	**450**
3rd Year	Surgery Paper 1 (Sec 1 &2)	100	100	200	100	400	200
	Surgery Paper 2 (Sec 1 &2)	100					
	Gynaecology and Obstetrics Paper 1	100	100	200	100	400	200
	Gynaecology and Obstetrics Paper 2	100					
	Homoeopathic Materia Medica Paper (Sec 1 & 2)	100	50	100	50	200	100
	Organon of Medicine (Sec 1 & 2)	100	50	100	50	200	100
	TOTAL MARKS	**600**	**300**	**600**	**300**	**1200**	**600**

4th Year	Practical of medicine Paper 1 (Sec 1 & 2)	100	100	200	100	400	200
	Practical of medicine Paper 2 (Sec 1 & 2)	100					
	Homoeopathic Materia Medica Paper 1 (Sec 1 & 2)	100	100	200	100	400	200
	Homoeopathic Materia Medica Paper 2 (Sec 1 & 2)	100					
	Organon of Medicine with Homoeopathic Philosophy Paper 1 (Sec 1 & 2)	100	100	100	50	300	150
	Organon of Medicine with Homoeopathic Philosophy Paper 2 (Sec 1 & 2)	100					
	Repertory (Sec 1 & 2)	100	50	100	50	200	100
	Community Medicine (Sec 1 & 2)	100	50	100	50	200	100
	TOTAL MARKS	**800**	**400**	**700**	**350**	**1500**	**750**

SCHEME OF EXAMINATIONS FIRST BHMS EXAMINATION

First BHMS Examination:

i. The Student shall be admitted to the First BHMS examination provided he has required attendance as per clause (iii) of regulation 13 to the satisfaction of the head of the college.

ii. The First BHMS Examination shall be held in the 12th Month of admission.

iii. The minimum number of hours for lecture, tutorial, demonstration or practical classes and seminars in the subjects shall be as under:

Sl. No.	**Subject**	**Theoretical Lecture(in hours)**	**Practical or Clinical or Tutorial or Seminars (in hours)**
1.	Organon of Medicine with Homoeopathic Philosophy	35 (including 10 for logic)	
2.	Anatomy	200 (including 10 hours each for histology and embryology)	275 (including 30 histology and embryology)
3.	Physiology	200 (including 50 hours for Bio-chemistry)	275 hours (including 50 hours for Bio-chemistry)
4.	Pharmacy	100	70
5.	Homoeopathic Materia Medica	35	-

iv. Full marks for each subject and the minimum number of marks required for passing the First BHMS examination shall be as follows, namely:

Subject	Written		Practical (including oral)		Total	
	Full Marks	**Pass Marks**	**Full Marks**	**Pass Marks**	**Full Marks**	**Pass Marks**
Homoeopathic Pharmacy	100	50	100	50	200	100
Anatomy	200	100	200	100	400	200
Physiology	200	100	200	100	400	200

A. Each College shall impart teaching and training to all the students in all the classes for Theory and Practical OR Clinical including tutorial and seminar for minimum of seven working hours on a working day (including thirty minutes of lunch).

SECOND BHMS EXAMINATION

Second BHMS Examination;

1. Subject to the provisions of sub-clause (c) of clause (iii) of regulation 11, no candidate shall be admitted to the Second BHMS Examination unless he has passed the First BHMS Examination and has required attendance as per clause (iii) of regulation 13 to the satisfaction of the Head of the Homoeopathic Medical College.
2. The Second BHMS Examination shall be held in the 24th month of admission of First BHMS.
3. The minimum number of hours of Lecture, Demonstration or Practical or Clinical classes and Seminar in the subjects shall be as follows, namely:

Sl. No.	Subject	Theoretical lecture (in hours)	Practical or Clinical or Tutorial or Seminar (in hours)
1.	Pathology	200	80
2.	Forensic Medicine and Toxicology	80	40
3.	Organon of Medicine with Homoeopathic Philosophy	160	60
4.	Homoeopathic Materia Medica	160	60

5.	Surgery	80	60 (One term of three months in surgical ward and outpatient department)
6.	Gynaecology and Obstetrics	40 and 40 = 80	60 (One term of three months in Gynaecology and Obstetrics and outpatient department)

4. In order to pass the Second BHMS Examination, a candidate has to pass all the subjects of examination.
5. Full marks for each subject and minimum marks required for pass are as follows, namely:

Subject	Written		Practical or Clinical including Oral		Total	
	Full Marks	Pass Marks	Full Marks	Pass Marks	Full Marks	Pass Marks
Pathology	200	100	100	50	300	150
Forensic Medicine and Toxicology	100	50	100	50	200	100
Homoeopathic Materia Medica	100	50	100	50	200	100
Organon of Medicine	100	50	100	50	200	100

THIRD BHMS EXAMINATION

Third BHMS Examination:

1. Subject to the provisions of sub-clause (a) of clause (iii) of regulation 11, no candidate shall be admitted to the Third BHMS examination unless he has passed the Second BHMS Examination and has required attendance as per clause (iii) of regulation 13 to the satisfaction of the Head of the Homoeopathic Medical College.
2. The Third BHMS Examination shall be held in the 36th month of admission to First BHMS.
3. The minimum number of hours for lecture, demonstration or practical or clinical classes and seminar in the subjects shall be as follows, namely:

Sl. No.	Subject	Theorotic Lecture(in hours)	Practical or Clinical or Tutorial or Seminars (in hours)
1.	Practice of Medicine and Homoeopathic Therapeutics	50} 75 25}	75 One term of three months each in outpatient department and inpatient department in different wards or department.
2.	Surgery including ENT Ophthalmology and Dental and Homoeopathic Therapeutics	100}150 50}	75 One term of three months each in surgical ward and outpatient department.
3.	Obstetrics and Gynaecology, Infant Care and Homoeopathic Therapeutics	100}150 50}	75 One term of three months Gynaecology and Obstetrics and outpatient department.
4.	Homoeopathic Materia Medica	100	75
5.	Organon of Medicine	100	75
6.	Repertory	50	25
7.	Community Medicine	35	15

4. In order to pass the Third BHMS Examination a candidate has to pass all the subjects of examination.
5. Full marks for each subject and minimum marks required for pass are as follows, namely:

Subject	Written	Practical or Clinical including Oral	Total

	Full Marks	Pass Marks	Full Marks	Pass Marks	Full Marks	Pass Marks
Surgery	200	100	200	100	400	200
Gynaecology and Obstetrics	200	100	200	100	400	200
Homoeopathic Materia Medica	100	50	100	50	200	100
Organon of Medicine	100	50	100	50	200	100

FOURTH BHMS EXAMINATION

Fourth BHMS Examination:

1. Subject to the provisions of sub-clause (b) of clause (iii) of regulation 11, no candidate shall be admitted to the Fourth BHMS Examination unless he has passed the Third BHMS Examination and has required attendance as per clause (iii) of regulation 13 to the satisfaction of the Head of the Homoeopathic Medical College.
2. The Fourth BHMS Examination shall be held in the 54th month of admission to First BHMS.
3. The minimum number of hours for lecture, demonstration or practical or clinical classes and seminar in the subjects shall be as follows, namely:

Subject	Theoretical Lecture (in hours)	Practical or Clinical or Tutorial classes (in hours)
Practice of Medicine	120} 180 60}	One term of three months each in outpatient department and inpatient department respectively for case taking, analysis, evaluation and provisional prescription just for case presentation on ten cases per month.
Homoeopathic Materia Medica	180	
Organon of Medicine and Homoeopathic Philosophy	180	
Repertory	180	
Community Medicine	100	100

4. In order to pass the Third BHMS Examination, a candidate has to pass in all the subject's examination.

5. Full marks for each subject and minimum marks required for pass are as follows, namely:

Subject	**Written**		**Practical or Clinical including oral**		**Total**	
	Full Marks	**Pass Marks**	**Full Marks**	**Pass Marks**	**Full Marks**	**Pass Marks**
Practice of Medicine	200	100	200	100	400	200
Homoeopathic Materia Medica	200	100	200	100	400	200
Organon of Medicine with Homoeopathic Philosophy	200	100	100	50	300	150
Repertory	100	50	100	50	200	100
Community Medicine	100	50	100	50	200	100

RESULTS AND RE-ADMISSION TO EXAMINATION

1. The examining body shall ensure that the results of the examination are published at the maximum within one month of the last date of examination so that students can complete the course in $5^1/_2$ Years after admission.
2. Candidates who have passed in one or more subjects need not appear in that subject or those subjects again in the subsequent examinations if the candidate passes the whole examination with in four chances including the original examination.
3. Facility to keep term: Not withstanding with the foregoing regulations, the students shall be allowed the facility to keep term on the following conditions:
   a. The candidate must pass the Second BHMS Examination at least one term (6 months) before he is allowed to appear in the Third BHMS examination.
   b. The candidate must pass the Third BHMS examination at least one term (6 months) before he is allowed to appear in the Fourth BHMS examination.
   c. The candidate shall pass First BHMS examination in all the subjects at least one term (six months) before he is allowed to appear in the Second BHMS examination provided that he has passed in the subjects of Anatomy and Physiology (including Biochemistry) examinations two terms (twelve months) before he is allowed to appear in the Second BHMS examination.

4. A candidate who appears at First BHMS examination, Second BHMS examination, Third BHMS examination or Fourth BHMS examination but fails to pass in the subject or subjects shall be re-admitted to the next examination in the subject or subjects (theory and practical or clinical including oral or practical or clinical wherein he has failed).
5. Special Classes, seminars, demonstrations, practical, tutorials etc. shall be arranged for the repeaters in the subject in which they have failed before they are allowed to appear at the next examination in which attendance shall be compulsory.
6. If a candidate fails to pass in all the subjects with in four chances in examinations, he shall be required to prosecute a further course of studying all the subjects and in all parts for one year to the satisfaction of the head of the college and appearing for examination in all the subjects.
   Provided that if a student appearing for the Fourth BHMS examination has only one subject to pass at the end of prescribed chances, he shall be allowed to appear at the next examination in that particular subject and shall complete the examination with these special chances.
7. The examining body may under exceptional circumstances, partially or wholly cancel any examination conducted by it under intimation to the Central Council of Homoeopathy and arrange for conducted re-examination in those subjects within a period of thirty days from the date of such cancellation.
8. The University or examining authority shall have the discretion to award grace marks at the maximum to ten marks in total if a student fails in one or more subjects.

Examiners:

1. No person other than the holder of qualification prescribed for the teaching staff in the Homoeopathy Central Council (Minimum Standards Requirement of Homoeopathic Colleges and attached Hospitals) Regulations, 2013 (as amended from time to time) shall be appointed as an internal or external examiner or paper-setter or moderator for the BHMS Degree Course: Provided that-
   a) No such person shall be appointed as an examiner unless he has at least three years continuous regular teaching experience in the subject concerned, gained in a degree level Homoeopathic Medical College.
   b) Internal examiners shall be appointed from amongst the teaching staff of the Homoeopathic Medical College to which the candidate or student belongs.
   c) A paper setter may be appointed as an internal or external examiner.
2. The criteria for appointing the Chairman or paper-setter or moderator shall be follows, namely:
   a. Chairman: Senior most person from amongst the examiners or paper-setters appointed for theory and oral or practical or clinical examinations shall be appointed as Chairman and the eligibility qualification for the Chairman shall be the same as for appointment of a Professor.

b. Moderator: A Professor or Associate Professor or Reader shall be eligible to be appointed as moderator: Provided that an Assistant Professor or Lecturer with five years' experience as an examiner shall be eligible to be appointed as moderator.
c. Paper-setter: A Professor or Associate Professor Or Reader shall be appointed as a paper-setter: Provided that an Assistant Professor Or Lecturer with three years' experience as an examiner shall be eligible to be appointed as Paper-setter.

3. The examining body may appoint a single moderator or moderators not exceeding three (03) in numbers moderating question papers.
4. Oral and Practical examinations shall as a rule be conducted by the respective internal and external examiners with mutual cooperation. They shall each have 50% of the maximum marks out of which they shall allot mark to the candidates appearing at the examinations according to their performances andthe mark sheet so prepared shall be signed by both the examiners of the examiners shall have the right to prepare, sign and send mark sheets separately to the examining body together with comments. The examining body shall take due note of such comments but its shall be declare results on the basis of the mark sheets.
5. Every Homoeopathic College shall provide all facilities to the internal and external examiners for the conduct of examination and the internal examiner shall make all preparation for holding the examinations.
6. The external examiner shall have the right to communicate to the examining body his views and observations about any shortcomings or deficiencies in the facilities provided by the Homoeopathic College.
7. He shall also submit a copy of his communication to the Central Council for such actions as the Central Council may consider fit.

GENERAL RULES FOR ADMISSION TO EXAMINATION AND SCHEME OF EXAMINATION

1. The examining body shall ensure that the minimum number of hours for lecture/demonstration / practical / seminar etc. in the subjects in each BHMS examination as specified in respective regulations are followed before allowing any Homoeopathic Medical College to send the students for University examination.
2. The examining body shall ensure that the students of the Homoeopathic Medical Colleges, who do not fulfil the Homoeopathy (Minimum Standards of Education) Regulation, are not sent for the University examination.
3. Seventy five percent attendances at the minimum in each of the subjects (in theory and practical including clinical) for appearing in the University examinations shall be compulsory.
4. Each theory paper shall be of three hours duration.
   a. The Practical / Oral examination shall be completed immediately after the theory examination.
   b. That the examining body shall hold examinations on such date and time as the

Examining body may determine. The theory and practical examination shall be held in premises of the Homoeopathic Medical College concerned.

c. There shall be a regular examination and a supplementary examination in a year and the supplementary examination shall be conducted within two months of declaration of results (including issue of mark sheets)

5. For non-appearance in an examination for any reason, a candidate shall not have any liberty for availing additional chance to appear in that examination.

MISCELLANEOUS

1. Authorities empowered to conduct examinations:
   The Universities shall conduct the examination for the Degree Course in various States or the agencies empowered by an Act of Parliament.
2. Interpretation:
   Where any doubt arises to the interpretation of these regulations it shall be referred to the Central Council for clarification.
3. Power to relax:
   Where any University or Medical institution in India which grants medical qualification, is satisfied that the operation of any of these regulations causes undue hardship in any particular case, that University or Medical Institution as the case may be, may by order, for reasons recorded in writing, dispense or relax the requirement of that regulation in such an extent and subject exceptions and conditions as it may consider necessary for dealing with the case in a such case in a just and equitable manner.
   Provided that no such order shall be made except with the concurrence of the Central Council.
4. Saving Clause:
   Any Diploma / Degree qualification, at present included in II or III Schedule to the Homoeopathy Central Council Act where nomenclature is not in consonance with these regulations shall cease to be recognised medical qualification when granted after the commencement of these regulations. However, this clause will not apply to the students who are already admitted to these courses before the enforcement of these regulations.
5. Migration or transfer of students from one college to another:
   a. Migration from one college to other is not a right of a student.
   b. Migration of students from the Homoeopathic College to another Homoeopathic College in India shall be considered by the Central Council of Homoeopathy only in exceptional cases on extreme compassionate grounds, provided following criteria's are fulfilled. Routine migrations on other grounds shall not be allowed.
   c. Both the college, i.e. one at which the student is studying at present and one to which migration is sought are recognised as per provisions of Homoeopathy Central Council Act.

d. The applicant shall have passed First BHMS examination.
e. The applicant shall submit his application in the format annexed below for migration, complete in all respects, to the principal of his college within a period of one month of passing (declaration of result) the first professional Bachelor of Homoeopathic Medicine and Surgery (BHMS) examination
f. The applicant shall submit an affidavit stating that he shall pursue twelve months of prescribed study before appearing at second professional BHMS examination at the transferee college, which shall be duly certified by the Registrar of the concerned University in which he is seeking transfer and the transfer shall be effective only after receipt of the affidavit.
g. Migration during internship training shall be allowed on extreme compassionate grounds, provided that such migration shall be allowed only with the mutual consent of the concerned colleges, where both the college, i.e..one at which the student is studying at present and one to which migration is sought are recognised as per provisions of Homoeopathy Central Council Act

Note 1:

A. All applications for migration shall be referred to Central Council of Homeopathy by college authorities. No institution or University shall allow migrations directly without the approval of the Central Council.
B. The Central Council of Homoeopathy Reserves the right not to entertain any applicant except under the following compassionate grounds, Namely:
   1. Death of a supporting guardian.
   2. Illness of candidate causing disability supported by medical grounds certified by a recognised hospital.
   3. Disturbed conditions as declared by concerned Government in the area where the college is situated.
C. A student applying for transfer on compassionate ground shall apply in format '1' incomplete manner with requisite documents.

ANNEXURE 'A' (Regulation 3 (ii)

INTERNSHIP TRAINING

1.

a. Each candidate shall be required to undergo compulsory rotating internship of one year, after passing the final BHMS Examinations to the satisfaction of the Principal of the Homoeopathic College. Thereafter only the candidate shall be eligible for the award of Degree of Bachelor of Homoeopathic Medicine and Surgery (BHMS) by the University.
   - ❖ All parts of the Internship training shall be undertaken at the hospital attached to the College and in case where such hospital cannot accommodate all of its

students for Internship then such candidates/ students shall be informed in writing by the college and it shall be the responsibility of the College to ensure that each of such students is put on internship training in a Homoeopathic Hospital or dispensary run by Government or local bodies.

b. To enable the State Board/Council of Homoeopathy to grant provisional registration of minimum of one year to each candidate to undertake the internship, the University concerned shall issue a provisional passed certificate on passing the final BHMS examination to each successful candidate.
Provided that in the event of shortage or unsatisfactory work, the period of compulsory internship and the provisional registration shall be accordingly extended by the State Board/Council.

c. Full registration shall only be given by the State Boards if the BHMS Degree awarded by the University concerned is a recognised medical qualification as per Section 13 (1) of the Act and Board shall award registration to such candidates who produce certificate of completion or compulsory rotating internship of not less than one year duration from the Principal of the College where one has been a bonafide student which shall also declare that the candidate is eligible for it.

d. The internee students shall not prescribe the treatment including medicines and each of them shall work under the direct supervision of Head of Department concerned and/ or a Resident Medical Officer. No intern student shall issue any medico legal document under his/ her signatures.

e. (Omitted).

2. The internship training shall be regulated by the Principal in consultation with concerned Head of Departments and R.M.O as under :

1) Each internee student shall be asked to maintain a record of work which is to be constantly monitored by the Head of Concerned Department and/or Resident Medical Officer under whom the internee is posted. The scrutiny of record shall be done in an objective way to update the knowledge, skill and aptitude of internee.

2)

- ❖ The stress during the internship training shall be on case taking, analysis and evaluation of symptoms, nosological and miasmatic diagnosis, totality of symptoms, repertorisation and management of sick people based on principles of Homoeopathy.
- ❖ The Principal or Head of the College in consultation with heads of concerned clinical departments (including Organon of Medicine, Materia Medica and Repertory) shall make medical units having integration of teaching faculty of concerned departments to regulate internship training to be given to each student.
- ❖ Weekly seminars shall be conducted wherein interns in rotation be given a chance to present their cases for discussion and concerned teachers shall assess performance of each of interns.
- ❖ Resident Medical Officer shall coordinate with teachers concerned in conduct of

weekly seminars.

3) Rotation of intern students shall be as under:
   a. Practice of Medicine: 8 months wherein internee will be rotated in each Psychology, Respiratory, Gastro-intestinal, Endocrinology, Skin and V.D. Loco motor, Cardiology, Paediatrics sections.
   b. Surgery- 1 month.
   c. Obstetrics and Gynaecology – 2 months [1 month each (including Reproductive and child health care)]
   d. Community Medicine (including PHC/CHC) – 1 MONTH.
4) Each internee shall be exposed to clinic pathology work to acquire skill in taking samples and doing routine blood- examination, blood smear for parasites, sputum examination, urine and stool examination. Students shall be trained to correlate laboratory findings with diagnosis and management of sick people.
5) Each internee shall be given opportunities to learn the diagnostic techniques like X-Rays, Ultrasonography, E.C.G, Spirometer and other forthcoming techniques and co-relate their findings with diagnosis and management of cases.
6) Each internee student shall be given adequate knowledge about issuing of medico-legal certificates, including Medical and fitness certificates, death certificates, birth certificates, court producers and all of such legislations be discussed which were taught in curriculum of Forensic Medicine.
7) Each internee shall maintain records of 40 acute and 25 chronic cases complete in all manner including follow up in Practice of Medicine, record of 5 antenatal check-up and 3 delivery cases attended by him/her in Department of Obstetrics 3 cases of Gynaecology, records of 5 Surgical cases assisted by him (and demonstration of knowledge of dressings) in Surgery department, and records of knowledge gained in Primary Health Centre, Community Health Centres various health programmes.
8) (Omitted).
9) Each internee shall be given a liberty to choose an elective assignment on any subject and complete out-put shall be furnished in writing by the internee in respect of elective assignment to the Principal of the College within Internship duration.
10) Each intern shall be posted on duty in such a manner that each of them attends at least 15 days in O.P.D. at least in each month (except for duty in Community Medicine and the other parts of duty including self-preparation in Library.
11) Each intern student shall be made to learn importance of maintaining statistics and records, intern student shall also be familiarized with research methodology.

3.

   a. Each internee shall have not less than 80% of attendance during the internship training.
   b. Each internee shall be on duty of at least 6 hours per day during the compulsory internship training.

ANNEXURE- "B"

Components:

(See Regulation 6)

Educational Tour

Number of Students:

Name of the teachers accompanying

Students: What the tour is about an overview.

Prerequisites- What knowledge the students must know before going for tour .

How it will be organised: Approaches to teaching and assessment.

Aim and Objectives

1. To provide the basic knowledge of practical aspects of Pharmacy/FMT/Community Medicine by exposure of students to pharmaceutical labs. and HPL/District courts// hospitals/ Milk dairies/PHC/I.D. Hospitals/Industrial units/sewage treatment plants/Water purification plants
2. To inspire students for their involvement in study during the said visits to learn the related procedures.
3. To provide the platform for evaluation of their skill and knowledge by interactive Methodology.
4. To infuse confidence amongst students about Homoeopathy, its future and their career.
5. To provide interaction between students, induce decision making skills and to motivate them for better vision about their future.
6. To improve cognitive skills (thinking and analysis).
7. To improve communication skills (personal and academic).

Learning outcomes:

1. To be more than a wish list objectives, need to be realistic, pragmatic, understandable and achievable.
2. The focus should be on what students will be able to do or how they will show that they know and how this will help in their career and individual growth.
3. Knowledge we want the students to have by the end of the course.
4. Skills we want the students to master by the end of the course.
5. Attitudes we want students to demonstrate at the ends of the course.
   Note: It shall be an essential part of the Journal on the subject a viva –voce can be put in respect of it.

Resources.

1. Essential and recommended text books.
2. Journals and other readings.
3. Equipment and apparatus.

Visit record

1. Places visited with photographs
2. Programmes organised during visit
3. Summary

Assignment or project report

1. Description of assignments.
2. Due dates of assignments.
3. Preparation method for the project report
    a. Purpose
    b. Schedule
    c. Places visited
    d. Details of visit
    e. Summary of achievements or learning's.

Format -1

{See regulation 14(v)}

Migration of Mr./Miss. _____

_____Homoeopathic Medical College

_____to _____Homoeopathic Medical College

_____

1. Date of admission in First B.H.M.S course
2. Date of passing First BHMS University examination
3. Date of application
4. No objection certificate from relieving college (enclosed)- Yes / No
5. No objection certificate from relieving University (enclosed)- Yes / No
6. No objection certificate from receiving college (enclosed)- Yes / No
7. No objection certificate from receiving University(enclosed) – Yes /No
8. No objection certificate from state Government wherein the relieving college is located- Yes/ No
9. Affidavit, duly sworn before First Class Magistrate containing an undertaking that- I transferred Homoeopathic Medical College before appearing in the IInd BHMS Course in University examination(enclosed) – Yes / No
10. Reasons for migration in brief (please enclose copy of proof)- Yes / No
11. Permanent address:_____||

********** ********** ********** **********

Note: The principal regulations were published in the Gazette of India, Extraordinary Part III, Section 4 vide number 7-1/83/CCH Dated the 11th May 1983 and Subsequently amended vide;

1. **12-13/87 (Pt.II) dated the 24th September, 2003 and**
2. **12-4/2000-CCH (Pt.-I) dated the 13th June, 2005**
3. **12-13/2006-CCH (Pt.V) dated the 14th July, 2015.**

---

1) **Amended in September, 2003**

a. **Amended in June, 2005**

2) **Amended in July, 2015.**

REGULATIONS AND CURRICULUM GOVERNING

B.H.M.S PROGRAM

(As Amended up to December, 2022)

Deralakatte, Mangalore, Karnataka.

Name of the Constituent Unit/Centre:

YENEPOYA HOMOEOPATHIC MEDICAL COLLEGE AND HOSPITAL,

FACULTY OF HOMOEOPATHY

Ordinance Governing Regulations and Curriculum of

HOMOEOPATHY DEGREE B.H.M.S. COURSE

(Bachelor of Homoeopathic Medicine & Surgery)

In conformity with

Homoeopathy (Degree Course) B.H.M.S. Regulations, 1983

(As Amended up to December, 2022)

Central Council of Homoeopathy, New Delhi 2026

NOTIFICATION FROM THE UNIVERSITY

YENEPOYA
UNIVERSITY

Recognized under Sec 3(A) of the UGC Act 1956 as per Notification No. F.9-11/2007-U.3 (A) dated 27th February 2008

Ref: No. YU/REG/ACA/23-ACM/2016 05.04.2016

NOTIFICATION

Sub: Starting of Faculty of Homeopathy

Ref: (1) Decision of BoM at its 33rd meeting held on 16.12.2015 (Agenda-22)
(2) Proceedings of the Expert Committee meeting held on 21.03.2016
(3) Minutes of the 23rd meeting of the Academic Council held on 28.03.2016 (Agenda – 10)

****

The proposal of Yenepoya University to start Faculty of Homeopathy was in principle, approved by the Board of Management at its 33rd meeting held on 16.12.2015.

Consequently an Expert Committee was constituted to study the matter and submit its recommendation. The Expert Committee which met on 21.03.2016 submitted its detailed recommendations.ರ್ಶ:

1. Faculty requirement
2. Budget for the equipments from 2016-17 to 2020-21.
3. Requirement of Lands and buildings
4. It was submitted that adequate land is available for the Hospital/College at Natekal in permission of I.A.E and the same has to be based to the University for construction building.
5. Calendar of Events
6. Departmentwise building
7. It is stated that Regulation/Curriculum for the proposed 4 ½ + 1 year internship BHMS course will be as per the Guidelines of Central Council of Homeopathy.

The Academic Council after exhaustive discussion, approved the recommendation of the Expert Committee.

This notification is issued for proceeding with the establishment of the Homeopathic Hospital as well as BHMS course as per the Calendar of Events.

REGISTRAR

To: The Ayush Coordinator
Copy to: Finance Officer/Director (Finance)/Academic Section

University Road, Deralakatte, Mangalore-575018
T: +91 824 220 4676 / 4668 /4669 / 4671/ 2192 / 2193 F : +91 824 220 4667 E : reachus@yenepoya.org
www.yenepoya.edu.in

YENEPOYA
UNIVERSITY

Office of the Registrar
University Road,
Deralakatte
Mangalore - 575018
Ph: 0824-2204667/68/69/71
Fax: 0824-2203943

Ref: No.YU/REG/ACA/A Council -26/2016 14.11.2016

NOTIFICATION

Sub: Starting of Faculty of Homeopathy

Ref: 26th meeting of the Academic Council held on 21.10.2016 (Agenda-6(3))

****

The Academic Council at its meeting held on 21.10.2016, vide Agenda – 6 (3) and subsequently the Board of Management has approved the proposal to start Faculty of Homeopathy.

The undergraduate course in Homeopathy shall commence after obtaining permission from the regulatory body.

(Dr. G. Shreekumar Menon)
REGISTRAR
mj

Copy to:

1. The Coordinator, Faculty of Homeopathy
2. Academic Section

YENEPOYA
(DEEMED TO BE UNIVERSITY)

A+ NAAC

YENEPOYA (DEEMED TO BE UNIVERSITY)

No.: 60-ACM/09/2024

OFFICE OF THE REGISTRAR
Date: 18.12.2024

NOTIFICATION

Sub: Competency-Based Dynamic Curriculum of 2nd BHMS program - reg .:-

Ref: 1. Resolution of the Academic Council at its 60th meeting held on 19.11.2024 vide agenda-9

2. Resolution of the Executive Council at its 6th meeting held on 17.12.2024 vide agenda-05.

*****

Pursuant to the resolutions cited in the above references, the Yenepoya (Deemed to be University) hereby notifies the regulations of Competency-Based Dynamic Curriculum for the 2nd BHMS Professional program as per the NCH guidelines under the Faculty of Homeopathy from the academic year 2024-2025.

The curriculum has also been approved by the above bodies.

REGISTRAR
mj

To:

PA to Vice Chancellor
Dean of Academics, Yenepoya (Deemed to be University)
Controller of Examinations
Dean, Faculty of Homeopathy
File Copy

YENEPOYA
(DEEMED TO BE UNIVERSITY)

A+ NAAC

YENEPOYA (DEEMED TO BE UNIVERSITY)

OFFICE OF THE REGISTRAR
Date: 16.09.2025

No.: 64-ACM/09/2025

NOTIFICATION

Sub: Competency-Based Dynamic Curriculum for Third BHMS Professional Program – reg.:-

Ref: 1. Resolution of the Academic Council at its 64th meeting held on 14.08.2025 vide agenda-09.
2. Resolution of the Executive Council at its 9th meeting held on 11.09.2025 vide agenda - 3

*****

Pursuant to the resolutions cited in the above references, Yenepoya (Deemed to be University) hereby notifies the Competency Based Dynamic Curriculum for Third BHMS Professional Program as per the National Commission for Homoeopathy with the following courses from the academic year 2025-2026.

1. Community Medicine
2. Essentials of Pharmacology
3. Gynaecology and Obstetrics
4. Homeopathic Materia Medica
5. Homoeopathic Repertory and case-taking
6. Practice of Medicine
7. Surgery
8. Yoga for Health Promotion

REGISTRAR
mj

To: PA to Vice Chancellor/Dean of Academics, Yenepoya (Deemed to be University)/ Controller of Examinations/Dean, Faculty of Homeopathy/File Copy

YENEPOYA
(DEEMED TO BE UNIVERSITY)

YENEPOYA (DEEMED TO BE UNIVERSITY)

OFFICE OF THE REGISTRAR

No.: 64-ACM/08/2025 Date: 16.09.2025

NOTIFICATION

Sub: Modification in the eligibility criteria for admission to BHMS Program

Ref: 1. Resolution of the Academic Council at its 64th meeting held on 14.08.2025 vide agenda-08.
2. Resolution of the Executive Council at its 9th meeting held on 11.09.2025 vide agenda - 3

*****

Pursuant to the resolutions cited in the above references, Yenepoya (Deemed to be University) hereby notifies a modification in the eligibility criteria for admission to the BHMS program as per the National Commission For Homoeopathy Gazette Notification dated 6th January 2025 as follows:-

Previous Eligibility criteria (6th DEC 2022) NATIONAL COMMISSION FOR HOMOEOPATHY NOTIFICATION New Delhi, the 6th Dec 2022	**Changed on 6 Jan 2025** NATIONAL COMMISSION FOR HOMOEOPATHY NOTIFICATION New Delhi, the 3rd January, 2025
Eligibility criteria for admission and manner of admissions. – (1) The eligibility for admission in Bachelor of Homoeopathic Medicine and Surgery (B.H.M.S.) Course shall be, namely:- (a) the candidate shall have passed 10+2 or its equivalent examination from any recognised Board with Physics, Chemistry, Biology and have obtained minimum **of fifty percent**. marks taken together in Physics, Chemistry and Biology/Biotechnology in case of student belonging to general category and **forty percent**. marks in case of student belonging to the **Scheduled Castes, Scheduled Tribes and Other Backward Classes**	In regulation 4 of the principal regulations, in sub-regulation (1),- (i) for clause (a), the following shall be substituted, namely:- "(a) **the candidate shall have passed 10 +2 (or equivalent)** with subjects of Physics, Chemistry, Biology or Biotechnology."

REGISTRAR

mj

To: PA to Vice Chancellor/Dean of Academics, Yenepoya (Deemed to be University)/Controller of Examinations/Dean, Faculty of Homeopathy/File Copy

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PREAMBLE TO THE COMPETENCY BASED DYNAMIC CURRICULUM

The National Commission for Homoeopathy (NCH) has undertaken major revisions in the educational regulations in the last year and has devised a new Syllabus to ensure that the student who completes the homoeopathic undergraduate course grows into a homoeopathic physician who is informed and capable of performing as a professional with competencytodeliverservicesasrequiredforaddressingthehealthneedsofthepersonand society at large. It is based on the premise that a correct adherence to homoeopathic principles and knowledge imparted will enable the physician to deliver results in all aspects of health, viz. preventive promotive, curative and rehabilitative.

There is a significant change in the approach and contents in the newly designed curriculum, with the intention of making it more coherent for the present and future needs of society. The designing of curriculum is based on the sound theories of educational methodology as applicable for the health professionals' education, and therefore, the outcomes are quite transparent and achievable.

The Homoeopathic Educational Board (HEB) is obliged by the NCH Act 26 (b) to "develop a competency based dynamic curriculum for Homoeopathy at all levels in accordance with the regulations made under this Act, in such manner that it develops appropriates kill, knowledge, attitude, values and ethics among the graduates, post graduate and super-specialty students and enables them to provide healthcare, to impart medical education and to conduct medical research".

Competency based medical education (CBME) has been around in the medical world for more than three decades. It has under gone several revisions and adaptations through this period which has placed the NCH in an advantageous position to learn from the varied experiences of curriculum formulation, implementation and assessment.

It should be emphasized that the switch over to CBME involves a sea change in the understanding of the processes and outcomes for which all stakeholders need to be adequately sensitized and the teachers trained to minimize the difficulties inevitable in any transition. The following four pillars need a special mention to grasp the nature of the change being brought about (Frank Jason R, et al 2010).

INTRODUCTION TO

COMPETENCY BASED DYNAMIC CURRICULUM FOR

FIRST BHMS PROFESSIONAL COURSE

(Applicable from Batch 2022-2023 onwards for 5 years or until further notification by National Commission for Homoeopathy whichever is earlier)



HOMOEOPATHY EDUCATION BOARD

NATIONAL COMMISSION FOR HOMOEOPATHY

MINISTRY OF AYUSH, GOVERNMENT OF INDIA

JAWAHAR LAL NEHRU BHARTIYA CHIKITSA AVUM HOMOEOPATHY ANUSANDHAN BHAVAN

No.61-65, Institutional Area, opp. 'D' block, Janak Puri, New Delhi-110 058

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FOREWORD

New Education Policy 2020 has a focus on developing and shaping the education system with focus on pedagogical approach. It mentions that with the quickly changing employment landscape and global ecosystem, it is becoming increasingly critical that children not only learn, but more importantly learn how to learn. Education thus, must move towards less content, and more towards learning about how to think critically and solve problems, how to be creative and multidisciplinary, and how to innovate, adapt, and absorb new material in novel and changing fields. Pedagogy must evolve to make education more experiential, holistic, integrated, inquiry-driven, discovery-oriented, learner-centered, discussion-based, flexible, and, of course, enjoyable.

In aligning with the NEP 2020, prime objective of National Commission for Homoeopathy is to provide a medical education system that improves access to quality and affordable medical education, ensures availability of adequate and high quality homoeopathic medical professionals in all parts of the country. We are amidst the shift from the traditional approaches of training to a focus on the application of learning through assessing competency acquired by the learner. The curriculum driven instructional model has been the standard method of teaching for more than century, but it is consistently failing to produce well educated citizens and lifelong learners. Medical sciences being high professional courses, there has to be a much greater emphasis on preventive healthcare and community medicine in all forms of healthcare education.

To achieve the prime objective, it's a pleasure and privilege to introduce transformation in curriculum of homoeopathy education which is competency based dynamic.

This curriculum guide can serve a number of purposes. The principal uses are,

- Foundation program in the very beginning after admissions will help students adapting the needs and for their preparedness for the whole course.
- Provide trainers with guidance and resources for conducting or supporting learning activities
- Provide learners with a resource that will support an 'instructor led' delivery and will be a useful reference for future application of the learning
- Providing learners and assessors with resources for understanding and completing assessments
- Serve as guide or resource for 'self-directed' learning

Each chapter is explicit and easy to digest, provides strategies to inspire conversation and action.

I hope teachers, administrators; leaders will find this guide as helpful for reworking our current educational system into a new, dynamic model of teaching & learning in all facets of Homoeopathy.

Dr. Anil Khurana,
Chairperson

ACKNOWLEDGEMENT

The task of formulating the Competency based Dynamic Curriculum (CBDC) in Homoeopathy has been a stupendous effort which would not have been possible without the vision, direction, and unstinting support of a number of eminent persons.

We can start with none other than the Honourable Prime Minister, Shri Narendra Modiji, who has envisioned the future of the youth through the formulation of the National Education Policy 2020 which has helped to bring about a paradigm shift from knowledge centric to competency-based education.

Honourable Minister of AYUSH, Shri Sarbananda Sonowalji and Minister of State for AYUSH, Dr Munjpara Mahendrabhai Kalubhai have taken effective steps for implementing the National Education Policy in the AYUSH sector. Secretary AYUSH, Vaidya Shri Rajesh Kotechaji has consistently emphasized the urgency, given the direction, and provided resources for structuring and implementing the changeover to Competency based Curriculum.

Chairperson of the National Commission of Homoeopathy (NCH), Dr Anil Khuranaji has been personally monitoring and encouraging us for taking orderly steps and planning for the formulation and implementation of the CBDC. All the esteem members of NCH have given their valuable suggestion while making the final draft of CBDC. Advisory Council of the National Commission for Homoeopathy has always supported the progressive changes which the NCH has been bringing about.

Dr Mangesh Jatkar, Member, Homoeopathy Education Board has kept a vigilant eye over the functioning of various committees constituted for formulating CBDC for First BHMS course. Dr. Rupali Bhalerao, for technical & editorial assistance to revamp this document and homoeopathy education board team including Dr. Kanika Malhotra for tirelessly working to meet every timeline of CBDC work.

Subject experts and convener for syllabus/curriculum designing, Dr K M Dhawale for formulating the syllabus and content which formed the base for this competency based dynamic curriculum.

Members of the core CBDC committee, Dr Munir Ahmed R, Dr Payal Bansal and Convener Dr. Bipin Jain for setting the framework and spending countless hours selflessly guiding this process. All the experts took out time and got trained in medical education technology and formulated the curriculum of their respective subject in record time. Team from Dr.D.Y.Patil Homoeopathic Medical College, Pune for contributing in the final shaping of this document.

Dr. Tarkeshwar Jain,

President, Homoeopathy Education Board

PREAMBLE TO THE COMPETENCY BASED DYNAMIC CURRICULUM

The National Commission for Homoeopathy (NCH) has undertaken major revisions in the educational regulations in the last year and has devised a new Syllabus to ensure that the student who completes the homoeopathic undergraduate course grows into a homoeopathic physician who is informed and capable of performing as a professional with competency to deliver services as required for addressing the health needs of the person and society at large. It is based on the premise that a correct adherence to homoeopathic principles and knowledge imparted will enable the physician to deliver results in all aspects of health, viz. preventive promotive, curative and rehabilitative.

There is a significant change in the approach and contents in the newly designed curriculum, with the intention of making it more coherent for the present and future needs of society. The designing of curriculum is based on the sound theories of educational methodology as applicable for the health professionals' education, and therefore, the outcomes are quite transparent and achievable.

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Competency based medical education (CBME) has been around in the medical world for more than three decades. It has undergone several revisions and adaptations through this period which has placed the NCH in an advantageous position to learn from the varied experiences of curriculum formulation, implementation and assessment.

It should be emphasized that the switch over to CBME involves a sea change in the understanding of the processes and outcomes for which all stakeholders need to be adequately sensitized and the teachers trained to minimize the difficulties inevitable in any transition. The following four pillars need a special mention to grasp the nature of the change being brought about (Frank Jason R, et al 2010).

1. The focus is on ensuring that the end user of the health care services is benefited. Hence it is important that the outcomes of the training are defined in clear terms so that the teacher, the student and the community are aware of what can be expected from the training.
2. The second logical focus is on bringing the abilities of the physician to the level when the outcomes defined above are realized. This involves the definition of the competencies required in the discharge of various functions of the physician. This would involve certain generic competencies such as problem solving or effective communication and certain specific ones related to the subject of study like. Anatomy, Materia Medica or others. This coupling of the outcome and abilities leads automatically to the third pillar.
3. We have been used to consider all training as time bound as the BHMS course is 5 1/2 years duration. But when we realize that the rate of mastering different abilities would vary from

student to student, we should de-emphasize the fixed period of training and instead look at how the student can be helped to master the specific competency.

4. The fourth pillar becomes the student herself/himself. The entire education and training become learner centred and hence the teacher takes a great effort in defining the outcomes, competencies, teaching and learning methods and most important of all, assessment which is predominantly formative and hence intends to shape the evolving capacities of the learner.

While formulating the competency based dynamic curriculum (CBDC) for the homoeopathy undergraduate, we must bear in mind the central role that homoeopathy philosophy and the principle of holistic care plays in the therapeutic actions of the homoeopathic interventions. This is a distinctive aspect which has hardly received the attention it deserves despite Hahnemann's clear recommendations in the first six Aphorisms of the Organon. The revised syllabus has brought this change and the formulation of the competency-based curriculum provides an opportunity to incorporate this approach at all levels of teaching and training. The implications lie in bringing about a sensitive and effective integration (horizontal/vertical/spiral) of all aspects of the syllabus throughout the five and half years of the undergraduate course.

There are five compelling factors that form the fulcrum to drive the change (Harris Peter, et al, 2010):

1. Design of curriculum: This needs careful attention due to its novelty. Homoeopathy, as a holistic discipline resting on the foundations of philosophy, needs a holistic approach from the first year itself. Several novel situations will need to be envisaged and catered to. And yet, a number of issues will remain. This is the dynamic nature of the enterprise, and we must be prepared to accept the well-known adage: Change, the only constant!
2. Teacher training: Our teachers have discharged the role of information providers and the teaching-learning process calls for a transformation in the role of the teacher (Sidhu Navdeep S. et al2022). The future will need them to wear multiple hats and hence they will need to develop competencies viz. planner, facilitator, assessor, education manager, role model, etc, to be effective for these roles.
3. Assessment: Assessment practices must be based on a robust platform of validity, reliability, and objectivity, so that the tools of assessment blend fluidly with the academic flow. In this background, the focus is to shift the assessment approach from the monopoly of summative assessment to a significant allowance for formative assessment, which are supportive for learning and correction on-the-go.
4. Student issues: Along with the parents and the community, a significant re-orientation is called for while changing it from that of a 'last-minute' sprinter to a long range 'racer'! All stakeholders should be on the same page so that the processes can operate in a well-oiled manner. Glitches are to be expected when a largely 'rights' based social mind set has to shift gears to adopt a competency oriented one. Understanding that change needs patience and good will go a long way to make the latter orientation a way of life.
5. Systems: All educational systems from the colleges to universities need to incorporate the multiple changes within their systems. We are used to consider results as 'pass' and 'fail' with the latter carrying the stigma. While there is an

expressed need to wish to cater to all categories of learners – fast, normal, slow – the need to bring about changes in the systems is not so readily accepted. The institutions need to develop as 'learning organisations' that spur the 'growth mind-set' of its members – the teachers, students, and all those who are in the loop of curricular or co-curricular management.

The HEB considers the CBDC as a work in progress. Considerable thoughts and efforts are invested into the design and planning of the curriculum. But as has been mentioned above, this is a pioneering work and would always benefit from suggestions that spring from critical thinking and reflection subsequent to sincere attempts in implementation.

The next sections provide details of operational clarity to implement the program. Training of teachers is the key component which will make all the difference. The NCH is committed to make it happen and the cooperation of all stakeholders is earnestly solicited.

References

1. Frank Jason R, et al (2010) Competency-based medical education: theory to practice, *Medical Teacher,* 32:8, 638-645, DOI: 10.3109/0142159X.2010.501190
2. Harris Peter, Linda Snell, Martin Talbot, Ronald M. Harden & for the International CBME Collaborators (2010) Competency-based medical education: implications for undergraduate programs, *Medical Teacher*, 32:8, 646-650, DOI: 10.3109/0142159X.2010.500703
3. Sidhu Navdeep S. et al (2022): Competency domains of educators in medical, nursing, and health sciences education: An integrative review, *Medical Teacher*, DOI: 10.1080/0142159X.2022.2126758

[I - STEPS TAKEN TO FORMULATE HOMOEOPATHY CBDC MANUAL

In this section we will detail the process undertaken in the formulation of this manual. The account will be of use to the users viz. the academicians, teachers and students to better grasp the significance of the effort and the role that each would have to play. The subsequent section will outline the correct use of the manual in order to derive the maximum benefit.

I - Defining National and Institutional Goals and Programme Outcomes

The process of identifying competency is a complex one. Defining the outcome clearly helps in defining the relevant competency thus enabling a person acquiring it with relative ease. In case of the medical graduate, the outcome or goal is determined by the health care needs of the community as perceived by the statutory authorities and the ability of the particular health care system to respond to this need. India has a pluralistic health tradition and the community accesses the several health care systems to fulfil their multiple health needs. Scientific evidence is generally relied upon to determine and differentiate the role of each system in providing health care. This, however, may not always be forthcoming to the required degree of precision.

Considering the above, the NCH has formulated broad national goals which a Homoeopathic graduate would be expected to be able to achieve.

NATIONAL GOALS:

At the end of undergraduate program, the medical student should be able to:

a. Recognize the strength of homoeopathy, its applicability and limitations in health care of society and the individual.
b. Learn the integration of medical services for effective delivery of health care.
c. Recognize the purpose of the National Health Policy and "Health for all" as a national goal and health right of all citizens and undergo training to achieve the realization of this social responsibility
d. Achieve competence in the practice of homoeopathy with holistic approach, encompassing promotive, preventive, curative and rehabilitative aspects of common diseases.
e. Develop a scientific temper, acquire educational experience for proficiency in profession and promote healthy living based on the tenets of homoeopathy.
f. Become an exemplary citizen by observing medical ethics and fulfilling social and professional obligations so as to respond to national aspirations.
g. Develop skills to perpetuate homoeopathy & practice it with zeal so that it stands parallel to other scientific healing methods.

In order to realize these goals, Homoeopathic institutions will need to prepare themselves with suitable infrastructure and processes so that the graduate is able to deliver on the National goals. The NCH has laid down the following goals for homoeopathic institutions.

INSTITUTIONAL GOALS:

In consonance with the national goals, each homoeopathic medical institution should evolve institutional goals to define the kind of trained homoeopathic professionals they intend to produce. The undergraduate students coming out of a homoeopathic medical institute should:

a. Be competent in clinical diagnosis and homoeopathic management of the health problems of the individual and the community, commensurate with his/her position as a member of the health team at the primary, secondary or tertiary levels, using his/her clinical skills based on history, physical examination and relevant investigations.

b. Be competent to use homoeopathic medicines scientifically for health problems in preventive, promotive, curative palliative and rehabilitative mode.

c. Appreciate the rationale for the use of different therapeutic modalities &engage in cross- referral when required in the interest of the patient.

d. Be able to appreciate the socio-psychological, cultural, economic and environmental factors affecting health and develop a humane attitude towards patients in discharging professional responsibilities.

e. Be able to identify community health problems and learn to work to resolve these by understanding, designing, instituting corrective steps as per homoeopathic principles and evaluating outcome of such measures.

f. Develop sensitivity to environmental sustainability and engage in community work towards achieving it with responsibility and commitment.

g. Be trained in critical thinking, evidence-based practice and possess research aptitude and documentation skills necessary in professional work.

h. Possess the attitude for lifelong learning and be ready to develop competencies as and when conditions of practice demand it.

i. Be familiar with the basic factors which are essential for the implementation and integration of the National Health Programmes with homoeopathy including practical aspects of the following: (i) Family Welfare and Mother and Child Health (MCH) (ii) Sanitation and water supply (iii) Prevention and control of communicable and non-communicable diseases (iv) Immunization (v) Health Education.

j. Acquire basic management skills in the area of human resources, materials and resource management related to homoeopathy in health care delivery, general and hospital management, principal inventory skills and counselling.

k. Be able to work as an active and responsible partner in health care teams and acquire proficiency in communication skills with colleagues, patients and the community at large.

l. Be competent to work in a variety of health care settings.

m. Develop personal characteristics and attitudes required for professional life such as personal integrity, sense of responsibility and dependability and ability to relate to or show concern for other individuals.

When we look at the translation of these set of goals to the individual learner, we will be able to define these as follows:

GOALS OF THE LEARNER

Towards attaining the goals of this program, the homoeopathic graduate must be able to function in the following roles appropriately and effectively:

a. Clinician who understands and provides holistic preventive, promotive, curative, palliative and rehabilitative care with compassion.
b. Leader and member of the health care team and system with capabilities to collect, analyse, synthesize and communicate health data.
c. Communicator with patients, families, colleagues and community.
d. Lifelong learner committed to continuous improvement of skills and knowledge.
e. Professional, who is committed to excellence, is ethical, responsive and accountable to patients, community and profession.

The above goals, though desirable, are broad. To realize them, the student entering into the undergraduate homoeopathic programme needs to be equipped with a set of competencies which would fall in the domains of knowledge, skills and attitudes. The broad goals need to be defined in specific actionable terms which will form the Programme outcomes. These will enable all the stakeholders to be clear of the nature of functioning expected from the homoeopathic physician at the end of the training. Accordingly, the team of resource persons worked together to formulate Programme Outcomes

PROGRAMME OUTCOMES:

At the end of the course of the undergraduate studies, the homoeopathic physician must

1) Develop the knowledge, skills, abilities and confidence as a primary care homoeopathic practitioner to attend to the health needs of the community in a holistic manner
2) Correctly assess and clinically diagnose common clinical conditions prevalent in the community from time to time
3) Identify and incorporate the socio-demographic, psychological, cultural, environmental & economic factors affecting health and disease in clinical work
4) Recognize the scope and limitation of homoeopathy in order to apply Homoeopathic principles for curative, prophylactic, promotive, palliative, and rehabilitative primary health care for the benefit of the individual and community

5) Be willing and able to practice homoeopathy as per medical ethics and professionalism.
6) Discern the scope and relevance of other systems of medical practice for rational use of cross referrals and role of life saving measures to address clinical emergencies
7) Develop the capacity for critical thinking, self-reflection and a research orientation as required for developing evidence based homoeopathic practice.
8) Develop an aptitude for lifelong learning to be able to meet the changing demands of clinical practice
9) Develop the necessary communication skills and enabling attitudes to work as a responsible team member in various healthcare settings and contribute towards the larger goals of national health policies such as school health, community health and environmental conservation.

Defining the Programme outcomes is a crucial step since this allows us to derive the competencies the homoeopathic graduate should possess at the end of the period of training. Care is taken to ensure that the National goals and Institutional goals are covered as much as possible by the various aspects of the Programme Outcomes. Further, the Outcomes for each academic year and of the period of internship will be formulated separately based on the Courses studied and the nature of clinical or community activities undertaken each year. Accordingly, the corresponding competencies for the respective years have been defined.

II - Deriving Competencies of the Homoeopathic Medical Graduate

Seven broad dimensions of practice were identified in which all actions of the homoeopathic physician in the context of our health care system could be classified (Englander, et al, 2013). The definition of these terms in our medical and social context are as follows:

Table 1: Dimensions of Practice of the Homoeopathic Physician

	Dimensions of Practice of the Homoeopathy Physician	**Definition**
1.	Knowledge for Homoeopathy Practice	Demonstrates knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to patient care using homoeopathy as a means of intervention.

2.	Patient Care	Provides patient-centered, individualized care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.
3.	Interpersonal and Communication Skills	Demonstrates interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, families, and health professionals.
4.	Professionalism	Demonstrates a commitment to carrying out professional responsibilities and an adherence to ethical principles.
5.	Practice based learning and Improvement	Demonstrate the ability to investigate and evaluate one's care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning.
6.	Health care systems	Demonstrate an awareness of and responsiveness to the larger context and system of health care in the country, as well as the ability to call effectively on other resources in the system to provide optimal health care.
7.	Scholarship	Demonstrate the qualities required to sustain lifelong personal and professional growth.

We now needed to draw up a list of generic competencies relevant for the training of the homoeopathic physician. These would subsequently be mapped on to the Programme Outcomes for each year. The list of generic competencies drawn up were subsumed under the 4 relevant areas of the functioning of the physician viz. cognitive, personal, interpersonal and in the community after referring to Kallioinen (2010), General Medical Council (2017) and Arora (2020).

Table 2: Generic competencies relevant to the functioning of the physician

Areas	**Cognitive**	**Personal**	**Interpersonal**	**Community**
	Analytical	Self-reflection	Empathetic	Ethical awareness
	Synthetic	Self-Awareness	Leadership	Community awareness
	Objective	Safety compliance	Team work	Safety awareness

	Organizing and Planning	Lifelong learning	Collaboration	
	Problem Solving	Compassion	Respect for Privacy and autonomy	
	Information gathering	Personal integrity	Communication skills - oral and written	
	Documentation	Healthy coping mechanisms	Executive ability	
	Information management	Flexibility		
	Creative thinking	Dealing with uncertainty		
	Holistic approach			
	System based thinking			

This now equips us to chart the generic competencies against the expanded functions of the physician in each of the areas mentioned in Table 1. The components of each of the areas has been expanded to include all actions which the trained physician would be expected to undertake. This also helps us to zero down on the tasks which the physician would need to be trained to perform. The series of seven tables below expands each of the areas, identifies the generic competencies and the component tasks.

Table 3: Charting of Generic Competencies and Tasks against the areas of functioning

	Areas of action	**Generic Competencies**	**Component tasks**
1	**Knowledge (K) for Homoeopathy practice**		
k-1	Describe the basic scientific principles underlying normal development, structure and function of genes, cells, organs and the body as a whole throughout the life cycle and correlate with concept of man	Integration of information	Information gathering Information management Synthesis of data Holistic approach

	as per Dr Hahnemann and other Homoeopathic masters		
k-2	Describe the aetiology and pathophysiology of major diseases and disorders, and their clinical, laboratory, radiographic and pathologic manifestations and correlate with Homoeopathic concept of disease	Integration of information Problem integration	Information gathering Information management System based thinking Analysis synthesis
k-3	Describe the epidemiology of disorders in populations and approaches designed to screen, detect, prevent, and treat disease in populations. - problem formulation- planning of intervention, treatment, evaluation- interpretation, integration and correlate with Homoeopathic concept of preservation of health and clinical management	Integration of information problem integration communication problem solving leadership skill team work communication	Information gathering Information management System based thinking Analysis Synthesis Organizing and planning Implementation evaluation
k-4	Describe the spectrum of	Problem solving	Information gathering

	therapies for common physical and mental disorders and recognize the relative efficacies and common adverse effects of these and their variations among different patients and populations and relate with different expression of chronic disease		Information management System based thinking Analysis Synthesis

		Generic competencies	**Component tasks**
2	**Patient care (PC)**		
Pc1	Perform both a focused and comprehensive history and physical examination, develop diagnostic hypotheses, order and evaluate diagnostic tests, and formulate an appropriate plan of care using Homoeopathic concept of case taking with individualisation and Management	Problem solving	Information gathering Problem Integration Documentation Information management System based thinking Organising and planning Analysis and evaluation Holistic approach
Pc2	Perform core technical procedures, as would be expected of a beginning intern, and describe their indications,	Problem solving independent study	Information gathering

	contraindications, and potential complications.		Problem integration Problem formulation Implementation of plan and evaluation
Pc3	Recognize acute, life-threatening conditions and perform measures to stabilize the patient.	Problem solving	Information gathering Problem integration Problem formulation Implementation of plan and evaluation Dealing with uncertainty

		Generic competencies	**Component tasks**
3	**Interpersonal and Communication Skills (ICS)**		
Cs1	Communicate with patients and their families, counsel them in an effective, caring, and culturally competent manner as per the guidance of Hahnemann and different masters and current advances	Communication Objectivity Flexibility of thought	Information gathering Organising and planning Compassion Empathy Personal integrity Dealing with uncertainty Respect for privacy and autonomy
Cs2	Communicate, consult, collaborate, and work effectively as a member or leader of healthcare teams.	Communication Team member Leadership skills	Organising planning System based thinking Objectivity

			Communication - written and oral Collaboration Executive ability

		Competency generic	**Component tasks**
4	**Professionalism (P)**		
P1	Maintain a professional demeanour, while demonstrating responsibility, integrity, empathy, reliability, and attention to personal wellness as per the direction from Organon of medicine and homoeopathic masters	Problem solving	Ethical awareness Self-awareness Empathy Integrity Reliability
P2	Demonstrate ethical principles that govern the doctor-patient relationship, medical decision-making, and healthcare delivery.	Problem solving	Ethical awareness Respect for privacy and autonomy
P3	Provide compassionate, unbiased care to patients from diverse backgrounds	Problem solving	Compassion Objectivity Flexibility in thinking

		Generic competency	**Component tasks**
5	**Practice-Based Learning and Improvement (PBLI)**		
Pbl1	Utilize appropriate information technology for scientific and clinical problem-solving and decision-making	Problem solving Independent study	Information gathering Information management Documentation Creative thinking
Pbl2	Analyze and critically appraise the relevant medical literature	Information management	Analysis,

			Evaluation Critical thinking Creative thinking
Pbl3	Apply principles of evidence-based medicine, medical ethics, and cost-effectiveness to diagnosis, prognosis, and therapeutics.	Problem solving Objectivity Integration of information Problem integration	Analysis Evaluation Critical thinking Plan for implementation evaluation
Pbl4	Demonstrate the ability for lifelong self-directed learning.	Problem solving Objectivity Integration of information Problem integration Learning ability	Analysis Evaluation Critical thinking Plan for implementation Evaluation Lifelong learner

		Generic competency	**Component tasks**
6	**Healthcare Systems (HCS)**		
HCS1	Discuss the organization, financing, and delivery of healthcare services with particular awareness of healthcare disparities, the needs of the underserved, and the medical consequences of common societal problems.	Problem solving objectivity	Empathy Compassion Community awareness Analysis evaluation of information

			information management
HCS2	Define the core principles of healthcare quality, patient safety, and interprofessionalism	Problem solving objectivity	Problem definition Critical thinking Information management
HCS3	Participate in national programmes	Problem solving	Team work Communication Empathy Compassion

		Generic competency	**Component tasks**
7	**Scholarship (S)**		
S1	Define the scientific and ethical principles of biomedical research, including basic, translational, clinical, and population studies.	Integration of information Problem integration objectivity	Information management Critical thinking
S2	Identify a scholarly area of interest, formulate an investigative question, develop and implement methods to assess it, and communicate the results.	Problem solving objectivity Independent study	Analytical Evaluation Documentation Information management Critical thinking Personal integrity Ethical awareness Communication skill

With this background, we should be able to approach the Manual which is being issued in four parts for each year, the last manual also covering the period of internship. It will be noted that the Generic competencies and the Component tasks as in the Table 3 will be aligned with the specific competencies for each item of learning.

Considerable fresh thought has gone into the framing of this document of CBDC for the Homoeopathic graduate. The existing templates were unable to satisfy the very foundations on which homoeopathic practice rests and which have been extensively elaborated in the Preamble to the new Syllabus introduced in 2022. The two features which may be emphasized here are:

1. Close adherence to homoeopathic philosophy and principles at every stage of education and training

2. This is turn demands a rare amount of integration at horizontal, vertical and spiral forms

The next section will deal with how the Competency table was formulated and how it should be used.

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II - UNDERSTANDING THE COMPETENCIES TABLE

The Competency Table has been designed keeping in mind the Generic and specific competencies required by the learner to attain the overall Program Outcomes (PO) as well as Course Outcomes (CO) of all courses.

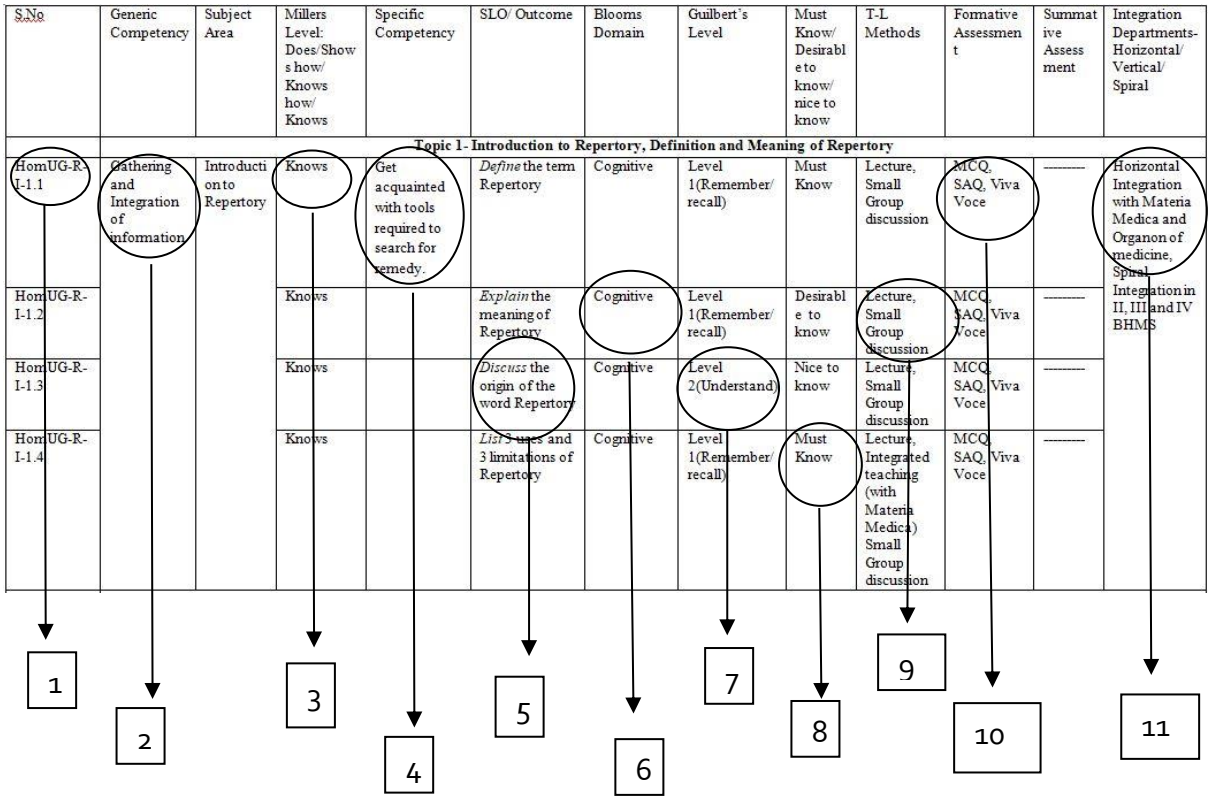
A. **Methodology in preparation of the Competency Table**

The following methodology was adopted in preparing the Competencies table for each course (or subject) of the BHMS program once the National and Institutional Goals, Programme Outcomes, Generic Competencies and component tasks were identified:

- Course Outcomes (CO) were identified for each course (or subject) that were in alignment with the National and Institutional Goals, Programme Outcomes (PO)
- Finalizing the syllabus or the list of topics which will help to achieve not only the Course Outcomes (CO) but also the overall Program Outcomes (PO)
- Identifying the Learning Objectives and Specific Learning Outcome (SLO) for each topic
- Aligning the Specific Learning Outcome (SLO) to the Generic and Specific Competencies that are to be achieved
- Identifying the level of Miller's Pyramid for each Specific Learning Objectives/ Outcome (SLO)
- Classifying each Specific Learning Outcome (SLO) as per Bloom's Taxonomy and Guibert's Level
- Distinguishing the Specific Learning Outcome (SLO) into 'Must know' or 'Desirable to know' or 'Nice to know' categories
- Choosing the appropriate Teaching Learning method/s and the assessment method/s required for achieving each objective or outcome
- Identifying the Horizontal, Vertical and Spiral Integration with other courses (or subjects) required for holistic understanding of the topic

We will now illustrate how the Competency table is to be read with respect to the Repertory Course (subject)

Illustrative Diagrammatic Representation of Competencies Table with example of the Repertory Course



S.No	Generic Competency	Subject Area	Millers Level: Does/Shows how/ Knows how/ Knows	Specific Competency	SLO/ Outcome	Blooms Domain	Guilbert's Level	Must Know/ Desirable to know/ nice to know	T-L Methods	Formative Assessment	Summative Assessment	Integration Departments- Horizontal/ Vertical/ Spiral
Topic 1- Introduction to Repertory, Definition and Meaning of Repertory												
HomUG-R-I-1.1	Gathering and Integration of information	Introduction to Repertory	Knows	Get acquainted with tools required to search for remedy.	*Define* the term Repertory	Cognitive	Level 1(Remember/ recall)	Must Know	Lecture, Small Group discussion	MCQ, SAQ, Viva Voce	---------	Horizontal Integration with Materia Medica and Organon of medicine, Spiral Integration in II, III and IV BHMS
HomUG-R-I-1.2			Knows		*Explain* the meaning of Repertory	Cognitive	Level 1(Remember/ recall)	Desirable to know	Lecture, Small Group discussion	MCQ, SAQ, Viva Voce	---------	
HomUG-R-I-1.3			Knows		*Discuss* the origin of the word Repertory	Cognitive	Level 2(Understand)	Nice to know	Lecture, Small Group discussion	MCQ, SAQ, Viva Voce	---------	
HomUG-R-I-1.4			Knows		*List* 3 uses and 3 limitations of Repertory	Cognitive	Level 1(Remember/ recall)	Must Know	Lecture, Integrated teaching (with Materia Medica) Small Group discussion	MCQ, SAQ, Viva Voce	---------	

Table 4: Description of the Competencies table

S.No	Description
1	Unique number of the competency /outcome (Hom-UG-R-I-1.1) Hom-UG-R-I: Course Code 1.1: Topic number followed by serial number of the Specific Learning Objectives/ Outcome (SLO)
2	Generic Competency to be achieved from the topic
3	Mapping of the Level of Specific Learning Outcome (SLO) to Miller's Pyramid- Knows/ Knows How/ Shows How/ Does
4	Specific Competency to be acquired from the topic
5	Description of Specific Learning Outcome (SLO) for the topic

6	The Blooms Domain addressed by the Specific Learning Outcome (SLO)- Cognitive or Affective or Psychomotor Domain
7	Mapping of the Specific Learning Outcome (SLO) to Guibert's Level of Learning in the Cognitive or Affective or Psychomotor Domain
8	Classifying the Specific Learning Outcome (SLO) into Must know or desirable to know or nice to know areas
9	Teaching Learning methods
10	Assessment methods
11	Subjects that can be vertically or horizontally integrated to improve understanding. If the subject is taught for more than 1 year, it must be integrated spirally in all the years.

B.USING THE COMPETENCIES TABLE

A Competency Based Dynamic Curriculum necessitates that each topic in a course (or subject) be elaborated in terms of the outcomes that are to be achieved by the learner at the end of the particular topic. This in turn will help the learner to achieve the competencies at the course and overall, at the program level.

1. Linking the Specific learning Objective/ Outcome (SLO) to the Generic Competency, Specific Competency and Miller's Level

S.No	Generic Competency	Subject Area	Millers Level: Does/Shows how/ Knows how/ Knows	Specific Competency	SLO/ Outcome	Blooms Domain	Guilbert's Level	Must Know/ Desirable to know/ nice to know	T-L Methods	Formative Assessment	Summative Assessment	Integration Departments- Horizontal/ Vertical/ Spiral
	Topic 1- Introduction to Repertory, Definition and Meaning of Repertory											
HomUG-R-I-1.1	Gathering and Integration of information	Introduction to Repertory	Knows	Get acquainted with tools required to search for remedy.	*Define* the term Repertory	Cognitive	Level 1(Remember/ recall)	Must Know	Lecture, Small Group discussion	MCQ, SAQ, Viva Voce	----------	Horizontal Integration with Materia Medica and Organon of medicine, Spiral Integration in II, III and IV BHMS
HomUG-R-I-1.2			Knows		*Explain* the meaning of Repertory	Cognitive	Level 1(Remember/ recall)	Desirable to know	Lecture, Small Group discussion	MCQ, SAQ, Viva Voce	----------	
HomUG-R-I-1.3			Knows		*Discuss* the origin of the word Repertory	Cognitive	Level 2(Understand)	Nice to know	Lecture, Small Group discussion	MCQ, SAQ, Viva Voce	----------	
HomUG-R-I-1.4			Knows		*List* 3 uses and 3 limitations of Repertory	Cognitive	Level 1(Remember/ recall)	Must Know	Lecture, Integrated teaching (with Materia Medica) Small Group discussion	MCQ, SAQ, Viva Voce	----------	

Each Specific learning Objective/ Outcome (SLO) will help the learner to acquire Generic competencies (abilities that a basic homoeopathic doctor would be trusted to have acquired as a consequence of his / her learning) and Specific competencies (abilities that the student is expected to acquire in a focused area of expertise)

In the above table Introduction to a subject will help the learner to acquire a generic competency of gathering and Integrating knowledge & a specific competency of getting acquainted with the tools required to search for a Homoeopathic remedy.

The Specific learning Objective/ Outcome (SLO) also indicates at what level the competency is defined in the Miller's Pyramid which in the above example is at the level of 'Knows' – the ability to recall facts and ideas.

2. Specific learning Objective/ Outcome (SLO) for each topic

S.No	Generic Competency	Subject Area	Millers Level: Does/Shows how/ Knows how/ Knows	Specific Competency	SLO/ Outcome	Blooms Domain	Guilbert's Level	Must Know/ Desirable to know/ nice to know	T-L Methods	Formative Assessment	Summative Assessment	Integration Departments- Horizontal/ Vertical/ Spiral
	Topic 1- Introduction to Repertory, Definition and Meaning of Repertory											
HomUG-R-I-1.1	Gathering and Integration of information	Introduction to Repertory	Knows	Get acquainted with tools required to search for remedy.	*Define* the term Repertory	Cognitive	Level 1(Remember/ recall)	Must Know	Lecture, Small Group discussion	MCQ, SAQ, Viva Voce	--------	Horizontal Integration with Materia Medica and Organon of medicine, Spiral Integration in II, III and IV BHMS
HomUG-R-I-1.2			Knows		*Explain* the meaning of Repertory	Cognitive	Level 1(Remember/ recall)	Desirable to know	Lecture, Small Group discussion	MCQ, SAQ, Viva Voce	--------	
HomUG-R-I-1.3			Knows		*Discuss* the origin of the word Repertory	Cognitive	Level 2(Understand)	Nice to know	Lecture, Small Group discussion	MCQ, SAQ, Viva Voce	--------	
HomUG-R-I-1.4			Knows		*List* 3 uses and 3 limitations of Repertory	Cognitive	Level 1(Remember/ recall)	Must Know	Lecture, Integrated teaching (with Materia Medica) Small Group discussion	MCQ, SAQ, Viva Voce	--------	

Specific Learning Objectives / Outcomes (SLOs) start with the "Action Verb" as per the Domain and describe what students should know or be able to do at the end of a learning session. The SLOs are written as per the Blooms Domain (Cognitive or Affective or Psychomotor) under which they are categorized.

In the above example four Specific Learning Objectives / Outcomes (SLOs) have been described that belong to the Cognitive domain.

3. **Teaching Learning methods for each topic**

S.No	Generic Competency	Subject Area	Millers Level: Does/Shows how/ Knows how/ Knows	Specific Competency	SLO/ Outcome	Blooms Domain	Guilbert's Level	Must Know/ Desirable to know/ nice to know	T-L Methods	Formative Assessment	Summative Assessment	Integration Departments- Horizontal/ Vertical/ Spiral
	Topic 1- Introduction to Repertory, Definition and Meaning of Repertory											
HomUG-R-I-1.1	Gathering and Integration of information	Introduction to Repertory	Knows	Get acquainted with tools required to search for remedy.	*Define* the term Repertory	Cognitive	Level 1(Remember/ recall)	Must Know	Lecture, Small Group discussion	MCQ, SAQ, Viva Voce	--------	Horizontal Integration with Materia Medica and Organon of medicine, Spiral Integration in II, III and IV BHMS
HomUG-R-I-1.2			Knows		*Explain* the meaning of Repertory	Cognitive	Level 1(Remember/ recall)	Desirable to know	Lecture, Small Group discussion	MCQ, SAQ, Viva Voce	--------	
HomUG-R-I-1.3			Knows		*Discuss* the origin of the word Repertory	Cognitive	Level 2(Understand)	Nice to know	Lecture, Small Group discussion	MCQ, SAQ, Viva Voce	--------	
HomUG-R-I-1.4			Knows		*List* 3 uses and 3 limitations of Repertory	Cognitive	Level 1(Remember/ recall)	Must Know	Lecture, Integrated teaching (with Materia Medica) Small Group discussion	MCQ, SAQ, Viva Voce	--------	

The Teaching- Learning methods have been identified that are most suitable to the Specific Learning Objectives / Outcomes (SLOs) formed for each topic and as per the Domain of each of the Specific Learning Objectives / Outcomes (SLOs).

In the above example, Lectures, Integrated teaching and Small Group Discussion are the Teaching- Learning methods to be adopted for achieving the SLO.

The Teaching Learning Methods will vary as per the Specific Learning Objectives / Outcomes (SLO) and the Domains they cover.

4. Assessment methods for each topic

S.No	Generic Competency	Subject Area	Millers Level: Does/Shows how/ Knows how/ Knows	Specific Competency	SLO/ Outcome	Blooms Domain	Guilbert's Level	Must Know/ Desirable to know/ nice to know	T-L Methods	Formative Assessment	Summative Assessment	Integration Departments- Horizontal/ Vertical/ Spiral
	Topic 1- Introduction to Repertory, Definition and Meaning of Repertory											
HomUG-R-I-1.1	Gathering and Integration of information	Introduction to Repertory	Knows	Get acquainted with tools required to search for remedy.	*Define* the term Repertory	Cognitive	Level 1(Remember/ recall)	Must Know	Lecture, Small Group discussion	MCQ, SAQ, Viva Voce	---------	Horizontal Integration with Materia Medica and Organon of medicine, Spiral Integration in II, III and IV BHMS
HomUG-R-I-1.2			Knows		*Explain* the meaning of Repertory	Cognitive	Level 1(Remember/ recall)	Desirable to know	Lecture, Small Group discussion	MCQ, SAQ, Viva Voce	---------	
HomUG-R-I-1.3			Knows		*Discuss* the origin of the word Repertory	Cognitive	Level 2(Understand)	Nice to know	Lecture, Small Group discussion	MCQ, SAQ, Viva Voce	---------	
HomUG-R-I-1.4			Knows		*List* 3 uses and 3 limitations of Repertory	Cognitive	Level 1(Remember/ recall)	Must Know	Lecture, Integrated teaching (with Materia Medica) Small Group discussion	MCQ, SAQ, Viva Voce	---------	

The Assessment methods have been identified that are most suitable to the Specific Learning Objectives / Outcomes (SLOs) formed for each topic and as per the Domain of each Specific Learning Objectives / Outcomes (SLOs) to assess the learner.

In the above example, Multiple Choice Questions (MCQ), Short Answer Questions (SAQ) and Viva Voce are the assessment methods to be adopted for assessing the SLO. The Assessment Methods will vary as per the SLO and the Domain it covers

5. Integrated Teaching

S.No	Generic Competency	Subject Area	Millers Level: Does/Shows how/ Knows how/ Knows	Specific Competency	SLO/ Outcome	Blooms Domain	Guilbert's Level	Must Know/ Desirable to know/ nice to know	T-L Methods	Formative Assessment	Summative Assessment	Integration Departments- Horizontal/ Vertical/ Spiral
	Topic 1- Introduction to Repertory, Definition and Meaning of Repertory											
HomUG-R-I-1.1	Gathering and Integration of information	Introduction to Repertory	Knows	Get acquainted with tools required to search for remedy.	*Define* the term Repertory	Cognitive	Level 1(Remember/ recall)	Must Know	Lecture, Small Group discussion	MCQ, SAQ, Viva Voce	---------	Horizontal Integration with Materia Medica and Organon of medicine, Spiral Integration in II, III and IV BHMS
HomUG-R-I-1.2			Knows		*Explain* the meaning of Repertory	Cognitive	Level 1(Remember/ recall)	Desirable to know	Lecture, Small Group discussion	MCQ, SAQ, Viva Voce	---------	
HomUG-R-I-1.3			Knows		*Discuss* the origin of the word Repertory	Cognitive	Level 2(Understand)	Nice to know	Lecture, Small Group discussion	MCQ, SAQ, Viva Voce	---------	
HomUG-R-I-1.4			Knows		*List* 3 uses and 3 limitations of Repertory	Cognitive	Level 1(Remember/ recall)	Must Know	Lecture, Integrated teaching (with Materia Medica) Small Group discussion	MCQ, SAQ, Viva Voce	---------	

Horizontal or Vertical Integrated Teaching with other subjects is required for a holistic understanding of the topic from different points of view.

The above topic should be integrated with other subjects of the same year for better understanding of the topic.

Spiral integration is required as the subject will be taught in II, III and IV BHMS and concepts taught in I BHMS will be utilized for further understanding of the subject.

III - Glossary of terms used in the template.

Goals

These are broad outcomes expected of a student at the end of the course of studies. These are to be contrasted with Objectives/Outcomes which are more specifically and narrowly defined.

Programme

A range of learning experiences offered to students in a formal manner over a period of one-to-four years leading to certificates/ diplomas/ degrees. Examples: BA (Economics) BSc (Physics). All possible formal degree Programmes are identified by UGC. BHMS is one such Programme

Programme Outcome

Programme Outcomes (POs) are what knowledge, skills and attitudes a graduate should have at the time of graduation. The Programme Outcomes of professional disciplines are identified at national level by the concerned accrediting agency. In this case, it would be the National Commission of Homoeopathy which would be involved.

Course

Course for the purpose of this Manual represents a subject e.g. Anatomy. In homoeopathic education some of the courses extend over several years e.g. Materia Medica. The relevance of this is in the formulation of Course Outcome

Course Outcome

Course Outcomes are statements that describe what students should be able to do at the end of a course. Where a Course extends over a number of years, it is necessary to define distinct Course Outcomes over the entire teaching programme of the subject. These will vary in depth and extent of the coverage of the subject.

Competency

An observable ability of a health professional, integrating multiple components such as knowledge, skills, values, and attitudes. Since competencies are observable, they can be measured and assessed to ensure their acquisition.

Generic competency:

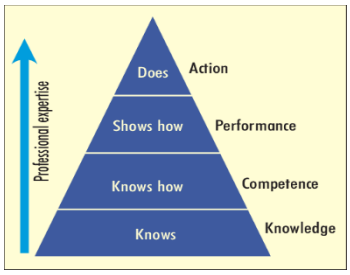
Professional performances are denoted by certain demonstrable attributes that the learners imbibe and internalize as reflex activities. These are the abilities of the professional that characterize the quality and level of performance. The generic competencies therefore are the abilities that a basic homoeopathic doctor would be trusted to have acquired as a consequence of his / her learning. The examples include Information gathering, problem identification, etc. The generic competencies therefore refer to the overall frames of abilities.

Subject area:

Subject area is a chunk of content in a given subject. It could be a chapter, topic, sub-topic, etc.

Millers Levels:

Miller's Pyramid is a diagrammatic representation of the convergence of learning. It maps the pathway of learning to show a person gains the ability and competence in a series of increasingly progressive phases of learning.



The broad base of this pyramid - 'Knows' – has the ability to recall facts and ideas that form the bedrock of professional requirements. 'Knows How' is the next phase of learning, where the students gains the insight into the relationships between the various units of 'knows' and can relate them meaningfully to reach the 'knows how' capacity. These phases would largely be in the Cognitive Domain of Bloom's Taxonomy of Learning Objectives.

Learning is not just about knowing and knowing how, but also to enable that the 'know how' is put into practice. This is the third phase of Miller's Pyramid – the 'Shows How'. During this phase of learning, the student is able to demonstrate the reasoning ability that he / she has acquired in controlled or real situations. This ability also includes the psychomotor dimension of Bloom's Taxonomy. The summit of pyramid, i.e., 'Does' also includes the emotional aspect

of learning in the form of values, attitudes, communication, etc, that denote the 'Affective Domain' of Bloom's Taxonomy.

The Miller's Pyramid is a valuable tool to represent the increasing levels of competencies that the students need to acquire, and also a framework to assess the level of competency that is achieved. Interestingly, the framework focuses on what the learner would be doing, rather than on what the teacher would be doing.

Specific competency:

Specific competencies are the abilities that the student is expected to acquire in a focused area of expertise, which could be a discipline-based knowledge, a skill, an attitude, or a combination of these.

Specific Learning Objectives / Outcomes:

Specific Learning Objectives / Outcomes (SLOs) describe what students should know or be able to do at the end of a learning session, that they couldn't do before. These are written and communicated in a 'low context communication style', that is to say, whoever reads the SLO would have the same understanding that the person who wrote it had. That is, there would be no communication gap.

That is the reason why the SLOs are written specifically and exclusively as units of learning in one of the domains of Bloom, and further at one of the levels of Guilbert. This will ensure that the learning that is expected is clearly communication among all those who refer to it, including those who set the assessment and evaluate the student performance. Further, the SLOs are ALWAYS written with an ACTIVE verb, so as to make the statement observable and measurable.

Bloom's domain:

Bloom's Taxonomy of Educational Objectives is a tool for classifying learning under the categories of 'knowledge', 'skill', and 'attitude / value / communication', represented by the technical terms 'Cognitive', 'Psychomotor', and 'Affective' domains respectively. Each of these domains distinguish the dimension of learning in a particular area. The importance of such classification is that it offers a clear model for both teaching and students' assessment.

Guilbert's level:

Guilbert's Hierarchy is a tool that describes the various levels of learning that can be mapped and managed in the Bloom's domains of learning – cognitive, psychomotor, and affective. This tool also has the additional benefit to identify the appropriate teaching – learning methods / media, and also the assessment strategies.

In the 'knowledge' domain Guilbert's approach to learning proceeds from recall of facts to understanding / interpreting the different sets of data, and finally to the ability to make decisions and solve problems on the basis of the understanding / interpretation. This simple three-step process builds a sequential order of learning; it clearly brings out that decisions shall be made NOT on the basis of facts alone, but through a process of understanding and interpretation.

The 'skill' domain builds the learning from the stage of observing and imitation to gaining control over the skills and culminating in automatism of the skill. In simple terms, any skill will be learnt initially by observing its performance, and imitating the same in the sequential order. In the next phase, the learner tries to gain control over the skill initially under the supervision, and ultimately will be able to perform it independently.

Learning in the affective domain proceeds from the stage where the learner is open and receptive to the stimulus or trigger situation, responding to it in a desirable manner, and finally internalising the responses.

Priority of learning:

The priority of learning is represented as 'Must know', 'Desirable-to-know', and 'Nice-to-know'. Prioritisation is a critical component of curriculum design because it classifies the learning outcomes on the basis of their importance and usefulness for the ultimate professional standards. The priority of learning is objectively assigned by a formula that gives weightage on the basis of 'frequency and impact' of the learning for professional needs.

TL Method / Media:

The teaching-learning (TL) methods and media are the vehicles that enable the acquisition of stated outcomes. Teaching method is simply 'what the teacher does or what the teacher enables the students with', such as giving a lecture, conducting a demonstration, or facilitating a group discussion. Teaching-learning media is 'what the teacher or the students use' to enable the learning; with examples such as a board, or projector, or model, or specimen, among others.

The teaching-learning methods and media are specific to the domains and levels in the domains. It must also be remembered that learning is a continuum, and a range of methods and media would be appropriate in the different phases in the continuum of learning.

Assessment:

Assessment of learning is an important component of curriculum. This measures the performance of the students in comparison to the expected outcomes of learning. Therefore the learning outcomes must be stated and communicated clearly and objectively to all the stakeholders of education. Assessment strategy is based on the domain and the level of domain in which the outcome is to be measured. Assessment could be judgemental for the extent and quality of outcomes, when it is called 'assessment of learning', or it could also be supportive for learning, when it is called as 'assessment for learning'. There are two major approaches to assessment – formative, and summative. The tools of assessment are provided in the annexure.

Formative Assessment:

Formative assessment is NOT judgmental, in that it does not brand the learner as 'pass' or 'fail'. The formative assessments measure the extent and quality of learning with reference to the expected learning outcomes, so that the students can be given feedback to improve on their performance. The formative assessments promote mastery learning, that is to say, each students achieves the stated level of mastery of performance because of the feedback and support. Formative assessment is also called as continuous assessment.

Summative Assessment:

Summative assessment has the mandate to judge the achievement of the learner at the end of a period of learning, and label him / her as 'pass' or 'fail, assign a rank, approve for eligibility to be promoted or eligibility to be admitted to a course. These assessments also serve as quality check to ensure that those who are being certified conform to a minimum standard of professional competence.

Integration:

Integration of learning is an essential requirement for aligning various data points of knowledge and skills for getting a holistic understanding and enabling a unified performance. Integration can be achieved at various dimensions and at various levels.

The dimensions of integration could be temporal in the form of Horizontal, Vertical, or Spiral. Horizontal integration is the alignment of learning on a longitudinal timeline, where the comparable contents of various subjects in the same term or year are integrated, for example the structure from anatomy, function from physiology, symptoms from Materia medica, and rubrics from repertory in the pre-clinical phase of BHMS.

Vertical integration is seen in the subjects that build on the pre-existing knowledge and skills of another subject. For example, the integration between the basic sciences such as anatomy, physiology, and biochemistry for the para-clinical learning such as in pathology, and the integration of basic and para-clinical skills into clinical learning.

Spiral integration is where a subject is recurring at various levels in the same course. For example, Materia medica is learnt from the first to final BHMS, and the focus of the subject is not the same in each year. There would be iteration of the same knowledge from different perspectives and capabilities across the different phases of BHMS.

The levels of integration represent the increasing approximation of knowledge from different subjects, so as to reach an approximation of fusion. The attempt to integration may begin with arranging the comparable contents of different subjects at the same cross sections of timeline. Further, there could be positioning the content of one subject into another subject to bring some kind of co-existence. Still further, the contents can be seamlessly merged to create an aligned learning content. Such integrative efforts can bring about holistic learning for a meaningful homeopathic capacity-building.

FINAL VERSION OF COMPETANCY BASED CURRICUUM FOR ANATOMY FOR FIRST BHMS COURSE

Subject- Human Anatomy

Subject Code: Hom UG-AN

Sl No	Description	Page Number
1	Preamble	2-3
2	Program Outcomes (PO)	3
3	Course Outcomes (CO)	3-4
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6	Teaching Learning Methods	34-36
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1. PREAMBLE

Anatomy is a study of the structural organization and development of man from gross to cellular aspects along with exploring the interrelationship of different tissues, organs and systems.

An important aspect for the homoeopathic student to grasp is the essentially holistic approach emphasized by Hahnemann. From that perspective, study of anatomy is not a study of isolated organs, parts or tissues but that of a hierarchical system which is intimately interconnected and functions with a purpose of striking balance when in a state of adaptation. The subtle ways in which this balance is lost through a malfunctioning of the vital force needs to be appreciated. This can occur when anatomy is taught with applied anatomy in the background.

While anatomy explores the structural organization of man, physiology gives us an understanding of the functional organization of the human being. These subjects, which are in reality the two sides of the coin, need to be taught interdependently. This enables the student to develop an insight into the essential interconnection of both in normal health and how both these alter when the disease process gets initiated in the system. This will also reduce the number of teaching hours due to avoiding duplication of information. While the clinical integration is taking place, homoeopathic connection is emphasized when the relevance of the Homoeopathic subjects being taught in the 1st year (Philosophy, Materia Medica, Pharmacy and Repertory), is simultaneously brought to the forefront and hence student-centered teaching of the first BHMS year be achieved.

Advances in the understanding of tissues and cell structures which subsume functions of the organs and systems can afford a fertile area for exploring the action of drugs of Materia medica.

2. PROGRAMME OUTCOMES

At the end of BHMS program, a student should;

1. Develop the competencies essential for primary health care in clinical diagnosis and treatment of diseases through the judicious application of homoeopathic principles.
2. Recognize the scope and limitation of homoeopathy and to apply the Homoeopathic Principles for curative, prophylactic, promotive, palliative, and rehabilitative primary health care for the benefit of the individual and community.
3. Discern the relevance of other systems of medical practice for rational use of cross referral and life saving measures, so as to address clinical emergences.
4. Develop capacity for critical thinking and research aptitude as required for evidence based homoeopathic practice.
5. Demonstrate aptitude for lifelong learning and develop competencies as and when conditions of practice demand.
6. Be competent enough to practice homoeopathy as per the medical ethics and professionalism.
7. Develop the necessary communication skills to work as a team member in various healthcare setting and contribute towards the larger goals of national policies such as school health, community health, environmental conservation.
8. Identify and respect the socio-demographic, psychological, cultural, environmental & economic factors that affect health and disease and plan homoeopathic intervention to achieve the sustainable development Goal.

3. COURSE OUTCOMES

At the end of the I BHMS course, I BHMS student should be able to;

1. Discuss the evolution of life and the developmental anatomy and genetics of human.
2. Explain the ethics of Anatomy, such as Anatomy act, Body donation & receiving procedure and its legal aspects, develop respect to the human cadaver.
3. Differentiate the structural organization of man from micro to macro and its evolution from embryo.

4. Correlate the structural organization of man with functional organization and its applied aspect.
5. Apply anatomy knowledge to achieve vertical integration with clinical subjects.
6. Correlate structural organization of man with Homeopathic Philosophy and concept of man, Homoeopathic Materia Medica, Repertory and Pharmacy.
7. Correlate structural organization in interpreting different investigations.

4. TEACHING HOURS

Sl. No.	Subject	Theoretical Lecture	(Non – Lecture hours) Practical / Tutorials / Seminars / Clinical Postings
01	Anatomy	325 hrs.	330hrs.

Theory (hrs)	**Non-lecture (hrs)**	
325	**Practical**	**Non-lecture activities**
	250	**80**
Total – 655 hours		

a. TEACHING HOURS (THEORY)

Paper-I

Sl. No	List of Topics	Term	Teaching Hours
1	General Anatomy	I	32
2	Head, Neck & Face	II	50
3	Central Nervous System	II	30
4	Upper Extremities	I	35
5	Embryology	I	20

Paper-II			
Sl. No	**List of Topics**	**Term**	**Teaching Hours**
1	Thorax	II	28
2	Abdomen & Pelvis	III	70
3	Lower Extremities	III	40
4	Histology	I	20

b. TEACHING HOURS (PRACTICAL)

Sl. No	List of Topics	Term	Teaching Hours
1	Head, Neck & Face	II	56
2	Central Nervous System	II	16
3	Upper Extremities	I	34
4	Thorax	II	30
5	Abdomen & Pelvis	III	50
6	Lower Extremities	III	40
7	Histology	I	24

5. COURSE CONTENT: Syllabus Planning

a. Theory:

a. Syllabus should start with revision of some of important topics of BIOLOGY (To connect Biology to Medical Science), origin of Earth and Environment, Origin of LIFE-Evolution of Human Lives.

b. The complete course of Human Anatomy should be subdivided in number of modules according to topics/regions/systems.

c. Syllabus of other subjects of same course should be planned out where the maximum integration (Vertical & Horizontal) of topics is possible.

d. Theory/Practical/Tutorial/Case based learning should be arranged in parallel.

e. Each module should be planned according to the need of system-Co-relation with Homoeopathy & time dimension (number of hours).

f. At the end of each module knowledge should be assessed by arranging joint seminars (application of classroom knowledge to practical understanding).

g. The curriculum includes the following;

1. Anatomy Act.
2. Body donation procedure and its legal aspects.
3. Develop respect to the human cadaver, empathy towards diseased and sense of gratification for the voluntary body donors and their families.
4. Anatomy and Ethics.

b. Practical

a. Dissection of whole Human Body, Demonstration of dissected parts and small group discussions.

b. Identification of histological slides, related to tissue & organs.

c. Students shall maintain Practical/Dissection & Histology record.

THEORY

Sl. No.	Topics	No. of hours	Term
1.	**GENERAL ANATOMY**		**I**
	1. Modern concepts of cell and its components; cell division, types with their significance	2	
	2. Basic tissues	2	
	3. Genetics i. DNA & RNA ii. Chromosomes iii. Genes iv. Inheritances	6	

Sl. No.	Topics	No. of hours	Term
	v. Genetic basis of diseases and Integration with homoeopathic concept of miasmatic influence		
	4. Basics of General Anatomy- i. Definition and subdivisions of Anatomy ii. History of Anatomy iii. Anatomical terms of position & movement iv. Skin, superficial and deep fasciae v. Muscles vi. Bones vii. Joints viii. Blood vessels ix. Lymphatic system x. Nerves xi. Glands: types and classification	 1 1 2 2 2 2 2 2 2 2 2 2	
	5. Revision	2	
	Total Hours	**32**	
2.	**DEVELOPMENTAL ANATOMY (EMBRYOLOGY)**		**I**
	1. Introduction 2. Spermatogenesis 3. Oogenesis 4. Fertilization 5. Cleavage and implantation 6. Bilaminar germ disc formation 7. Gastrulation: Germ layers & Derivatives	1 1 1 1 2 2 3 1	

Sl. No.	Topics	No. of hours	Term
	8. Intraembryonic mesoderm derivatives: Somites 9. Ossification 10. Notochord 11. Folding of the embryonic: formation of primitive gut 12. Placenta 13. Revision	1 1 1 2 1 2	
	Total Hours	**20**	
3.	**HISTOLOGY (General)**		**I**
	1. Introduction	1	
	2. Epithelial tissue	2	
	3. Connective tissue	2	
	4. Cartilage	1	
	5. Bone	1	
	6. Muscle	2	
	7. Nervous tissue	1	
	8. Skin	2	
	9. Lymphoid organs	2	
	10. Blood vessels	2	

Sl. No.	Topics	No. of hours	Term
	11. Glands	2	
	12. Revision	2	
	Total Hours	**20**	
4.	**UPPER EXTREMITY**		**I**
	1. Introduction	1	
	2. Pectoral region and axilla	2	
	3. Mammary Gland	2	
	4. Brachial plexus	2	
	5. Axillary artery	1	
	6. Back and Intermuscular spacesaround scapula	2	
	7. Shoulder Joint	2	
	8. Musculocutaneous and axillary nerves	1	
	9. Arm and cubital fossa; brachial artery	2	
	10. Fore arm: Muscles, nerves and blood vessels (Superficial and Deep Flexors and Extensors)	4	
	11. Radial artery	1	
	12. Ulnar artery	1	

Sl. No.	Topics	No. of hours	Term
	13. Median nerve	2	
	14. Ulnar nerve	1	
	15. Radial nerve	2	
	16. Elbow joint and radio-ulnar articulations	2	
	17. Wrist joint	1	
	18. Flexor and extensor retinacula	1	
	19. Palmar aponeurosis and spaces in palmar spaces	2	
	20. Venous drainage of upper extremity	1	
	21. Revision	2	
	Total Hours	**35**	
5.	**LOWER EXTREMITY**		**III**
	1. Introduction	1	
	2. Lumbar plexus and femoral nerve	2	
	3. Front of thigh	2	
	4. Femoral Triangle and Femoral artery	2	
	5. Median compartment of thigh and obturator nerve	2	

Sl. No.	Topics	No. of hours	Term
	6. Gluteal region	2	
	7. Sacral plexus and sciatic nerve, tibial and common peroneal nerves	4	
	8. Back of the thigh Popliteal fossa	2	
	9. Hip joint	2	
	10. Front of the leg and dorsum of the foot: Anterior tibial artery, deep peroneal nerve	4	
	11. Back of the leg: Tibial nerve and posterior tibial artery	3	
	12. Side of the leg: Superficial peroneal nerve	2	
	13. Retinacula around the ankle	1	
	14. Sole of foot	2	
	15. Knee Joint	2	
	16. Ankle joint	1	
	17. Arches of foot	2	
	18. Venous drainage of lower extremity	2	
	19. Revision	2	
	Total Hours	**40**	
6.	**THORAX**		**II**

Sl. No.	Topics	No. of hours	Term
	1. Introduction	1	
	2. Trachea	1	
	3. Pleura	1	
	4. Lungs	3	
	5. Mediastinum	2	
	6. Pericardium and Heart	4	
	7. Blood supply of heart	2	
	8. Superior mediastinum: Arch of aorta	1	
	9. Superior mediastinum: Superior Vena cava	1	
	10. Inferior Vena Cava	1	
	11. Posterior mediastinum: Azygous vein & Thoracic duct	2	
	12. Posterior mediastinum: Oesophagus & Descending thoracic aorta	2	
	13. Diaphragm	1	
	14. Systemic embryology: Development of Heart and lung	3	
	15. Systemic histology: Trachea and Lung	1	
	16. Revision	2	
	Total Hours	**28**	

Sl. No.	Topics	No. of hours	Term
7.	**ABDOMEN, PELVIS & PERINEUM**		**III**
	1. Introduction	1	
	2. Anterior Abdominal wall	2	
	3. Peritoneum	2	
	4. Stomach	2	
	5. Liver	2	
	6. Gall bladder and Extrahepatic biliary apparatus	2	
	7. Spleen	1	
	8. Duodenum	1	
	9. Pancreas	2	
	10. Jejunum and Ileum, Superior mesenteric artery	2	
	11. Caecum & appendix	2	
	12. Large intestine	2	
	13. Portal venous system	2	
	14. Kidney	2	
	15. Supra renal glands	1	

Sl. No.	Topics	No. of hours	Term
	16. Abdominal aorta	1	
	17. Posterior abdominal wall	1	
	18. Urinary bladder	2	
	19. Ureter	1	
	20. Prostate gland	2	
	21. Ovary	1	
	22. Uterus	2	
	23. Fallopian tube	1	
	24. Scrotum and testis	2	
	25. Vas deferens	1	
	26. Rectum	1	
	27. Anal canal	1	
	28. Walls of pelvis including pelvic diaphragm	2	
	29. Perineum: superficial and deep perineal pouches	3	
	30. Ischiorectal fossa	1	
	31. Systemic embryology: Development of digestive system	4	
	32. Systemic embryology: Development of urogenital organs	2	

Sl. No.	Topics	No. of hours	Term
	33. Systemic histology: Digestive system	4	
	34. Systemic histology: Urinary system & supra renal gland	2	
	35. Systemic histology: Male reproductive system	2	
	36. Systemic histology: Female reproductive system	2	
	37. Revision	6	
	Total Hours	**70**	
8.	**HEAD, NECK & FACE**		**II**
	1. Introduction	1	
	2. Scalp	2	
	3. Face: muscles, nerves and blood vessels	2	
	4. Lachrymal apparatus	1	
	5. Side of the neck: Posterior triangle	1	
	6. Front of the neck: Anterior triangle and its subdivisions	3	
	7. Deep cervical fascia	1	
	8. Back of the neck: Suboccipital triangle	1	
	9. Contents of vertebral canal	1	

Sl. No.	Topics	No. of hours	Term
	10. Parotid gland	1	
	11. Submandibular gland	1	
	12. Muscles of mastication	1	
	13. Temporomandibular joint	1	
	14. Thyroid gland	2	
	15. Cranial cavity: Dura mater, Dural venous sinuses & Pituitary gland	3	
	16. Contents of the orbit	1	
	17. Extraocular muscles	1	
	18. Oral cavity	1	
	19. Soft palate and palatine tonsil	1	
	20. Tongue	1	
	21. Pharynx	2	
	22. Larynx	2	
	23. Nose and paranasal air sinuses	2	
	24. Ear: EAC & middle ear, inner ear	2	
	25. Eustachian tube	1	
	26. Eyeball	2	

Sl. No.	Topics	No. of hours	Term
	27. Common & Internal carotid artery	1	
	28. External carotid artery	2	
	29. Vertebral artery	1	
	30. Internal Jugular vein	1	
	31. Systemic histology: Thyroid gland, Pituitary gland and Tongue	3	
	32. Systemic embryology: Pharyngeal arches: derivatives	1	
	33. Revision	3	
	Total Hours	**50 hrs**	
9.	**CENTRAL NERVOUS SYSTEM: BRAIN**		**II**
	1. Introduction	1	
	2. Meninges & CSF	1	
	3. Spinal cord	1	
	4. Medulla oblongata	1	
	5. Pons	1	
	6. Cerebellum	1	
	7. Fourth ventricle	1	

Sl. No.	Topics	No. of hours	Term
	8. Mid-brain	1	
	9. Diencephalon: Thalamus & Hypothalamus	2	
	10. Third Ventricle	1	
	11. Lateral Ventricle	1	
	12. Cerebrum: external features	2	
	13. Functional areas of cerebral cortex	1	
	14. Basal ganglia	1	
	15. White matter of cerebrum: Corpus callosum & Internal capsule	2	
	16. Blood supply of brain	2	
	17. Cranial nerves	6	
	18. Systemic embryology: Development of Brain	2	
	19. Revision	2	
	Total Hours	**30**	

Total – 325 hrs

PRACTICAL

Sl. No.	Topics	No. of hours	Term
1.	**GENERAL HISTOLOGY**		**I**
	1. Epithelial tissue: Simple & Stratified	4	
	2. Connective tissue: Loose/Areolar & Adipose	2	
	3. Connective tissue: Cartilages	2	
	4. Connective tissue: Compact bone (L.S, T.S) and Spongy bone	2	
	5. Muscle tissue: Skeletal (L.S, T.S), Smooth and Cardiac	2	
	6. Nervous tissue: Peripheral nerve (T.S) & Nerve fibre (L.S)	2	
	7. Skin: Thick & Thin	2	
	8. Lymphoid organs: Lymph node, Spleen, Thymus & Tonsil	4	
	9. Blood vessels: Large artery, Medium sized artery & Large vein	2	
	10. Glands: Serous, Mucous & Mixed	2	
	Total Hours	24	
2.	**UPPER EXTREMITY**		**I**
	1. Introduction	2	
	Osteology		
	2. Clavicle	2	
	3. Scapula	2	

Sl. No.	Topics	No. of hours	Term
	4. Humerus	2	
	5. Radius	2	
	6. Ulna	2	
	7. Articulated hand	2	
	8. Surface Markings in upper extremity	2	
	Dissection		
	9. Pectoral region	2	
	10. Axilla	2	
	11. Back & Shoulder	2	
	12. Arm: Front & Cubital fossa and Back of the arm	2	
	13. Front of Forearm & palm of hand	4	
	14. Back of Forearm & Dorsum of Hand	2	
	15. Joints of upper extremity	2	
	16. Radiology of upper extremity	2	
	Total Hours	**34**	
3.	**HEAD, NECK & FACE**	**II**	
	1. Introduction	2	

Sl. No.	Topics	No. of hours	Term
	Osteology		
	2. Skull	6	
	3. Mandible	2	
	4. Hyoid bone	2	
	5. Cervical vertebrae: Typical & Atypical	2	
	6. Surface Markings in head, neck & face.	2	
	Dissection		
	7. Scalp	2	
	8. Face	2	
	9. Posterior triangle of neck	2	
	10. Anterior triangle of neck	2	
	11. Back of neck	2	
	12. Cranial cavity & Contents of vertebral canal	4	
	13. Deep dissection of neck	2	
	14. Orbit & Eyeball	2	
	15. Ear	2	
	16. Parotid region	2	

Sl. No.	Topics	No. of hours	Term
	17. Temporal & infratemporal region	2	
	18. Sub mandibular region	2	
	19. Mouth, Tongue & Pharynx	2	
	20. Nose & Larynx	2	
	21. Temporo-Mandibular joint & joints of Neck	2	
	22. Radiological anatomy of Head, Neck and Face	2	
	Systemic Histology-		
	23. Thyroid gland (including parathyroid)	2	
	24. Pituitary gland	2	
	25. Revision	2	
	Total Hours	**56**	
4.	**CENTRAL NERVOUS SYSTEM**		**II**
	1. Introduction	2	
	Demonstration		
	2. Parts of the brain	4	
	3. Spinal cord	2	

Sl. No.	Topics	No. of hours	Term
	4. Ventricles (model)	2	
	5. Radiology of brain	2	
	Systemic Histology		
	6. Nervous tissue: Cerebrum & Cerebellum	2	
	7. Revision	2	
	Total Hours	**16**	
5.	**THORAX**		**II**
	1. Introduction	2	
	Osteology		
	2. Sternum. Ribs: Typical & Atypical	2	
	3. Thoracic vertebrae: Typical & Atypical	2	
	Surface Marking	4	
	Dissection		
	4. Anterior Thoracic wall, Intercostal space & contents	2	
	5. Pleura & Lungs	4	
	6. Contents of superior mediastinum & Pericardium	2	
	7. Heart: External features	2	

Sl. No.	Topics	No. of hours	Term
	8. Interior of Heart with valves of heart	2	
	9. Contents of posterior Mediastinum	2	
	10. Radiological anatomy	2	
	Systemic Histology		
	11. Trachea & Lung	2	
	12. Revision	2	
	Total Hours	**30**	
6.	**LOWER LIMB**		**III**
	1. Introduction	2	
	Osteology		
	2. Hip Bone	2	
	3. Femur & Patella	2	
	4. Tibia	2	
	5. Fibula	2	
	6. Articulated Foot	2	
	7. Surface Marking	2	
	Dissection		

Sl. No.	Topics	No. of hours	Term
	8. Front of thigh	4	
	9. Medial side of thigh	2	
	10. Gluteal region	2	
	11. Back of thigh & Popliteal fossa	2	
	12. Front of Leg & Dorsum of Foot	2	
	13. Leg: Medial, Lateral & Back of Leg	4	
	14. Sole of Foot	4	
	15. Joints of the lower extremity	2	
	16. Radiology lower extremity	2	
	17. Revision	2	
	Total Hours	**40**	
7.	**ABDOMEN & PELVIS**		**III**
	1. Introduction	2	
	2. **Osteology**		
	3. Lumbar Vertebrae	2	
	4. Sacrum and joints	2	
	5. Articulated Pelvis: Male & female	2	

Sl. No.	Topics	No. of hours	Term
	6. **Surface Marking**	4	
	Dissection		
	7. Anterior abdominal wall	2	
	8. External genitalia of Male	2	
	9. Abdominal cavity: Positions & Relations of viscera, Peritoneum, Greater & Lesser sac	2	
	10. Stomach & Spleen	2	
	11. Small intestine (Jejunum & Ileum) & Large intestine	2	
	12. Duodenum & Pancreas	2	
	13. Liver, Gall bladder & blood vessels of Digestive system	2	
	14. Kidney & Suprarenal gland	2	
	15. Posterior Abdominal wall & Diaphragm	2	
	16. Walls of the pelvis & Pelvic cavity : position & relations of viscera, Perineum	2	
	17. Urinary bladder, Urethra & Prostate	2	
	18. Ovary, Uterus, Fallopian tubes, Vagina	2	
	19. Sigmoid colon, Rectum & Anal canal	2	

Sl. No.	Topics	No. of hours	Term
	20. **Radiological anatomy**	2	
	Systemic Histology		
	21. Digestive system: Basic structure of GIT	2	
	22. Digestive system: Liver & Gall bladder, Pancreas	2	
	23. Urinary system: Kidney, Ureter & Suprarenal gland	2	
	24. Male Reproductive system: Testis & Prostate	2	
	25. Female Reproductive system: Ovary & Uterus	2	
	Total Hours	**50**	
Total Practical hours		**250 Hours**	

Non-Lecture activities

Sl. No	Non-Lecture Teaching Learning methods	Time Allotted per Activity (in Hours)
1.	Seminars/ Workshops	10
2.	Group Discussions	10
3.	Problem based learning	10

4.	Integrated Teaching	15
5.	Case Based Learning	10
6.	Self-directed Learning	15
7.	Tutorials, Assignments and projects	10
	Sub total	80
8.	Practical	250
	Total	**330**

Description of Non-Lecture Activities

Sl. No	Non-Lecture Teaching Learning methods	Time Allotted per Activity (in Hours)	Topics
1.	Seminars/ Workshops	10	Seminars: Guest Seminars, Student Seminars of Fast Learners can be conducted on any topic of Anatomy. E.g.: Shoulder joint, Liver etc. Workshop: Workshop can be arranged on important topics of Anatomy. E.g.: Abdomen, Thorax, CNS etc.
2.	Group Discussions	10	Group discussions can be conducted during practical hours on any topic of Practical and dissection. E.g.: Heart, Lungs, actions of joints etc.
3.	Problem based learning	10	Problem based learning can be conducted on any applied anatomy topic. E.g.: Bell's palsy, Frozen shoulder, Varicose veins etc.
4.	Integrated Teaching	15	**A] Horizontal Integration**

			Physiology: Any topic related to Physiology can be conducted. E.g.: Anatomy: Physiology Seminar on Respiratory System. Homoeopathic Subjects: Any topic related to Homoeopathic Materia Medica, Repertory, Organon of Medicine. E.g.: a) Integrated lecture with HMM - Homoeopathic drugs related to organs of Abdomen. b) Integrated lecture with Repertory – Rubrics related to structures of Thorax. c) Integrated lecture with Organon –Miasmatic influence on heredity. d) Integrated lecture with Homoeopathic Pharmacy - Action of Homoeopathic drugs on cellular level. **B] Vertical Integration** Gynecology – E.g.: Any topic related on female reproductive System. Surgery – E.g.: Integrated lecture on radiology. Medicine – E.g.: Embryological basis of major congenital anomalies of heart
5.	Case Based Learning	10	Case Based Learning can be conducted on any clinical topic of anatomy by presenting a case scenario with the help of Simulation or Audiovisual aid in the classroom. E.g.: A case of Bell's Palsy for the topic Facial Nerve, A case of Wrist drop for the topic Radial Nerve etc.

6.	Self-Directed Learning	15	Self-Directed Learning can be conducted for any topic of Anatomy. E.g.: Functional areas of cerebrum, Actions of Facial muscles.
7.	Tutorials, Assignments, Projects	10	Tutorials, Assignments, projects can be conducted on any topic of anatomy at the end of the topic.

6. TEACHING LEARNING METHODS

General Instructions

(a) Instructions in anatomy should be so planned as to present a general working knowledge of the structure of the human body both at micro and macro level and should correlate with function. Topics/syllabus should be planned out in parallel with other subjects for better understanding & to achieve integration.

(b) The amount of detail which a student is required to memorise should be reduced to the minimum but should connect to syllabus of other subjects and applied anatomy.

(c) Major emphasis should be laid on functional anatomy of the living subject rather than on the static structures of the cadaver and on general anatomical positions and broad relations of the viscera, muscles, blood vessels, nerves and lymphatics and study of the cadaver is the only means to achieve this.

(d) Students should know the basic applied anatomy & should not be burdened with minute anatomical details which have no clinical significance.

(e) Only such details which have professional or general educational value for the Homoeopathic medical students need to be focused.

(f) Normal radiological anatomy may also form part of practical or clinical training and the structure of the body should be presented linking functional aspects.

(g) A good part of theoretical lectures on anatomy can be transferred to tutorial classes with the demonstrations/ Projection / Dissection.

(h) Case based learning should be conducted for the students on various clinical conditions with the help of case scenario, simulation or Audiovisual aids as a Non-Lecture activity.

(i) Seminars and group discussions to be arranged periodically with view of presenting these subjects in an integrated manner.

(j) More stress on demonstrations and tutorials should be given. Emphasis should be laid on the general anatomical positions and broad relations of the viscera, muscles, blood vessels, nerves and lymphatics.

(k) There should be joint seminars with the departments of Physiology and Biochemistry, Repertory, HMM, Philosophy and Pharmacy which should be organized wherever necessary as per the topic.

(l) There should be a close correlation in the teaching of gross Anatomy, Histology, Embryology and Genetics and the teaching of Anatomy, Physiology including Biochemistry along with Homoeopathic subjects shall be integrated.

Though dissection of the entire body is essential for the preparation of the student for his clinical studies, the burden of dissection can be reduced and much saving of time can be affected with considerable reduction of the number of topographical details while following the above points.

The purpose of dissection is to give the student an understanding of the body-Structure from Macro to Micro correlate to its function- Functional anatomy to integrate with Physiology and the dissection should be designed to achieve this goal.

Dissection should be preceded by a course of lectures on the general structure of the organ or the system under discussion and then its function. In this way anatomical and physiological knowledge can be presented to students in an integrated form and the instruction of the whole course of anatomy and physiology made interesting, lively practical or clinical. Syllabus of all the subjects of First BHMS course should be structured to run parallel, horizontally & vertically as far as possible to achieve maximum integration.

Students should be able to identify anatomical specimens and structures displayed in the dissection. Teaching and Demonstration methods should be supported with latest software/Practical/Charts/slides/Working or 3D Diagrams, Audio-Visual/ Multimedia presentation/Simulation to train clinical application.

The Teaching Learning activities in Anatomy requires change in structure & process in order to be more skill based & providing hands on experience.

The Teaching Learning methods with respect to Anatomy may be covered in the following manner:

a. **Class Room Lectures** – Oral Presentation, Board Work, Power point Presentation. **Tutorials** on the topics covered.

b. **Assignments –** For Slow Learners

c. **Practical Class** – Demonstration, Dissection, Surface Marking, Histology, Radiology

d. **Student Activities –** Working out the Assignments, Projects, PowerPoint presentations as assigned

e. **Case based Learning & Problem Based Learning (CBL & PBL)** for students to understand the application of knowledge of Anatomy with Clinical subjects.

f. **DOAP (Demonstration – Observation – Assistance – Performance)** For Clinical Anatomy.

7. CONTENT MAPPING (COMPETENCY TABLE)

1. General Anatomy
2. Developmental anatomy (Embryology)
3. Regional anatomy (Upper and Lower Extremities, Thorax, Abdomen, Pelvis & Perineum, Head, Neck & Face and Brain)

3.1 Each of the region will be studied under the following headings

(a) Osteology
(b) Syndesmology and Arthrology (Joints)
(c) Myology
(d) Angiology
(e) Neurology
(f) Splanchnology (Viscera/Organ)
(g) Histology
(h) Surface anatomy
(i) Applied anatomy
(j) Radiographic anatomy
(k) Correlation with homoeopathic subjects

Semester - I

1. **Topic: General Anatomy**

Learning Outcomes (LO): At the end of general anatomy, I-BHMS student must;

1. Describe the structure of a cell, its components and their function.
2. Recall the terminologies used in Anatomy.
3. Classify bones, muscles, joints and nerves
4. Mention the homoeopathic drugs indicated for particular tissue/organ involvement.
5. Practice Ethics related to the learning of Anatomy.

Sl. No.	Generic Competency	Subject Area	Millers: Knows (K) /Knows how (KH) / Shows how (SH) /Does (D) K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know (MK) / Desire to know (DK) / Nice to know (NK)	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Summative Assessment	Integration Horizontal (H) / Vertical(V)

Hom UG-AN-1.1	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/Information management/synthesis	General Anatomy	K	Concept of cell as structural and functional unit of the body	1. Define cell 2. Name the components of cell 3. Mention their functions of cell organelle 4. Mention the types of cell division **5.** explain their significance	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK 4. MK 5. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)
Hom UG-AN-1.2			K	Understanding of the four basic tissues that make up organs and systems	1. Describe the structure and location 2. Mention the characteristics 3. Function of each of the basic tissues	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)
Hom UG-AN-1.3. i			K	Understand role of DNA in carrying the genetic code and RNA in gene expression	1. Describe the structure of DNA and RNA 2. List the functions of DNA and RNA	Cognitive	Level 1 (Remember/ recall)	1. DK 2. DK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H) Medicine (V)

Sl. No.	**Generic Competency**	**Subject Area**	**Millers: K/KH/ SH/D**	**Specific Competency**	**Specific learning objectives:** At the end of the session student should be able to	**Bloom's Domain**	**Guilbert's level**	**Must know/ Desire to know/ Nice to know**	**Teaching Learning Method/Media**	**Formative Assessment**	**Summative Assessment Summative Assessment**	**Integration Horizontal/ Vertical**

Hom UG-AN-1.3. ii	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/Information management/synthesis	General Anatomy	K	Describe the role of chromosomes in transfer or genetic material & role in cell division	1. Definition and number 2. Karyotyping 3. Barr body 4. Chromosomal abnormalities	Cognitive	Level 1 (Remember/ recall)	1. MK 2. DK 3. NK 4. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H) Medicine (V)
Hom UG-AN-1.3. iii			K	Explain the concept of Gene as unit of inheritance	1. Definition 2. Functions 3. Types and location	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H) Medicine (V)
Hom UG-AN-1.3. iv			KH	Describe the types of inheritance and their role in hereditary diseases	1. Definition 2. Define autosomal inheritance 3. Define sex linked inheritance 4. Define mitochondrial inheritance	Cognitive	Level 2 (Remember/ recall)	1. MK 2. DK 3. DK 4. NK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H) Medicine (V)

Sl. No.	Generic Competency	Subject Area	Millers: K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/Media	Formative Assessment	Summative Assessment Summative Assessment	Integration Horizontal/ Vertical
Hom UG-AN-1.3. v	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/Information management/synthesis	General Anatomy	KH	Describe the genetic basis of diseases	1. Mention the types of genetic abnormalities 2. Describe the genetic basis of Down's syndrome 3. Explain miasmatic influence on heredity	Cognitive	Level 2 (understand/interpret)	1. DK 2. DK 3. NK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H) Medicine (V) Organon (H)
Hom UG-AN-1.4.i			K	Definition and subdivisions of anatomy	1. Definition of anatomy 2. List the subdivisions of anatomy 1. Recall the methods of study in each sub division of anatomy	Cognitive	Level 1 (Remember)	1. MK 2. DK 3. DK 4.	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	-
Hom UG-AN-1.4. ii			K	History of Anatomy	1. Recall the evolution of anatomy as a science 2. Enumerate the major contributors and their work	Cognitive	Level 1 (Remember)	1. NK 2. NK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	-

Sl. No.	Generic Competency	Subject Area	Millers: K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/Media	Formative Assessment	Summative Assessment Summative Assessment	Integration Horizontal/ Vertical
Hom UG-AN-1.4.iii	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/Information management/synthesis	General Anatomy	K & KH	Anatomical Terms of position & movement	1. Define anatomical terms of position and movement 2. Apply the anatomical terms 3. Demonstrate the movements	Cognitive & Psychomotor	Level 1 (Remember) & Level 2 (understand)	1. MK 2. MK 3. MK	Lecture Demonstration Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	-
Hom UG-AN-1.4.iv			K	Skin, Superficial and Deep fasciae	1. Describe the structure, appendages of skin 2. Mention the functions of skin 3. Describe superficial fascia and its distribution 4. Describe deep fascia and its functions	Cognitive	Level 1 (Remember)	1. MK 2. MK 3. DK 4. MK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)
Hom UG-AN-1.4. v			K & KH	Muscles	1. Classify muscles 2. Classify skeletal muscles based on fascicular architecture and their blood and nerve supply 3. Explain the actions of skeletal muscles	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. DK 3. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)

Sl. No.	Generic Competency	Subject Area	Millers: K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/Media	Formative Assessment	Summative Assessment Summative Assessment	Integration Horizontal/ Vertical
Hom UG-AN-14.vi	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/Information management/synthesis	General Anatomy	K & KH	Bones	1. Describe the structure and functions of bones 2. Classify bones 3. Describe the parts of growing long bone 4. Explain the blood supply of long bone	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. MK 3. MK 4. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)
Hom UG-AN-1.4.vii			K	Joints	1. Define joints 2. Classify joints 3. Describe the structure of synovial joint 4. Classify synovial joints 5. Mention the blood and nerve supply of joints	Cognitive	Level 1 (Remember)	1. MK 2. MK 3. MK 4. DK 5. DK 5.	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)
Hom UG-AN-1.4. viii			K	Blood vessels	1. Describe the types of blood vessels 2. Explain anastomosis & arteriovenous anastomosis 3. Describe the types of blood circulation 4. Describe foetal circulation	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. MK 3. MK 4. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)

Sl. No.	Generic Competency	Subject Area	Millers: K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/Media	Formative Assessment	Summative Assessment Summative Assessment	Integration Horizontal/ Vertical
Hom UG-AN-14. ix	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/Information management/synthesis	General Anatomy	K	Lymphatic system	1. Define the lymphatic system and mention its functions 2. Enumerate the components of lymphatic systems 3. Define mucosa associated lymphatic tissue and bronchus associated lymphatic tissue	Cognitive	Level 1 (Remember)	1. MK 2. MK 3. MK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)
Hom UG-AN-1.4x			K & KH	Nerves	1. Classify nervous system 2. Describe neuron & neuroglia 3. Describe the formation of typical spinal nerve 4. Differentiate sympathetic and parasympathetic nervous systems	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. MK 3. MK 4. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)
Hom UG-AN-1.4. xi			K & KH	Glands	1. Define a gland 2. Describe exocrine and endocrine glands 3. Classify exocrine glands 4. Classify endocrine glands	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. MK 3. DK 4. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)

Hom UG-AN-1.5			K	Cell, Tissues, organs, Organ System	Describe the action of Homoeopathic drugs on cellular level.	Cognitive	Level 1 (Remember/ recall)	NK	Integrated lecture	Viva Voce	-	Pharmacy , Homoeopathic Materia Medica (H),

2. Topic: Developmental Anatomy (Embryology)

Learning Outcomes (LO): At the end of embryology, I-BHMS student should be able to;

1. Describe evolution of life on earth and the developmental anatomy and genetics.
2. Explain the structural organization of man from micro to macro and its evolution from embryo.
3. Explain the evolution of different organs and systems from the embryo.
4. Enumerate the homoeopathic drugs indicated for particular genetic or developmental defect.

Embryology

Sl. No.	Generic Competency	Subject Area	Millers: K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal/ Vertical
Hom UG-AN-2.1	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/Information management/synthesis	Embryology	K & KH	Introduction to embryology	1. Define embryology 2. Enumerate the parts of male and female reproductive systems 3. Correlate meiosis with gametogenesis 4. Describe menstrual cycle	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. MK 3. DK 4. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H) Obstetrics and Gynecology (V)
Hom UG-AN-2.2			K & KH	Spermatogenesis	1. Define spermatogenesis 2. Describe the process of spermatogenesis 3. Describe spermiogenesis 4. Describe the structure of spermatozoon	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. MK 3. MK 4. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)
Hom UG-AN-2.3			K & KH	Oogenesis	1. Define Oogenesis 2. Describe the process of oogenesis 3. Describe formation of graafian follicle 4. Compare spermatogenesis and oogenesis	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. MK 3. MK 4. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H) Obstetrics and Gynecology (V)

Sl. No.	Generic Competency	Subject Area	Millers: K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal/ Vertical
Hom UG-AN-2.4 & 2.5	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/Information management/synthesis	Embryology	K & KH	Fertilization	1. Define fertilization 2. Describe the process of fertilization 3. Describe the process of cleavage and formation of blastocyst 4. Explain the clinical correlation with IVF	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. MK 3. MK 4. NK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)
Hom UG-AN-2.6			K	Formation of bilaminar germ disc	1. Describe the formation of amniotic cavity and yolk sac 2. Describe the formation of bilaminar germ disc 3. Describe the formation of extraembryonic mesoderm 4. Define chorion and amnion	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. MK 3. MK 4. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	-
Hom UG-AN-2.7			K	Gastrulation	1. Define Gastrulation 2. Describe the formation of prochordal plate 3. Describe the formation of primitive streak 4. Describe the formation of germ layers 5. Mention derivatives of each germ layer	Cognitive	Level 1 (Remember)	1. MK 2. MK 3. MK 4. DK 5. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)

Sl. No.	Generic Competency	Subject Area	Millers: K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal/ Vertical
Hom UG-AN-2.8	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/Information management/synthesis	Embryology	K	Intra embryonic mesoderm and formation of somites	1. Describe the parts of intra embryonic mesoderm 2. Describe the formation of somites and their derivatives 3. Define Sclerotome, myotome and dermatome	Cognitive	Level 1 (Remember)	1. MK 2. MK 3. MK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)
Hom UG-AN-2.9			K	Ossification	1. Define ossification 2. Mention the types of ossification 3. Describe intramembranous ossification 4. Describe endochondral ossification	Cognitive	Level 1 (Remember)	1. MK 2. MK 3. DK 4. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)
Hom UG-AN-2.10			K	Notochord	1. Describe the formation of notochord 2. Mention the function and fate of notochord 3. Describe the formation of neural tube	Cognitive	Level 1 (Remember)	1. MK 2. MK 3. MK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	-

Sl. No.	Generic Competency	Subject Area	Millers: K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal/ Vertical
Hom UG-AN-2.11	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/Information management/synthesis	Embryology	K	Folding of the embryonic disc and formation of primitive gut tube	1. Explain the sagittal folding of embryo 2. Explain the transverse folding of embryo 3. Describe the parts of primitive gut tube	Cognitive	Level 1 (Remember)	1. MK 2. MK 3. MK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	-
Hom UG-AN-2.12			K	Placenta	1. Define amnion and chorion 2. Define decidua 3. Describe the formation of placenta 4. Mention the functions of placenta	Cognitive	Level 1 (Remember)	1. DK 2. DK 3. MK 4. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	-
Hom UG-AN-2.13			K	Stages of development	1. Describe the Development of embryo and layers of suppression. 2. Enumerate the homoeopathic drugs indicated for particular genetic or developmental defect	Cognitive	Level 1 (Remember/ recall)	1. NK	Integrated lecture	Viva Voce	-	Organon (H), Homoeopathic Materia Medica (H)

3. Topic: General Histology

Learning Outcomes (LO): At the end of embryology, I-BHMS student should be able to;

1. Describe microscopic structure of the basic tissues and clinically relevant structures.
2. Correlate the histological features with their functions.
3. Explain the possible changes in cells, tissues and organs due to injury or disease.

Sl. No.	Generic Competency	Subject Area	Millers: K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal/ Vertical
Hom UG-AN-3.1	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/Information management/synthesis	**Histology**	K & KH	Introduction to histology	1. Define histology 2. Describe parts of microscope 3. Explain the use of microscope	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. MK 3. MK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)
Hom UG-AN-3.2			K	Epithelial tissue	1. Define epithelium 2. Mention the characteristics of epithelial tissue 3. Classify epithelia	Cognitive	Level 1 (Remember)	1. MK 2. MK 3. MK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)
Hom UG-AN-3.3			K & KH	Connective tissue	1. Define connective tissue 2. Mention the characteristics of connective tissue 3. Classify connective tissue	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. M 3. MK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)

Sl. No.	Generic Competency	Subject Area	Millers: K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal/ Vertical
Hom UG-AN-3.4	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/Information management/synthesis	Histology	K	Cartilage	1. Classify cartilages 2. Describe the microscopic structure of hyaline cartilage 3. Describe the microscopic structure of fibro cartilage 4. Describe the microscopic structure of elastic cartilage	Cognitive	Level 1 (Remember)	1. MK 2. MK 3. MK 4. MK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)
Hom UG-AN-3.5			K	Bone	1. Describe haversian system 2. Describe the microscopic structure of L S and T S of compact bone 3. Describe the microscopic structure of spongy bone	Cognitive	Level 1 (Remember)	1. MK 2. MK 3. MK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)
Hom UG-AN-3.6			K	Muscle	1. Classify muscle tissue 2. Describe the microscopic structure of L S and T S of skeletal muscle 3. Describe the microscopic structure of smooth muscle 4. Describe the microscopic structure of cardiac muscle	Cognitive	Level 1 (Remember)	1. MK 2. MK 3. MK 4. MK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)

Sl. No.	Generic Competency	Subject Area	Millers: K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal/ Vertical
Hom UG-AN-3.7	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/Information management/synthesis	Histology	K	Nervous tissue	1. Describe nerve 2. Describe T S of peripheral nerve 3. Describe L S of peripheral nerve	Cognitive	Level 1 (Remember)	1. MK 2. MK 3. MK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)
Hom UG-AN-3.8			K	Skin	1. Describe microscopic structure of thin skin 2. Describe microscopic structure of thick skin 3. Describe appendages of skin	Cognitive	Level 1 (Remember)	1. MK 2. MK 3. MK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)
Hom UG-AN-3.9			K	Lymphoid organs	1. Mention lymphoid organs 2. Describe the microscopic structure of lymph node, 3. Describe the microscopic structure of tonsil 4. Describe the microscopic structure of thymus 5. Describe the microscopic structure of spleen	Cognitive	Level 1 (Remember)	1. MK 2. MK 3. MK 4. MK 5. MK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)

Sl. No.	Generic Competency	Subject Area	Millers: K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal/ Vertical
Hom UG-AN-3.10	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/Information management/synthesis	Histology	K	Blood vessels	1. Classify blood vessels 2. Describe the microscopic structure of large artery 3. Describe the histology of medium sized artery 4. Describe the microscopic structure of large vein	Cognitive	Level 1 (Remember)	1. MK 2. MK 3. MK 4. MK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)
Hom UG-AN-3.11			K	Glands	1. Classify glands based on type of secretion 2. Describe the microscopic structure of serous gland 3. Describe the microscopic structure of mucous gland 4. Describe the microscopic structure of mixed gland	Cognitive	Level 1 (Remember)	1. MK 2. MK 3. MK 4. MK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)

4.Topic: Upper Extremities

Learning Outcomes (LO): At the end of Upper Extremities, I-BHMS student should be able to;

1. Describe the anatomy of the bones of the upper extremities, their blood supply and applied anatomy.
2. Describe anatomy of the joints of the upper extremities, their blood supply, action and applied anatomy.
3. Describe the muscles of the upper extremities, their origin, insertion, nerve supply, action and applied anatomy.
4. Explain anatomy of the vessels and nerves of the upper extremities, their course, muscles they supply, relations and applied anatomy.
5. Describe the anatomy of mammary gland with its applied anatomy.
6. Describe the anatomy of axilla.
7. Enumerate homoeopathic drugs and rubrics indicated for particular involvement of bones, muscles, joints, nerves, blood vessels.

Sr No.	Generic Competency	Subject Area	Millers: K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal/ Vertical
HomUG-AN-4.2, 4.6, 4.9, 4.10, 4.18 and 4.19	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/ Information management/ synthesis	Upper Extremity	K & KH	Anatomic al features of Pectoral region and axilla Back and Intermuscular spaces around scapula Arm and cubital fossa Fore arm Flexor and extensor retinacula Palmar aponeurosis and spaces in palmar spaces	1. Describe the contents of the regions of upper extremity 2. Recall the attachments, nerve supply and actions of the muscles in the regions 3. Describe the main joint, blood vessels and nerves in the region. 4. Identify the surface land marks in the region for surface marking	Cogniti ve	Level 1 (Remem ber/ recall)	1. MK 2. MK 3. MK 4. MK	Lectu re	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)
HomUG-AN-4.4, 4.5 4.9 to 4. 12 & 4.20			K	Main blood vessels of the upper limb: Axillary artery, brachial artery Radial artery and ulnar artery and superficial veins of upper extremity	1. Describe the origin, extent, parts, branches and distribution of main arteries 2. Describe superficial and deep palmar arches 3. Describe the venous drainage of upper extremity 4. Describe their applied anatomy		Level 1 (Remem ber/ recall)	5. MK 1. MK 2. MK 3. MK	Lectu re	MCQ, SAQ.	MCQ, SAQ. LAQ Viva Voce	Physiology (H)
HomUG-AN-4.8, 4.10, 4.13 to 4.15			K	Describe the Anatomy of nerves of Upper extremity Median nerve, Ulnar nerve, Radial nerve, Musculocutaneous nerve and Axillary nerve	1. Describe the formation, course and relations of main nerves of the upper extremity 2. Mention their branches and their distribution 3. Describe the applied anatomy	Cogniti ve	Level 1 (Remem ber/ recall)	1. MK 2. MK 3. DK	Lectu re	MCQ, SAQ.	MCQ, SAQ. LAQ Viva Voce	Physiology (H) Medicine (V) Surgery (V)

Sl. No.	Generic Competency	Subject Area	Millers: K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal/ Vertical
HomUG-AN-4.4	Problem formulation/ Integration of Knowledge/ Information gathering/Practical	Upper Extremity	K	Describe the anatomy of Brachial plexus	1. Define nerve plexus 2. Enumerate the root value of Brachial plexus 3. Mention the stages of formation of Brachial plexus 4. Name the branches of Brachial plexus 5. Enlist the deformities due to injuries to Brachial plexus	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK 4. MK 5. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. LAQ Viva Voce	Physiology H)
HomUG-AN-4.3			K	Describe the anatomy of Breast (Mammary gland)	1. Define location & extent of breast 2. Describe structure of breast 3. Describe the relations, blood supply and nerve supply 4. Explain the lymphatic drainage of breast 5. Describe applied anatomy of breast	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK 4. MK 5. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. LAQ Viva Voce	Surgery (V)

HomUG-AN-4.7, 4.16 &4.17			K	Describe the Anatomy of joints of Upper extremity Shoulder, Elbow, Radio-ulnar and wrist joints	1. Enumerate the joints of upper extremity 2. Describe the articulating surfaces, ligaments, blood and nerve supply of joints of upper extremity 3. Describe the movements of joints upper extremity 4. Describe the applied anatomy of joints of upper extremity	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK 4. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. LAQ Viva Voce	Surgery (V)
HomUG-AN-4.18			K	Structures of upper extremity	1. Enumerate the homoeopathic drugs related to structures of upper extremity. 2. Enumerate the rubrics related to structures of upper extremity.	Cognitive	Level 1 (Remember/ recall)	NK	Integrated Lecture	Viva voce		Homoeopathic Materia Medica (H), Repertory (H).

5. Topic: Lower Extremity

Learning Outcomes (LO): At the end of Lower Extremities, I-BHMS student should be able to;

1.Describe the anatomy of the bones of the lower extremities, their blood supply, and applied anatomy.

2. Describe the anatomy of the joints of the lower extremities, their blood supply, action and applied anatomy.

3. Describe the anatomy of the muscles of the lower extremities, their origin, insertion, nerve supply, action and applied anatomy.

4. Describe the anatomy of the vessels and nerves of the lower extremities, their course, muscles they supply, relations and applied anatomy.

5. Enumerate the homoeopathic drugs indicated for particular involvement of bones, muscles, joints, nerves, blood vessels.

Sr. No	Generic Competency	Subject Area	Millers: K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal/ Vertical
HomUG-AN-5.3 to 5.6, 5.8, 5.10 To 5.14	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/ Information management/ synthesis	Lower Extremity	K & KH	Front of the thigh, Femoral triangle, Medial side of thigh, Gluteal region, Back of the thigh and popliteal fossa, Front of the thigh and dorsum of the foot, Back & side of the leg, retinacula and sole of the foot	1. Describe Contents of the regions of lower extremity 2. Recall the attachments, nerve supply and actions of the muscles in the regions 3. Describe the main joint, blood vessels and nerves in the region. 4. Identify the surface land marks in the region for surface marking	Cogniti ve	Level 1 (Remem ber/ recall)	1. MK 2. MK 3. MK 4. MK	Lectu re	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)
HomUG-AN-5.4, 5.8 5.10 to 5.11, 5.14 & 5.18			K	Main blood vessels of the upper extremity: Femoral artery, Popliteal artery, Anterior tibial & Posterior tibial and Dorsalis pedis artery	1. Describe the origin, extent, parts, branches and distribution of main arteries 2. Describe superficial and deep plantar arches 3. Describe the venous drainage of lower extremity 4. Describe their applied anatomy		Level 1 (Remem ber/ recall)	1. MK 2. MK 3. MK 4. MK	Lectu re	MCQ, SAQ.	MCQ, SAQ. LAQ Viva Voce	Physiology (H)
HomUG-AN-5.2, 5.5,5.7, 5.10 to 5.12, 5.14			K	Describe morphology nerves of lower extremity Femoral, obturator, Sciatic, common peroneal and Tibial nerves	1. Describe the formation, course and relations of main nerves of the lower extremity 2. Mention their branches and their distribution 3. Describe the applied anatomy	Cogniti ve	Level 1 (Remem ber/ recall)	1. MK 2. MK 3. DK	Lectu re	MCQ, SAQ.	MCQ, SAQ. LAQ Viva Voce	Physiology (H) Medicine (V) Surgery (V)

Sl. No.	Generic Competency	Subject Area	Millers: K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal/ Vertical
Hom UG-AN- 5.2 & 5.7	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/ Information management/ synthesis	Lower Extremity	K	Describe the anatomy of Lumbar & Sacral plexuses	1. Define nerve plexus 2. Enumerate the root value of the plexuses 3. Describe the formation of the plexuses 4. Name the branches of sacral and lumbar plexus 5. Enlist the deformities due to injuries to lumbar & sacral plexuses	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK 4. MK 5. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. LAQ Viva Voce	Physiology H)
HomUG-AN-5.9, 5.15 to 5.17			K	Describe the Anatomy of joints of Lower extremity Hip, Knee and Ankle Arches of the foot	1. Describe the articulating surfaces, ligaments, blood and nerve supply of joints of lower extremity 2. Describe the movements of joints lower extremity 3. Describe the applied anatomy of joints of lower extremity 4. Describe the formation of arches of foot 5. Describe the applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK 4. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. LAQ Viva Voce	Surgery (V)
Hom UG-AN- 5.18			K	Structures of lower extremity	1. Enumerate the homoeopathic drugs related to structures of lower extremity. 2. Enumerate the rubrics related to structures of lower extremity.	Cognitive	Level 1 (Remember/ recall)	NK	Integrated Lecture	Viva voce		Homoeopathic Materia Medica (H), Repertory (H).

6. Topic: Thorax

Learning Outcomes (LO): At the end of Thorax, I-BHMS student should be able to;

1. Describe the parts of Respiratory and Cardiovascular system with their applied anatomy.

2. Enumerate the homoeopathic drugs and rubrics related to thorax.

Sl. No.	Generic Competency	Subject Area	Millers: Knows (K) /Knows how (KH) / Shows how (SH) /Does (D) K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert' s level	Must know (MK) / Desire to know (DK) / Nice to know (NK)	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal (H) I/ Vertical(V)
Hom UG-AN-6.1 & 6.2	Problem formulation/ Integration of Information Knowledge/	Thorax	K	Introduction & Trachea	1. Describe the Boundaries and content of thoracic cage 2. Describe the morphology of trachea 3. Mention the Blood supply and nerve supply 4. Describe the applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. DK 3. DK 4. DK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)
Hom UG-AN-6.3			K	Pleura	1. Define pleura 2. Mention the layers 3. Describe the parts of parietal pleura 4. Mention its blood and nerve supply 5. Describe its applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK 4. DK 5. DK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. LAQ Viva Voce	Physiology (H) Medicine (V)

Hom UG-AN-6.4			K	Lungs	1. Describe the external features of the lung 2. Compare the features of right and left lungs 3. State the blood supply and nerve supply 4. Explain the broncho-pulmonary segments and their applied aspect	Cognitive	Level 1 (Remember/ recall)	1. MK 2. DK 3. DK 4. MK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. LAQ Viva Voce	Physiology (H) Medicine (V)

Sl. No.	Generic Competency	Subject Area	Millers: Knows (K) /Knows how (KH) / Shows how (SH) /Does (D) K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert s level	Must know (MK) / Desire to know (DK) / Nice to know (NK)	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal (H) I / Vertical(V)
Hom UG-AN-6.5	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/Information management/synthesis	Thorax	K	Mediastinum	1. Define mediastinum 2. Describe the boundaries of mediastinum 3. Mention the contents of each mediastinum 4. Describe its applied aspect	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK 4. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. LAQ Viva Voce	Physiology (H)
Hom UG-AN-6.6			K	Pericardium and Heart	4. Describe the morphology of the pericardium 5. Describe the external features of the heart 6. Describe the internal features of the chambers of heart 7. Describe the applied anatomy	Cognitive	Level 1 (Remember/ recall)	4. MK 5. MK 6. MK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ Viva Voce	Physiology (H)
Hom UG-AN-6.7			K	Blood supply of heart	1. Mention the arteries and veins supplying the heart 2. Describe the course and distribution of right and left coronary arteries 3. Describe the course and drainage of coronary sinus 4. Describe the applied aspect	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK 4. MK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ LAQ. Viva Voce	Physiology (H) Medicine (V)

Sl. No.	Generic Competency	Subject Area	Millers: Knows (K) /Knows how (KH) / Shows how (SH) /Does (D) K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert s level	Must know (MK) / Desire to know (DK) / Nice to know (NK)	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal (H) I / Vertical(V)
Hom UG-AN-6.8	Problem formulation/ Information gathering/Practical Skills/Information Integration of Knowledge/	Thorax	K	Superior mediastinum: Arch of aorta	1. Describe the extent, course, convexities of arch of aorta 2. Mention the relations 3. Name the branches 4. Describe the applied aspect	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK 4. MK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)
Hom UG-AN-6.9			K	Superior mediastinum: Superior Vena cava	1. Describe the formation of SVC 2. Describe its course and relations 3. Name the tributaries 4. Describe it applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK 4. MK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H) Surgery (V)
Hom UG-AN-6.10			K	Posterior mediastinum: Azygous vein & Thoracic duct	1. Describe the origin, course and tributaries of azygos vein 2. Mention the relations 3. Describe the origin, course and tributaries of thoracic duct 4. Mention the relations of thoracic duct 5. Describe their applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. DK 2. DK 3. DK 4. DK 5. DK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H) Medicine (V)

Sl. No.	Generic Competency	Subject Area	Millers: Knows (K) /Knows how (KH) / Shows how (SH) /Does (D)	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert s level	Must know (MK) / Desire to know (DK) / Nice to know (NK)	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal (H) / Vertical(V)
Hom UG-AN-6.11	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/Information management/synthesis	Thorax	K	Posterior mediastinum: Oesophagus & Descending thoracic aorta	1. Describe the morphology and relations of the oesophagus 2. Mention constrictions in its course 3. Mention the blood supply and nerve supply 4. Describe the extent, branches and relations of descending thoracic aorta 5. Describe the applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK 4. MK 5. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)
Hom UG-AN-6.12			K	Diaphragm	1. Describe the attachments, nerve supply and actions of diaphragm 2. Mention the major openings in the diaphragm and structures passing through it. 3. Describe the nerve and blood supply 4. Describe its applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK 4. DK 5. DK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)

Hom UG-AN-6.13			K	Systemic embryology: Development of Heart and lung	1. Describe the formation of primitive heart tube 2. Describe the formation of the atria and ventricles of the heart 3. Explain the embryological basis of major congenital anomalies of heart 4. Describe formation of lung	Cognitive	Level 1 (Remember/ recall)	6. DK 7. DK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H) Medicine (V)
Sl. No.	**Generic Competency**	**Subject Area**	**Millers: Knows (K) /Knows how (KH) / Shows how (SH) /Does (D)**	**Specific Competency**	**Specific learning objectives**: At the end of the session student should be able to	**Bloom's Domain**	**Guilbert s level**	**Must know (MK) / Desire to know (DK) / Nice to know (NK)**	**Teaching Learning Method/Media**	**Formative Assessment**	**Summative Assessment**	**Integration Horizontal (H) I/ Vertical(V)**
Hom UG-AN-6.14	Problem formulation/ Integration of Knowledge/ Information gathering/Practical	Thorax	K	Systemic histology: Trachea and Lung	1. Describe the microscopic structure of trachea and lung 2. Correlate with their functions 3. Explain the applied aspect and correlate with histopathology	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H) Pathology (V)

Hom UG-AN-6.15			K	Structures of Thorax.	1. Enumerate the homoeopathic drugs related to thorax. 2. Enumerate the rubrics related to thorax.	Cognitive	Level 1 (Remember/ recall)	NK	Integrated lecture	Viva Voce	-	Homoeopathic Materia Medica (H), Repertory. (H)

7.Topic: Abdomen

Learning Outcomes (LO): At the end of Abdomen, I-BHMS student should be able to;

1. Describe the anatomy of the abdomen and pelvic organs with their applied anatomy.

2. Enumerate the homoeopathic drugs and rubrics indicated for involvement of the abdominal and pelvic organs.

Sl. No.	Generic Competency	Subject Area	Millers: K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal/ Vertical
Hom UG-AN-7.1	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/Information management/synthesis	Abdomen, Pelvis & Perineum	K	Introduction	1. Describe the regions of abdominal cavity 2. Name the contents of abdominal cavity and pelvic cavity 3. Describe perineum	Cognitive	Level 1 (Remember	1. MK 2. MK 3. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)
Hom UG-AN-7.2			K & KH	Anterior abdominal wall	1. Describe the muscles of anterior abdominal wall and their actions 2. Describe the boundaries and contents of inguinal canal 3. Explain the applied anatomy of inguinal canal	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. MK 3. 4. DK	Lecture	MCQ, SAQ.	MCQ, SAQ Viva Voce	Surgery (V)

Hom UG-AN-7.3			K & KH	Peritoneum	1. Define peritoneum 2. Describe greater sac, lesser sac and epiploic foramen 3. Describe the folds of peritoneum 4. Describe recto-uterine pouch and hepatorenal pouch 5. Define mesoappendix, transverse mesocolon and sigmoid mesocolon	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. MK 3. MK 4. MK 5. DK	Lecture	MCQ, SAQ.	MCQ, SAQ Viva Voce	Surgery (V)

Sl. No.	**Generic Competency**	**Subject Area**	**Millers: K/KH/ SH/D**	**Specific Competency**	**Specific learning objectives:** At the end of the session student should be able to	**Bloom's Domain**	**Guilbert's level**	**Must know/ Desire to know/ Nice to know**	**Teaching Learning Method/Media**	**Formative Assessment**	**Summative Assessment**	**Integration Horizontal/ Vertical**
Hom UG-AN-7.4	Problem formulation/ Integration of Knowledge/ Information	Abdomen, Pelvis & Perineum		Stomach	1. Describe the morphology of stomach 2. Describe the relations of stomach 3. Describe the interior of stomach 4. Describe the blood and nerve supply of stomach 5. Explain the applied anatomy of stomach	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. MK 3. MK 4. MK 5. DK	Lecture	MCQ, SAQ.	MCQ, SAQ LAQ Viva Voce	Physiology (H) Surgery (V)

rHom UG-AN-7.5			K & KH	Liver	1. Describe the morphology of liver 2. Describe the ligaments of liver 3. through porta hepatis 4. Describe the blood and nerve supply of liver 5. Explain the applied anatomy of liver	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. MK 3. MK 4. DK 5. DK	Lecture	MCQ, SAQ.	MCQ, SAQ LAQ Viva Voce	Physiology (H) Surgery (V)
Hom UG-AN-7.6			K & KH	Extra hepatic biliary apparatus	1. Mention the parts of extra hepatic biliary apparatus 2. Describe the morphology of gall bladder and its interior 3. Describe the blood and nerve supply of gall bladder 4. Describe the formation of bile duct 5. Describe the applied anatomy	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. MK 3. MK 4. DK 5. MK	Lecture	MCQ, SAQ.	MCQ, SAQ Viva Voce	Physiology (H) Surgery (V)

Sl. No.	**Generic Competency**	**Subject Area**	**Millers: K/KH/ SH/D**	**Specific Competency**	**Specific learning objectives:** At the end of the session student should be able to	**Bloom's Domain**	**Guilbert's level**	**Must know/ Desire to know/ Nice to know**	**Teaching Learning Method/Media**	**Formative Assessment**	**Summative Assessment**	**Integration Horizontal/ Vertical**
Hom UG-AN-7.7	Problem formulation/ Integration of Knowledge/	domen, Pelvis &	K & KH	Spleen	1. Describe the morphology of spleen 2. Describe the ligaments of spleen 3. Describe the functions of spleen and its applied anatomy	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. NK 3. DK 4. DK	Lecture	MCQ, SAQ.	MCQ, SAQ Viva Voce	Physiology (H) Surgery (V)

Hom UG-AN-7.8			K & KH	Duodenum	1. Describe the morphology of duodenum 2. Describe interior of duodenum 3. Describe the blood and nerve supply of duodenum 4. Describe the applied anatomy	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. NK 3. DK 4. DK	Lecture	MCQ, SAQ.	MCQ, SAQ LAQ Viva Voce	Physiology (H) Surgery (V)
Hom UG-AN-7.9			K & KH	Pancreas	1. Describe the morphology of pancreas 2. Describe duct system of pancreas 3. Describe the blood and nerve supply and applied anatomy	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. NK 3. DK	Lecture	MCQ, SAQ.	MCQ, SAQ LAQ Viva Voce	Physiology (H) Surgery (V)

Sl. No.	**Generic Competency**	**Subject Area**	**Millers: K/KH/ SH/D**	**Specific Competency**	**Specific learning objectives:** At the end of the session student should be able to	**Bloom's Domain**	**Guilbert's level**	**Must know/ Desire to know/ Nice to know**	**Teaching Learning Method/Media**	**Formative Assessment**	**Summative Assessment**	**Integration Horizontal/ Vertical**
Hom UG-AN-7.10	Problem formulation/ [illegible]	Abdomen, Pelvis & [illegible]	K & KH	Jejunum, Ileum and Superior mesenteric artery	1. Mention the characteristics of small intestine 2. State the differences between jejunum and ileum 3. Describe the origin, branches and distribution of superior mesenteric artery	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. NK 3. DK	Lecture	MCQ, SAQ.	MCQ, SAQ Viva Voce	Physiology (H) Surgery (V)

Hom UG-AN-7.11			K & KH	Caecum and appendix	1. Mention the morphology of caecum and vermiform appendix 2. Describe their relations, blood and nerve supply 3. Describe the applied anatomy	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. NK 3. DK	Lecture	MCQ, SAQ.	MCQ, SAQ Viva Voce	Surgery (V)
Hom UG-AN-7.12			K & KH	Large intestine	1. Mention the parts of large intestine 2. Mention the characteristics of large intestine 3. Mention the differences between large and small intestines Describe the applied anatomy	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. DK 3. DK	Lecture	MCQ, SAQ.	MCQ, SAQ Viva Voce	Surgery (V)

Sl. No.	**Generic Competency**	**Subject Area**	**Millers: K/KH/ SH/D**	**Specific Competency**	**Specific learning objectives:** At the end of the session student should be able to	**Bloom's Domain**	**Guilbert's level**	**Must know/ Desire to know/ Nice to know**	**Teaching Learning Method/Media**	**Formative Assessment**	**Summative Assessment**	**Integration Horizontal/ Vertical**
Hom UG-AN-7.13	Problem formulation/ Integration of Knowledge/	Abdomen, Pelvis & Perineum	K & KH	Portal venous system	1. Define portal vein 2. Describe its formation, course and relations 3. Mention the tributaries 4. Mention the sites of portacaval anastomosis and its applied anatomy	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. MK 3. DK 4. DK	Lecture	MCQ, SAQ.	MCQ, SAQ LAQ Viva Voce	Surgery (V)

Hom UG-AN-7.14			K & KH	Kidney	1. Describe the morphology of kidney 2. Mention the relations of the kidneys 3. Describe the structure of kidney in coronal section 4. Describe the blood supply of kidneys 5. Explain the applied anatomy	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. MK 3. DK 4. DK 5. DK	Lecture	MCQ, SAQ.	MCQ, SAQ LAQ Viva Voce	Physiology (H) Surgery (V)
Hom UG-AN-7.15			K & KH	Supra renal glands	1. Describe the morphology of supra renal glands 2. Mention their relations 3. Mention the functions 4. Describe the blood supply of supra renal glands 5. Explain the applied anatomy	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. DK 3. DK 4. DK 5. DK	Lecture	MCQ, SAQ.	MCQ, SAQ Viva Voce	Physiology (H) Surgery (V)

Sl. No.	**Generic Competency**	**Subject Area**	**Millers: K/KH/ SH/D**	**Specific Competency**	**Specific learning objectives: At the end of the session student should be able to**	**Bloom's Domain**	**Guilbert's level**	**Must know/ Desire to know/ Nice to know**	**Teaching Learning Method/Media**	**Formative Assessment**	**Summative Assessment**	**Integration Horizontal/ Vertical**

Hom UG-AN-7.16	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/Information management/synthesis	Abdomen, Pelvis & Perineum	K & KH	Abdominal aorta	1. Describe the origin and extent of abdominal aorta 2. Mention the relations 3. Name the branches 4. Describe the course and distribution of coeliac trunk 5. Describe the course and distribution of coeliac trunk	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. DK 3. MK 4. DK 5. DK	Lecture	MCQ, SAQ.	MCQ, SAQ LAQ Viva Voce	Surgery (V)
Hom UG-AN-7.17			K & KH	Posterior abdominal wall and Inferior vena cava	1. Name the structures in the posterior abdominal wall 2. Describe the origin, course relations and tributaries of inferior vena cava 3. Describe the applied anatomy	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. DK 2. MK 3. DK	Lecture	MCQ, SAQ.	MCQ, SAQ Viva Voce	Surgery (V)
Hom UG-AN-7.18			K & KH	Urinary bladder	1. Describe the morphology of urinary bladder 2. Describe the relations of urinary bladder 3. Describe the ligaments of urinary bladder 4. Describe the applied anatomy	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. MK 3. DK DK	Lecture	MCQ, SAQ.	MCQ, SAQ LAQ Viva Voce	Surgery (V)

Sl. No.	Generic Competency	Subject Area	Millers: K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal/ Vertical
Hom UG-AN-7.19	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/Information management/synthesis	Abdomen, Pelvis & Perineum	K & KH	Ureter	1. Describe the extent and parts of ureter 2. Describe the course and relations 3. Describe the applied anatomy	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. MK 3. DK	Lecture	MCQ, SAQ.	MCQ, SAQ Viva Voce	Surgery (V)
Hom UG-AN-7.20			K & KH	Prostate gland	1. Describe the morphology of prostate gland 2. Describe the relations of prostate gland 3. Describe the applied anatomy	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. MK 3. DK	Lecture	MCQ, SAQ.	MCQ, SAQ Viva Voce	Surgery (V)
Hom UG-AN-7.21			K & KH	Ovary	1. Describe the morphology of ovary 2. Describe the relations of ovary 3. Name the ligaments of ovary 4. Mention the blood supply of ovary 4. Describe the applied anatomy of ovary	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. MK 3. NK 4. DK 4. DK	Lecture	MCQ, SAQ.	MCQ, SAQ Viva Voce	Physiology (H) Obstetrics and Gynecology (V)

Sl. No.	Generic Competency	Subject Area	Millers: K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal/ Vertical
Hom UG-AN-7.22	Problem formulation/ Integration of Knowledge/ Information gathering/Practical	bdomen, Pelvis & Perineum	K & KH	Uterus	1. Describe the morphology of uterus 2. Describe the relations of Uterus 3. Name the ligaments and supports of uterus 4. Mention the blood supply of uterus 5. Describe the applied anatomy of uterus	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. MK 3. NK 4. DK 5. DK	Lecture	MCQ, SAQ.	MCQ, SAQ LAQ Viva Voce	Physiology (H) Obstetrics and Gynecology (V)
Hom UG-AN-7.23			K & KH	Fallopian tube	1. Describe the morphology of fallopian tube 2. Describe the relations of fallopian tube 3. Describe the applied anatomy of fallopian tube	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. MK 3. DK	Lecture	MCQ, SAQ.	MCQ, SAQ Viva Voce	Physiology (H) Obstetrics and Gynecology (V)
Hom UG-AN-7.24			K & KH	Scrotum and Testis	1. Describe the morphology of scrotum 2. Mention its blood and nerve supply 3. Describe the morphology of testis 4. Describe the applied anatomy of testis	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. DK 3. MK 4. DK	Lecture	MCQ, SAQ.	MCQ, SAQ LAQ Viva Voce	Physiology (H) Surgery (V)

Sl. No.	Generic Competency	Subject Area	Millers: K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal/ Vertical
Hom UG-AN-7.25	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/Information management/synthesis	Abdomen, Pelvis & Perineum	K & KH	Vas deferens	1. Mention the extent of ductus deferens, its course and relations 2. Mention its blood and nerve supply 3. Describe the applied anatomy of vas deferens	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. DK 3. MK	Lecture	MCQ, SAQ.	MCQ, SAQ LAQ Viva Voce	Surgery (V)
Hom UG-AN-7.26			K & KH	Rectum	1. Describe the morphology of rectum and its relations 2. Mention its blood and nerve supply 3. Describe the applied anatomy of rectum	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. MK 3. MK 4. DK	Lecture	MCQ, SAQ.	MCQ, SAQ LAQ Viva Voce	Surgery (V)
Hom UG-AN-7.27			K & KH	Anal canal	1. Describe the morphology of anal canal and its relations 2. Mention its blood and nerve supply 3. Describe the applied anatomy of anal canal	Cognitive	Level 1 (Remember) & Level 2 (understand)	5. MK 6. MK 7. MK 8. DK	Lecture	MCQ, SAQ.	MCQ, SAQ LAQ Viva Voce	Surgery (V)

Sl. No.	Generic Competency	Subject Area	Millers: K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal/ Vertical
Hom UG-AN-7.28	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/Information management/synthesis	Abdomen, Pelvis & Perineum	K & KH	Wall of pelvis including pelvic diaphragm	1. Describe the structures that form the walls and pelvic diaphragm 2. Describe the main blood vessels and nerves pelvis and perineum 3. Describe their applied aspect	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. DK 3. DK	Lecture	MCQ, SAQ.	MCQ, SAQ Viva Voce	Surgery (V)
Hom UG-AN-7.29			K & KH	Perineum: superficial and deep perineal pouches	1. Define perineum and mention its sub divisions 2. Describe the boundaries and contents of superficial and deep perineal pouches 3. Describe the applied anatomy	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. MK 3. DK	Lecture	MCQ, SAQ.	MCQ, SAQ Viva Voce	Surgery (V)
Hom UG-AN-7.30			K & KH	Ischiorectal fossa	1. Describe the morphology of ischiorectal fossa 2. Mention the contents 3. Describe the applied anatomy of anal canal	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. MK 3. MK	Lecture	MCQ, SAQ.	MCQ, SAQ Viva Voce	Surgery (V)

Sl. No.	Generic Competency	Subject Area	Millers: K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal/ Vertical
Hom UG-AN-7.31 & 7.32	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/Information management/synthesis	Abdomen, Pelvis & Perineum	K & KH	Systemic embryology: Development of Digestive system and Urogenital system	1. Explain the process of formation of primitive and development of digestive system including liver and pancreas 2. Explain the process of development of kidney, urinary bladder and ureter 3. Explain the process of formation of male and female gonads and reproductive organs.	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. DK 2. DK 3. DK	Lecture	MCQ, SAQ.	MCQ, SAQ Viva Voce	Surgery (V)
Hom UG-AN-7.33 to 7.36			K & KH	Systemic histology: Microscopic structure of Digestive, urinary, reproductive systems and Supra renal gland	1. Describe the microscopic structure of digestive, urinary, reproductive systems and supra renal gland 2. Correlate with their functions 3. Explain the applied aspect and correlate with histopathology	Cognitive	Level 1 (Remember) & Level 2 (understand)	1. MK 2. MK 3. DK	Lecture	MCQ, SAQ.	MCQ, SAQ Viva Voce	Surgery (V)

Hom UG-AN-7.37			K	Structures of Abdomen & Pelvis.	1.Enumerate the homoeopathic drugs related to Structures of Abdomen & Pelvis. 2. Enumerate the rubrics related to Structures of Abdomen & Pelvis.	Cognitive	Level 1 (Remember/ recall)	NK	Integrated lecture	Viva Voce	-	Homoeopathic Materia Medica (H), Repertory. (H)

8.Topic: Head Neck Face & Special Senses

Learning Outcomes (LO): At the end of Head Neck & Face, I-BHMS student should be able to;

1. Describe the anatomy of the bones of the Head Neck &Face, their blood supply, and applied anatomy.
2. Describe the anatomy of the joints of the Head Neck & Face, their blood supply, action and applied anatomy.
3. Explain the anatomy of the muscles of the Head Neck & Face, their origin, insertion, nerve supply, action and applied anatomy.
4. Describe the atomy of the vessels and nerves of the Head Neck & Face, their course, muscles they supply, relations and applied anatomy.
5. Describe the triangles of the Neck with its applied anatomy.
6. Identify a particular bone of Head Neck & Face on X-Ray.
7. Describe the structure of the special senses organs with its applied anatomy.
8. Enumerate the homoeopathic drugs and rubrics related to structures of HNF.

Sl. No.	Generic Competency	Subject Area	Millers: Knows (K) /Knows how (KH) / Shows how (SH) /Does (D)	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert s level	Must know (MK) / Desire to know (DK) / Nice to know (NK)	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal (H) I / Vertical(V)
Hom UG-AN-8.1 and 8.2	Problem formulation/ Integration of Information Knowledge/	Head, Neck and Face	K	Introduction & Scalp	1. Mention the main areas of the head and neck region 2. Describe the layers of the scalp 3. Enumerate the blood and nerves supplying the scalp 4. Describe the applied anatomy of scalp	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK 4. MK	Lecture	MCQ, SAQ.	MCQ, SAQ. LAQ Viva Voce	Surgery (V)
Hom UG-AN-8.3			K	Face – Muscle, Nerve and Blood vessels	1. Name the muscles of facial expression 2. Mention the blood and nerve supply of face 3. Explain related applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ Viva Voce	Surgery (V)

Sl. No.	Generic Competency	Subject Area	Millers: Knows (K) /Knows how (KH) / Shows how (SH) /Does (D) K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert s level	Must know (MK) / Desire to know (DK) / Nice to know (NK)	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal (H) I / Vertical(V)
Hom UG-AN-8.4	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/Information management/synthesis	Head, Neck and Face	K	Lachrymal apparatus	1. Mention the components of lachrymal apparatus 2. Describe the location and function of each of the components of lachrymal apparatus 3. Describe their applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Surgery (V)
Hom UG-AN-8.5			K	Side of the neck: Posterior triangle	1. Define triangles of neck 2. Describe the boundaries and contents of posterior triangle 3. Describe applied aspect	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. LAQ Viva Voce	Surgery (V)
Hom UG-AN-8.6			K	Front of the neck and Anterior triangle	1. Describe the sub divisions of anterior triangle 2. Describe the boundaries and contents of carotid triangle and digastric triangle 3. Describe the principal neurovascular bundle of the neck 4. Describe the applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. Dk 4. DK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Surgery (V)

Sl. No.	Generic Competency	Subject Area	Millers: Knows (K) /Knows how (KH) / Shows how (SH) /Does (D) K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert s level	Must know (MK) / Desire to know (DK) / Nice to know (NK)	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal (H) I/ Vertical(V)
Hom UG-AN-8.7	Knowledge/ Skills/Information Integration of Problem formulation/ Information gathering/Practical	Head, Neck and Face	K	Deep Cervical fascia	1. Describe the parts of deep cervical fascia 2. Describe the attachments and modifications 3. Explain applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Surgery (V)
Hom UG-AN-8.8			K	Back of the neck: suboccipital triangle	1. Describe the features of the back of the neck 2. Describe the boundaries and contents of occipital triangle	Cognitive	Level 1 (Remember/ recall)	1. MK 2. DK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Surgery (V)
Hom UG-AN-8.9			K	Content of the Vertebral Canal	1. List the contents of the vertebral canal 2. Describe the meninges of the spinal cord 3. Describe the internal vertebral plexus of veins and their applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. DK 2. DK 3. DK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Surgery (V)

Sl. No.	Generic Competency	Subject Area	Millers: Knows (K) /Knows how (KH) / Shows how (SH) /Does (D) K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert s level	Must know (MK) / Desire to know (DK) / Nice to know (NK)	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal (H) I/ Vertical(V)
Hom UG-AN-8.10	Problem formulation/ Information gathering/Practical Skills/Information Integration of Knowledge/	Head, Neck and Face	K	Parotid Gland	1. Describe the surfaces, border and relations of parotid gland 2. Mention the blood and nerve supply of the parotid gland 3. List the structures inside the parotid gland and parotid duct 4. Describe the clinical aspect	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. DK 4. DK	Lecture	MCQ, SAQ.	MCQ, SAQ LAQ. Viva Voce	Surgery (V)
Hom UG-AN-8.11			K	Submandibular gland	1. Describe the morphology of submandibular gland 2. Mention its blood and nerve supply 3. Describe the applied aspect	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Surgery (V)
Hom UG-AN-8.12			K	Muscles of Mastication	1. Name the muscles of mastication 2. Describe their attachments, nerve supply and actions 3. Describe related applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. DK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Surgery (V)

Sl. No.	Generic Competency	Subject Area	Millers: Knows (K) /Knows how (KH) / Shows how (SH) /Does (D) K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert s level	Must know (MK) / Desire to know (DK) / Nice to know (NK)	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal (H) I / Vertical(V)
Hom UG-AN-8.13	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/Information management/synthesis	Head, Neck and Face	K	Temporo-Mandibular Joint	1. Describe the articulation of TM joint 2. Enumerate the ligaments of the joint 3. Describe the relations 4. Explain the movements of the joint 5. Describe its applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK 4. MK 5. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Surgery (V)
Hom UG-AN-8.14			K	Thyroid Gland	1. Describe the location, external features and relations 2. Describe the blood and nerve supply 3. Describe its development 4. Explain the applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK 4. DK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. LAQ Viva Voce	Surgery (V)
Hom UG-AN-8.15			K	Cranial cavity: Dura mater, Dural venous sinuses & Pituitary gland	1. Describe the contents of cranial cavity 2. Describe morphology of pituitary gland and its clinical importance 3. Describe the folds of dura mater 4. Classify dural venous sinuses 5. Explain anatomy and clinical importance of cavernous sinus	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK 4. MK 5. MK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Surgery (V)

Sl. No.	Generic Competency	Subject Area	Millers: Knows (K) /Knows how (KH) / Shows how (SH) /Does (D)	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert s level	Must know (MK) / Desire to know (DK) / Nice to know (NK)	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal (H) I / Vertical(V)
Hom UG-AN-8.16	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/Information	Head, Neck and Face	K	Contents of the Orbit	1. Name the contents of orbit 2. Describe the fasciae around eye ball 3. Describe the course and distribution of ophthalmic nerve 4. Describe blood vessels in the orbit 5. Describe the connections and distribution of ciliary ganglion	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK 4. MK 5. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Surgery (V) Medicine (V)
Hom UG-AN-8.17			K	Extra Ocular Muscles	1. Name the extra ocular muscles 2. Describe their attachments, nerve supply and actions 3. Discuss the clinical anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)
Hom UG-AN-8.18			K	Oral cavity	1. Describe the parts and structure of tooth 2. Explain blood and nerve supply of tooth 3. Describe applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. DK 2. DK 3. DK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H) Medicine (V)

Sl. No.	Generic Competency	Subject Area	Millers: Knows (K) /Knows how (KH) / Shows how (SH) /Does (D) K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert s level	Must know (MK) / Desire to know (DK) / Nice to know (NK)	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal (H) I / Vertical(V)
Hom UG-AN-8.19	Problem formulation/ Information gathering/Practical Skills/Information Integration of Knowledge/	Head, Neck and Face	K	Soft palate and palatine tonsil	1. Describe the structure, muscles, blood and nerve supply of soft palate 2. Define Waldayer's lymphatic ring 3. Describe the features, blood and nerve supply of palatine tonsil 4. Describe the applied anatomy of palatine tonsil	Cognitive	Level 1 (Remember/ recall)	1. MK 2. NK 3. MK 4. MK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Surgery (H)
Hom UG-AN-8.20			K	Tongue	1. Describe the parts, features of the tongue 2. Describe the blood and nerve supply of tongue 3. Describe applied anatomy of tongue	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK 4. DK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)
Hom UG-AN-8.21			K	Pharynx	1. Describe the parts of the pharynx and their features 2. Describe the constrictors of pharynx 3. Describe the blood and nerve supply 4. Describe its applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK 4. DK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ.LAQ Viva Voce	Physiology (H) Medicine (V)

Sl. No.	Generic Competency	Subject Area	Millers: Knows (K) /Knows how (KH) / Shows how (SH) /Does (D) K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert s level	Must know (MK) / Desire to know (DK) / Nice to know (NK)	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal (H) I / Vertical(V)
Hom UG-AN-8.22	Knowledge/ Integration of Skills/Information Problem formulation/ Information gathering/Practical	Head, Neck and Face	K	Larynx	1. Describe the cartilages of larynx 2. Describe the interior of larynx 3. Describe its blood and nerve supply 4. Explain its applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK 4. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. LAQ Viva Voce	Physiology (H)
Hom UG-AN-8.23			K	Nose and paranasal air cavities	1. Describe the features, blood and nerve supply of nasal septum and lateral wall of the nose 2. Describe the features, blood and nerve supply of paranasal air sinuses 3. Describe its applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ Viva Voce	Physiology (H) Surgery (V)
Hom UG-AN-8.24			K	Ear: middle ear cavity	1. Mention the parts of the ear 2. Describe the parts, boundaries and contents of middle ear cavity 3. Describe features of ear ossicles 4. Describe the applied anatomy of middle ear cavity	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. DK 4. DK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. LAQ Viva Voce	Surgery (V) Surgery (V)

Sl. No.	Generic Competency	Subject Area	Millers: Knows (K) /Knows how (KH) / Shows how (SH) /Does (D) K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert s level	Must know (MK) / Desire to know (DK) / Nice to know (NK)	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal (H) I / Vertical(V)
Hom UG-AN-8.25	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/Information	Head, Neck and Face	K	Eustachian tube	1. Describe the parts of the auditory tube 2. Describe its relations 3. Mention the blood and nerve supply 4. Describe its clinical anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. DK 4. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Surgery (V)
Hom UG-AN-8.26			K	Eyeball	1. Describe the structure and location 2. Mention the characteristics 3. Function of each of the basic tissues	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ.Viva Voce	Physiology (H)
Hom UG-AN-8.27			K	Common & Internal carotidartery	1. Describe the origin, course relations and branches of CCA 2. Describe the origin, parts, course relations and distribution of ICA 3. Describe their applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. DK 2. DK 3. DK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Surgery (V)

Sl. No.	Generic Competency	Subject Area	Millers: Knows (K) /Knows how (KH) / Shows how (SH) /Does (D) K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert s level	Must know (MK) / Desire to know (DK) / Nice to know (NK)	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal (H) I / Vertical(V)
Hom UG-AN-8.28	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/Information management/synthesis	Head, Neck and Face	K	External carotid artery	1. Describe the origin, parts, course relations and distribution of ECA 2. Describe the course, relations and distribution of facial, lingual, maxillary and superficial temporal arteries 3. Describe their applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. LAQ Viva Voce	Physiology (H)
Hom UG-AN-8.29			K	Vertebral artery and middle meningeal artery	1. Describe the parts, course, relations and branches of vertebral artery 2. Describe the parts, course, relations and branches of middle meningeal artery 3. Describe its applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. DK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)
Hom UG-AN-8.30			K	Internal Jugular vein	1. Describe the formation of IVC 2. Describe the course and relations of IVC 3. Name the tributaries 4. Describe the applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. DK 2. DK 3. DK 4. DK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H) Medicine (V)

Sl. No.	Generic Competency	Subject Area	Millers: Knows (K) /Knows how (KH) / Shows how (SH) /Does (D) K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert s level	Must know (MK) / Desire to know (DK) / Nice to know (NK)	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal (H) I / Vertical(V)
Hom UG-AN-8.31	Problem formulation/ Integration of Information Knowledge/	Head, Neck and Face	K	Systemic histology: Thyroid gland, Pituitary gland and Tongue	1. Describe the microscopic structure of thyroid gland, pituitary gland and tongue 2. Correlate with their functions 3. Explain the applied aspect and correlate with histopathology	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Pathology (V)
Hom UG-AN-8.32			K	Systemic embryology: Pharyngeal arches: derivatives	1. Describe the formation of pharyngeal arches 2. Name the derivatives of pharyngeal arches 3. Describe the formation of tongue and thyroid gland	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ, Viva Voce	Physiology (H)
Hom UG-AN-8.33			K	Structures of HNF	1. Enumerate the homoeopathic drugs related to the structures of HNF 2. Enumerate the rubrics related to the structures of HNF.	Cognitive	Level 1 (Remember/ recall)	NK	Integrated Lecture	Viva voce	-	Homoeopathic Materia Medica (H), Repertory (H)

9.Topic- Brain- CNS System

Learning Outcomes (LO): At the end of CNS, I-BHMS student should be able to;

1. Describe the structure of Brain and CNS with their applied anatomy.
2. Classify nervous system and identify the parts of the brain and their features and internal structure.
3. Describe the origin and course of cranial nerves.
4. Enumerate the homoeopathic drugs and rubrics related to the structures of CNS.

Sl. No.	Generic Competency	Subject Area	Millers: Knows (K) /Knows how (KH) / Shows how (SH) /Does (D) K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert s level	Must know (MK) / Desire to know (DK) / Nice to know (NK)	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal (H) I/ Vertical(V)
Hom UG-AN-9.1	Problem formulation/ Integration of Information Knowledge/	CENTRAL NERVOUS SYSTEM: BRAIN	K	Introduction	1. Describe the parts of the nervous system 2. Mention the parts of the brain 3. Describe the structure of neuron and neuroglia 4. Describe the applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK 4. DK	Lecture	MCQ, SAQ.	MCQ, SAQ LAQ. Viva Voce	Physiology (H)
Hom UG-AN-9.2			K	Meninges & CSF	1. Describe the layers of meninges 2. Define Cisterns 3. Describe the ventricles 4. Describe the formation, circulation and functions of the CSF 5. Describe the applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK 4. DK 5. DK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H) Medicine (V)

Hom UG-AN-9.3			K	Spinal cord	1. Describe the morphology of spinal cord 2. Describe the structure in T.S 3. Mention the main contents of gray and white matter of SC 4. Mention the blood supply of spinal cord 5. Describe the applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. DK 2. DK 3. DK 4. DK 5. DK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H) Medicine (V)

Sl. No.	**Generic Competency**	**Subject Area**	**Millers: Knows (K) /Knows how (KH) / Shows how (SH) /Does (D) K/KH/ SH/D**	**Specific Competency**	**Specific learning objectives:** At the end of the session student should be able to	**Bloom's Domain**	**Guilbert s level**	**Must know (MK) / Desire to know (DK) / Nice to know (NK)**	**Teaching Learning Method/Media**	**Formative Assessment**	**Summative Assessment**	**Integration Horizontal (H) I/ Vertical(V)**
Hom UG-AN-9.4	Problem formulation/ Integration of Knowledge/ Information	CENTRAL NERVOUS SYSTEM:	K	Medulla oblongata	1. Describe the external features 2. Describe the internal structures in the transverse sections 3. Describe the blood supply 4. Describe the applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. DK 3. DK 4. MK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H) Medicine (V)
Hom UG-AN-9.5			K	Pons	1. Describe the external features 2. Describe the structures in the transverse section 3. Describe the blood supply 4. Describe the applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. DK 4. DK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H) Medicine (V)

Hom UG-AN-9.6			K	Cerebellum	1. Describe the location and external features 2. Describe the division and connections of cerebellum 3. Enumerate cerebellar peduncles 4. Name intra cerebellar nuclei 5. Describe the blood supply 6. Describe the applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. DK 4. DK 5. DK 6. DK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. LAQ Viva Voce	Physiology (H) Medicine (V)

Sl. No.	Generic Competency	Subject Area	Millers: Knows (K) /Knows how (KH) / Shows how (SH) /Does (D) K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert s level	Must know (MK) / Desire to know (DK) / Nice to know (NK)	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal (H) I/ Vertical(V)
Hom UG-AN-9.7	Problem formulation/ Integration of Knowledge/ Information	CENTRAL NERVOUS SYSTEM:	K	Fourth ventricle	1. Describe the boundaries of the ventricle 2. Explain the features 3. Mention the structures in the floor of IV Ventricle 4. Describe the applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK 4. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H) Medicine (V)
Hom UG-AN-9.8			K	Mid-brain	1. Describe the external features 2. Describe the structures in the transverse section 3. Describe the blood supply 4. Describe the applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. DK 4. DK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ.Viva Voce	Physiology (H) Medicine (V)

Hom UG-AN-9.9			K	Diencephalon: Thalamus & Hypothalamus	1. Name the parts of diencephalon 2. Describe the nuclei of thalamus and its functions 3. Describe the nuclei and functions of hypothalamus 4. Explain clinical significance	Cognitive	Level 1 (Remember/ recall)	1. DK 2. DK 3. DK 4. DK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H) Medicine (V)

Sl. No.	Generic Competency	Subject Area	Millers: Knows (K) /Knows how (KH) / Shows how (SH) /Does (D) K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert s level	Must know (MK) / Desire to know (DK) / Nice to know (NK)	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal (H) I/ Vertical(V)
Hom UG-AN-9.10	formulation/ Knowledge/	CENTRAL NERVOUS SYSTEM:	K	Third Ventricle	1. Describe the boundaries of the ventricle 2. Explain the features 3. Name the structures in the floor of III Ventricle 4. Describe the applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK 4. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H) Medicine (V)
Hom UG-AN-9.11	Problem Integration of		K	Lateral Ventricle	1. Describe the boundaries of the ventricle 2. Explain the features 3. Describe the applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H)

Hom UG-AN-9.12			K	Cerebrum: external features	1. Describe the external features 2. Name major sulci and Gyri 3. Describe the applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. DK 2. DK 3. DK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H) Medicine (V)

Sl. No.	Generic Competency	Subject Area	Millers: Knows (K) /Knows how (KH) / Shows how (SH) /Does (D) K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert s level	Must know (MK) / Desire to know (DK) / Nice to know (NK)	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal (H) I/ Vertical(V)
Hom UG-AN-9.13	formulation/ Knowledge/	CENTRAL NERVOUS SYSTEM:	K	Functional areas of cerebral cortex	1. Mention the functional area and their importance 2. Describe the applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H) Medicine (V)
Hom UG-AN-9.14	Problem Integration of		K	Basal ganglia	1. Name the basal ganglia 2. Describe their location and blood supply 3. Describe the applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. DK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H) Medicine (V)

Hom UG-AN-9.15			K	White matter of cerebrum: Corpus callosum & Internal capsule	1. Classify white matter of cerebrum 2. Describe the parts of corpus callosum 3. Describe the parts and composition of internal capsule 4. Mention the blood supply of internal capsule	Cognitive	Level 1 (Remember/ recall)	4. DK 5. DK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H) Medicine (V)

Sl. No.	Generic Competency	Subject Area	Millers: Knows (K) /Knows how (KH) / Shows how (SH) /Does (D) K/KH/ SH/D	Specific Competency	Specific learning objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert s level	Must know (MK) / Desire to know (DK) / Nice to know (NK)	Teaching Learning Method/Media	Formative Assessment	Summative Assessment	Integration Horizontal (H) I/ Vertical(V)
Hom UG-AN-9.16	formulation/ Knowledge/	CENTRAL NERVOUS SYSTEM:	K	Blood supply of brain	1. Mention the blood supply to the brain 2. Explain the formation, branches and distribution of circle of Willis 3. Describe the applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. DK	Lecture	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H) Medicine (V)
Hom UG-AN-9.17	Problem Integration		K	Cranial nerves	1. Describe the origin, course, branches and distribution of major cranial nerves 2. Describe applied anatomy	Cognitive	Level 1 (Remember/ recall)	1. MK 2. MK 3. MK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H) Medicine (V)

Hom UG-AN-9.18			K	Systemic embryology: Development of Brain	1. Describe the formation and fate of neural tube 2. List the derivatives of neural crest 3. Describe the formation of eye ball 4. Describe the formation of pituitary gland	Cognitive	Level 1 (Remember/ recall)	1. DK 2. DK 3. Dk 4. DK	Lecture Group discussion	MCQ, SAQ.	MCQ, SAQ. Viva Voce	Physiology (H) Medicine (V)
Hom UG-AN-9.19			K	Structures of CNS	1. Enumerate the homoeopathic drugs related to the structures of CNS. 2. Enumerate the rubrics related to the structures of CNS.	Cognitive	Level 1 (Remember/ recall)	NK	Integrated Lecture	Viva voce	-	Homoeopathic Materia Medica (H), Repertory (H)

PRACTICAL:

Topic – Histology

Learning Outcome- At the end of Histology, I-BHMS student should be able to;

1. Describe a particular organ and tissue through its histological features.

Sl. No.	Generic Competency	Subject Area	Millers: Knows (K) / Knows How (KH)/ Shows How (SH)/ Does (D)	Specific Competency	Specific learning Objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/ Media	Formative Assessment	Summative Assessment	Integration Horizontal/ Vertical
Hom UG-AN-1.1-1.10 3.23 3.24 4.6 5.11 7.24 to 7.29	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/ Information management/ synthesis	Histology	K	Histological & functional Correlation basic tissues and organs of the body	1. Identify the tissue/organ under microscope 2. Draw & label a schematic diagram to indicate the microscopic structure 3. Discuss Its characteristic features 4. Correlate the microscopic structure with its normal function	Cognitive Psychomotor	Level 1 (Remember / Recall)	1. MK 2. MK 3. MK 4. DK	DOPS session	Spotting/OSPE/Practical Performance	Practical performance / Checklist	Physiology (H) Pathology (V)

Upper Extremities

Learning Outcomes (LO): At the end of Upper Extremity, I-BHMS student should be able to;

1. Describe the anatomy of the bones of the upper extremity, their blood supply, and applied anatomy.

2. Describe the anatomy of the joints of the upper extremity, their blood supply, action and applied anatomy.

3. Describe the anatomy of the muscles of the upper extremity, their origin, insertion, nerve supply, action and applied anatomy.

4. Describe the anatomy of the vessels and nerves of the upper extremity, their course, muscles they supply, relation and applied anatomy.

5. Identify a particular bone and joint of upper extremity on X-Ray.

6. Trace the course of the vessels and nerves of the upper extremity on the cadaver.

Sl. No.	Generic Competency	Subject Area	Millers: Knows (K) / Knows How (KH)/ Shows How	Specific Competency	Specific learning Objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/ Media	Formative Assessment	Summative Assessment	Integration Horizontal/ Vertical
Hom UG-AN-2.1 to 2.7	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/ Information management/ synthesis	Upper Extremity	K	Osteology of upper extremity	1. Describe the laterality and general features of the bone 2. Describe the major attachments 3. Describe ossification 4. Describe the applied anatomy 5. Draw the surface marking of the major structures in the regions using surface landmarks	Cognitive	Level 1 (Remember / Recall)	1. MK 2. MK 3. NK 4. DK	Demonstration	Spotting/OSPE/Practical Performance	Practical/ Check list	Surgery (V)
Hom UG-AN-2.8 to 2.14			K	Dissection/ Demonstration	1. Describe the important surface land marks in the region 2. Identify major muscles, blood vessels and nerves including fascial structures of clinical importance 3. Identify articular surfaces of major joints	Cognitive Psychomotor	Level 1 (Remember / Recall)	1. MK 2. MK 3. NK 4. DK				

					4. Correlate features and normal functioning of joints							
Hom UG-AN-2.15			K	Radiological anatomy of upper extremity	1. Describe the normal appearance and relationship of bones and joints in a normal radiograph (X-ray) of the region	Cognitive	Level 1 (Remember / Recall)	1. MK				

Topic: Head Neck Face

Learning Outcomes (LO): At the end of Head Neck & Face, I-BHMS student should be able to;

1. Describe the anatomy of the bones of the Head Neck & Face, their blood supply and applied anatomy.

2. Describe the anatomy of the joints of the Head Neck & Face, their blood supply, action and applied anatomy.

3. Describe the anatomy of the muscles of the Head Neck & Face, their origin, insertion, nerve supply, action and applied anatomy.

4. Describe the anatomy of the vessels and nerves of the Head Neck & Face, their course, muscles they supply, relation and applied anatomy.

5. Identify individual bones of Head Neck & Face on X-Ray.

6. Demonstrate the projection of structures of Head, Neck & Face on the cadaver.

Sl. No.	Generic Competency	Subject Area	Millers: Knows (K) / Knows How (KH)/ Shows How (SH)/ Does (D)	Specific Competency	Specific learning Objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/ Media	Formative Assessment	Summative Assessment	Integration Horizontal/ Vertical
Hom UG-AN-3.1 to 3.6	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/ Information management/ synthesis	Upper Extremity	K	Osteology of Head, Neck & Face	1. Describe the general features of the skull, hyoid bone, cervical vertebrae & mandible 2. Describe the major attachments on mandible 3. Mention clinically significant ossification features 4. Draw the surface marking of the major structures in the regions using surface landmarks	Cognitive	Level 1 (Remember / Recall)	1. MK 2. MK 3. NK 4. DK	Demonstration	Spotting/OSPE/Practical Performance	Practical/ Check list	Surgery (V)
Hom UG-AN-3.7 to 3.21			K	Dissection/ Demonstration	1. Describe the important surface land marks in the region 2. Identify major viscera, muscles, blood vessels and nerves including fascial structures of clinical importance 3. Identify articular surfaces of major joints 4. Correlate features and normal functioning of joints	Cognitive Psychomotor	Level 1 (Remember / Recall)	1. MK 2. MK 3. NK 4. DK				
Hom UG-AN-3.22			K	Radiological anatomy of Head, Neck & Face	1. Describe the normal appearance and relationship of bones and joints in a normal	Cognitive	Level 1 (Remember / Recall)	1. MK				

					radiograph (X-ray) of the region							

Topic- Brain- CNS System

Learning Outcomes (LO): At the end of CNS, I-BHMS student should be able to;

1. Describe the anatomy of the Brain and its applied anatomy.
2. Classify CNS and describe the parts of brain.

Sl. No.	Generic Competency	Subject Area	Millers: Knows (K) / Knows How (KH)/ Shows How (SH)/ Does (D)	Specific Competency	Specific learning Objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/ Media	Formative Assessment	Summative Assessment	Integration Horizontal/ Vertical
4. 1 to 4.5	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/ Information management/ synthesis	Central Nervous System	K	Describe normal features of brain and spinal cord	1. Identify parts of brain on a specimen/model 2. Describe normal location and relationship of brain and spinal cord 3. Describe its applied anatomy	Cognitive Psychomotor	Level 1 (Remember / Recall)	1. MK 2. MK 3. DK	DOAP session	Spotting/OSPE/Practical Performance	Practical performance / Checklist	Physiology (H) Pathology (V)

Topic: Thorax

Learning Outcomes (LO): At the end of Thorax, I-BHMS student should be able to;

1. Describe the anatomy of the Respiratory and Cardiovascular system with their applied anatomy.

2. Identify the organs of the Respiratory and Cardiovascular system.

3. Explain features of X-ray thorax.

4. Demonstrate surface projection of thoracic organs.

Sl. No.	Generic Competency	Subject Area	Millers: Knows (K) / Knows How (KH)/ Shows How (SH)/ Does (D)	Specific Competency	Specific learning Objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/ Media	Formative Assessment	Summative Assessment	Integration Horizontal/ Vertical

Hom UG-AN-5.1 to 5.3	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/ Information management/ synthesis	Upper Extremity	K	Osteology of Thorax	1. Describe the general features of the sternum, ribs and thoracic vertebrae 2. Describe the major attachments on mandible 3. Mention clinically significant ossification features 4. Draw the surface marking of the major structures in the regions using surface landmarks	Cognitive Psychomotor	Level 1 (Remember / Recall)	1. MK 2. MK 3. NK 4. DK	Demonstration	Spotting/OSPE/Practical Performance	Practical/ Check list	Surgery (V)
Hom UG-AN-5.4 to 5.9			K	Dissection/ Demonstration	1. Describe the important surface land marks in the region 2. Describe the morphology of lung and its relations. 3. Describe the external features of heart and interior of its chambers 4. Identify major contents of superior and posterior mediastina	Cognitive Psychomotor	Level 1 (Remember / Recall)	1. MK 2. MK 3. NK 4. DK				
Hom UG-AN-5.10			K	Radiological anatomy of Thorax	1. Interpret normal chest radiograph in conventional P-A view	Cognitive	Level 1 (Remember / Recall)	1. MK				

Topic: Lower Extremities

Learning Outcomes (LO): At the end of Lower Extremity, I-BHMS student should be able to;

1. Describe the anatomy of the bones of the Lower extremity, their blood supply and applied anatomy.

2. Describe the anatomy of the joints of the Lower extremity, their blood supply, action and applied anatomy.

3. Describe the anatomy of the muscles of the Lower extremity, their origin, insertion, nerve supply, action and applied anatomy.

4. Describe the anatomy of the vessels and nerves of the Lower extremity, their course, muscles they supply, relations and applied anatomy.

5. Identify a particular bone and joint of Lower extremity on X-Ray.

6. Trace the course of the vessels and nerves of the Lower extremity on the cadaver.

Sl. No.	Generic Competency	Subject Area	Millers: Knows (K) / Knows How (KH)/ Shows How (SH)/ Does (D)	Specific Competency	Specific learning Objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/ Media	Formative Assessment	Summative Assessment	Integration Horizontal/ Vertical
Hom UG-AN-6.1 to 6.7	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/ Information management/ synthesis	Upper Extremity	K	Osteology of lower extremity	1. Describe the laterality and general features of the bones of the region 2. Describe the major attachments 3. Mention clinically important ossification features 4. Draw the surface marking of the major structures in the regions using surface landmarks	Cognitive Psychomotor	Level 1 (Remember / Recall)	1. MK 2. MK 3. NK 4. DK	Demonstration	Spotting/OSPE/Practical Performance	Practical/ Check list	Surgery (V)
Hom UG-AN-6.8 to 6.15			K	Dissection/ Demonstration	1. Describe the important surface land marks in the region 2. Identify major muscles, blood vessels and nerves including fascial structures of clinical importance 3. Identify articular surfaces of major joints	Cognitive Psychomotor	Level 1 (Remember / Recall)	5. MK 6. MK 7. NK 8. DK				

					4. Correlate features and normal functioning of joints							
Hom UG-AN-6.16			K	Radiological anatomy of Lower extremity	2. Describe the normal appearance and relationship of bones and joints in a normal radiograph (X-ray) of the region	Cognitive	Level 1 (Remember / Recall)	1. MK				

Topic: Abdomen

Learning Outcomes (LO): At the end of Abdomen, I-BHMS student should be able to;

1. Describe the anatomy of the Abdominal and pelvic organs with their applied anatomy.

2. Identify the abdominal and pelvic organs in dissection.

3. Explain features of plain X-ray abdomen and pelvis.

4. Demonstrate surface projection of Abdominal and pelvic organs.

Sl. No.	Generic Competency	Subject Area	Millers: Knows (K) / Knows How (KH)/ Shows How (SH)/ Does (D)	Specific Competency	Specific learning Objectives: At the end of the session student should be able to	Bloom's Domain	Guilbert's level	Must know/ Desire to know/ Nice to know	Teaching Learning Method/ Media	Formative Assessment	Summative Assessment	Integration Horizontal/ Vertical

Hom UG-AN-7.1 to 7.6	Problem formulation/ Integration of Knowledge/ Information gathering/Practical Skills/ Information management/ synthesis	Upper Extremity	K	Osteology of Abdomen & Pelvis	1. Describe the general features of the lumbar vertebra, Sacrum & Pelvis 2. Describe the major attachments on sacrum 3. Mention clinically significant ossification features 4. Draw the surface marking of the major structures in the regions using surface landmarks	Cognitive Psychomotor	Level 1 (Remember / Recall)	1. MK 2. MK 3. NK 4. DK	Demonstration	Spotting/OSPE/Practical Performance	Practical/ Check list	Surgery (V)
Hom UG-AN-7.7 to 7.22			K	Dissection/ Demonstration	1. Describe the important surface land marks in the region 2. Identify the abdominal viscera and describe major surface & internal features 3. Identify pelvic viscera and describe their features and relations	Cognitive Psychomotor	Level 1 (Remember / Recall)	1. MK 2. MK 3. NK 4. DK				
Hom UG-AN-7.23			K	Radiological anatomy of Abdomen & Pelvis	1. Interpret a normal radiograph (X-ray) of the abdomen and pelvis in different commonly used views	Cognitive	Level 1 (Remember / Recall)	1. MK				

8. Practical Topics (Non-Lecture Activities)

Sl. No	Non-Lecture Teaching Learning methods	Time Allotted per Activity (in Hours)
9.	Seminars/ Workshops	10
10.	Group Discussions	10
11.	Problem based learning	10
12.	Integrated Teaching	15
13.	Case Based Learning	10
14.	Self-Directed Learning	15
15.	Tutorials, Assignments & projects	10
	Sub total	80
16.	Practical	250
	Total	**330**

9. ASSESSMENT

Assessment Summary - Number of papers and Mark Distribution

Sl. No.	Course Code	Papers	Theory	Practical	Viva Voce	Internal Assessment-Practical	Electives Grade Obtained		Grand Total
1.	Hom UG-AN	2	200	100	80	20			400

Scheme of Assessment (formative and Summative)

Sl. No	Professional Course	1st term (1-6 Months)	2nd Term (7-12 Months)	3rd Term (13-18 Months)	
1.	First Professional BHMS	1st PA + 1ST TT	2nd PA+2ND TT	3rd PA	UE
		1st PA – 4th month 1st TT – 6th month	2nd PA – 9th month 2nd TT – 12th month	3rd PA - 14th month	17th month

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

Evaluation Methods for Assessment

Sl. No	Evaluation Criteria
1.	Theory, Practical, Viva voce Performance
2.	Theory: MCQs, SAQs and LAQs (MEQ - Modified Essay Questions/Structured Questions)

I. Theory Question Paper Layout

Paper-1 (100 marks) General Anatomy, Head, face and neck, Central nervous System, Upper extremities and Embryology.		
1.	**MCQ**	**10 marks**
2.	**SAQ**	**40 marks**

3.	**LAQ**	**50 marks**
Paper-2 (100 marks) Thorax, Abdomen, Pelvis, Lower extremities and Histology (micro anatomy).		
1.	**MCQ**	**10 marks**
2.	**SAQ**	**40 marks**
3.	**LAQ**	**50 marks**

I. Distribution of marks (Theory)

Paper-I						
Sl. No	**A**	**B**	**C**	**D**		
				Type of Questions and marks allotted "Yes" can be asked. "No" should not be asked.		
	List of Topics	**Term**	**Marks**	**MCQ** (1 Mark)	**SAQ** (5 Marks)	**LAQ** (10 Marks)
1.	General Anatomy	I	Refer Next Table	Yes	Yes	No
2.	Head, Neck & Face	II		Yes	Yes	Yes
3.	Central Nervous System	II		Yes	Yes	Yes
4.	Upper Extremities	I		Yes	Yes	Yes
5.	Embryology	I		Yes	Yes	No

Paper-II						
Sl. No	**A**	**B**	**C**	**D**		
				Type of Questions and marks allotted "Yes" can be asked. "No" should not be asked.		
	List of Topics	**Term**	**Marks**	**MCQ** (1 Mark)	**SAQ** (5 Marks)	**LAQ** (10 Marks)
1.	Thorax	II	Refer Next Table	Yes	Yes	Yes
2.	Abdomen, Pelvis & Perineum	III		Yes	Yes	Yes
3.	Lower Extremities	III		Yes	Yes	Yes
4.	Histology	I		Yes	Yes	No

Theme table

Paper-I

Theme*	Topics	Term	Marks	MCQ's	SAQ's	LAQ's
A	General Anatomy	I	12	Yes	Yes	No
B	Upper Extremities	I	27	Yes	Yes	Yes
C	Embryology	I	12	Yes	Yes	No
D	Head, Neck and Face	II	32	Yes	Yes	Yes
E	Central nervous System	II	17	Yes	Yes	Yes

Paper-II

Theme*	Topics	Term	Marks	MCQ's	SAQ's	LAQ's
A	Lower Extremities	III	27	Yes	Yes	Yes
B	Thorax	II	28	Yes	Yes	Yes
C	Abdodmen, Pelvis & Perineum	III	37	Yes	Yes	Yes
D	Histology	I	8	Yes	Yes	No

Question paper Blue Print

Paper-I

A **Question Serial Number**	**B** **Type of Question**	**Question Paper Format** **(Refer table 4 F II Theme table for themes)**
Q1	Multiple choice Questions (MCQ) 10 Questions	1. Theme A 2. Theme A 3. Theme B 4. Theme B 5. Theme C 6. Theme C

	1 mark each All compulsory Must know part: 7 MCQ Desirable to know: 2 MCQ. Nice to know: 1 MCQ	7. Theme D 8. Theme D 9. Theme E 10. Theme E
Q2	Short answer Questions (SAQ) eight Questions 5 Marks Each All compulsory Must know part: 6 SAQ Desirable to know: 2 SAQ	1. Theme A 2. Theme A 3. Theme B 4. Theme C 5. Theme C 6. Theme D 7. Theme D 8. Theme E
Q3	Long answer Questions (LAQ) Five 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 B 3. Theme D 4. Theme D 5. Theme E

Paper-II

A Question Serial Number	B Type of Question	Question Paper Format (Refer table II Theme table for themes)
Q1	Multiple choice Questions (MCQ) 10 Questions 1 mark each All compulsory Must know part:7 MCQ Desirable to know: 2 MCQ. Nice to know: 1 MCQ	1. Theme A 2. Theme A 3. Theme B 4. Theme B 5. Theme B 6. Theme C 7. Theme C 8. Theme D 9. Theme D 10. Theme D
Q2	Short answer Questions (SAQ) eight Questions 5 Marks Each All compulsory Must know part: 7 SAQ Desirable to know: 2 SAQ Nice to know: 1 SAQ	1. Theme A 2. Theme A 3. Theme A 4. Theme B 5. Theme C 6. Theme C 7. Theme C 8. Theme D
Q3	Long answer Questions (LAQ) five Questions 10 marks each All compulsory All questions on must know No Questions on Nice to know and Desirable to know	1. Theme A 2. Theme B 3. Theme B 4. Theme C 5. Theme C

II. Scheme of Practical and Viva voce Examination and distribution of marks (Practical 100 marks – Viva voce 80 marks + Internal assessment 20 marks: Total 200 marks)

Scheme of Practical Examination	
1. **Spotters: 4** (5 marks each) A. Histology Slide – 2 (5 marks each) a) Identification – 1 mark b) Draw and label – 2 marks c) Two identification features – 2 marks B. Radiology – 2 X-RAYS (5 marks each) a) Identification of X-Ray and its view – 1 mark b) Identification of features – 4 marks	**20 marks**
2. Osteology - Bones of Upper Extremity, Lower Extremity, Skull, Ribs and Vertebrae.	**20 marks**
3.Viscera - Organs from Thorax, Abdomen and CNS.	**20 marks**
4. Knowledge of dissected parts - Dissected Specimens of Upper and Lower Extremities.	**20 marks**
2. Surface marking	**10 marks**
3. Journal – Practical record of Anatomy including Histology and dissection card.	**10 marks**

Total	**100 Marks**

Viva voce Max. Marks - 80 + Internal assessment marks – 20	
Total marks	**100 marks**

9B - Scheme of Assessment (formative and Summative)

Sr. No	Professional Course	1st term (1-6 Months)			2nd Term (7-12 Months)			3rd Term (13-18 M	
1	First Professional BHMS	1st PA	1ST TT		2nd PA	2ND TT		3rd PA	UE
		20 Marks Practical/Viva	100 Marks Theory	100 Marks Practical/ Viva	20 Marks Practical/Viva	100 Marks Theory	100 Marks Practical/ Viva	20 Marks Practical/Viva	

For Internal assessment, Only Practical/Viva marks will be considered. Theory marks will not be counted)

Method of Calculation of Internal Assessment Marks for Final University Examination:

PA1 Practical/Viva (20 Marks)	PA2 Practical/Viva (20 Marks)	PA3 Practical/Viva (20 Marks)	Periodical Assessment Average PA1+PA2+PA3 /3	TT1 Practical/ Viva (100 Marks)	TT2 Practical/ Viva (100 Marks)	Terminal Test Average TT1+ TT2/ 200*20	Final Internal Assessment Marks
A	**B**	**C**	**D**	**E**	**F**	**G**	**D+G/2**

PA- Periodical Assessment, **TT-** Terminal Test, **UE**- University Examination

10. List of recommended books –

Standard Books

- Garg K, *B.D.Chaurasia's Human Anatomy Regional & Applied, Dissection & Clinical. Upper limb & Thorax*. CBS Publishers & Distributors Pvt Ltd, New Delhi.
- Garg K, *B.D. Chaurasia's Human Anatomy Regional & Applied, Dissection & Clinical. Lower limb &Abdomen*.CBS Publishers & Distributors Pvt Ltd, New Delhi
- Garg K, *B.D. Chaurasia's Human Anatomy Regional & Applied, Dissection & Clinical. Head, Neck &Brain.*CBS Publishers & Distributors Pvt Ltd, New Delhi
- Singh V. *General Anatomy*. Elsevier; New Delhi

- Singh V. *Anatomy of Head, Neck & Brain*. Elsevier; New Delhi.
- Singh V. *Anatomy of Upper limb & Thorax*. Elsevier; New Delhi
- Singh V. *Anatomy of Abdomen & Lower limb*. Elsevier; New Delhi
- Singh V. *Anatomy of Clinical embryology*. Elsevier; New Delhi
- Garg K, Indira Bahl, Mohini Kaul. *Textbook of Histology*. Ed. 5. CBS Publishers & Distributors Pvt Ltd, New Delhi
- Halim A. *Surface and Radiological Anatomy*. CBS Publishers & Distributors Pvt Ltd, New Delhi
- Khurana A, Khurana I, Garg K *B.D. Chaurasia's Dream Human Embryology*, CBS Publishers & Distributors Pvt Ltd, New Delhi
- Loukas M, Benninger B, Tubbs R S. *Gray's Clinical Photographic Dissector of Human Body.* Elsevier; Philadelphia
- Romanes G J. *Cunningham's Manual of Practical Anatomy. Upper & Lower limb*. Oxford Medical Publisher; Oxford
- Romanes G J. *Cunningham's Manual of Practical Anatomy. Abdomen & Pelvis*. Oxford Medical Publisher; Oxford
- Romanes G J. *Cunningham's Manual of Practical Anatomy. Head & Neck*. Oxford Medical Publisher; Oxford

Reference books

- Eroschenko VP. *Di'fiore's Atlas of Histology with functional correlation*. Lippincot, William, Wilkins; London
- Gunasegaran JP. *Text book of Histology & Practical Guide*. Elsevier; New Delhi.
- Hansen JT. *Netter's Atlas of Human Anatomy*. South Asian Ed. Elsevier; New Delhi
- Mescher AL. *Junqueria's Basic Histology Text & Atlas*. Lange; New York
- Mortan DA, Peterson KD, Albretine K. H. *Gray's Dissection Guide for Human Anatomy.*Elsevier; London
- RomanesGJ.*Cunningham's Textbook of Anatomy*. Oxford Medical Publisher; Oxford
- Ross &Wilson.*Anatomy and Physiology in Health and Illness*. Elsevier; London
- Singh, Inderbir. *Human Embryology*. Jaypee; New Delhi
- Sinnathamby CS. *Snell's Clinical Anatomy for Medical Students*. Lippincot, William, Wilkins; London
- Standring Susan. *Gray's Anatomy The Anatomical Basis of Clinical Practice*. Elsevier; London
- Tortora GJ &Derrickson B. *Anatomy & Physiology*. New Delhi: Wiley; New Delhi.

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COMPETENCY BASED DYNAMIC CURRICULUM FOR

FIRST BHMS PROFESSIONAL COURSE

(Applicable from Batch 2022-2023 onwards for 5 years or until further notification by National Commission for Homoeopathy whichever is earlier)

(Human physiology & Biochemistry)

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1. PREAMBLE

Physiology studies the functional organization of man at several levels like atom, chemical, cells, tissues, organ systems and the whole body to understand fundamental mechanisms that operate in a living organism. The underlying goal is to explain the operations in a living organism.

Besides satisfying a natural curiosity about how humans function, the study of physiology is of central importance in medicine and related health sciences, as it underpins advances in our understanding of disease and our ability to treat it more effectively. It is also important from psychological and philosophical viewpoints, helping us to understand the different systems. Homoeopathic Philosophy postulates the force animating every cell as the Vital Force which helps in homoeostasis. When it is deranged due to web of causes, disease develops.

Homoeopath must understand Man in a holistic way which would help him to deliver the therapeutic action for the purpose of bringing about a cure. Understanding the structural organisation i.e., Anatomy along with psychological organisation go hand in hand. Their interplay maintains health and delivers optimum function for healthy living and progressing towards higher purpose as per Hahnemannian guidelines. Hence physiology needs to be integrated horizontally with Anatomy, Materia Medica, Organon of Medicine, Psychology & Pharmacy as well as vertically with Pathology, Surgery, Obstetrics &Gynaecology, Community Medicine, Practice of Medicine & Repertory for better grasp of health, disease and process of cure.

Advances in biochemical processes have been occurring at an astonishing pace. The action of homoeopathic medicines does occur at sub-cellular levels. Hence an in-depth understanding and correlation of the processes in health and disease can open up a whole new way of understanding Homoeopathic drugs and their far-reaching effects.

2.PROGRAMME OUTCOMES:

At the end of the course of the undergraduate studies, the homoeopathic physician must

1) Develop the knowledge, skills, abilities and confidence as a primary care homoeopathic practitioner to attend to the health needs of the community in a holistic manner
2) Correctly assess and clinically diagnose common clinical conditions prevalent in the community from time to time
3) Identify and incorporate the socio-demographic, psychological, cultural, environmental & economic factors affecting health and disease in clinical work
4) Recognize the scope and limitation of homoeopathy in order to apply Homoeopathic principles for curative, prophylactic, promotive, palliative, and rehabilitative primary health care for the benefit of the individual and community
5) Be willing and able to practice homoeopathy as per medical ethics and professionalism.
6) Discern the scope and relevance of other systems of medical practice for rational use of cross referrals and role of life saving measures to address clinical emergencies
7) Develop the capacity for critical thinking, self reflection and a research orientation as required for developing evidence based homoeopathic practice.
8) Develop an aptitude for lifelong learning to be able to meet the changing demands of clinical practice
9) Develop the necessary communication skills and enabling attitudes to work as a responsible team member in various healthcare settings and contribute towards the larger goals of national health policies such as school health, community health and environmental conservation.

3. Course Outcomes (COs):

At the end of the course the student will be able to:

1. Discuss the Homoeopathic concept of health in relation to integrated body structure and functions.
2. Explain the normal functioning of the human body at all levels of organization.
3. Relate the concept of homoeostasis with relevant ideas in Anatomy, Materia medica and Organon of Medicine at BHMS I level .
4. Elucidate the physiological aspects of normal growth and development with focus on evolution.
5. Correlate micro functions at cellular level with macro functions at organ-system level.
6. Use necessary communication skills required for history-taking of the patient & relating various clinical findings in the patient.
7. Perform experiments in haematology, clinical physiology & biochemistry as required for the study of physiological phenomena and for assessment of normal function.
8. Identify the normal values of haematology, clinical physiology & biochemistry.
9. Perform clinical – physiological examination under supervision.
10. Correlate knowledge of Organon & Materia Medica with Physiology.
11. Explain the integrated responses of the organ systems of the body to physiological and pathological stresses.

4. TEACHING HOURS

Sr No.	Subject	Theoretical Lecture	Practical / Tutorial / Seminar / Clinical Posting
01	PHYSIOLOGY & BIOCHEMISTRY	325 hrs.	330 hrs.

Theory Wise Teaching Hours Distribution – 325 Hours

Sr. No	**Paper-I**	
	List of System	**Teaching Hours**
1	General Physiology	20
2	Bio Physics Science	15
3	Skin & The Integumentary System	15
4	Body fluids & Immune mechanism	35
5	Nerve Muscle physiology	15
6	Cardiovascular system	20
7	Respiratory and Environmental Physiology	25
8	Renal Physiology	20
	Total	**165**
Sr. No	**Paper-II**	
	List of System	**Teaching Hours**
1	Central Nervous System	35
2	Endocrinology	30
3	Reproduction	15
4	Special Senses	20
5	Digestion and Nutrition	35
6	Biochemistry	25
	Total	**160**

Practical / Clinical Physiology / OPD Wise Teaching Hours Distribution – 330 Hours

Physiology – Practical – lab work			
No	**Practical**	**Demonstration / Performance**	**Number of Teaching Hours**
HAEMATOLOGY			
1	Study of the Compound Microscope	Performance	05
2.	Collection of Blood Samples	Performance	05
3	Estimation of Haemoglobin Concentration	Performance	05
4	Determination of Haematocrit	Demonstration	05
5	Hemocytometry	Performance	05
6	Total RBC Count	Performance	10
7	Determination of RBC Indices	Demonstration	05
8	Total Leucocytes Count (TLC)	Performance	10
9	Preparation And Examination Of Blood Smear	Performance	10
10	Differential Leucocyte Count (DLC)	Performance	10
11	Absolute Eosinophil Count	Demonstration	05
12	Determination of Erythrocyte Sedimentation Rate	Demonstration	05
13	Determination of Blood Groups	Performance	05
14	Determination of Bleeding Time and Coagulation Time	Performance	05
BIOCHEMISTRY			
1	Demonstration of Uses Of Instruments Or Equipment	Demonstration	05
2	Qualitative Analysis of Carbohydrates, Proteins And Lipids	Performance	10
3	Normal Characteristics of Urine	Performance	04
4	Abnormal Constituents of Urine	Performance	10
5	Quantitative Estimation of Glucose, Total Proteins, Uric Acid in Blood	Performance	05
6	Liver Function Tests	Demonstration	04
7	Kidney Function Tests	Demonstration	04
8	Lipid Profile	Demonstration	04
9	Interpretation and Discussion of Results of Biochemical Tests	Demonstration	04
	Total		**140**

CLINICAL PHYSIOLOGY			
1	Case Taking & Approach to pt	Performance	05
2	General Concept Of Examination	Performance	10
3	Examination of muscles, joints,	Performance	10
4	Cardio-Vascular System – Blood Pressure Recording, Radial Pulse, ECG, Clinical Examination	Performance	15
5	Nervous System- Clinical Examination	Performance	15
6	Respiratory System- Clinical Examination, Spirometry, Stethography	Performance	15
7	Special Senses- Clinical Examination	Performance	15
8	Reproductive System- Diagnosis of Pregnancy	Performance	05
9	Gastrointestinal System- Clinical Examination	Performance	10
	Total		**100**
OPD – APPLIED PHYSIOLOGY			
1	OPD (Applied Physiology)	Demonstration & Performance	90
	TOTAL		**90**

Semester Wise Distribution of Theory, Practical, Clinical Physiology & OPDs

Sr. No	Theory, Practical, Clinical Physiology & OPDs
SEMESTER - 1	
Module 1. Organization of the human body	**Theory :** • General physiology • Bio Physics Science • Skin & The integumentary System **Clinical Physiology :** • Case Taking & Approach to Patient • General concept of examination.
Module 2 Principals of Support System & Movements with transportation	**Theory :** • Body Fluid & Immune Mechanism • Nerve Muscles Physiology

	Practical : • Study of the Compound Microscope • Collection of Blood Samples • Estimation of Haemoglobin Concentration • Determination of Haematocrit • Haemocytometry • Total RBC Count • Determination of RBC Indices • Total Leucocytes Count (TLC) • Preparation And Examination Of Blood Smear • Differential Leucocyte Count (DLC) • Absolute Eosinophil Count • Determination of Erythrocyte Sedimentation Rate • Determination of Blood Groups • Determination of Bleeding Time and Coagulation Time **Clinical Physiology :** Examination of muscles, joints,
4th Month – 5 days PA 6th Month – 10 days TT – including Viva Voce	
SEMESTER – 2	
Module 3. Vital Maintenance of the human body	**Theory :** • Cardiovascular System • Respiratory & Environmental Physiology **Clinical Physiology :-** • Cardio-Vascular System – Blood Pressure Recording, Radial Pulse, ECG, Clinical Examination • Respiratory System- Clinical Examination, Spirometry, Stethography • OPD (Applied Physiology)

Module 4. Control system of the human body with continuity	**Theory :** • Central Nervous System • Endocrinology **Clinical Physiology :** • Nervous System- Clinical Examination • Special Senses- Clinical Examination • Reproductive System – Diagnosis of pregnancy • OPD
9th Month – 5 days PA 12th Month – 10 days TT – including Viva Voce	
SEMESTER - 3	
Module 5. **Energy maintenance of human body**	**Theory :** • Reproductive System • Special Senses • Digestion System & Nutrition • Renal Physiology • Bio-Chemistry **Practical : -** • Demonstration of Uses Of Instruments Or Equipment • Qualitative Analysis of Carbohydrates, Proteins And Lipids • Normal Characteristics of Urine • Abnormal Constituents of Urine • Quantitative Estimation of Glucose, Total Proteins, Uric Acid in Blood • Liver Function Tests • Kidney Function Tests • Lipid Profile • Interpretation and Discussion of Results of Biochemical Tests **Clinical Physiology :-**

	• Gastrointestinal System- Clinical Examination • OPD
14th Month – 5 days PA 18th Month – 12 days TT – including Viva Voce – University exam	

5.COURSE CONTENT

1. The purpose of a course in physiology is to enable the students to learn the functions, processes and inter-relationship of the different organs and systems of the normal disturbance in disease so that the student is familiar with normal standards of reference while diagnosing deviations from the normal, and while treating the patients.
2. There can be no symptoms of disease without vital force animating the human organism and it is primarily the vital force which is maintaining state of health
3. Physiology shall be taught from the stand point of describing physical processes underlying them in health;
4. Applied aspect of every system including the organs is to be stressed upon while teaching the subject.
5. Correlation with Organon and philosophy especially the concept of health and its derangement the interplay of different cell, tissue organ and system, their representation in repertory and integration in HMM
6. There should be close co-operation between the various departments while teaching the different systems;

7. There should be joint courses between the two departments of anatomy and physiology so that there is maximum co-ordination in the teaching of these subjects;
8. Seminars should be arranged periodically and lecturers of anatomy, physiology and bio-chemistry should bring home the point to the students that the integrated approach is more meaningful.

THEORY:-

1. **GENERAL PHYSIOLOGY:**
    - Introduction to cellular physiology
    - Cell Junctions
    - Transport through cell membrane and resting membrane potential Body fluids compartments
    - Homeostasis
2. **BIO-PHYSICAL SCIENCES**
    - Filtration Ultra-filtration Osmosis
    - Diffusion Adsorption Hydrotropy, Colloid
    - Donnan Equilibrium Tracer elements Dialysis
    - Absorption Assimilation Surface tension
3. **SKIN &THE INTEGUMENTARY SYSTEM**
    - Skin & Integumentary System
    - Layers of Skin
    - Function of Skin
    - Sweat
    - Body temperature and its regulation
4. **BODY FLUID & IMMUNE MECHANISM**
    - Blood
    - Plasma Proteins
    - Red Blood Cells
    - Erythropoiesis
    - Haemoglobin and Iron Metabolism

- Erythrocyte Sedimentation Rate
- Packed Cell Volume and Blood Indices
- Haemolysis and Fragility of Red Blood Cells
- White Blood Cell
- Immunity
- Platelets
- Haemostasis
- Coagulation of Blood
- Blood groups
- Blood Transfusion
- Blood volume
- Reticulo-endothelial System and Tissue Macrophage Lymphatic System and Lymph
- Tissue Fluid and Oedema

5. NERVE MUSCLE PHYSIOLOGY

- Physiological properties of nerve fibres
- Nerve fibre- types, classification, function, Degeneration and regeneration of peripheral nerves
- Neuro-Muscular junction
- Physiology of Skeletal muscle
- Physiology of Cardiac muscle
- Physiology of Smooth muscle
- EMG

6. **CARDIO-VASCULAR SYSTEM**

- Introduction to cardiovascular system Properties of cardiac muscle
- Cardiac cycle
- General principles of circulation Heart sounds
- Regulation of cardiovascular system
- Normal and abnormal Electrocardiogram (ECG)
- Cardiac output

- Heart rate
- Arterial blood pressure
- Radial Pulse
- Regional circulation- Cerebral, Splanchnic, Capillary, Cutaneous & skeletal muscle circulation.
- Cardiovascular adjustments during exercise

7. RESPIRATORY SYSTEM AND ENVIRONMENTAL PHYSIOLOGY

- Physiological anatomy of respiratory tract
- Mechanism of respiration: Ventilation, diffusion of gases
- Transport of respiratory gases Regulation of respiration Pulmonary Function Test
- High altitude and space physiology Deep sea physiology
- Artificial respiration
- Effects of exercise on respiration

8. CENTRAL NERVOUS SYSTEM

- Introduction to nervous system Neuron
- Neuroglia
- Receptors
- Synapse
- Neurotransmitters
- Reflex
- Spinal cord
- Somato-sensory system and somato-motor system Physiology of pain
- Brain stem, Vestibular apparatus
- Cerebral cortex
- Thalamus
- Hypothalamus
- Internal capsule
- Basal ganglia
- Limbic system

- Cerebellum – Posture and equilibrium
- Reticular formation
- Proprioceptors
- Higher intellectual function Electroencephalogram (EEG)
- Physiology of sleep
- Cerebro-spinal fluid (CSF) Autonomic Nervous System (ANS)

9. ENDOCRINOLOGY

- Introduction of endocrinology and importance of PNEI axis Hormones and hypothalamo- hypophyseal axis
- Pituitary gland
- Thyroid gland
- Parathyroid
- Endocrine functions of pancreas Adrenal cortex
- Adrenal medulla
- Endocrine functions of other organs

10. REPRODUCTIVE SYSTEM

- Male reproductive system-testis and its hormones; seminal vesicles, prostate gland, semen.
- Introduction to female reproductive system
- Menstrual cycle
- Ovulation
- Menopause
- Infertility
- Pregnancy and parturition Placenta
- Pregnancy tests
- Mammary glands and lactation Fertility
- Foetal circulation

11. SPECIAL SENSES

- Eye: Photochemistry of vision, Visual pathway, Pupillary reflexes, Colour vision, Errors of refraction
- Ear: Auditory pathway, Mechanism of hearing, Auditory defects

- Sensation of taste: Taste receptors, Taste pathways
- Sensation of smell: Olfactory receptors, olfactory, pathways Sensation of touch

12. DIGESTIVE SYSTEM & NUTRITION

- Introduction to digestive system
- Composition and functions of digestive juices
- Physiological anatomy of Stomach, Pancreas, Liver and Gall bladder, Small intestine, Large intestine
- Movements of gastrointestinal tract
- Gastrointestinal hormones
- Digestion and absorption of carbohydrates, proteins and lipids

13. RENAL PHYSIOLOGY

- Physiological anatomy of kidneys and urinary tract
- Fluid & electrolyte with acid base balance need to be include
- Renal circulation
- Urine formation: Renal clearance, glomerular filtration, tubular reabsorption, selective secretion, concentration of urine, acidification of urine
- Renal functions tests
- Micturition

14. BIO-CHEMISTRY THEORY

- Carbohydrates: (Chemistry, Metabolism, Glycolysis, TCA, HMP, Glycogen synthesis and degradation, Blood glucose regulation)
- Lipids: (Chemistry, Metabolism, Intestinal uptake, Fat transport, Utilization of stored fat,Activation of fatty acids, Beta oxidation and synthesis of fatty acids)
- Proteins: (Chemistry, Metabolism, Digestion of protein, Transamination, Deamination Fate of Ammonia, Urea cycle, End products of each amino acid and their entry into TCA cycle
- Enzymes: (Definition, Classification, Biological Importance, Diagnostic use, Inhibition)
- Vitamins: (Daily requirements, Dietary source, Disorders and physiological role)
- Minerals (Daily requirement, Dietary Sources, Disorders and physiological role) mineral metabolism
- Organ function tests

PRACTICAL & CLINICAL PHYSIOLOGY:-

No	Practical	Demonstration / Performance
	Haematology	
1	Study of the Compound Microscope	Performance
2.	Collection of Blood Samples	Performance
3	Estimation of Haemoglobin Concentration	Performance
4	Determination of Haematocrit	Demonstration
5	Hemocytometry	Performance
6	Total RBC Count	Performance
7	Determination of RBC Indices	Demonstration
8	Total Leucocytes Count (TLC)	Performance
9	Preparation And Examination Of Blood Smear	Performance
10	Differential Leucocyte Count (DLC)	Performance
11	Absolute Eosinophil Count	Demonstration
12	Determination of Erythrocyte Sedimentation Rate	Demonstration
13	Determination of Blood Groups	Performance
14	Determination of Bleeding Time and Coagulation Time	Performance
	Biochemistry	
1	Demonstration of Uses Of Instruments Or Equipment	Demonstration
2	Qualitative Analysis of Carbohydrates, Proteins And Lipids	Performance
3	Normal Characteristics of Urine	Performance
4	Abnormal Constituents of Urine	Performance
5	Quantitative Estimation of Glucose, Total Proteins, Uric Acid in Blood	Performance
6	Liver Function Tests	Demonstration
7	Kidney Function Tests	Demonstration
8	Lipid Profile	Demonstration
9	Interpretation and Discussion of Results of Biochemical Tests	Demonstration
	Clinical Physiology & OPD	
1	Case Taking & Approach to pt	Performance
2	General Concept Of Examination	Performance

3	Examination of muscles, joints,	Performance
4	Cardio-Vascular System – Blood Pressure Recording, Radial Pulse, ECG, Clinical Examination	Performance
5	Respiratory System- Clinical Examination, Spirometry, Stethography	Performance
6	Nervous System- Clinical Examination	Performance
7	Special Senses- Clinical Examination	Performance
8	Reproductive System- Diagnosis of Pregnancy	Performance
9	Gastrointestinal System- Clinical Examination	Performance
10	OPD	Demonstration & Performance

6. TEACHING LEARNING METHODS

Different teaching-learning methods must be apply for understanding holistic and integrated way of physiology. There has to be classroom lectures, small group discussions, case discussion where case based learning (CBL) and problem based learning (PBL). In the applied physiology, Case discussion (CBL-PBL) methods are helpful for students. AV – Methods for demonstration of physiological processes will be very helpful. In process of Clinical Physiology – DOAP (Demonstration – Observation – Assistance – Performance) is very well applicable.

Practical & Clinics are the best medium to demonstrate all physiological processes in objective ways. They help us to understand and explain the physiological signs. Haematological & Biochemistry practical are done in laboratory, where one can apply the DOAP (Demonstration – Observation – Assistance – Performance) & OSPE (Objective Structured Practical Examination) methods. All this should be recorded in the journal.

In the clinics / OPD / IPD / Bed side there shall be exposure of Clinical & Applied Physiology. These can be demonstrated by DOAP (Demonstration – Observation – Assistance – Performance) & OSCE (Objective Structured Clinical Examination) methods. These methods are more objective, and t will help students to develop the attitude as clinicians. In these type of exposure students has to observe the teachers or consultants and able to corelate what they have learned in clinical physiology classes. They do not have to examine the patient by themselves but only observe the teachers. They can keep the record of all physiological function which are disturbed.

Other Innovative methods include preparation of charts and models.

7.CONTENT MAPPING (COMPETENCY TABLE)

SEMESTER – 1

Topic No	**1**
Theory	**General Physiology**
Practical	**-**
Clinical Physiology	**Case Taking & Approach to Patient**

Learning Outcome: -

At the end of the chapter General Physiology, the student must be able to –

- Discuss the principles of cellular physiology.
- Classify cell junctions.
- Explain the process of transport through cell membrane
- Describe the resting membrane potential.
- Categorise body fluids compartments.
- Explain the concept of homeostasis

S.No	Generic competency	Subject area	Miller's Level	Specific competency	Specific Learning Objectives / outcomes	Bloom's domain	Guilbert's level	Must know/ desirable to know / nice to know	TL method / media	Formative Assessment	Summative Assessment	Integration - Horizontal / Vertical / Spiral
Hom UG-PB 1.1	Integration Of Information (K-1)	Introduction & Cell	Knows	Definition & general introduction	Define Physiology.	Cognitive	Level 1 (Remember / recall)	Must know	Lecture, Small group discussion	MCQs	_	
Hom UG-PB 1.2			Knows How		Discuss the importance of learning physiology in a homoeopathic course	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	MCQs	Viva Voce	Organon
Hom UG-PB 1.3			Knows How		Discuss the Internal & external	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	

					environment of Body							
Hom UG-PB 1.4	Integration Of Information (K-1)	Homeostasis	Knows How W	Describe and discuss the principles of homeostasis	Explain the regulation of internal environment	Cognitive	Level 2 Understand / interpret	Desirable to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine Pathology Organon
Hom UG-PB 1.5			Knows How		Explain homoeostasis & it's control	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	MCQs	LAQs, Viva Voce	
Hom UG-PB 1.6	Integration Of Information (K-1)	The Cellular Level Organisation	Knows How	Describe the structure and functions of a mammalian cell	Describe the structure of cell	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Anatomy Pathology
Hom UG-PB 1.7			Knows How		Describe the functions of cell	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Pathology Organon
Hom UG-PB 1.8			Knows		List the organelles present in cell	Cognitive	Level 1 (Remember / recall)	Must know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	
Hom UG-PB 1.9			Knows		Enumerate the functions of organelles	Cognitive	Level 1 (Remember / recall)	Must Know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Pathology
Hom UG-PB 1.10			Knows		List the name of intracellular junction	Cognitive	Level 1 (Remember / recall)	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy
Hom UG-PB 1.11			Knows How		Discuss the importance of intracellular Junction	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	MCQs	Viva Voce	Anatomy

Hom UG-PB 1.12	Integration Of Information (K-1)		Knows How	To understand transport mechanisms across cell membranes	Explain Passive transportation	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Biochemistry
Hom UG-PB 1.13			Knows How		Explain Active Transportation	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Biochemistry
Hom UG-PB 1.14			Knows How		Explain Vesicular Transportation	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Biochemistry
Hom UG-PB 1.15	Information Gathering , Integration Of information, Problem Integration (K-2)	Clinical & Applied Physiology	Shows How	To conduct History taking	Demonstrate history taking process	Affective	Level 1 Receiving	Must know	Demonstration, Role Play	Observation	DOPS	

Topic No	**2**
Theory	**Bio Physics Science**
Practical	**-**
Clinical Physiology	**-**

Learning Outcomes: -

At the end of the chapter Bio Physics Science, the student must be able to –

- Define biophysics.
- Illustrate the biophysical activity across the cell membrane.
- Explain membrane potential.
- Describe the chemical bond & solution.

S.No	Generic competency	Subject area	Miller's Level	Specific competency	Specific Learning Objectives / outcomes	Bloom's domain	Guilbert's level	Must know / desirable to know / nice to know	TL method / media	Formative Assessment	Summative Assessment	Integration - Horizontal / Vertical / Spiral
Hom UG-PB 2.1	Integration Of Information (K-1)	Bio Physics Science	Knows	To understand the bio-Physical science of cell membrane	Define the terms Filtration& Ultrafiltration	Cognitive	Level 1 (Remember / recall)	Nice to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Biochemistry
Hom UG-PB 2.2			Knows		Define intra cellular communication	Cognitive	Level 1 (Remember / recall)	Nice to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Biochemistry
Hom UG-PB 2.3			Knows		Define the terms adsorption & Absorption	Cognitive	Level 1 (Remember / recall)	Nice to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Biochemistry
Hom UG-PB 2.4			Knows		Define the terms Hydro trophy, Dialysis & Assimilation	Cognitive	Level 1 (Remember / recall)	Nice to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Biochemistry Medicine
Hom UG-PB 2.5			Knows		Define Surface Tension	Cognitive	Level 1 (Remember / recall)	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Biochemistry Medicine
Hom UG-PB 2.6	Integration Of Information (K-1)		Knows How	Discuss the Membrane Physiology &Membrane Potential	Explain Action Potential	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Biochemistry
Hom UG-PB 2.7			Knows		Define Donnan Equilibrium	Cognitive	Level 1 (Remember / recall)	Nice to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Biochemistry

Hom UG-PB 2.8			Knows		Define Transmembrane Potential	Cognitive	Level 1 (Remember / recall)	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Biochemistry
Hom UG-PB 2.9			Knows How		Explain nerve action potential	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 2.10			Knows		Define Tracer Elements	Cognitive	Level 1 (Remember / recall)	Nice to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 2.11			Knows		Define Rhythmicity of some excitable tissues	Cognitive	Level 1 (Remember / recall)	Nice to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 2.12	Integration Of Information (K-1)	The Chemical Level Organisation	Knows How	Understand the chemical bonds	Describe the Ionic Bond	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Biochemistry
Hom UG-PB 2.13			Knows How		Describe the covalent bond	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Biochemistry
Hom UG-PB 2.14			Knows How		Describe the Hydrogen Bond	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs	Viva Voce	Biochemistry
Hom UG-PB 2.15	Integration Of Information (K-1)		Knows	Understand the inorganic Compound & Solution	Define the terms Colloid, Solution & Suspension	Cognitive	Level 1 (Remember / recall)	Desirable to know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Biochemistry
Hom UG-PB 2.16			Knows How		Discuss the characteristics of acids, Base & Salts	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Biochemistry
Hom UG-PB 2.17			Knows How		Discuss acid - base balance & its application to the concept of pH	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Biochemistry

Hom UG-PB 2.18			Knows How		Describe the maintaining of pH: Buffer System	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Biochemistry

Topic No	**3**
Theory	**Skin & The Integumentary System**
Practical	**-**
Clinical Physiology	**Demonstration of General Examination**

Learning Outcomes: -

At the end of the chapter Skin & the Integumentary System, the student must be able to –

- Discuss the functions of skin, nail, and hair.
- Conduct examination of the Integumentary System under supervision.

S.No	Generic competency	Subject area	Miller's Level	Specific competency	Specific Learning Objectives / outcomes	Bloom's domain	Guilbert's level	Must know/ desirable to know / nice to know	TL method / media	Formative Assessment	Summative Assessment	Integration - Horizontal / Vertical / Spiral
Hom UG-PB 3.1	Integration Of Information (K-1)	Skin & The Integumentary System	Knows How	Understand the Structure & function of Skin	Discuss layers of skin with their functions	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy Medicine Organon Materia Medica Pharmacy
Hom UG-PB 3.2			Knows How		Relate the structure of hair with its function	Cognitive	Level 2 Understand / interpret	Must Know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Anatomy
Hom UG-PB 3.3			Knows How		Relate the structure of nail with its function	Cognitive	Level 2 Understand / interpret	Desirable To Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy
Hom UG-PB 3.4			Knows How		Relate the structure of different glands of skin with their functions	Cognitive	Level 2 Understand / interpret	Must Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy
Hom UG-PB 3.5			Knows How		Describe the glands of skin	Cognitive	Level 2 Understand / interpret	Must Know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	
Hom UG-PB 3.6			Knows How		Explain the regulation of body temperature through skin	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Medicine
Hom UG-PB 3.7	Information Gathering , Integration Of information,	Clinical & Applied	Shows How	To demonstrate General examination	Demonstrate the examination of Skin & Mucus Membrane	Psycho Motor	Level 1 Observe / Imitate	Must know	DOAP	Observation	OSCE	Medicine

Hom UG-PB 3.8	Problem Integration (K-2)	Physiology	Shows How		Demonstrate the examination of Conjunctive, Nail & Glands	Psycho Motor	Level 1 Observe / Imitate	Must know	DOAP	Observation	OSCE	Medicine

Topic No	**4**
Theory	**Nerve Muscle Physiology**
Practical	**-**
Clinical Physiology	**Demonstrate effect of mild, moderate and severe exercise and record changes in cardiorespiratory parameters Perform Ergography, Examination of muscles, joints,**

Learning Outcomes: -

At the end of the chapter Nerve Muscle Physiology, the student must be able to –

- Discuss the properties and functions of neurons.
- Illustrate a neuromuscular junction.
- Classify muscle fibres.
- Describe the properties of skeletal, cardiac, and smooth muscle fibres.
- Demonstrate effect of mild, moderate and severe exercise and record changes in cardiorespiratory parameters.

- Perform Ergography under supervision.

S.No	Generic competency	Subject area	Miller's Level	Specific competency	Specific Learning Objectives / outcomes	Bloom's domain	Guilbert's level	Must know / desirable to know / nice to know	TL method / media	Formative Assessment	Summative Assessment	Integration - Horizontal / Vertical / Spiral
Hom UG-PB 4.1	Integration Of Information (K-1)	Nerve Muscle Physiology	Knows	To understand the functional anatomy of Nerve fibers	Define Neuron Classify neurons	Cognitive	Level 1 (Remember/ recall)	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy
Hom UG-PB 4.2			Knows How		Explain structure and function of neuroglia	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Anatomy
Hom UG-PB 4.3	Integration Of Information (K-1)		Knows	To understand the physiological properties of nerve fibers	Define the terms Excitability & Conductivity	Cognitive	Level 1 (Remember/ recall)	Desirable To Know	Lecture, Small group discussion	SAQs	SAQs Viva Voce	
Hom UG-PB 4.4			Knows How		Discuss graded & action potential	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	
Hom UG-PB 4.5	Integration Of Information (K-1)		Knows How	To understand the degeneration & regeneration of neuron	Discuss the causes & grade of injury	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Medicine
Hom UG-PB 4.6			Knows How		Identify the stages of degeneration	Cognitive	Level 2 Understand / interpret	Desirable To Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Pathology
Hom UG-PB 4.7			Knows How		Discuss the stages of regeneration	Cognitive	Level 2 Understand / interpret	Desirable To Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 4.8	Integration Of Information (K-1)		Knows How	To describe Neuromuscular Junction	Illustrate the Structure of Neuro-Muscular Junction	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy

Hom UG-PB 4.9			Knows How		Discuss the Neuromuscular Transmission	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs	Viva Voce	Anatomy
Hom UG-PB 4.10			Knows How		Discuss Disorders of neuromuscular Junction	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion, CBL, PBL	MCQs	SAQs, Viva Voce	Medicine
Hom UG-PB 4.11	Integration Of Information (K-1)		Knows How	To understand the physiological properties of Skeletal Muscle	Illustrate the mechanism of skeletal muscle contraction. Describe the general mechanism of muscle contraction.	Cognitive	Level 2 Understand / interpret	Desirable To Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy
Hom UG-PB 4.12			Knows How		Discuss Molecular mechanism	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs	Viva Voce	
Hom UG-PB 4.13			Knows How		Discuss Energetic of muscle contraction	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs	Viva Voce	Anatomy
Hom UG-PB 4.14			Knows How		Discuss Excitation of skeletal muscle	Cognitive	Level 2 Understand / interpret	Desirable To Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 4.15	Integration Of Information (K-1)		Knows How	To understand the physiological properties of Smooth Muscle	Explain Contraction of smooth muscle	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Anatomy
Hom UG-PB 4.16			Knows How		Explain Nervous & hormonal control of smooth muscle contraction	Cognitive	Level 2 Understand / interpret	Desirable To Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine

Hom UG-PB 4.17	Integration Of Information (K-1)		Knows How	To understand the physiological properties of Cardiac Muscle	Illustrate Functional Anatomy of cardiac Muscle	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Anatomy
Hom UG-PB 4.18			Knows How		Explain process of excitability & contractility	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Anatomy
Hom UG-PB 4.19			Knows How		Explain properties of cardiac muscle	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Medicine
Hom UG-PB 4.20			Knows How		Discuss the disorders of Skeletal Muscles	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine
Hom UG-PB 4.21	Information Gathering , Integration Of information, Problem Integration (K-2)	Clinical & Applied Physiology Of Muscle	Shows How	Demonstrate effect of mild, moderate and severe exercise and record changes in cardio - respiratory parameters	Measure the parameters of cardio-pulmonary changes during exercise	Psycho Motor	Level 2 Control	Must Know	Demonstration	Observation	OSCE	Medicine
Hom UG-PB 4.22			Shows How	Perform Ergography	Demonstrate the sequence of performing ergography.	Psycho Motor	Level 1 Observe / Imitate	Nice to know	Demonstration	Observation	OSCE	Medicine

Topic No	**5**
Theory	**Body Fluid& Immune Mechanism**
Practical	**Hematology**
Clinical Physiology	

Learning Outcomes: -

At the end of the chapter on Body Fluid & Immune System & Hematology, the student must be able to –

- Describe the composition and functions of blood components
- Describe the origin, Forms, Variations and functions of plasma Protein
- Illustrate the synthesis of Haemoglobin
- Describe RBC formation (erythropoiesis) and its regulation
- Describe WBC formation (granulopoiesis) and its regulation
- Classify Anaemias & Jaundice
- Explain the role of lymphoid tissues in immune responses
- Classify different types of immunity
- Describe the development and regulation of immunity.
- Explain the formation and functions of platelets.
- Illustrate the physiological basis of haemostasis
- Describe different blood groups
- Discuss the clinical importance of blood grouping

- Describe blood transfusion
- Estimate Hb, RBC, TLC, RBC indices, DLC, Blood groups, BT/CT

S.No	Generic competency	Subject area	Miller's Level	Specific competency	Specific Learning Objectives / outcomes	Bloom's domain	Guilbert's level	Must know / desirable to know / nice to know	TL method / media	Formative Assessment	Summative Assessment	Integration - Horizontal / Vertical / Spiral
Hom UG-PB 5.1	Integration Of Information (K-1)	Blood Fluid and It's Constituents	Knows How	Describe the composition and functions of blood components	Discuss the composition of Blood	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	MCQs	LAQs, Viva Voce	Anatomy
Hom UG-PB 5.2			Knows How		Describe the function of blood	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Anatomy Pathology Medicine
Hom UG-PB 5.3			Knows		Define serum	Cognitive	Level 1 recall	Must Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Pathology Medicine
Hom UG-PB 5.4			Knows How		Explain the difference between serum & Plasma	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Biochemistry
Hom UG-PB 5.5	Integration Of Information (K-1)		Knows How	Describe the origin, Forms, Variations and functions of plasma Protein	Discuss the origin of plasma protein	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Biochemistry
Hom UG-PB 5.6			Knows How		Explain the forms and functions of plasma proteins	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Pathology

Hom UG-PB 5.7			Knows How		Identify the relation of diet to plasma protein	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 5.8	Integration Of Information (K-1)		Knows How	Describe and discuss the synthesis and functions of Haemoglobin	Illustrate the structure of Haemoglobin	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Biochemistry
Hom UG-PB 5.9			Knows How		Discuss the synthesis of Haemoglobin	Cognitive	Level 2 Understand / interpret	Must Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Biochemistry
Hom UG-PB 5.10			Knows		Define Normal function of Haemoglobin	Cognitive	Level 1 recall	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Biochemistry Materia Medica
Hom UG-PB 5.11			Knows		State normal Value of different varieties of Haemoglobin	Cognitive	Level 1 recall	Must know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Medicine
Hom UG-PB 5.12			Knows How		Explain Iron metabolism	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Biochemistry
Hom UG-PB 5.13	Integration Of Information (K-1)		Knows How	Describe RBC formation (erythropoiesis & its regulation) and its functions	Discuss the normal structure of RBC with its morphology	Cognitive	Level 2 Understand / interpret	Desire to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy Pathology Medicine
Hom UG-PB 5.14			Knows How		discuss stages and regulation of erythropoiesis	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 5.15			Knows How		Discuss the fate of RBC	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 5.16			Knows How		Discuss the hemolysis	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group	SAQs	SAQs, Viva Voce	Medicine FMT

									discussion, CBL			
Hom UG-PB 5.17	Information Gathering ,Integration Of information , Problem Integration (K-2)		Knows How	Describe different types of anemia & Jaundice	Classify the anemia according to their morphology & etiology	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion, CBL, PBL	MCQs	LAQs, Viva Voce	Medicine, Pathology
Hom UG-PB 5.18			Knows How		Discuss the different anemia	Cognitive	Level 2 Understand / interpret	Desirable to know	Lecture, Small group discussion, CBL, PBL	MCQs	LAQs, Viva Voce	Medicine, Pathology Materia Medica Repertory
Hom UG-PB 5.19			Knows How		Enumerate the different abnormal functions in anaemia	Cognitive	Level 2 Understand / interpret	Desirable to know	Lecture, Small group discussion, CBL, PBL	SAQs	SAQs, Viva Voce	Medicine
Hom UG-PB 5.20			Knows How		Discuss the fate of bilirubin	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion, CBL	SAQs	SAQs, Viva Voce	Medicine, Pathology Materia Medica Repertory
Hom UG-PB 5.21			Knows How		Explain Physiological Jaundice	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion, CBL	SAQs	SAQs, Viva Voce	Materia Medica Repertory
Hom UG-PB 5.22			Knows How		Explain Jaundice in new-born	Cognitive	Level 2 Understand / interpret	Nice to Know	Lecture, Small group discussion, CBL	SAQs	SAQs, Viva Voce	Medicine Materia Medica Repertory
Hom UG-PB 5.23	Integration Of Information (K-1)		Knows How	Describe WBC formation (granulopoiesis	Explain different condition of leucocyte count in our body	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Medicine Pathology

Hom UG-PB 5.24			Knows How	) and its regulation	Classify different type of WBCs	Cognitive	Level 2 Understand / interpret	Must Know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Pathology
Hom UG-PB 5.25			Knows How		Discuss the function of WBCs as per their classification	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Pathology Medicine
Hom UG-PB 5.26			Knows How		Discuss the phagocytosis	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Pathology
Hom UG-PB 5.27			Knows How		Discuss the stages of leucopoiesis with its regulation	Cognitive	Level 2 Understand / interpret	Must Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 5.28			Knows How		Discuss the conditions that cause abnormal value of leucocyte	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine Surgery Pathology
Hom UG-PB 5.29	Integration Of Information (K-1)		Knows How	Describe the formation of platelets, functions and variations.	Discuss the structure & function of Platelets	Cognitive	Level 2 Understand / interpret	Must Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine Pathology
Hom UG-PB 5.30			Knows How		Describe the Thrombopoiesis	Cognitive	Level 2 Understand / interpret	Must Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 5.31			Knows How		Discuss its count & variation of platelets	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Medicine
Hom UG-PB 5.32	Integration Of		Knows How	Describe the physiological	Describe the process of coagulation	Cognitive	Level 2 (Understand / interpret)	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Pathology Materia Medica

Hom UG-PB 5.33	Information (K-1)		Knows How	basis of haemostasis	Discuss the mechanism of haemostasis	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 5.34			Knows How		Explain stages of clotting mechanism	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Pathology Medicine
Hom UG-PB 5.35	Integration Of Information (K-1)		Knows How	Describe the clinical importance of blood coagulation	Discuss hemorrhagic disorder	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion, CBL	MCQs	SAQs, Viva Voce	Medicine
Hom UG-PB 5.36	Integration Of Information (K-1)		Knows	Describe different blood groups	Classify the ABO blood group system	Cognitive	Level 1 Recall	Must Know	Lecture, Small group discussion	SAQs	LAQs Viva Voce	Pathology
Hom UG-PB 5.37			Knows How		Discuss Landsteiner's Law	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Pathology Medicine
Hom UG-PB 5.38	Integration Of Information (K-1)		Knows How	Discuss the clinical importance of blood grouping	Describe Rhesus Blood Group	Cognitive	Level 2 Understand / interpret	Must Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 5.39			Knows How		Discuss Rh Incompatibility	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine, Pathology Obstetrics & Gynaecology
Hom UG-PB 5.40	Integration Of Information (K-1)		Knows How	Describe blood transfusion	Discuss the importance of Blood transfusion	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Surgery Medicine
Hom UG-PB 5.41			Knows		List causes for Blood transfusion reaction	Cognitive	Level 1 Recall	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Pathology Medicine

Hom UG-PB 5.42	Integration Of Information (K-1)	Immune Mechanism	Knows How	Explain the role of lymphoid tissues in immune responses	Discuss Tissue Macrophage system	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Pathology Medicine
Hom UG-PB 5.43			Knows How		Describe the morphology and functions of Lymphocytes & Plasma cell	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Pathology
Hom UG-PB 5.44			Knows How		Explain the functions of spleen	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Medicine
Hom UG-PB 5.45			Knows How		Discuss the formation and functions of Lymph	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine
Hom UG-PB 5.46	Integration Of Information (K-1)		Knows	Define and classify different types of immunity.	Define Immunity	Cognitive	Level 1 (Remember/ recall)	Must know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Pathology Medicine Organon
Hom UG-PB 5.47			Knows How		Explain different type of immunity	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	MCQs	LAQs, Viva Voce	Pathology Medicine
Hom UG-PB 5.48	Integration Of Information (K-1)		Knows How	Describe the development of immunity and its regulation	Discuss development of immune response	Cognitive	Level 2 Understand / interpret	Must Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Pathology
Hom UG-PB 5.49			Knows How		Discuss Auto - immunity & Hypersensitivity	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Pathology Medicine
Hom UG-PB 5.50			Knows How		Discuss Immunodeficiency Diseases	Cognitive	Level 2 Understand / interpret	Desirable to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Pathology Medicine
Hom UG-PB 5.51	Information Gathering ,Integration	Hematology Practical	Shows How	Estimate Hb, RBC, TLC, RBC indices, DLC,	Estimate Hb in the given sample	Psycho Motor	Level 2 (Control)	Must know	DOAP	Observation	Checklist	Pathology Medicine

Hom UG-PB 5.52	Of information, Problem Integration (K-2)		Knows How	Blood groups, BT/CT	Interpret results of Hb estimation	Cognitive	Level 2 Understand / interpret	Must know	DOAP	Observation	Checklist	Pathology Medicine
Hom UG-PB 5.53			Shows How		Perform RBC Total Count Estimation	Psycho Motor	Level 2 (Control)	Must know	DOAP	Observation	Checklist	Pathology
Hom UG-PB 5.54			Knows How		Interpret the results of RBC Total Count Estimation	Cognitive	Level 2 Understand / interpret	Must know	DOAP	Observation	Checklist	Pathology
Hom UG-PB 5.55			Shows How		Perform WBC Total Count Estimation	Psycho Motor	Level 2 (Control)	Must know	DOAP	Observation	Checklist	Pathology Medicine
Hom UG-PB 5.56			Knows How		Interpret the results of WBC Total Count Estimation	Cognitive	Level 2 Understand / interpret	Must know	DOAP	Observation	Checklist	Pathology Medicine
Hom UG-PB 5.57			Shows How		Perform WBC DC estimation	Psycho Motor	Level 2 (Control)	Must know	DOAP	Observation	Checklist	Pathology
Hom UG-PB 5.58			Knows How		Interpret the results of WBC DC estimation	Cognitive	Level 2 Understand / interpret	Must know	DOAP	Observation	Checklist	Pathology
Hom UG-PB 5.59			Shows How		Record RBC indices	Psycho Motor	Level 2 (Control)	Must know	DOAP	Observation	Checklist	Pathology Medicine
Hom UG-PB 5.60			Knows How		Evaluate RBC indices	Cognitive	Level 2 Understand / interpret	Must know	DOAP	Observation	Checklist	Pathology Medicine
Hom UG-PB 5.61			Shows How		Perform Blood Group identification	Psycho Motor	Level 2 (Control)	Must know	DOAP	Observation	Checklist	Pathology
Hom UG-PB 5.62			Shows How		Perform BT / CT	Psycho Motor	Level 2 (Control)	Must know	DOAP	Observation	Checklist	Pathology

Hom UG-PB 5.63			Knows How		Interpret the results of BT / CT	Cognitive	Level 2 Understand / interpret	Must know	DOAP	Observation	Checklist	Pathology
Hom UG-PB 5.64			Shows How		Record ESR	Psycho Motor	Level 2 (Control)	Must know	Demonstration	Observation	Checklist	Pathology
Hom UG-PB 5.65			Knows How		Interpret the results of ESR estimation	Cognitive	Level 2 Understand / interpret	Must know	DOAP	Observation	Checklist	Pathology
Hom UG-PB 5.66	Information Gathering ,Integration Of information , Problem Integration (K-2)		Shows How	Describe steps for reticulocyte and platelet count	Record Reticulocyte count	Psycho Motor	Level 1 (Observe / Imitate)	Nice to know	Demonstration	Observation	Observation	Pathology
Hom UG-PB 5.67			Knows How		Interpret the results of Reticulocyte count	Cognitive	Level 2 Understand / interpret	Must know	DOAP	Observation	Checklist	Pathology Medicine
Hom UG-PB 5.68			Shows How		Record Platelet Count	Psycho Motor	Level 1 (Observe / Imitate)	Nice to know	Demonstration	Observation	Observation	Pathology
Hom UG-PB 5.69			Knows How		Interpret the results of Platelet Count	Cognitive	Level 2 Understand / interpret	Must know	DOAP	Observation	Checklist	Pathology Medicine

SEMESTER – 2

Topic No	**6**
Theory	**Cardio Vascular System**
Practical	
Clinical Physiology	**Cardio-Vascular System – Blood Pressure Recording, Radial Pulse, ECG, Clinical Examination**

Learning Outcomes: -

At the end of chapter on Cardio Vascular System & its examination, the student must be able to –

- Describe the functional anatomy of the heart, with respect to its chambers, valves, input and output vessels, AV ring and electrical discontinuity, Conducting system, Coronary supply.
- Describe the properties of cardiac muscle including its morphology, electrical, mechanical and metabolic functions.
- Discuss the events occurring during the cardiac cycle
- Illustrate the haemo-dynamics of circulatory system
- Explain the regulation of cardiac output
- Describe the normal mode of conduction of the cardiac impulse
- Explain coronary, cerebral, capillary, pulmonary& splanchnic circulation
- List the major diseases of cardiovascular system,
- Record Pulse, blood pressure, and ECG
- Perform the clinical examination of cardiovascular system

S.No	Generic competency	Subject area	Miller's Level	Specific competency	Specific Learning Objectives / outcomes	Bloom's domain	Guilbert's level	Must know / desirable to know / nice to know	TL method / media	Formative Assessment	Summative Assessment	Integration - Horizontal / Vertical / Spiral
Hom UG-PB 6.1	Integration Of Information (K-1)	Cardio Vascular System	Knows How	Describe the functional anatomy of heart including chambers, Sounds	Describe the chambers of heart	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Human Anatomy
Hom UG-PB 6.2			Knows How		Discuss the valves & the walls of heart	Cognitive	Level 2Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Human Anatomy
Hom UG-PB 6.3	Integration Of Information (K-1)		Knows How	Describe Pacemaker tissue and conducting system.	Explain the pacemaker of heart.	Cognitive	Level 2 Understand / interpret	Desirable to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine – Cardiology
Hom UG-PB 6.4			Knows How		Describe the conducting system	Cognitive	Level 2 Understand / interpret	Must Know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Anatomy

Hom UG-PB 6.5	Integration Of Information (K-1)		Knows How	Describe the properties of cardiac muscle including its morphology, electrical, mechanical and metabolic functions	Discuss the Morphological Properties of heart	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Anatomy
Hom UG-PB 6.6			Knows How		Discuss the electrical properties of heart	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy
Hom UG-PB 6.7			Knows How		Discuss the mechanical & metabolic Properties of heart	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs	Viva Voce	Anatomy
Hom UG-PB 6.8	Integration Of Information (K-1)		Knows	Discuss the events occurring during the cardiac cycle	Define Cardiac cycle	Cognitive	Level 1 (Remember / recall)	Must know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Medicine
Hom UG-PB 6.9			Knows How		Discuss the events of cardiac cycle	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 6.10			Knows How		Explain the pressure changes during cardiac cycle	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 6.11			Knows How		Explain the ECG changes during each cardiac cycle	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Medicine
Hom UG-PB 6.12	Integration Of Information (K-1)		Knows	Discuss heart sounds	Define Heart Sound	Cognitive	Level 1 (Remember / recall)	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Medicine
Hom UG-PB 6.13			Knows How		Explain different heart sounds with their measurement technique	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	MCQs	LAQs, Viva Voce	

Hom UG-PB 6.14			Knows How		Discuss the clinical importance of Murmurs & Triple heart sound	Cognitive	Level 2 Understand / interpret	Must know	Lecture, PBL, Small group discussion	SAQs	SAQs, Viva Voce	Medicine Surgery
Hom UG-PB 6.15	Integration Of Information (K-1)		Knows How	Describe the physiology of electrocardiogram (E.C.G),	Discuss normal ECG with it's waves and intervals	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Medicine
Hom UG-PB 6.16			Knows How		Explain in electrocardiography with unipolar & bipolar recording.	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 6.17	Information Gathering ,Integration Of information Problem Integration (K-2)		Knows How	Discuss arrhythmia, heart block and myocardial Infarction	Classify arrythmias	Cognitive	Level 2 Understand / interpret	Must know	Lecture, PBL, Small group discussion	SAQs	SAQs, Viva Voce	Medicine
Hom UG-PB 6.18			Knows How		Explain Different degree of heart block. Explain Myocardial Infarction	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, PBL , Small group discussion	SAQs	SAQs, Viva Voce	Medicine Pathology Materia Medica Repertory
Hom UG-PB 6.19	Integration Of Information (K-1)		Knows	Describe haemo-dynamics of circulatory system	List the functions of circulation	Cognitive	Level 1 Recall	Desirable to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy
Hom UG-PB 6.20			Knows		State the functions of heart	Cognitive	Level 1 Recall	Desirable to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine
Hom UG-PB 6.21			Knows How		Discuss the pressure changes in vascular system	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	MCQs	Viva Voce	
Hom UG-PB 6.22			Knows		Recall the structure of the blood vessels	Cognitive	Level 1Recall	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy

Hom UG-PB 6.23	Integration Of Information (K-1)		Knows How	Describe the factors affecting heart rate,	Identify the factors affecting heart rate and how it affects	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine
Hom UG-PB 6.24			Knows How		Discuss the mechanism of control of heart rate	Cognitive	Level 2 Understand / interpret	Desirable to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 6.25	Integration Of Information (K-1)		Knows	Describe the regulation of cardiac output	Define cardiac output	Cognitive	Level 1 (Remember / recall)	Must know	Lecture, Small group discussion	SAQs	LAQs Viva Voce	Materia Medica Repertory
Hom UG-PB 6.26			Knows How		Discuss the distribution of cardiac output	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Medicine
Hom UG-PB 6.27			Knows How		Discuss the factors affecting cardiac output	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 6.28			Knows How		Discuss in detail the Control mechanism of cardiac output	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 6.29	Integration Of Information (K-1)		Knows How	Understand the blood pressure regulation	Discuss the importance of blood pressure	Cognitive	Level 2 Understand / interpret	Must know	Lecture, PBL, Small group discussion	SAQs	LAQs, Viva Voce	Medicine
Hom UG-PB 6.30			Knows		State the factors affecting arterial blood pressure	Cognitive	Level 1 Recall	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Medicine
Hom UG-PB 6.31			Knows How		Discuss the determinants of arterial blood pressure	Cognitive	Level 2 Understand / interpret	Must Know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Medicine

Hom UG-PB 6.32			Knows How		Describe regulation of arterial blood pressure	Cognitive	Level 2 Understand / interpret	Must know	PBL, Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Medicine
Hom UG-PB 6.33	Integration Of Information (K-1)		Knows How	Describe coronary, cerebral, capillary, pulmonary & splenic circulation	Discuss the capillary circulation	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs	Viva Voce	
Hom UG-PB 6.34			Knows How		Discuss the Coronary circulation	Cognitive	Level 2 Understand / interpret	Desirable to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine Pathology
Hom UG-PB 6.35			Knows How		Discuss the Cerebral circulation	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine Pathology
Hom UG-PB 6.36			Knows How		Discuss the Splenic circulation	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs	Viva Voce	Medicine
Hom UG-PB 6.37			Knows How		Discuss Pulmonary circulation	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine
Hom UG-PB 6.38	Information Gathering ,Integration Of information, Problem Integration (K-2)		Knows How	Describe the mechanism of shock, syncope & Hypertension	Explain mechanism responsible for shock & syncope	Cognitive	Level 2 Understand / interpret	Must know	CBL, Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine Pathology
Hom UG-PB 6.39			Knows How		Discuss the mechanism of hypertension	Cognitive	Level 2 Understand / interpret	Must know	CBL, Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine Pathology Materia Medica Organon
Hom UG-PB 6.40	Information Gathering ,Integration Of information, Problem		Shows How	Record blood pressure at rest and in different grades of Exercise and postures	Measure the blood pressure in resting &different grade of exercise	Psycho-motor	Level 2 (Control)	Must know	Demonstration	Observation	OSCE	Medicine
Hom UG-PB 6.41			Knows How		Discuss the variation between	Cognitive	Level 2 (Understanding)	Must know	CBL, Lecture,	Observation	OSCE	Medicine

	Integration (K-2)				different blood pressure values after measurement				Small group discussion			
Hom UG-PB 6.42	Information Gathering ,Integration Of information, Problem Integration (K-2)		Shows How	Record pulse at rest and in different grades of Exercise and postures	Measure pulse at rest and in different grades of exercise	Psycho-motor	Level 2 (Control)	Must know	Demonstration	Observation	OSCE	Medicine
Hom UG-PB 6.43			Knows How		Discuss the variation between different arterial pulse value after measurement	Cognitive	Level 2 (Understand)	Must know	CBL, Lecture, Small group discussion	Observation	OSCE	Medicine
Hom UG-PB 6.44	Information Gathering, Integration of information, Problem Integration (K-2)		Shows How	Record ECG	Record ECG in a volunteer.	Psycho-motor	Level 2 (Control)	Desirable to know	Demonstration	Observation	OSCE	Medicine
			Knows		Identify the features of a normal ECG.	Cognitive	Level 1 (Recall)	Nice to Know	CBL, Lecture, Small group discussion		OSCE	
Hom UG-PB 6.45	Information Gathering, Integration Of information, Problem Integration (K-2)		Shows How	Demonstrate the correct clinical examination of the cardio vascular system	Locate the Apex beat	Psycho-motor	Level 2 (Control)	Must know	Demonstration	Observation	OSCE	Human Anatomy
Hom UG-PB 6.46			Shows How		Auscultate for heart sound	Psycho-motor	Level 2 (Control)	Must know	Demonstration	Observation	OSCE	Medicine
Hom UG-PB 6.47			Shows How		Identify different heart sounds	Psycho-motor	Level 2 (Control)	Must know	Demonstration	Observation	OSCE	Medicine

Topic No	**7**
Theory	**Respiratory & Environmental Physiology**
Practical	
Clinical Physiology	**Respiratory System- Clinical Examination, Spirometry, Stethography**

Learning Outcomes: -

At the end of the chapter of Respiratory & Environmental Physiology, the student must be able to –

- Describe the functional anatomy of respiratory tract.
- Describe the mechanics of normal respiration
- Describe pressure changes during ventilation
- Describe lung volume and capacities
- Describe the transport of respiratory gases
- Describe the regulation of respiration
- Demonstrate the correct clinical examination of the respiratory system in a normal volunteer.

S.No	Generic competency	Subject area	Miller's Level	Specific competency	Specific Learning Objectives / outcomes	Bloom's domain	Guilbert's level	Must know / desirable to know / nice to know	TL method / media	Formative Assessment	Summative Assessment	Integration - Horizontal / Vertical / Spiral
Hom UG-PB 7.1	Integration Of Information (K-1)	Respiratory & Environmental Physiology	Knows How	Describe the functional anatomy of respiratory tract	Identify the different parts of upper respiratory tract	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Anatomy
Hom UG-PB 7.2			Knows How		Describe the importance of different parts of lower respiratory tract	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Anatomy

Hom UG-PB 7.3			Knows How		Identify the different parts of tracheo – bronchial tree, Respiratory membrane & pleura	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy
Hom UG-PB 7.4			Knows How		Explain the properties of Gases	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 7.5			Knows How		Discuss non-respiratory function of respiratory system	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine
Hom UG-PB 7.6	Integration Of Information (K-1)		Knows How	Describe the mechanics of normal respiration	Discuss the mechanism of Inspiration	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy
Hom UG-PB 7.7			Knows How		Discuss the mechanism of Expiration	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy
Hom UG-PB 7.8	Integration Of Information (K-1)		Knows How	Describe pressure changes during ventilation	Discuss intra-pulmonary pressure	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine
Hom UG-PB 7.9			Knows How		Discuss intra pleural pressure	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine
Hom UG-PB 7.10	Integration Of Information. (K-1)		Knows How	Describe lung volume and capacities,	Discuss static lung volume & capacities	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Medicine
Hom UG-PB 7.11			Knows How		Discuss dynamic lung volume and capacities	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Medicine
Hom UG-PB 7.12	Integration Of		Knows How	Describe alveolar surface tension	Define surface tension	Cognitive	Level 1 (Remember / recall)	Desirable To Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine

Hom UG-PB 7.13	Information (K-1)		Knows How		Discuss the significance of lung surfactant	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 7.14	Integration Of Information (K-1)		Knows How	Describe the transport of respiratory gases	Describe the Oxygen transportation	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 7.15			Knows How		Explain the carbon dioxide transportation	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 7.16	Information Gathering ,Integration Of information, Problem Integration (K-2)		Knows How	Describe the regulation of respiration	Discuss the nervous regulation of respiration	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 7.17			Knows How		Discuss the Chemical regulation of respiration	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 7.18			Knows How		Discuss the physio clinical aspect of Apnea	Cognitive	Level 2 Understand / interpret	Must know	PBL, Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine
Hom UG-PB 7.19			Knows How		Discuss the physio clinical aspect of Dyspnoea, Asphyxia, Oxygen toxicity	Cognitive	Level 2 Understand / interpret	Must know	PBL, Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Medicine FMT Materia Medica
Hom UG-PB 7.20	Information Gathering ,Integration Of information, Problem Integration (K-2)		Know	Describe the physio clinical aspect of hypoxia	Define Hypoxia	Cognitive	Level 1 (Recall)	Must know	PBL, Lecture, Small group discussion	MCQs	LAQs, Viva Voce	Medicine
Hom UG-PB 7.21			Knows		Classify hypoxia. Define Cyanosis	Cognitive	Level 1 Recall	Must know	PBL, Lecture, Small group discussion	MCQS, SAQs	SAQs, Viva Voce	Pathology Medicine

Hom UG-PB 7.22	Information Gathering ,Integration Of information, Problem Integration (K-2)		Knows How	Describe the principles and methods of artificial respiration,	Discuss the principles of artificial respiration	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine
Hom UG-PB 7.23			Knows How		Discuss the Methods of artificial respiration	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine
Hom UG-PB 7.24	Integration Of Information (K-1)		Knows How	Describe the physiology of high altitude and deep sea diving	Discuss the pressure changes during high altitude	Cognitive	Level 2 Understand / interpret	Desirable to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine
Hom UG-PB 7.25			Knows How		Discuss the effect during Rapid & slow ascent on high altitude	Cognitive	Level 2 Understand / interpret	Desirable to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 7.26			Knows How		Discuss the pressure changes during Deep sea diving	Cognitive	Level 2 Understand / interpret	Desirable to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 7.27	Information Gathering ,Integration Of information, Problem Integration (K-2)		Shows How	Perform the clinical examination of the respiratory system in a normal volunteer	Perform the technique to assess normal respiratory rate, expansion of chest, in resting as well as exercise condition through inspection and palpation	Psycho-motor	Level 2 (Control)	Must know	Demonstration	Observation	Checklist	Medicine
Hom UG-PB 7.28			Shows How		Perform percussion on the chest	Psycho-motor	Level 2 (Control)	Must know	Demonstration	Observation	Checklist	Medicine

Hom UG-PB 7.29			Shows How		Perform the auscultation on different parts of lungs.	Psycho-motor	Level 2 (Control)	Must know	Demonstration	Observation	Checklist	Medicine

Topic No	**8**
Theory	**Central Nervous System**
Practical	
Clinical Physiology	**Nervous System- Clinical Examination**

Learning Outcomes: -

At the end of chapter of Central Nervous System, the student must be able to –

- Map the organization of nervous system.
- State the functions and properties of synapse.
- Explain the functions and properties of receptors

- Describe the functions and properties of reflex.
- Discuss the mechanism of chemical transmission in the nervous system.
- Describe somatic sensations & sensory tracts.
- Describe and discuss motor tracts & mechanism of maintenance of muscle tone.
- Describe the physiology of vestibular apparatus, Control of body movements, posture and equilibrium.
- Describe structure and functions of autonomic nervous system
- Explain the functions, lesion & sensory disturbance of Spinal cord
- Describe functions of cerebral cortex, basal ganglia, thalamus, hypothalamus, cerebellum and limbic system
- Describe behavioural and EEG characteristic during Sleep.
- Describe the physiological basis of memory, learning and speech
- Perform the clinical examination of the nervous system in a volunteer or on a simulator.

S.No	Generic competency	Subject area	Miller's Level	Specific competency	Specific Learning Objectives / outcomes	Bloom's domain	Guilbert's level	Must know / desirable to know / nice to know	TL method / media	Formative Assessment	Summative Assessment	Integration - Horizontal / Vertical / Spiral
Hom UG-PB 8.1	Integration Of Information (K-1)	Nervous System	Knows	Describe the organization of nervous system	Identify the parts of central nervous system – brain & spinal cord with its function	Cognitive	Level 1 (Remember / recall)	Must know	Lecture, Small group discussion	SAQs MCQs	SAQs, Viva Voce	Anatomy
Hom UG-PB 8.2			Knows How		Discuss the developmental aspect of central nervous system	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs MCQs	SAQs, Viva Voce	Anatomy
Hom UG-PB 8.3			Knows		Classify nervous system	Cognitive	Level 1 (Remember / recall)	Must know	Lecture, Small group discussion	SAQs MCQs	SAQs, Viva Voce	Anatomy
Hom UG-PB 8.4	Integration Of Information (K-1)		Knows How	Describe the functions and properties of synapse.	Illustrate the physiological anatomy of synapse	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	SAQs, Viva Voce	Anatomy

Hom UG-PB 8.5			Knows How		Discuss the electrical events occurring at synapses	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	SAQs, Viva Voce	
HomUG -PB 8.6			Knows How		Discuss the properties of synapse.	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	SAQs, Viva Voce	
HomUG -PB 8.7	Integration Of Information (K-1)		Knows	Describe the functions and properties of receptors	Define receptor	Cognitive	Level 1 (Remember / recall)	Desirable to know	Lecture, Small group discussion	SAQs MCQs	SAQs Viva Voce	Anatomy
Hom UG-PB 8.8			Knows		Classify the sensory receptors.	Cognitive	Level 1 (Remember / recall)	Desirable to Know	Lecture, Small group discussion	MCQs	LAQs, Viva Voce	Anatomy
Hom UG-PB 8.9			Knows How		Describe the Cutaneous receptor	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs MCQs	SAQs, Viva Voce	
Hom UG-PB 8.10			Knows How		explain the properties of receptor	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	SAQs, Viva Voce	
Hom UG-PB 8.11	Integration Of Information (K-1)		Knows How	Describe the functions and properties of reflex.	Discuss reflex arc	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	SAQs, Viva Voce	Anatomy
Hom UG-PB 8.12			Knows		Classify reflexes	Cognitive	Level 1 (Remember / recall)	Must know	Lecture, Small group discussion	SAQs MCQs	SAQs, Viva Voce	Medicine
Hom UG-PB 8.13			Knows How		Discuss the properties of reflex	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	SAQs, Viva Voce	
Hom UG-PB 8.14	Integration Of Information (K-1)		Knows	Describe the mechanism of chemical transmission in the nervous system.	Classify neuro-transmitters	Cognitive	Level 1 (Remember / recall)	Must know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Medicine
Hom UG-PB 8.15			Knows How		Explain the different types of neuro-transmitter	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs MCQs	SAQs, Viva Voce	

Hom UG-PB 8.16	Integration Of Information (K-1)		Knows	Describe somatic sensations & sensory tracts	Define sensory system	Cognitive	Level 1 (Remember / recall)	Must know	Lecture, Small group discussion	SAQs MCQs	SAQs, Viva Voce	
Hom UG-PB 8.17			Knows How		Discuss different sensory tracts of spinal cord	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	LAQ, Viva Voce	Anatomy
Hom UG-PB 8.18			Knows How		Describe the sensory tracts of spinal cord	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	LAQs, Viva Voce	Medicine
Hom UG-PB 8.19			Knows How		Explain the somato-sensory cortex	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs MCQs	SAQs Viva Voce	Anatomy Medicine
Hom UG-PB 8.20			Knows How		Explain the somatic sensation – touch, pressure, pain, temperature, proprioception	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion Demonstration	SAQs MCQs	SAQs, Viva Voce	Anatomy Medicine Materia Medica Repertory
Hom UG-PB 8.21	Information Gathering ,Integration Of information, Problem Integration (K-2)		Knows How	Describe motor tracts & mechanism of maintenance of muscle tone	Discuss motor areas	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	LAQs, Viva Voce	Anatomy
Hom UG-PB 8.22			Knows How		Discuss different motor tracts of spinal cord	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	LAQs, Viva Voce	Anatomy Medicine
Hom UG-PB 8.23			Knows How		Discuss the motor tracts of spinal cord	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	LAQs, Viva Voce	Anatomy Medicine
Hom UG-PB 8.24			Knows How		Discuss the clinical significance of Motor tracts of spinal cord	Cognitive	Level 2 Understand / interpret	Must know	CBL, Lecture, Small group discussion	SAQs MCQs	LAQs, Viva Voce	Anatomy Medicine Materia Medica

Hom UG-PB 8.25	Information Gathering ,Integration Of information, Problem Integration (K-2)		Knows How	Describe the physiology of vestibular apparatus, Control of body movements, posture and equilibrium	Discuss the physiological anatomy of vestibular apparatus	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	SAQs, Viva Voce	Anatomy Medicine
Hom UG-PB 8.26			Knows How		Explain the functions of vestibular apparatus	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	LAQs, Viva Voce	Medicine Materia Medica
Hom UG-PB 8.27			Knows How		Discuss the common vestibular dysfunctions	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	LAQs, Viva Voce	Medicine Materia Medica
Hom UG-PB 8.28	Integration Of Information (K-1)		Knows How	Describe structure and functions of Autonomic nervous system (ANS)	Differentiate between somatic and autonomic nervous system	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs MCQs	Viva Voce	Anatomy
Hom UG-PB 8.29			Knows How		Describe the divisions of Autonomic nervous system	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy
Hom UG-PB 8.30			Knows How		Discuss the responses of effector organ to autonomic nerve impulse	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs	Viva Voce	
Hom UG-PB 8.31	Information Gathering ,Integration Of information, Problem Integration (K-2)		Knows	Explain the functions, lesion & sensory disturbance of Spinal cord	List the functions of Spinal cord	Cognitive	Level 1 (Remember / recall)	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Anatomy Medicine
Hom UG-PB 8.32			Knows How		Illustrate the transection of spinal cord	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine, Surgery
Hom UG-PB 8.33			Knows How		Describe the sensory disturbances of spinal cord	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine

Hom UG-PB 8.34	Information Gathering ,Integration Of information, Problem Integration (K-2)		Knows How	Describe functions of cerebral cortex, basal ganglia, thalamus, hypo - thalamus, cerebellum and limbic system and their abnormalities	Discuss the connections & functions of cerebral cortex	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Anatomy Medicine – Psychiatry Repertory
Hom UG-PB 8.35			Knows How		Discuss the connections& functions of Basal Ganglia	Cognitive	Level 2 Understand / interpret	Desirable to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy Medicine – Psychiatry
Hom UG-PB 8.36			Knows How		Explain the connections & functions of Thalamus	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy Medicine – Psychiatry Repertory
Hom UG-PB 8.37			Knows How		Explain the connections& functions of Hypothalamus	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Anatomy Medicine – Psychiatry Materia Medica Repertory
Hom UG-PB 8.38			Knows How		Discuss the connections & functions of Limbic system	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy, Psychology, Medicine – Psychiatry Materia Medica
Hom UG-PB 8.39			Knows How		Explain the connections& functions of Cerebellum	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Anatomy Medicine – Psychiatry Materia Medica
Hom UG-PB 8.40			Knows How		Explain the cerebellar lesions	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Pathology Medicine – Psychiatry Materia Medica

Hom UG-PB 8.41	Integration Of Information (K-1)		Knows How	Describe behavioral and EEG characteristic during Sleep and mechanism responsible for its production	Discuss the importance of EEG	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs	Viva Voce	
Hom UG-PB 8.42			Knows How		Explain the Physiological Basis of EEG	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs	Viva Voce	
Hom UG-PB 8.43			Knows How		Discuss the factors affecting sleep	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine
Hom UG-PB 8.44			Knows How		Describe the Physiological changes during sleep	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine
Hom UG-PB 8.45			Knows		Classify the types of sleep	Cognitive	Level 1 (Remember / recall)	Nice to know	Lecture, Small group discussion	SAQs	Viva Voce	Medicine
Hom UG-PB 8.46			Knows How		Discuss the factors controlling sleep cycle	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs	Viva Voce	Anatomy Medicine
Hom UG-PB 8.47	Information Gathering ,Integration Of information, Problem Integration (K-2)		Knows How	Describe the physiological basis of memory, learning And speech	Discuss the mechanism and development of speech	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy Medicine
Hom UG-PB 8.48			Knows How		Describe the physiological basis of learning	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy Medicine Materia Medica Repertory
Hom UG-PB 8.49			Knows How		Discuss the physiological basis of memory.	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine
Hom UG-PB 8.50			Knows How		Discuss the applied physiology of memory	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine Materia Medica Repertory

Hom UG-PB 8.51	Information Gathering ,Integration Of information, Problem Integration (K-2)		Shows How	Perform the clinical examination of the nervous System : Higher functions, sensory system, motor system, reflexes, cranial nerves in a normal volunteer or simulated Environment	Perform examination of cranial nerves	Psycho-motor	Level 2 (Control)	Must know	Demonstration	Observation	Checklist OSCE	Anatomy Medicine
Hom UG-PB 8.52			Shows How		Perform examination for speech	Psycho-motor	Level 2 (Control)	Must know	Demonstration	Observation	Checklist OSCE	Anatomy Medicine
Hom UG-PB 8.53			Shows How		Conduct the assessment of muscle tone	Psycho-motor	Level 2 (Control)	Must know	Demonstration	Observation	Checklist OSCE	Anatomy Medicine
Hom UG-PB 8.54			Shows How		Conduct the assessment of muscle power	Psycho-motor	Level 2 (Control)	Must know	Demonstration	Observation	Checklist OSCE	Anatomy Medicine
Hom UG-PB 8.55			Shows How		Perform the clinical examination for reflexes	Psycho-motor	Level 2 (Control)	Must know	Demonstration	Observation	Checklist OSCE	Anatomy Medicine
Hom UG-PB 8.56			Shows How		Perform Cutaneous sensory examination	Psycho-motor	Level 2 (Control)	Must know	Demonstration	Observation	Checklist OSCE	Anatomy Medicine
Hom UG-PB 8.57			Shows How		Perform the clinical examination of gait and posture	Psycho-motor	Level 2 (Control)	Must know	Demonstration	Observation	Checklist OSCE	Anatomy Medicine

Topic No	**9**
Theory	**Endocrine System**
Practical	
Clinical Physiology	**Reproductive System – Diagnosis of pregnancy**

Learning Outcomes: -

At the end of chapter of Endocrine System& Diagnosis of pregnancy, the student must be able –

- Explain the mechanism of action of steroid, protein and amine hormones.
- Describe the regulation of secretion of hormones by hypothalamus.
- Discuss the synthesis, secretion, Transport, Physiological action, regulation & effect of altered secretion of-Pituitary gland; Thyroid gland; Para Thyroid glands; Adrenal glands; and Pancreatic Gland.
- Explain the physiology of Thymus &Pineal Glands, and the local hormones.

S.No	Generic competency	Subject area	Miller's Level	Specific competency	Specific Learning Objectives / outcomes	Bloom's domain	Guilbert's level	Must know / desirable to know / nice to know	TL method / media	Formative Assessment	Summative Assessment	Integration - Horizontal / Vertical / Spiral
Hom UG-PB 9.1	Integration Of Information (K-1)	Endocrine system	Knows	Describe the mechanism of action of steroid, protein And amine hormones	Define hormones	Cognitive	Level 1 (Remember/ recall)	Desirable to Know	Lecture, Small group discussion	SAQs MCQs	SAQs, Viva Voce	
Hom UG-PB 9.2			Knows How		Discuss the characteristic of hormones	Cognitive	Level 2 Understand / interpret	Desirable to know	Lecture, Small group discussion	SAQs MCQs	SAQs, Viva Voce	Psychology
Hom UG-PB 9.3			Knows How		Classify the hormones as per their chemistry	Cognitive	Level 2 Understand / interpret	Desirable to know	Lecture, Small group discussion	SAQs MCQs	SAQs, Viva Voce	Biochemistry

Hom UG-PB 9.4	Integration Of Information (K-1)		Knows How	Describe the regulation of secretion of hormones by hypothalamus	Discuss the regulation of hormone from the hypothalamus	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	SAQs, Viva Voce	Anatomy Medicine
Hom UG-PB 9.5			Knows How		Discuss the homoeostatic mechanism of secretion of hormone through Hypothalamus	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Medicine
Hom UG-PB 9.6	Integration Of Information (K-1)		Knows How	Discuss the synthesis, secretion, Transport, Physiological action, regulation & effect of altered secretion of Pituitary gland	Discuss the physiological anatomy of pituitary gland	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs MCQs	SAQs, Viva Voce	Anatomy Materia Medica
Hom UG-PB 9.7			Knows How		Explain the secretion of anterior pituitary hormone	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs MCQs	LAQs, Viva Voce	Anatomy Materia Medica
Hom UG-PB 9.8			Knows How		Explain the secretion of growth hormone	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	LAQs, Viva Voce	
Hom UG-PB 9.9			Knows How		Describe the functions of growth hormone	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	LAQs, Viva Voce	
Hom UG-PB 9.10			Knows		List the factors affecting growth hormone	Cognitive	Level 1Recall	Nice to know	Lecture, Small group discussion	SAQs MCQs	Viva Voce	
Hom UG-PB 9.11			Knows How		Discuss the effects of altered secretion of	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	LAQs, Viva Voce	Anatomy Medicine

					growth hormone							
Hom UG-PB 9.12			Knows How		Explain the actions and control of secretion of prolactin	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	SAQs, Viva Voce	Anatomy Obstetrics & Gynaecology
Hom UG-PB 9.13			Knows How		Discuss the secretion of posterior Pituitary hormones	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs MCQs	SAQs, Viva Voce	Anatomy
Hom UG-PB 9.14			Knows How		Explain the functions of ADH	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	LAQs, Viva Voce	
Hom UG-PB 9.15			Knows How		Discuss the functions of Oxytocin	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	LAQs, Viva Voce	Medicine Obstetrics & Gynaecology
Hom UG-PB 9.16			Knows How		Describe pituitary insufficiency	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	SAQs, Viva Voce	Anatomy Medicine
Hom UG-PB 9.17	Integration Of Information (K-1)		Knows How	Describe the synthesis, secretion, Transport, Physiological action, regulation & effect of altered	Discuss the physiological anatomy of Thyroid gland	Cognitive	Level 2 Understand / interpret	Desirable to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy Materia Medica Repertory
Hom UG-PB 9.18			Knows How		Describe the formation & secretion of thyroid hormone	Cognitive	Level 2 Understand / interpret	Must know	CBL, Lecture, Small group discussion	SAQs	LAQs, Viva Voce	

Hom UG-PB 9.19			Knows How	secretion of Thyroid gland	Explain the transport & metabolism of thyroid hormone	Cognitive	Level 2 Understand / interpret	Desirable to Know	CBL, Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 9.20			Knows How		Discuss the regulation and action of thyroid hormone	Cognitive	Level 2 Understand / interpret	Must know	CBL, Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 9.21			Knows How		Explain the effect of altered secretion of Thyroid hormone	Cognitive	Level 2 Understand / interpret	Must know	CBL, Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Medicine
Hom UG-PB 9.22	Integration Of Information (K-1)		Knows How	Explain the synthesis, secretion, Transport, Physiological action, regulation & effect of altered secretion of Para Thyroid gland.	Discuss the calcium & phosphate metabolism	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs	Viva Voce	Biochemistry Medicine Materia Medica
Hom UG-PB 9.23			Knows How		Discuss the action of parathormone	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs MCQs	SAQs, Viva Voce	
Hom UG-PB 9.24			Knows How		Describe the action of Calcitonin	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs MCQs	SAQs, Viva Voce	Biochemistry
Hom UG-PB 9.25			Knows How		Discuss the role of Calcitonin in the maintenance of calcium homoeostasis in body	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	LAQs, Viva Voce	Biochemistry Medicine Materia Medica

Hom UG-PB 9.26			Calcitonin		Discuss the effect of altered secretion of para thyroid hormone	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	SAQs, Viva Voce	Medicine
Hom UG-PB 9.27	Integration Of Information (K-1)		Calcitonin	Describe the synthesis, secretion, Transport, Physiological action, regulation & effect of altered secretion of Adrenal gland	Discuss the physiological anatomy of Adrenal Cortex gland	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs	Viva Voce	Anatomy
Hom UG-PB 9.28			Calcitonin		Describe the formation, secretion, and functions of Glucocorticoid hormone	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 9.29			Knows How		Describe the formation, secretion, and functions of Mineralocorticoid hormone	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 9.30			Knows How		Describe the formation, secretion, and functions of Sex hormones	Cognitive	Level 2 Understand / interpret	Desirable to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 9.31			Knows How		Explain the effects of altered secretion of Adrenal cortex hormone	Cognitive	Level 2 Understand / interpret	Desirable to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine

Hom UG-PB 9.32			Knows How		Discuss the physiological anatomy of Adrenal Medullary gland	Cognitive	Level 2 Understand / interpret	Desirable to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy
Hom UG-PB 9.33	Integration Of Information (K-1)		Knows How	Describe the synthesis, secretion, Transport, Physiological action, regulation & effect of altered secretion of Pancreatic Gland	Explain the physiological anatomy of Pancreatic gland	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy Materia Medica
Hom UG-PB 9.34			Knows How		Discuss the action and regulation of Glucagon	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 9.35			Knows How		Discuss the action and regulation of Insulin	Cognitive	Level 2 Understand / interpret	Must know	CBL, Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Medicine Materia Medica
Hom UG-PB 9.36			Knows How		Describe the effects of altered secretion of Pancreatic Hormone	Cognitive	Level 2 Understand / interpret	Must know	CBL, Lecture, Small group discussion	SAQs MCQs	LAQs, Viva Voce	Pathology Medicine
Hom UG-PB 9.37	Integration Of Information (K-1)		Knows How	Describe the physiology of Thymus & Pineal Gland	Describe the functions of hormone of thymus gland	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	SAQs, Viva Voce	
Hom UG-PB 9.38			Knows How		Discuss the functions of hormone of pineal gland	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	SAQs, Viva Voce	
Hom UG-PB 9.39			Knows How	Describe the Physiology of Local hormones	State the functions of Local hormones	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs MCQs	Viva Voce	

Hom UG-PB 9.40	Information Gathering ,Integration Of information , Problem Integration (K-2)		Shows How	Describe the diagnosis of pregnancy	Demonstrate the diagnosis of pregnancy through Urine pregnancy Strip	Psycho Motor	Level 2 (Control)	Must know	Demonstration	Observation	Checklist	Obs&Gynec

SEMESTER – 3

Topic No	**10**
Theory	**Reproductive System**
Practical	
Clinical Physiology	

Learning Outcomes: -

At the end of the chapter on Reproductive System, the student must be able to –

- Describe the onset, progression, and stages puberty.
- Describe the structure and functions of male reproductive system.
- Describe the physiological effects of male sex hormone.
- Describe female reproductive system & functions of ovary and its Control.
- Describe menstrual cycle with hormonal, uterine and ovarian changes.
- Describe the physiological effects of female sex hormones.
- Discuss the contraceptive methods for male and female.
- Discuss the physiology of pregnancy, parturition & lactation.

S.No	Generic competency	Subject area	Miller's Level	Specific competency	Specific Learning Objectives / outcomes	Bloom's domain	Guilbert's level	Must know / desirable to know / nice to know	TL method / media	Formative Assessment	Summative Assessment	Integration - Horizontal / Vertical / Spiral
Hom UG-PB 10.1	Integration Of Information (K-1)	Reproductive System	Knows	Describe the onset, progression, and stages puberty. List causes and expressions of early and delayed puberty	Define puberty	Cognitive	Level 1 (Remember / recall)	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Psychology Obstetrics & Gynaecology
Hom UG-PB 10.2			Knows How		Discuss the role of LH & FSH in development of puberty	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Anatomy Psychology Obstetrics & Gynaecology
Hom UG-PB 10.3			Knows How		Explain puberty for its onset, and stages. Describe the causes for delayed &precocious puberty.	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy Psychology Obstetrics & Gynaecology
Hom UG-PB 10.4	Integration Of Information (K-1)		Knows How	Describe the structure and functions of male	Describe the structure of male reproductive system	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs	Viva Voce	Anatomy

Hom UG-PB 10.5			Knows How	reproductive system.	Explain the function of male reproductive system.	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine
Hom UG-PB 10.6	Integration Of Information (K-1)		Knows How	Describe the physiological effects of male sex hormone	Explain the functions of testis as an endocrine gland.	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	SAQs, Viva Voce	Psychology Medicine
Hom UG-PB 10.7			Knows How		Discuss the role of testosterone	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Medicine Obstetrics & Gynaecology
Hom UG-PB 10.8	Integration Of Information (K-1)		Knows How	Describe the functions of testis and control of Spermatogenesis & factors modifying it	Discuss the process of spermatogenesis	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Anatomy Medicine
Hom UG-PB 10.9			Knows How		Discuss the factors affecting spermatogenesis	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 10.10	Integration Of Information (K-1)		Knows How	Describe female reproductive system & functions of ovary and its Control.	Describe structure the female reproductive tract	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy Obstetrics & Gynaecology
Hom UG-PB 10.11			Knows How		Discuss the functions of female reproductive tract	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Obstetrics & Gynaecology
Hom UG-PB 10.12			Knows How		Discuss the role of ovary as an endocrine gland. List the hormones secreted by ovary.	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	LAQs, Viva Voce	Obstetrics & Gynaecology

Hom UG-PB 10.13	Integration Of Information (K-1)		Knows How	Describe menstrual cycle with hormonal, uterine and ovarian changes	Discuss the ovarian changes during menstrual cycle	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	LAQs, Viva Voce	Obstetrics & Gynaecology
Hom UG-PB 10.14			Knows How		Discuss the Uterine changes during menstrual cycle	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs MCQs	LAQs, Viva Voce	Obstetrics & Gynaecology
Hom UG-PB 10.15			Knows How		Discuss the Vaginal changes during menstrual cycle	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Obstetrics & Gynaecology
Hom UG-PB 10.16	Integration Of Information (K-1)		Knows How	Describe the physiological effects of female sex hormones	Discuss the Gonadotrophin changes during menstrual cycle	Cognitive	Level 2 Understand / interpret	Desirable to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Obstetrics & Gynaecology Materia Medica
Hom UG-PB 10.17			Knows How		Discuss the changes during menopause	Cognitive	Level 2 Understand / interpret	Must know	CBL, Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Obstetrics & Gynaecology
Hom UG-PB 10.18			Knows How	Discuss the contraceptive methods for male and female.	Describe the contraceptive methods for male	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	MCQs	Viva Voce	Obstetrics & Gynaecology Community Medicine
Hom UG-PB 10.19			Knows How		Describe the contraceptive methods for female	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	MCQs	Viva Voce	Obstetrics & Gynaecology Community Medicine
Hom UG-PB 10.20	Integration Of Information (K-1)		Knows How	Discuss the physiology of pregnancy, parturition & lactation.	Discuss the fertilization & implantation of ovum	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Obstetrics & Gynaecology
Hom UG-PB 10.21			Knows How		Explain the role of placenta as an endocrine organ. List the placental hormones	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Obstetrics & Gynaecology

Hom UG-PB 10.22			Knows How		Discuss the process of parturition	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Obstetrics & Gynaecology Materia Medica
Hom UG-PB 10.23			Knows How		Describe the role of prolactin Hormone	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Obstetrics & Gynaecology
Hom UG-PB 10.24			Knows How		Explain the process of lactation	Cognitive	Level 2 Understand / interpret	Desirable to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Obstetrics & Gynaecology Community Medicine Materia Medica

Topic No	**11**
Theory	**Special Senses**
Practical	
Clinical Physiology	**Special Senses – Clinical Examination**

Learning Outcomes: -

At the end of the chapter on Special senses, the student must be able to –

- Discuss perception of smell and taste sensation
- Discuss patho-physiology of altered smell and taste sensation
- Discuss functional anatomy of ear and auditory pathways & physiology of hearing
- Discuss functional anatomy of eye, physiology of image formation, physiology of vision including colour vision, refractive errors, colour blindness, physiology of pupil and light reflex
- Discuss the physiological basis of lesion in visual pathway
- Demonstrate the testing of visual acuity, colour and field of vision; hearing; smell; and taste sensation in volunteer or simulated environment

S.No	Generic competency	Subject area	Miller's Level	Specific Competency	Specific Learning Objectives / outcomes	Bloom's domain	Guilbert's level	Must know / desirable to know / nice to know	TL method / media	Formative Assessment	Summative Assessment	Integration - Horizontal / Vertical / Spiral
Hom UG-PB 11.1	Integration Of Information (K-1)	Special Senses	Knows How	Describe the perception of smell sensation	Discuss the sensation of olfaction	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy Surgery - ENT
Hom UG-PB 11.2			Knows How		Discuss the olfactory receptor, olfactory pathway	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQ, Viva Voce	Anatomy
Hom UG-PB 11.3			Knows How		Discuss the physiology of olfaction	Cognitive	Level 2 Understand / interpret	Desirable to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 11.4			Knows How		Discuss the altered sensation of smell	Cognitive	Level 2 Understand / interpret	Must know	CBL, Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Medicine
Hom UG-PB 11.5	Integration Of Information (K-1)		Knows How	Describe perception of taste sensation	Discuss the sensation of Taste	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy Surgery – ENT Materia Medica Repertory
Hom UG-PB 11.6			Knows How		Discuss the taste receptor.	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQ, Viva Voce	Anatomy
			Shows How		Draw the taste pathway	Psycho motor	Level 2. Control	Must Know	Demonstration	Observation	DOPS	Anatomy
Hom UG-PB 11.7			Knows How		Discuss the physiology of Taste	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	

Hom UG-PB 11.8			Knows How		Discuss the altered sensation of Taste	Cognitive	Level 2 Understand / interpret	Desirable to know	CBL, Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Medicine Materia Medica
Hom UG-PB 11.9	Integration Of Information (K-1)		Knows How	Describe the functional anatomy of ear & auditory pathways	Describe the physiological anatomy of ear	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy Surgery – ENT Materia Medica
Hom UG-PB 11.10			Shows How		Map the Auditory Pathway	Psycho motor	Level 2. Control	Must Know	Demonstration	Observation	Checklist	Anatomy ENT
Hom UG-PB 11.11			Knows How		Describe the mechanism of hearing	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Surgery - ENT
Hom UG-PB 11.12			Knows How		Discuss the altered sensation of Hearing	Cognitive	Level 2 Understand / interpret	Must know	CBL, Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Medicine Surgery – ENT Materia Medica
Hom UG-PB 11.13	Integration Of Information (K-1)		Knows How	Describe the functional anatomy of eye	Explain the structure & function of eye.	Cognitive	Level 2 Understand / interpret	Must Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy Surgery - Ophthalmology
Hom UG-PB 11.14	Integration Of Information (K-1)		Knows How	Describe the physiology of image formation	Describe the visual pathway	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 11.15			Knows How		Discuss the principles of optics, visual acuity, Visual reflex	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Surgery – Ophthalmology
Hom UG-PB 11.16	Information Gathering ,Integration Of		Knows How	Describe the physiology of vision including colour vision	Discuss the photochemistry of vision	Cognitive	Level 2 Understand / interpret	Desirable to know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Surgery – Ophthalmology

Hom UG-PB 11.17	information, Problem Integration (K-2)		Knows How		Discuss the photopic & scotopic vision	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Surgery – Ophthalmology
Hom UG-PB 11.1. 8			Knows How		Discuss the visual adaptation, visual accommodation & night blindness	Cognitive	Level 2 Understand / interpret	Desirable to know	PBL, Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Surgery – Ophthalmology Materia Medica
Hom UG-PB 11.19	Information Gathering ,Integration Of information, Problem Integration (K-2)		Knows How	Describe the refractive errors and colour blindness	Discuss the different types of refractive errors	Cognitive	Level 2 Understand / interpret	Desirable to know	Lecture, Small group discussion	MCQs	LAQs, Viva Voce	Surgery – Ophthalmology Materia Medica Repertory
Hom UG-PB 11.20			Knows How		Discuss the colour blindness	Cognitive	Level 2 Understand / interpret	Desirable to know	CBL, Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Surgery – Ophthalmology Materia Medica
Hom UG-PB 11.21			Knows		List the causes of Nystagmus	Cognitive	Level 1Recall	Nice to know	CBL, Lecture, Small group discussion	SAQs	Viva Voce	Surgery – Ophthalmology Materia Medica
Hom UG-PB 11.22	Information Gathering ,Integration Of information, Problem Integration (K-2)		Shows How	Demonstrate Testing of visual acuity, colour and field of vision in a volunteer	Perform the testing of visual acuity, colour and field of vision	Psycho Motor	Level 2 (Control)	Desirable to know	Demonstration	Observation	Checklist	Surgery – Ophthalmology
Hom UG-PB 11.23			Knows How		Interpret the testing of visual acuity, colour and field of vision	Cognitive	Level 2 Understand / interpret	Nice to know	CBL, Lecture, Small group discussion	SAQs	Viva Voce	Surgery – Ophthalmology Materia Medica
Hom UG-PB 11.24	Information Gathering ,Integration		Shows How	Demonstrate testing of hearing in a	Perform the testing of hearing in a volunteer	Psycho Motor	Level 2 (Control)	Desirable to know	Demonstration	Observation	Checklist	Surgery – ENT

Hom UG-PB 11.25	Of information, Problem Integration (K-2)		Knows How	volunteer	Interpret the testing of hearing in a volunteer	Cognitive	Level 2 Understand / interpret	Nice to know	CBL, Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Surgery – Ophthalmology Materia Medica
Hom UG-PB 11.26	Information Gathering ,Integration Of information, Problem Integration (K-2)		Shows How	Demonstrate testing for smell in a volunteer	Perform testing for smell in a volunteer	Psycho Motor	Level 2 (Control)	Desirable to know	Demonstration	Observation	Checklist	Surgery – ENT
Hom UG-PB 11.27			Knows How		Interpret testing for smell in a volunteer	Cognitive	Level 2 Understand / interpret	Nice to know	CBL, Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Surgery – Ophthalmology Materia Medica
Hom UG-PB 11.27	Information Gathering, Integration Of information, Problem Integration (K-2)		SHOW HOW	Demonstrate testing for taste sensation in volunteer	Perform testing for taste sensation in volunteer	Psycho Motor	Level 2 (Control)	Must know	Demonstration	Observation	Checklist	Anatomy Surgery – ENT
Hom UG-PB 11.29			Knows How		Interpret testing for taste sensation in volunteer	Cognitive	Level 2 Understand / interpret	Nice to know	CBL, Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy Surgery – ENT

Topic No	**12**
Theory	**Digestive System & Nutrition**
Practical	**Liver Function Test**
Clinical Physiology	**Gastrointestinal system clinical examination**

Learning Outcomes: -

At the end of the chapter Digestive system & Nutrition, the student must be able to –

- Describe the structure, Function & Innervation of digestive system.
- Describe the composition, mechanism of secretion, function & regulation of saliva.
- Describe the movement of oesophagus.
- Describe the composition, mechanism of secretion, function & regulation of gastric juice.
- Describe the composition, mechanism of secretion, function & regulation of pancreatic juice.
- Describe the structure & function of liver & Gall bladder.
- Describe the composition, mechanism of secretion, function & regulation of Bile.
- Describe the composition, mechanism of secretion, function & regulation of Small Intestine.
- Describe the movement of gastrointestinal tract, it's regulation & function.
- Describe the movement of large intestine & defecation as a process.
- Describe the physiology of digestion and absorption of nutrients.
- Observe the procedure for Liver Function Test.
- Perform examination for gastrointestinal system on a volunteer.

S.No	Generic competency	Subject area	Miller's Level	Specific competency	Specific Learning Objectives / outcomes	Bloom's domain	Guilbert's level	Must know / desirable to know / nice to know	TL method / media	Formative Assessment	Summative Assessment	Integration - Horizontal / Vertical / Spiral
Hom UG-PB 12.1	Integration Of Information (K-1)	Digestive System	Knows How	Describe the structure, Function &	Discuss the importance of digestive system	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy

Hom UG-PB 12.2		& Nutrition	Knows	Innervation of digestive system	Recall the structure of digestive system	Cognitive	Level 1 Recall	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy
Hom UG-PB 12.3			Knows		Recognize the structure of small intestine	Cognitive	Level 1 Recall	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy
Hom UG-PB 12.4			Knows		Identify the structure of large intestine	Cognitive	Level 1 Recall	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy
Hom UG-PB 12.5	Integration Of Information (K-1)		Knows	Describe the composition, mechanism of secretion, function & regulation of saliva	Classify salivary glands. Mention the innervation of salivary glands.	Cognitive	Level 1 Recall	Desirable to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy Materia Medica
Hom UG-PB 12.6			Knows How		Discuss composition of saliva	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	MCQs	LAQs, Viva Voce	Biochemistry
Hom UG-PB 12.7			Knows How		Discuss functions of saliva	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Medicine Materia Medica
Hom UG-PB 12.8			Knows How		Describe mechanism of salivary secretion	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 12.9			Knows How		Discuss the control of salivary secretion	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 12.10			Knows How		Explain the clinical relevance of salivary gland & salivary secretion	Cognitive	Level 2 Understand / interpret	Desirable to Know	PBL, Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine Materia Medica
Hom UG-PB 12.11	Integration Of Information (K-1)		Knows How	Describe the movement of oesophagus	Describe the process of mastication.	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 12.12			Knows How		Explain the stages of swallowing	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	MCQs	LAQs, Viva Voce	Anatomy Medicine

Hom UG-PB 12.13			Knows How		Discuss the role of upper & lower oesophageal sphincter	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs	Viva Voce	
Hom UG-PB 12.14			Knows		List the common oesophageal motility disorders	Cognitive	Level 1 Recall	Nice to Know	CBL, Lecture, Small group discussion	SAQs	Viva Voce	Medicine Surgery
Hom UG-PB 12.15	Integration Of Information (K-1)		Knows	Describe the composition, mechanism of secretion, function & regulation of Gastric Juice	Recall the macro and micro structure of stomach	Cognitive	Level 1 Recall	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy
Hom UG-PB 12.16			Knows How		Discuss the functions of stomach	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Anatomy
Hom UG-PB 12.17			Knows How		Discuss the composition & functions of gastric juice	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	MCQs	LAQs, Viva Voce	Biochemistry
Hom UG-PB 12.18			Knows How		Discuss the mechanism & regulation of gastric juice secretion	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Medicine
Hom UG-PB 12.19			Knows How		Discuss the process of digestion in stomach	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 12.20			Knows How		Discuss the movements of stomach	Cognitive	Level 2 Understand / interpret	Desirable to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy
Hom UG-PB 12.21			Knows		Mention the three phases of vomiting	Cognitive	Level 1 Recall	Nice to know	CBL, Lecture, Small group discussion	SAQs	Viva Voce	Medicine Materia Medica Repertory

Hom UG-PB 12.22	Integration Of Information (K-1)		Knows	Describe the composition, mechanism of secretion, function & regulation of Pancreatic Juice	Recall the macro and micro structure of Pancreas	Cognitive	Level 1 Recall	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy
Hom UG-PB 12.23			Knows How		Discuss the composition & functions of pancreatic juice	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Biochemistry
Hom UG-PB 12.24			Knows How		Discuss the mechanism & regulation of pancreatic juice secretion	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Medicine
Hom UG-PB 12.25			Knows How		Describe exocrine pancreatic insufficiency	Cognitive	Level 2 Understand / interpret	Desirable to Know	CBL, Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Medicine Materia Medica Repertory
Hom UG-PB 12.26	Integration Of Information (K-1)		Knows How	Describe the structure & function of liver & Gall bladder	Discuss the structure & functions of Liver	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy
Hom UG-PB 12.27			Knows How		Explain the signs of liver insufficiency	Cognitive	Level 2 Understand / interpret	Desirable to Know	CBL, Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Medicine
Hom UG-PB 12.28			Knows How		Describe the structure & functions of gall bladder	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy Repertory
Hom UG-PB 12.29	Integration Of Information (K-1)		Knows How	Describe the composition, mechanism of secretion, function & regulation of Bile	Discuss the composition & function of liver bile	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Biochemistry
Hom UG-PB 12.30			Knows How		Discuss the composition &	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Biochemistry

					function of gall bladder bile							
Hom UG-PB 12.31			Knows How		Describe the control & mechanism of bile secretion	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 12.32			Knows How		Describe the clinical significance of liver functions.	Cognitive	Level 2 Understand / interpret	Desirable to know	CBL, Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine Materia Medica
Hom UG-PB 12.33			Knows How		Describe the clinical significance of Gall Bladder functions	Cognitive	Level 2 Understand / interpret	Desirable know	CBL, Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine Surgery
Hom UG-PB 12.34	Integration Of Information (K-1)		Knows	Describe the composition, mechanism of secretion, function & regulation of Small intestine	Recognise the macro and micro structure of Small intestine	Cognitive	Level 1 Recall	Desirable to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy Repertory
Hom UG-PB 12.35			Knows How		Discuss the composition & functions of Succus Entericus	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	MCQs	LAQs, Viva Voce	Biochemistry
Hom UG-PB 12.36			Knows How		Discuss the mechanism & regulation of secretions of Succus Entericus	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 12.37			Knows How		Describe the process of digestion in small intestine	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 12.37			Knows How		Describe the Malabsorption Syndrome	Cognitive	Level 2 Understand / interpret	Nice to Know	CBL, Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine Materia Medica

Hom UG-PB 12.39	Integration Of Information (K-1)		Knows How	Describe the movement of gastrointestinal tract, it's regulation & function.	Explain peristalsis as intestinal movement	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Materia Medica
Hom UG-PB 12.40			Knows How		Describe segmentation as intestinal movement	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 12.41			Knows How		Discuss the clinical importance of small intestine	Cognitive	Level 2 Understand / interpret	Desirable to Know	CBL, Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine
Hom UG-PB 12.42	Integration Of Information (K-1)		Knows How	Describe the movement of large intestine & defecation as a process.	Discuss the movements of large intestine	Cognitive	Level 2 Understand / interpret	Must Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 12.43			Knows How		Describe the process of absorption &secretion in large intestine	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Materia Medica
Hom UG-PB 12.44			Knows How		Discuss the process of defecation	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Repertory
Hom UG-PB 12.45			Knows How		Discuss the clinical significance of large intestine	Cognitive	Level 2 Understand / interpret	Desirable to know	CBL, Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Medicine
Hom UG-PB 12.46	Integration Of Information (K-1)		Knows How	Describe the physiology of digestion and absorption of nutrients	Discuss the digestion & absorption of carbohydrates	Cognitive	Level 2 Understand / interpret	Must Know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 12.47			Knows How		Discuss the digestion & absorption of Fats	Cognitive	Level 2 Understand / interpret	Must Know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 12.48			Knows How		Discuss the digestion &	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	MCQs SAQs	LAQs, Viva Voce	

					absorption of Proteins							
Hom UG-PB 12.49			Knows How		Discuss absorption of water, electrolytes	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	
Hom UG-PB 12.50			Knows How		Describe the absorption of vitamins & minerals	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	
Hom UG-PB 12.51	Information Gathering ,Integration Of information, Problem Integration (K-2)		Shows How	Observe the process of conducting liver function test	Observe the liver function test	Psycho Motor	Level 1 (Observe / Imitate)	Nice to know	Demonstration	Observation	Checklist	Medicine
Hom UG-PB 12.52	Information Gathering ,Integration Of information, Problem Integration (K-2)		Shows How	Demonstrate the Gastrointestinal system examination	Perform the inspection of gastrointestinal system in the clinical examination	Psycho Motor	Level 2 (Control)	Desirable to know	Demonstration	Observation	Checklist	Anatomy Medicine
Hom UG-PB 12.53			Knows How		Interpret the findings of inspection of gastrointestinal system in clinical examination	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Anatomy Medicine
Hom UG-PB 12.54			Shows How		Perform the palpation of gastrointestinal system in the clinical examination	Psycho Motor	Level 2 (Control)	Desirable to know	Demonstration	Observation	Checklist	Anatomy Medicine

Hom UG-PB 12.55			Knows H		Interpret the findings of palpation of gastrointestinal system in clinical examination	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Anatomy Medicine
Hom UG-PB 12.56			Shows How		Perform the percussion of gastrointestinal system in the clinical examination	Psycho Motor	Level 2 (Control)	Desirable to know	Demonstrati on	Observ ation	Checklist	Anatomy Medicine
Hom UG-PB 12.57			Knows H		Interpret the findings of percussion of gastrointestinal system in clinical examination	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Anatomy Medicine
Hom UG-PB 12.58			Shows How		Perform the auscultation of gastrointestinal system in the clinical examination	Psycho Motor	Level 2 (Control)	Desirable to know	Demonstrati on	Observ ation	Checklist	Anatomy Medicine
Hom UG-PB 12.59			Knows How		Interpret the findings of auscultation of gastrointestinal system in clinical examination	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Anatomy Medicine

Topic No	**13**
Theory	**Renal Physiology**
Practical	**Kidney Function Test**
Clinical Physiology	

Learning Outcomes: -

At the end of the chapter Renal Physiology, the student must be able to –

- Describe structure & functions of the kidneys.
- Explain the role of renin-angiotensin system.
- Describe the mechanism of urine formation.
- Describe the process of filtration, secretion & reabsorption in kidney.
- Describe the concentration and diluting mechanism in the kidney.
- Describe the renal regulation of acid-base balance.
- Describe the physiology of micturition.
- Describe the Renal Function Tests.

S.No	Generic competency	Subject area	Miller's Level	Specific Competency	Specific Learning Objectives / outcomes	Bloom's domain	Guilbert's level	Must know / desirable to know / nice to know	TL method / media	Formative Assessment	Summative Assessment	Integration - Horizontal / Vertical / Spiral
Hom UG-PB 13.1	Integration Of Information (K-1)	Renal Physiology	Knows	Describe structure & functions of the kidneys.	Recognize the structure of kidney & nephron	Cognitive	Level 1 Recall	Must Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy Materia Medica
Hom UG-PB 13.2			Knows How		Discuss the functions of kidney	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 13.3			Knows How		Discuss the organization and function of glomerulus	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Anatomy Medicine
Hom UG-PB 13.4			Knows		Classify the type of nephrons	Cognitive	Level 1 Recall	Must Know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Anatomy
Hom UG-PB 13.5			Knows How		Describe the structure and functions of juxtaglomerular apparatus	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Anatomy
Hom UG-PB 13.6	Integration Of Information (K-1)		Knows How	Explain the role of renin – angiotensin system	Explain the secretions from juxtaglomerular apparatus & their regulation	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Medicine
Hom UG-PB 13.7	Integration Of Information (K-1)		Knows How	Describe the mechanism of urine formation	Explain the process of glomerular filtration	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 13.8			Knows How		Describe the regulation of Glomerular Filtration Rate	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	

Hom UG-PB 13.9			Knows How		Discuss the mechanism of GFR. Explain the factors affecting GFR	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 13.10	Integration Of Information (K-1)		Knows How	Describe the process of filtration, secretion & reabsorption in kidney	Discuss the general considerations of reabsorption & secretion	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	MCQs	LAQs, Viva Voce	Medicine Biochemistry
Hom UG-PB 13.11			Knows How		Describe the renal transport mechanisms throughout the tubular segments	Cognitive	Level 2 Understand / interpret	Desirable to know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Biochemistry
Hom UG-PB 13.12			Knows How		Describe the transport of individual substances in different segments of renal tubule	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	MCQs	Viva Voce	
Hom UG-PB 13.13	Integration Of Information (K-1)		Knows How	Describe the concentration and diluting mechanism in the kidney	Discuss the general consideration of urine concentration mechanism	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Medicine
Hom UG-PB 13.14			Knows How		Describe the counter current multipliers	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	Biochemistry
Hom UG-PB 13.15			Knows How		Discuss the counter current exchangers	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	MCQs	SAQs, Viva Voce	

Hom UG-PB 13.16	Information Gathering ,Integration Of information, Problem Integration (K-2)		Knows How	Describe the renal regulation of acid – base balance	Discuss the renal regulation of acid-base balance	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Biochemistry
Hom UG-PB 13.17			Knows How		Describe the buffer system in the kidney	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs	Viva Voce	Biochemistry
Hom UG-PB 13.18	Integration Of Information (K-1)		Knows	Describe the physiology of micturition	Define micturition	Cognitive	Level 1 (Remember / recall)	Desirable to Know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 13.19			Knows How		Discuss the nerve supply of urinary bladder	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs	Viva Voce	Anatomy
Hom UG-PB 13.20			Knows How		Describe the micturition reflex	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Anatomy
Hom UG-PB 13.21	Information Gathering ,Integration Of information, Problem Integration (K-2)		Shows How	Describe the Kidney function teste	Perform the physical, chemical, and microscopical examination of urine	Psycho Motor	Level 2 (Control)	Must know	Demonstration	Observation	OSCE	Biochemistry
Hom UG-PB 13.22			Knows How		Recognize the normal values of physical, chemical, and microscopical examination of urine	Cognitive	Level 2 Understand / interpret)	Must know	Lecture, Small group discussion	SAQs	LAQ, Viva Voce	Biochemistry
Hom UG-PB 13.23			Shows How		Perform examination for the abnormal constituents of urine	Psycho Motor	Level 2 (Control)	Must know	Demonstration	Observation	Checklist	Biochemistry Medicine

Hom UG-PB 13.24			Knows How		Interpret the results of examination for the abnormal constituents of urine	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQ, Viva Voce	Biochemistry Medicine
Hom UG-PB 13.25			Knows How		Interpret the renal clearance test for glomerular function	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQ, Viva Voce	Biochemistry Medicine
Hom UG-PB 13.26			Knows How		Interpret the renal clearance test for Tubular function.	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	LAQ, Viva Voce	Biochemistry Medicine

Topic No	**14**
Theory	**Biochemistry**
Practical	**Biochemistry Practical of carbohydrate, lipid, protein, Urine normal & abnormal constituents**
Clinical Physiology	

Learning Outcomes: -

At the end of the chapter Biochemistry, the student must be able to –

- Describe the lipid, carbohydrate, and protein metabolisms.
- Describe the enzymes and their activities.
- Describe the role of Vitamins.
- Perform the quantitative estimation of Glucose, Total Proteins, Uric Acid in Blood.
- Perform the Lipid Profile.

S.No	Generic competency	Subject area	Miller's Level	Specific Competency	Specific Learning Objectives / outcomes	Bloom's domain	Guilbert's level	Must know / desirable to know / nice to know	TL method / media	Formative Assessment	Summative Assessment	Integration - Horizontal / Vertical / Spiral
Hom UG-PB 14.1	Integration Of Information (K-1)	Biochemistry	Knows How	Describe the lipid Metabolism.	Explain the biosynthetic and catabolic pathways	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs	Viva Voce	
Hom UG-PB 14.2			Knows How		Explain the importance of lipids in the body.	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 14.3			Knows How		Explain the different	Cognitive	Level 2 Understand / interpret	Must Know	Lecture, Small	SAQs	SAQs, Viva Voce	

					properties of lipids.				group discussion			
Hom UG-PB 14.4	Integration Of Information (K-1)		Knows How	Describe the Carbohydrate metabolism	Discuss different types of carbohydrates.	Cognitive	Level 2 Understand / interpret	Must know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 14.5			Knows		List major functions of carbohydrates.	Cognitive	Level 1Recall	Must Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 14.6			Knows How		Discuss the food sources of carbohydrates.	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 14.7			Knows How		Explain the processes of glycolysis	Cognitive	Level 2 Understand / interpret	Must Know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 14.8			Knows How		Explain the process of gluconeogenesis	Cognitive	Level 2 Understand / interpret	Must Know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 14.9			Knows How		Describe the process of ATP production through oxidative phosphorylation	Cognitive	Level 2 Understand / interpret	Must Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 14.10	Integration Of Information (K-1)		Knows How	Describe the Protein Metabolism	Discuss the special features of protein Metabolism	Cognitive	Level 2 Understand / interpret	Must Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 14.11			Knows How		Discuss the functions of intact amino acid	Cognitive	Level 2 Understand / interpret	Nice to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	

Hom UG-PB 14.12			Knows How		Discuss the oxidation of amino acid	Cognitive	Level 2 Understand / interpret	Must Know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	
Hom UG-PB 14.13			Knows How		Discuss the synthesis of proteins	Cognitive	Level 2 Understand / interpret	Must Know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Physiology
Hom UG-PB 14.14			Knows How		Discuss the function of nitrogenous part	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 14.15			Knows How		Discuss the exogenous & endogenous protein metabolism	Cognitive	Level 2 Understand / interpret	Must Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 14.16	Integration Of Information (K-1)		Knows How	Describe the enzymes and their activities.	Discuss the concept of enzyme, chemical reactions, catalyst and substrates.	Cognitive	Level 2 Understand / interpret	Desirable to know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Physiology
Hom UG-PB 14.17			Knows		Mention the major functions of enzymes.	Cognitive	Level 1Recall	Must Know	Lecture, Small group discussion	SAQs	LAQs, Viva Voce	Physiology
Hom UG-PB 14.18			Knows How		Discuss the importance of enzymes in the body.	Cognitive	Level 2 Understand / interpret	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Physiology
Hom UG-PB 14.19	Integration Of Information (K-1)		Knows	Describe the role of Vitamins	Define vitamin	Cognitive	Level 1 (Remember / recall)	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Physiology Community Medicine

Hom UG-PB 14.20			Knows		Classify vitamins	Cognitive	Level 1Recall	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 14.21			Knows		Mention common vitamin deficiencies		Level 1Recall	Desirable to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Physiology Medicine Community Medicine
Hom UG-PB 14.22	Information Gathering , Integration Of information , Problem Integration (K-2)		Knows	Demonstration of Uses Of Instruments Or Equipment	List the use of different instruments in biochemistry experiments	Cognitive	Level 1 Recall	Must Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	
Hom UG-PB 14.23			Shows How	Demonstrate the Qualitative Analysis of Carbohydrates , Proteins And Lipids	Perform the qualitative analysis of carbohydrate	Psycho Motor	Level 2 (Control)	Must Know	Demonstration	Observation	Checklist	Pathology
Hom UG-PB 14.24			Knows How		Interpret the results of Qualitative analysis of carbohydrate	Cognitive	Level 2 Understand / interpret	Nice to Know	Lecture, Small group discussion	SAQs	Viva Voce	Pathology
Hom UG-PB 14.25			Shows How		Observe the qualitative analysis of Protein	Psycho Motor	Level 1 (Observe / Imitate)	Desirable to Know	Demonstration	Observation	Checklist	Pathology
Hom UG-PB 14.26			Knows How		Interpret the results of Qualitative analysis of Protein	Cognitive	Level 2 Understand / interpret	Nice to Know	Lecture, Small group discussion	SAQs	Viva Voce	Pathology
Hom UG-PB 14.27			Shows How		Perform the qualitative analysis of Lipid	Psycho Motor	Level 2 (Control)	Nice to Know	Demonstration	Observation	Checklist	Pathology
Hom UG- PB 14.28			Knows How		Interpret the results of	Cognitive	Level 2 Understand / interpret	Nice to Know	Lecture, Small	SAQs	Viva Voce	Pathology

					Qualitative analysis of Lipid				group discussion			
Hom UG-PB 14.29	Information Gathering ,Integration Of information , Problem Integration (K-2)		Shows How	Perform the quantitative estimation of Glucose, Total Proteins, Uric Acid in Blood	Perform the Quantitative estimation of glucose	Psycho Motor	Level 3 (Automatism)	Must Know	Demonstration	Observation	Checklist	Pathology
Hom UG-PB 14.30			Knows How		Interpret the results of Qualitative analysis of glucose	Cognitive	Level 2 Understand / interpret	Nice to Know	Lecture, Small group discussion	SAQs	Viva Voce	Pathology
Hom UG-PB 14.31			Shows How		Perform the Quantitative estimation of Total proteins	Psycho Motor	Level 3 (Automatism)	Must Know	Demonstration	Observation	Checklist	Pathology
Hom UG-PB 14.32			Knows How		Interpret the results of Qualitative analysis of total protein	Cognitive	Level 2 Understand / interpret	Nice to Know	Lecture, Small group discussion	SAQs	Viva Voce	Pathology
Hom UG-PB 14.33			Shows How		Observe the Quantitative estimation of Uric Acid	Psycho Motor	Level 1 (Observe / Imitate)	Nice to Know	Demonstration	Observation	Checklist	Pathology
Hom UG-PB 14.34			Knows How		Interpret the results of Quantitative estimation of Uric acid	Cognitive	Level 2 Understand / interpret	Nice to Know	Lecture, Small group discussion	SAQs	SAQs, Viva Voce	Pathology
Hom UG-PB 14.35			Shows How	Perform the Lipid Profile	Observe the laboratory testing for Lipid profile	Psycho Motor	Level 1 (Observe / Imitate)	Must Know	Demonstration	Observation	OSCE	Pathology
Hom UG-PB 14.36			Knows How		Interpret the results of Lipid profile testing	Cognitive	Level 2 Understand / interpret	Nice to Know	Lecture, Small group discussion	SAQs	Viva Voce	Pathology

					done in a laboratory							

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8. PRACTICAL TOPICS

PRACTICAL & CLINICAL PHYSIOLOGY:-

No	Practical	Demonstration / Performance
HAEMATOLOGY		
1	Study of the Compound Microscope	Performance
2.	Collection of Blood Samples	Performance
3	Estimation of Haemoglobin Concentration	Performance
4	Determination of Haematocrit	Demonstration
5	Hemocytometry	Performance
6	Total RBC Count	Performance
7	Determination of RBC Indices	Demonstration
8	Total Leucocytes Count (TLC)	Performance
9	Preparation And Examination Of Blood Smear	Performance
10	Differential Leucocyte Count (DLC)	Performance
11	Absolute Eosinophil Count	Demonstration
12	Determination of Erythrocyte Sedimentation Rate	Demonstration
13	Determination of Blood Groups	Performance
14	Determination of Bleeding Time and Coagulation Time	Performance
BIOCHEMISTRY		
1	Demonstration of Uses Of Instruments Or Equipment	Demonstration
2	Qualitative Analysis of Carbohydrates, Proteins And Lipids	Performance
3	Normal Characteristics of Urine	Performance
4	Abnormal Constituents of Urine	Performance
5	Quantitative Estimation of Glucose, Total Proteins, Uric Acid in Blood	Performance
6	Liver Function Tests	Demonstration
7	Kidney Function Tests	Demonstration

8	Lipid Profile	Demonstration
9	Interpretation and Discussion of Results of Biochemical Tests	Demonstration
CLINICAL PHYSIOLOGY & OPD		
1	Case Taking & Approach to pt	Performance
2	General Concept Of Examination	Performance
3	Examination of muscles, joints,	Performance
4	Cardio-Vascular System – Blood Pressure Recording, Radial Pulse, ECG, Clinical Examination	Performance
5	Respiratory System- Clinical Examination, Spirometry, Stethography	Performance
6	Nervous System- Clinical Examination	Performance
7	Special Senses- Clinical Examination	Performance
8	Reproductive System- Diagnosis of Pregnancy	Performance
9	Gastrointestinal System- Clinical Examination	Performance
10	OPD (Applied Physiology)	Demonstration & Performance
SPOTTING		
1	Haematology	
2	Bio-Chemistry	
3	Clinical Physiology	

9. ASSESSMENT

PHYSIOLOGY THEME TABLE

PAPER – 1

Theme*	Topics	Term	Marks	MCQ's	SAQ's	LAQ's
A	General Physiology	I	07	Yes	Yes	No
B	Biophysics Science	I	07	Yes	Yes	No
C	Body fluids& Immune Mechanism	I	26	Yes	Yes	Yes
D	Cardiovascular system	II	16	Yes	Yes	Yes
E	Respiratory system	II	16	Yes	Yes	Yes
F	Excretory system	III	16	Yes	Yes	Yes
G	Skin & The Integumentary System	I	06	Yes	Yes	No
H	Nerve Muscle physiology system	I	06	Yes	Yes	No

QUESTION PAPER BLUE PRINT

UNIVERSITY EXAM PAPER-I – 100 MARKS

MCQs – 10 Marks. SAQs – 40 Marks. FAQs – 50 Marks

Question Serial Number	Type of Question	Question Paper Format (Refer Theme table for themes)
Q1	Multiple choice Questions (MCQ) All questions compulsory 1 mark each	1. Theme A 2. Theme A 3. Theme B 4. Theme B 5. Theme C 6. Theme D 7. Theme E 8. Theme F 9. Theme G 10. Theme H
Q2	Short answer Questions(SAQ)	1. Theme A

	All questions compulsory 5 Marks Each	2. Theme B 3. Theme C 4. Theme D 5. Theme E 6. Theme F 7. Theme G 8. Theme H
Q3	Long answer Questions (LAQ) All questions compulsory 10 marks each	1. Theme C 2. Theme C 3. Theme D 4. Theme E 5. Theme F

PAPER – 2

Theme*	Topics	Term	Marks	MCQ's	SAQ's	LAQ's
A	Endocrine system	II	21	Yes	Yes	Yes
B	Central Nervous System	II	21	Yes	Yes	Yes
C	Digestive system and Nutrition	III	16	Yes	Yes	Yes
D	Reproductive system	III	17	Yes	Yes	Yes
E	Sense organs	III	17	Yes	Yes	Yes
F	Biochemistry	III	08	Yes	Yes	No

UNIVERSITY EXAM PAPER-II – 100 MARKS

MCQs – 10 Marks. SAQs – 40 Marks. FAQs – 50 Marks

Question Serial Number	**Type of Question**	**Question Paper Format (Refer Theme table for themes)**
Q1	Multiple choice Questions (MCQ) All questions compulsory 1 mark each	1) Theme A 2) Theme B 3) Theme C 4) Theme D 5) Theme D 6) Theme E 7) Theme E 8) Theme F 9) Theme F 10) Theme F
Q2	Short answer Questions (SAQ) All questions compulsory 5 Marks Each	1) Theme A 2) Theme A 3) Theme B 4) Theme B 5) Theme C 6) Theme D 7) Theme E 8) Theme F
Q3	Long answer Questions (LAQ) All questions compulsory 10 marks each	1) Theme A 2) Theme B 3) Theme C 4) Theme D 5) Theme E

Distribution of Marks for Practical Exam:

Practical Exam: 100 Marks	
Haematology	20 marks
Bio-chemistry	20 marks
Clinical Physiology	20 marks
Spotting - 10 Spots	30 marks
Journal	10 marks
Viva: 80 Marks	
Viva Voce	80 marks
Internal Assessment: 20	
IA	20

The Pass Marks in Each Component of the Examination shall be 50%.

9B - Scheme of Assessment (formative and Summative)

Sr. No	**Professional Course**	**1st term (1-6 Months)**			**2nd Term (7-12 Months)**			**3rd Term (13-18 Months)**	
1	First Professional BHMS	1st PA	1ST TT		2nd PA	2ND TT		3rd PA	UE
		20 Marks Practical/Viva	100 Marks Theory	100 Marks Practical/ Viva	20 Marks Practical/Viva	100 Marks Theory	100 Marks Practical/ Viva	20 Marks Practical/Viva	

For Internal assessment, Only Practical/Viva marks will be considered. Theory marks will not be counted)

Method of Calculation of Internal Assessment Marks for Final University Examination:

PA1 Practical/Viva (20 Marks)	PA2 Practical/Viva (20 Marks)	PA3 Practical/Viva (20 Marks)	Periodical Assessment Average PA1+PA2+PA3/3	TT1 Practical/ Viva (100 Marks)	TT2 Practical/ Viva (100 Marks)	Terminal Test Average TT1+ TT2/ 200*20	Final Internal Assessment Marks
A	**B**	**C**	**D**	**E**	**F**	**G**	**D+G/2**

PA- Periodical Assessment **TT-** Terminal Test **UE**- University Examination

10. LIST OF RECOMMENDED BOOKS

THEORY

TEXT BOOKS

1. John N A (2023) Chatterjee C C. Text Book of Physiology 14th Edition. CBS Publication. (CBDC based)
2. Tortora G (2020). Principles of Anatomy & Physiology. Wiley Publication.
3. Jain A (2021). Text Book of Physiology Vol – 1 & 2. Avichal Publishing Company.
4. Reddy L P(2023)Fundamentals of Medical Physiology. CBS Publishers and Distributors(CBDC based)

REFERENCE BOOKS

1. Hall J. (2020). Guyton & Hall Text book of Medical Physiology. Elsevier Publication.
2. Khurana I (2021). Essential Medical Physiology. Elsevier Publication.

PRACTICAL & CLINICAL PHYSIOLOGY:-

1. Varshney VP, Bedi M, (2023) Ghai's Textbook of Practical Physiology: 10th Edition. Jaypee Brothers Medical Publisher (CBDC based)
2. John N Aet al (2021) C C Chatterjee's Manual of Practical Physiology: CBS Publishers and Distributors(CBDC based)
3. Jain A. (2019) Manual of Practical Physiology. 6th ed. Arya Publications.
4. Glynn M., William D. (2017). Hutchison's Clinical methods. 24th edition Elsevier Publication

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COMPETENCY BASED DYNAMIC CURRICULUM FOR

FIRST BHMS PROFESSIONAL COURSE

(Applicable from Batch 2022-2023 onwards for 5 years or until further notification by National Commission for Homoeopathy whichever is earlier)

(Homoeopathic Pharmacy)

HOMOEOPATHY EDUCATION BOARD

NATIONAL COMMISSION FOR HOMOEOPATHY

MINISTRY OF AYUSH, GOVERNMENT OF INDIA

JAWAHAR LAL NEHRU BHARTIYA CHIKITSA AVUM HOMOEOPATHY ANUSANDHAN BHAVAN

No.61-65, Institutional Area, opp. 'D' block, Janak Puri, New Delhi-110 058

Course-Homoeopathic Pharmacy

Course code: Hom-UG-HP

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1. PREAMBLE

Pharmacy holds a unique place in Homoeopathic practice and education. It involves knowledge of sources of drugs and the process through which these are processed to obtain dynamic, potent homoeopathic drugs for use at the bedside. It encompasses knowledge of drug action, drug proving, methods of Quality testing, standardization & storage with up todate information of changing drug laws related to Homoeopathic Pharmaceutical Industry & Homoeopathy.

We all know the travails which Master went through while establishing the right to manufacture and dispense what he had so painfully discovered. The challenges have not lessened in the modern era when 'scientific' evidence has been gathered for dubbing Homoeopathic medicines as nothing more than a placebo. It is important that the entrant to our science is introduced to the scientific nature of the process employed to prepare our medicines and he develops confidence in the soundness of the practices as well as its efficacy. The student should also appreciate the more than 250 year advance that Hahnemann was able to establish of Homoeopathic science. We now know that Homoeopathy is the 'greenest' of all medical systems in existence and that is sustainable, eco-friendly and the most economic while being effective over a wide range of conditions.

The way that this can be conveyed is by adopting an integrated approach to Pharmacy education and training. Effective linkages with the subjects of Homoeopathic Philosophy and Materia Medica will be able to convey the strong roots that the practice of Pharmacy has not only in the philosophical approach but also the experimental results as seen through the proving from which the world of Materia Medica has evolved.

Simultaneously, the recent advances in the bio-physical and quantum physics has opened new avenues to address the age-old question of how homoeopathic medicines act. A host of researchers are already doing work which the student needs to be made conversant with. That will produce an insight of the way new researches and developments in related fields of the 21st century are able to start explaining Hahnemann's insights of the 18th! This will also firmly root the student in the first year itself to being a participant in ongoing research related to the discipline which will be his own. Hence the teacher of Pharmacy has a crucial role to play in being abreast of the developments in the field and lend to the student the excitement that becomes a part of teaching-learning.

2. PROGRAMME OUTCOMES

At the end of BHMS program, a student must

1)Develop the knowledge, skills, abilities and confidence as a primary care homoeopathic practitioner to attend to the health needs of the community in a holistic manner

2) Correctly assess and clinically diagnose common clinical conditions prevalent in the community from time to time

3) Identify and incorporate the socio-demographic, psychological, cultural, environmental & economic factors affecting health and disease in clinical work

4) Recognize the scope and limitation of homoeopathy in order to apply Homoeopathic principles for curative, prophylactic, promotive, palliative, and rehabilitative primary health care for the benefit of the individual and community

5) Be willing and able to practice homoeopathy as per medical ethics and professionalism.

6) Discern the scope and relevance of other systems of medical practice for rational use of cross referrals and role of life saving measures to address clinical emergencies

7) Develop the capacity for critical thinking, self reflection and a research orientation as required for developing evidence based homoeopathic practice.

8) Develop an aptitude for lifelong learning to be able to meet the changing demands of clinical practice

9) Develop the necessary communication skills and enabling attitudes to work as a responsible team member in various healthcare settings and contribute towards the larger goals of national health policies such as school health, community health and environmental conservation.

3.COURSE OUTCOMES

At the end of the course of Homoeopathic Pharmacy, I BHMS Student will be able to

1. Explain the principles that govern homoeopathic pharmacy.
2. Discuss the pharmacognosicalbasis of homoeopathic drugs with respect to their identification, nomenclature, source, part used, method of collection and preparation.
3. Prepare homoeopathic medicines from their respective sources according to the different scales & methods of potentisation on a small scale in the laboratory.
4. Describe the pharmacology of homoeopathic drugs with respect to the types of drug action, sphere of action and pharmacological action of homoeopathic drugs integrated with Homoeopathic Materia Medica, Anatomy and physiology.
5. Relate the methodology of Homoeopathic Drug Proving integrated with Organon of Medicine.
6. Apply the principles of Homoeopathic Posology in different health care setting like OPD/IPD integrated with Organon of Medicine and Homoeopathic Materia Medica.
7. State the methods of standardization and quality control of homoeopathic medicines to ensure the genuineness of homoeopathic medicines.
8. Explain the principles of pharmaconomy, dispensing and preservation of homoeopathic medicines.
9. Engage the principles of pharmaco-vigilance, and adverse drug reaction in relation to homoeopathic medicines.
10. Write an ideal prescription.
11. Evaluate the scope for research in homoeopathic pharmacy in the context of the recent advancements in pharmaceutical sciences

1. TEACHING HOURS

Sr No.	Subject	Theoretical Lecture	Practical + Posting at IPD/OPD/Hospital Dispensing Section
01	Homeopathic Pharmacy	100 hrs.	110 hrs.

Teaching Hours (Theory)

A. List of Topics		**B.Term**	**C.Teaching Hours**
a) General Concepts and Orientation:			
History of Pharmacy with emphasis on emergence of Homoeopathic Pharmacy.	Definition of Pharmacy & Homoeopathic Pharmacy Concept of Drug substance, Drug, Medicine & Remedy Forming Basic concept of other AYUSH Schools of Pharmacy (Ayurveda, Siddha, Sowa Rigpa& Unani Pharmacy)	I	03
Homoeopathic Pharmacy Basics	Sources of Homoeopathic Pharmacy Branches of Pharmacy Scope of Homoeopathic Pharmacy Specialty and originality of Homoeopathic Pharmacy The Principles of Homoeopathy	I	04

	Law of Similia, Simplex & Minimum Theory of Chronic Disease & Vital Force Doctrine of Drug Proving & Drug Dynamisation		
Homoeopathic Pharmacopoeia	The Evolution, History & Development of Homoeopathic Pharmacopoeias throughout the world (year wise Publications) – GHP, BHP, HPUS, FHP Official –(HPI) &Unofficial Pharmacopoeias – (M Bhattacharya & Co's Homoeopathic Pharmacopoeia Encyclopaedia of Homoeopathic Pharmacopoeia – P N Verma, Homoeopathic Pharmaceutical Codex) Monograph, Contents of Monograph with its individual importance	I	04
Ideal laboratory	Pre requisites of ideal Laboratory (General Laboratory), Laboratory safety Rules Role of Laboratory in Homoeopathic Pharmacy Education	I	02
Weights and measurements.	Metrology Basics & Units of Apothecary System, British Imperial System, Metric System Interrelationship between various systems of Weight & Measure Concept on Domestic Measures with Metric Equivalents	I	01

Nomenclature	The Basic Rules of Nomenclature Nomenclature of Homoeopathic Drugs Important terminologies like scientific names, common names, synonyms Anomalies in Nomenclature	I	02
Pioneers of Homoeopathic Pharmacy	Role & contributions of Pioneers in development of Homoeopathic Pharmacy	I	02
b) Raw Material: Drugs and Vehicles			
Source of drugs in Homoeopathy	Different sources - Plant kingdom, Animal kingdom, Mineral kingdom, Nosodes, Sarcodes, Imponderabilia, Synthetic source, New Sources - Allersode, Isodes with reference to their clinical utility Introduction to Bowel Nosodes, Tissue remedies	I	07
Collection of drug substances	General and Specific guidelines for collecting drugs from all available sources	I	03
Vehicles.	Definition, classification, General Use Source, Properties & Particular use of Vehicles with respect to List Provided in Appendix D Preparation – Commercial Lactose, Alcohol Purity tests – Water, Alcohol, Sugar of Milk	I	06
c) Homoeopathic Pharmaceutics:			

Mother tincture and its preparation	Extraction – Principles & Various Methods Old Method (Based on Class I to IX) Concept of Uniform Drug Strength Estimation of Moisture Content - Necessity New Method/Modern Approach of Homoeopathic Drug Preparation	II	07
Various Scales of Potentization in Homoeopathic pharmacy.	History of development, Introducer, Designation, Preparation, Administration & Application with respect to - Centesimal Scale, Decimal Scale & 50 Millesimal Scale	II	03
Drugs Dynamisation	The Evolution of Dynamisation Concept in Homoeopathy Potentisation & its types The Merits of Potentisation Succussion & Trituration Various types of Potency– Fluxion Potency, Jumping Potency, Back Potency, Single Vial Potency, Multiple Vial Potency, Mixed Vial Potency Post-Hahnemannian Potentization Techniques	II	06
External applications	Scope of administration of External Applications in Homoeopathic Practice Dr Hahnemann's View as per Organon (5th& 6th Ed) Preparation & Uses of lotion, glycerol, liniment	II	05

	and ointment. Commercial Preparation of Ointment		
Posology	Basic principles of Homoeopathic Posology Related aphorisms of Organon of medicine. Criteria for Selection of Potency & Repetition of Dose Various Kinds of Dose, Emphasis on Minimum Dose	III	06
Prescription	Prescription Writing Important Abbreviations Parts & Contents of Prescription Merits & Demerits of Prescription Writing	III	02
Dispensing of Homoeopathic Medicines	Various Dosage Forms – Solid, Liquid Dosage Forms, Methods of Dispensing	II	02
Placebo.	Concept of Homoeopathic Placebo The Philosophy of administration of placebo Concept of Placebo Effect	II	01
Pharmaconomy	Routes of Homoeopathic drug administration.	II	02
Preservation	Preservation Rules – Raw Materials Drug Substance, Mother Preparations, Finished products & Vehicles	II	02

d) Pharmacodynamics			
▪ Doctrine of Signature.	Basic Concept, Its Evolution & Application in Ancient Medical System Supporters of the Doctrine Dr Hahnemann's view on the Doctrine	II	01
▪ Drug Proving.	Homoeopathic Pharmacodynamics With reference to aphorisms 105 – 145 of Organon of Medicine – 6th Ed) Post Hahnemannian Drug Proving Homoeopathic Pathogenetic Trial (HPT) CCRH & Other Protocols on HPT Other Noted Provers & their work on Drug Proving	III	06
▪ Adverse Drug Reactions	Basic Idea, Reporting of ADE Drug safety with Ref to HPI Medication errors, Causality Assessment Incompatible Remedies	II	02
▪ Pharmaco-vigilance.	Pharmacovigilance in Homoeopathy Activities of Pharmacovigilance Centres Awareness on Medicinal Preparations against Homoeopathic Principles – Patents, Combinations	II	02
▪ Pharmacological	listed in Appendix-A (Any 15)	III	05

study of drugs			
e) Quality Control:			
• Standardisation in Homoeopathy	Different Methods of Standardisation Quality Control of Raw Materials – Various Evaluation techniques In Process Quality Control Quality Control of finished products – Various standard parameters	II	02
• Industrial pharmacy.	Good Manufacturing Practices (GMP) Schedule M1	II	02
• Homoeopathic pharmacopoeia laboratory (HPL)	Functions and Activities of HPL relating to quality control of drugs. Pharmacopoeia Commission for Indian Medicines	II	01
f) Legislations pertaining to Homoeopathic Pharmacy:		**III**	**04**
The Drugs and Cosmetics Act, 1940 (23 to 1940)			
Drugs and Cosmetics Rules, 1945			
Medicinal and Toilet Preparations (Excise Duties) Act, 1955 (16 of 1955)			
Drugs and Magic Remedies (Objectionable Advertisements) Act, 1954 (21 of 1954)			
The Narcotic Drugs and Psychotropic Substances Act, 1985 (61 of 1985)			
Dangerous Drug Act, 1930			

g) Recent Advances in Homoeopathic Pharmacy	**III**	**02**
Modern theories related with Homoeopathic Drug action ▪ Principles of Drug action ▪ Introduction to Nanomedicine ▪ Molecular Mechanism of Drug Action ▪ Mechanism of Action of Homoeopathic Medicines		
Scope of Research in Homoeopathic Pharmacy ▪ Drug Discovery ▪ Principles of New Drug discovery ▪ Clinical evaluation of New Drugs ▪ Pre-Clinical Research in Homoeopathic Pharmacy	III	01
h) Homoeopathic Pharmacy - Relationships	III	02
Relation of Homoeopathic Pharmacy with Anatomy		
Relation of Homoeopathic Pharmacy with Physiology		
Relation of Homoeopathic Pharmacy with Materia Medica With reference to Source of Drugs, Identification, Common Name of Drugs, Role of Drug Proving & Other Types of Proving in construction of Materia Medica, Clinical Verification Family wise study of Sphere of action – Solanaceae, Loganiaceae, Compositae, Liliaceae, Anacardiaceae, Rubiaceae etc		

Teaching Hours (Practical)

Homoeopathic Pharmacy Practicals		Teaching Hours	Peyton's 4 step assessment criteria
	Particulars of Experiments		
1	Estimation of size of globules	2	Execution
2	Medication of globules (Small Scale)	2	Execution
3	Purity test of Sugar of milk	2	Comprehension & Execution
4	Purity test of water	2	Comprehension & Execution
5	Purity test of Ethyl alcohol	2	Comprehension & Execution
6	Determination of Specific gravity of a given liquid Vehicle & identifying the same.	2	Execution
7	Preparation of dispensing alcohol from strong alcohol.	1	Comprehension & Execution
8	Preparation of dilute alcohol from strong alcohol.	1	Comprehension & Execution
9	Trituration of drug in Old Method (One each of Class VII, VIII & IX)	3	Execution
10	Trituration of one drug as per HPI	1	Execution
11	Succussion in decimal scale from Mother Tincture (Prepared in Old Method) to 3X potency.	2	Execution
12	Succussion in decimal scale from Mother Tincture (Prepared in New Method) to 3X potency	2	Execution
13	Succussion in centesimal scale from Mother Tincture (Prepared in Old Method) to 3C	2	Execution
14	Succussion in centesimal scale from Mother Tincture (Prepared in New Method) to 3C	2	Execution
15	Conversion of Trituration to liquid potency: Decimal scale 6X to 8X potency.	1	Execution

16	Conversion of Trituration to liquid potency: Centesimal scale 3C to 4C potency.	1	Execution
17	Preparation of 0/2 potency (Solid form) (LM scale) of 1 Drug from 3rd Degree Trituration.	2	Execution
18	Preparation of external applications – Lotion	1	Execution
19	Preparation of external applications – Glycerol	1	Execution
20	Preparation of external applications – Liniment	1	Execution
21	Preparation of external applications – Ointment	1	Execution
22	Writing of prescription & Dispensing the Medicine in Water with preparation of Doses	1	Execution
23	Writing of prescription & Dispensing the Medicine in Sugar of Milk with Preparation of Doses	1	Execution
24	Preparation of mother tinctures according to Old Hahnemannian method (Class I, II, III, IV)	8	Execution
25	Preparation of mother solutions according to Old Hahnemannian method (Class Va, Vb, VIa, VIb)	4	Execution

5. **COURSE CONTENT**

A. THEORY

Table 4: Homoeopathic Pharmacy Theory	
a) General Concepts and Orientation:	
History of Pharmacy with emphasis on emergence of Homoeopathic Pharmacy.	Definition of Pharmacy & Homoeopathic Pharmacy Concept of Drug substance, Drug, Medicine & Remedy Forming Basic concept of other AYUSH Schools of Pharmacy (Ayurveda, Siddha, Sowa Rigpa& Unani Pharmacy)
Homoeopathic Pharmacy Basics	Sources of Homoeopathic Pharmacy Branches of Pharmacy Scope of Homoeopathic Pharmacy Specialty and originality of Homoeopathic Pharmacy The Principles of Homoeopathy Law of Similia, Simplex & Minimum Theory of Chronic Disease & Vital Force Doctrine of Drug Proving & Drug Dynamisation

Homoeopathic Pharmacopoeia	The Evolution, History & Development of Homoeopathic Pharmacopoeias throughout the world (year wise Publications) – GHP, BHP, HPUS, FHP Official –(HPI) &Unofficial Pharmacopoeias – (M Bhattacharya & Co's Homoeopathic Pharmacopoeia Encyclopaedia of Homoeopathic Pharmacopoeia – P N Verma, Homoeopathic Pharmaceutical Codex) Monograph, Contents of Monograph with its individual importance
Ideal laboratory	Pre requisites of ideal Laboratory (General Laboratory), Laboratory safety Rules Role of Laboratory in Homoeopathic Pharmacy Education
Weights and measurements.	Metrology Basics & Units of Apothecary System, British Imperial System, Metric System Interrelationship between various systems of Weight & Measure Concept on Domestic Measures with Metric Equivalents
Nomenclature	The Basic Rules of Nomenclature Nomenclature of Homoeopathic Drugs Important terminologies like scientific names, common names, synonyms Anomalies in Nomenclature
Pioneers of Homoeopathic Pharmacy	Role & contributions of Pioneers in development of Homoeopathic Pharmacy
b) Raw Material: Drugs and Vehicles	

Source of drugs in Homoeopathy	Different sources - Plant kingdom, Animal kingdom, Mineral kingdom, Nosodes, Sarcodes, Imponderabilia, Synthetic source, New Sources - Allersode, Isodes with reference to their clinical utility Introduction to Bowel Nosodes, Tissue remedies
Collection of drug substances	General and Specific guidelines for collecting drugs from all available sources
Vehicles.	Definition, classification, General Use Source, Properties & Particular use of Vehicles with respect to List Provided in Appendix D Preparation – Commercial Lactose, Alcohol Purity tests – Water, Alcohol, Sugar of Milk
c) Homoeopathic Pharmaceutics:	
Mother tincture and its preparation	Extraction – Principles & Various Methods Old Method (Based on Class I to IX) Concept of Uniform Drug Strength Estimation of Moisture Content - Necessity New Method/Modern Approach of Homoeopathic Drug Preparation
Various Scales of Potentization in Homoeopathic pharmacy.	History of development, Introducer, Designation, Preparation, Administration & Application with respect to - Centesimal Scale, Decimal Scale & 50 Millesimal Scale

Drugs Dynamisation	The Evolution of Dynamisation - Concept in Homoeopathy Potentisation & its types The Merits of Potentisation Succussion & Trituration Various types of Potency– Fluxion Potency, Jumping Potency, Back Potency, Single Vial Potency, Multiple Vial Potency, Mixed Vial Potency Post-Hahnemannian Potentization Techniques
External applications	Scope of administration of External Applications in Homoeopathic Practice Dr Hahnemann's View as per Organon (5th& 6th Ed) Preparation & Uses of lotion, glycerol, liniment and ointment. Commercial Preparation of Ointment
Posology	Basic principles of Homoeopathic Posology Related aphorisms of Organon of medicine. Criteria for Selection of Potency & Repetition of Dose Various Kinds of Dose, Emphasis on Minimum Dose
Prescription	Prescription Writing Important Abbreviations Parts & Contents of Prescription Merits & Demerits of Prescription Writing
Dispensing of Homoeopathic Medicines	Various Dosage Forms – Solid, Liquid Dosage Forms, Methods of Dispensing

Placebo.	Concept of Homoeopathic Placebo The Philosophy of administration of placebo Concept of Placebo Effect
Pharmaconomy	Routes of Homoeopathic drug administration.
Preservation	Preservation Rules – Raw Materials Drug Substance, Mother Preparations, Finished products & Vehicles
d) Pharmacodynamics	
▪ Doctrine of Signature.	Basic Concept, Its Evolution & Application in Ancient Medical System Supporters of the Doctrine Dr Hahnemann's view on the Doctrine
▪ Drug Proving.	Homoeopathic Pharmacodynamics With reference to aphorisms 105 – 145 of Organon of Medicine – 6th Ed) Post Hahnemannian Drug Proving Homoeopathic Pathogenetic Trial (HPT) CCRH & Other Protocols on HPT Other Noted Provers & their work on Drug Proving
▪ Adverse Drug Reactions	Basic Idea, Reporting of ADE Drug safety with Ref to HPI Medication errors, Causality Assessment Incompatible Remedies

▪ Pharmaco-vigilance.	Pharmacovigilance in Homoeopathy Activities of Pharmacovigilance Centres Awareness on Medicinal Preparations against Homoeopathic Principles – Patents, Combinations
▪ Pharmacological study of drugs	listed in Appendix-A (Any 15)
e) Quality Control:	
• Standardisation in Homoeopathy	Different Methods of Standardisation Quality Control of Raw Materials – Various Evaluation techniques In Process Quality Control Quality Control of finished products – Various standard parameters
• Industrial pharmacy.	Good Manufacturing Practices (GMP) Schedule M1
• Homoeopathic pharmacopoeia laboratory (HPL)	Functions and Activities of HPL relating to quality control of drugs. Pharmacopoeia Commission for Indian Medicines
f) Legislations pertaining to Homoeopathic Pharmacy:	
The Drugs and Cosmetics Act, 1940 (23 to 1940)	
Drugs and Cosmetics Rules, 1945	
Medicinal and Toilet Preparations (Excise Duties) Act, 1955 (16 of 1955)	
Drugs and Magic Remedies (Objectionable Advertisements) Act, 1954 (21 of 1954)	
The Narcotic Drugs and Psychotropic Substances Act, 1985 (61 of 1985)	

Dangerous Drug Act, 1930
g) Recent Advances in Homoeopathic Pharmacy
Modern theories related with Homoeopathic Drug action 1. Principles of Drug action 2. Introduction to Nanomedicine 3. Molecular Mechanism of Drug Action 4. Mechanism of Action of Homoeopathic Medicines
Scope of Research in Homoeopathic Pharmacy 1. Drug Discovery 2. Principles of New Drug discovery 3. Clinical evaluation of New Drugs 4. Pre-Clinical Research in Homoeopathic Pharmacy
h) Homoeopathic Pharmacy - Relationships
Relation of Homoeopathic Pharmacy with Anatomy
Relation of Homoeopathic Pharmacy with Physiology
Relation of Homoeopathic Pharmacy with Materia Medica With reference to Source of Drugs, Identification, Common Name of Drugs, Role of Drug Proving & Other Types of Proving in construction of Materia Medica, Clinical Verification Family wise study of Sphere of action – Solanaceae, Loganiaceae, Compositae, Liliaceae, Anacardiaceae, Rubiaceaeetc

B. Practical – Lab Work – Field – Clinical Hospital Work

1. **Laboratory Work –**

Practical Class (Experiments) - Maintaining Record of Experiments Conducted

(Principle, Requirements, Calculation if applicable, Process, Label, Conclusion/Inference)

Practical Class (Demonstration) – Maintaining Records of Practical Demonstrated

(Principle, Requirements, Calculation if applicable, Process, Label, Conclusion/Inference)

Field Visits-

A) **Maintain File/Report on Visit to GMP Compliant Large Scale Medicine Manufacturing Unit (Format should be as per Appendix – E)**

B) **Maintain File/Report on Visit to Medicinal Plant Garden (Format should be as per Appendix - F)**

Activity –

(a) Clinical Hospital Work – Maintain Record (Activities/Posting in Dispensing Section, Prescriptions based on Homoeopathic Principles in IPD/OPD) – Record to be maintained as per format in Appendix G

(b) Seminar – Maintain Record on Seminar Presentation on Topics of Homoeopathic Pharmacy as assigned – Record to be maintained as per Appendix - H

(c) Herbarium – Maintenance of 30 Plant Drug Substances Samples

B. PRACTICALS

Table 5 : Homoeopathic Pharmacy Practicals	
Sr No.	
	Particulars of Experiments
1	Estimation of size of globules

2	Medication of globules (Small Scale)
3	Purity test of Sugar of milk
4	Purity test of water
5	Purity test of Ethyl alcohol
6	Determination of Specific gravity of a given liquid Vehicle & identifying the same.
7	Preparation of dispensing alcohol from strong alcohol.
8	Preparation of dilute alcohol from strong alcohol.
9	Trituration of drug in Old Method (One each of Class VII, VIII & IX)
10	Trituration of one drug as per HPI
11	Succussion in decimal scale from Mother Tincture (Prepared in Old Method) to 3X potency.
12	Succussion in decimal scale from Mother Tincture (Prepared in New Method) to 3X potency
13	Succussion in centesimal scale from Mother Tincture (Prepared in Old Method) to 3C
14	Succussion in centesimal scale from Mother Tincture (Prepared in New Method) to 3C
15	Conversion of Trituration to liquid potency: Decimal scale 6X to 8X potency.
16	Conversion of Trituration to liquid potency: Centesimal scale 3C to 4C potency.
17	Preparation of 0/2 potency (Solid form) (LM scale) of 1 Drug from 3rd Degree Trituration.
18	Preparation of external applications – Lotion
19	Preparation of external applications – Glycerol
20	Preparation of external applications – Liniment
21	Preparation of external applications – Ointment
22	Writing of prescription & Dispensing the Medicine in Water with preparation of Doses

23	Writing of prescription & Dispensing the Medicine in Sugar of Milk with Preparation of Doses
24	Preparation of mother tinctures according to Old Hahnemannian method (Class I, II, III, IV)
25	Preparation of mother solutions according to Old Hahnemannian method (Class Va, Vb, VIa, VIb)

Demonstration

1. Homoeopathic pharmaceutical instruments and appliances with their cleaning (List provided in Appendix C)

2. Estimation of moisture content using water bath

3. Paper chromatography & TLC of any mother tincture

4. Laboratory methods – Sublimation, distillation, decantation, filtration, crystallization.

5. Preparation of mother tincture – Maceration and Percolation

6. Study & demonstration of Drug Substances (listed in Appendix B)-

i)Macroscopic Characteristic (Any 15)

ii) Microscopic characteristic (Any 05)

7. Study & demonstration of vehicles (Solid, Liquid & Semi solid – as available)

8. Microscopical study of Trituration (One drug up to 3X Potency)

9. Medication of Globule (Large Scale)

Activities

1. Collection of 30 drugs for herbarium

2. Visit to a Large-scale manufacturing unit of Homoeopathic medicine (GMP compliant).

3. Visit to a Medicinal Plant /Botanical Garden & shall keep details Visit report

4. Clinical Class: Visit to IPD, OPD to take note on prescriptions as per Homoeopathic Principles &keep record

5. Visit to Hospital dispensing section to observe & gain knowledge on Dispensing techniques & Keep Records

Demonstration

1. Homoeopathic pharmaceutical instruments and appliances with their cleaning (List provided in Appendix C)-06 Hours

2. Estimation of moisture content using water bath-02 Hours

3. Paper chromatography & TLC of any mother tincture-04 Hours

4. Laboratory methods – Sublimation, distillation, decantation, filtration, crystallization.-04 Hours

5. Preparation of mother tincture – Maceration and Percolation- 04 Hours

6. Study & demonstration of Drug Substances (listed in Appendix B)- 10 Hours

i)Macroscopic Characteristic (Any 15)

ii) Microscopic characteristic (Any 05)

7. Study & demonstration of vehicles (Solid, Liquid & Semi solid – as available)- 02 Hours

8. Microscopical study of Trituration (One drug up to 3X Potency)-02 Hours

9. Medication of Globule (Large Scale)-1 Hour

Clinical Hospital Work – Maintain Record (Activities/Posting in Dispensing Section, Prescriptions based on Homoeopathic Principles in IPD/OPD) – Record to be maintained as per format in Appendix G- 20 Hours

Seminar – Maintain Record on Seminar Presentation on Topics of Homoeopathic Pharmacy as assigned- 07 Hours

6.TEACHING LEARNING METHODS

The Teaching Learning activities in Homoeopathic Pharmacy requires change in structure & process in order to be more skill based & providing hands on experience. The Teaching Learning methods with respect to Homoeopathic Pharmacy may be covered in the following manner –

a) **Class Room Lectures** – Oral Presentation, Board Work, Power point Presentation

b) **Tutorials** – Special Classes on Doubt Clearing of Completed topics/Chapters, Special Classes for Slow Learners (involving Students in Groups comprising 5-10)

c) **Practical Class** – Demonstration & Explanation of the Experiments, this would follow by conduction of the Experiment by the students on their own, write up of the Experiment conducted

d) **Clinical Class** – Visit **to** IPD/OPD for gaining Knowledge on Prescription writing, Administration of Homoeopathic medicines based on Homoeopathic Posology, Visiting Hospital Pharmacy to observe & Gain Knowledge on dispensing techniques

e) **Field Visit** – Visit to One GMP Compliant Homoeopathic Manufactory.

Visit to One Medicinal Plant Garden

f) **Student Activities –** Working out the Assignments, Projects, Power point presentations as assigned

7.**CONTENT MAPPING (COMPETENCY TABLE)**

Topic: History of Pharmacy

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to –

Interpret the difference in concept of Pharmacy in different AYUSH systems of medicine

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/ Nice to know	Teaching - Learning Method	Assessment /Evaluation		Integration
										Formative	Type (Summative)	
HomUG-HP-1.1.1	Integration of Knowl	History of Pharmacy with emphasis to emergence of	Knows	Must be able to interpret the difference in	Define Pharmacy	Cognitive	Lvel1 Recall	Must Know	1.Lecture Demonstrations 2. Small Group Discussions/ 3.Peer teaching (Think-Pair-Share,	1.Structured Oral Examination 2. Tutorials	Theory & Viva Voce	Horizontal with Organon of Medicine

	edge Synthesis and application of knowledge	Homoeopathic Pharmacy		concept of Pharmacy among various systems of AYUSH					Jigsaw Strategy) 4. Quiz 5. Student Seminars 6. Integrated Teaching with Organon of Medicine	3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's and LAQ's		
HomUG-HP-1.1.2			Knows		Define Homoeopathic Pharmacy		Level 1 Recall	Must know				
HomUG-HP-1.1.3			Knows		Describe the Basic concepts of Different schools of Pharmacy with reference to AYUSH		Level 2 Understand	Nice to Know				
Hom-UG-HP-1.1.4			Knows		Differentiate between Drug-Medicine-Remedy		Level 2 Understand	Must know				

TOPIC: Basics of Homoeopathic Pharmacy

Topic: Basics of Homoeopathic Pharmacy

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to –
Enumerate the fundamental Principles of Homoeopathic Pharmacy

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/Nice to know	Teaching - Learning Method	Assessment /Evaluation		Integration
										Formative	Summative	Horizontal Integration with Organon of Medicine
HomUG-HP-1.2.1	Integration of Knowledge Synthesis and	Basics of Homoeopathic Pharmacy	Knows	Must be able to state the fundamental Principles governi	1.Enumerate the Sources of Homoeopathic Pharmacy	Cognitive	Level 1 Recall	Must Know	1.Lecture Demonstrations 2. Small Group Discussions / Peer	1.Structured Oral Examination 2. Tutorials 3. Assignm	SAQ MCQ LAQ Viva Voce	

HomUG-HP-1.2.2	Application of knowledge		Knows	ng Homoeopathic Pharmacy	2.Explain the Branches of Homoeopathic Pharmacy		Level 2 Understanding	Must Know	teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student Seminars 5. Guest Lecture 6. Problem based learning	ents 4. MCQ's 5. 2 marks question 6.SAQ's and LAQ's		
HomUG-HP-1.2.3			Knows		3.Illustrate the Scope of Homoeopathic Pharmacy		Level 2 Understanding	Must Know				
Hom-UGHP-1.2.4			Knows		4.Describe the Originality & Specialty of Homoeopathic Pharmacy		Level 2 Understanding	Must Know				
HomUG-			Knows		5.Explain the Funda		Level 2 Understa	Must Know				

HP-1.2.5					mental Principles, Laws & Doctrines related to Homoeopathic Pharmacy		nding					

TOPIC: Nomenclature of Homoeopathic Medicines

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to –
State the basic rules of Nomenclature of Homoeopathic medicines
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Sr. No	Generic Competencies	Subject Area	Miller'sLevel Does / Shows how/ Kno	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative

			ws how/ Know					Nice to know			
Hom UG-HP-1.3.1	Integration of Knowledge Synthesis and Application of knowledge	Nomenclature of Homoeopathic Medicines	Knows	Must be able to describe the principles followed in nomenclature of Homoeopathic medicines	1.State the Basic rules of Nomenclature	Cognitive	Level 1 Recall	Must Know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student Seminars 5. Guest Lecture 6. Problem based learning	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question	SAQ Viva Voce
Hom UG-HP-1.3.2			Knows		2.Describe the nomenclature of Homoeopathic Drugs		Level 2 Understanding	Must Know			
Hom UG-HP-1.3.3			Knows		3.Enumerate the important terminologies related to Nomenclature		Level 1 Recall	Must Know			

Hom UG-HP-1.3.4			Knows		4.Define Scientific Name		Level 1 Recall	Must Know			
Hom UG-HP-1.3.5			Knows		5.Define Common Name		Level 1 Recall	Must Know			
Hom UG-HP-1.3.6			Knows		6.Enumerate the advantages of Scientific Name	Cognitive	Level 1 Recall	Must Know			
Hom UG-HP-1.3.7			Knows		7.Enumerate the Advantages of Common Name	Cognitive	Level 1 Recall	Must know			
Hom UG-HP-1.3.8			Knows		8.Identify the existing anomalies in Nomenclature of Homoeopathic Medicines	Cognitive	Level 3 Problem Solving	Nice to know	1.Lecture Demonstration 2.Procedural Skills Teaching 3. Problem Based Learning		

TOPIC: Pioneers of Homoeopathic Pharmacy

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to.-
State the Contribution of various Pioneers in the field of Homoeopathic Pharmacy

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/Nice to know	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative
HomUG-HP-1.4.1	Integration of Knowledge Synthesis and Application of knowled	Pioneers of Homoeopathic Pharmacy	Knows	Must be able to state the contributions of various pioneers in the field of Homoeopathic Pharmacy	1.Outline the contributions of the Pioneers of Homoeopathy in the field of Homoeopathic Pharmacy	Cognitive	Level 1 Recall	Nice to Know	1.Lecture Demonstrations 2. Small Group Discussions/ 3. Quiz 4. Student Seminars	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question	SAQ MCQ Viva Voce

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TOPIC: Pharmacopoeia

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able abide by the homoeopathic pharmacopoeia guidelines for preparation of homoeopathic medicines.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's levels	Must to know/ desirable to know/ Nice to know	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative
Hom UG-HP-	Problem solution	Pharmacopoeia	Knows	Must be able abide by the	1. Define Pharmacopoeia	Cognitive	Level 1 Recall	Must Know	1.Lecture Demonstrations	1.Structured Oral	SAQ MCQ

1.5.1	Integration of Knowledge Synthesis and application of knowledge			homoeopathic pharmacopoeia guidelines for preparation of homoeopathic medicines.					2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student Seminars	Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's, LAQ's 7.Projects	Viva Voce
Hom UG-HP-1.5.2			Knows		2. Enumerate the different types of homoeopathic pharmacopoeia with suitable examples.		Level 1 Recall	Must Know			
Hom UG-HP.1.5.3			Knows		3. Explain the different types of homoeopathic pharmacopoeia.		Level 2 Understanding	Must Know			
Hom UG-HP-1.5.4			Knows		4. Explain HPI in detail		Level 2 Understanding	Must Know			
Hom UG-HP-1.5.5			Knows		5. Explain what is monograph?		Level 2 Understandi	Must Know			

							ng				
Hom UG-HP-1.5.6			Knows how		6.Apply the guidelines laid down in the official homoeopathic pharmacopoeia w.r.t. identification, collection, preservation, preparation and dispensing of homoeopathic medicine	Cognitive	Level 3 Problem solving	Nice to know	1. Practical Demonstration 2. Lecture Demonstration 3. Projects 4. Herbarium 5. Journal	1. DOPS 2. OSPE 3. Evaluation of projects 4. Evaluation of Journal & Herbarium	SAQ MCQ LAQ Viva Voce Practical Examination / Checklist
Hom UG-HP-1.5.7			Knows how		7.Demonstrate care, professionalism & commitment & follow all the guidelines	Affective	Level 1 Receiving	Nice to know	1. Practical Demonstration 2. Lecture Demonstration	1. DOPS 2. OSPE 3. Evaluation	Viva Voce

					meticulously as given in official homoeopathic pharmacopoeia w.r.t. identification, collection, preservation, preparation and dispensing of homoeopathic medicine				3. Projects 4. Herbarium 5. Journal	of projects 4. Evaluation of Journal & Herbarium	

TOPIC: Plant Kingdom

Topic: Plant Kingdom

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to identify the plant drug substances for preparation of homoeopathic medicines.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/	Specific Competenci	Specific Learning	Bloom's	Guilbert's	Must to	Teaching - Learning	Assessment /Evaluation

			Shows how/ Knows how/ Know	es	Objectives	Domain	Levels	know/ desirable to know/ Nice to know	Method	Formative	Type **S**ummative
Hom UG-HP-1.6.1	Integration of knowledge Synthesis and application of knowledge Classroom to herbarium and lab transfer	Sources of drugs	Knows	Must be able to identify the plant drug substances for preparation of homoeopathic medicines.	1. Explain in detail the part used and drug prepared from plant kingdom	Cognitive	Level 2 Understanding	Must know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student Seminars 5. Guest	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's and LAQ's 7. Herbarium	SAQ MCQ LAQ Viva Voce
Hom UG-HP-1.6.2			Knows		2. List any 4 examples of drugs from particular part of the plant.		Level 1 Recall	Must know			

Hom UG-HP-1.6.3			Knows		3. Explain classification of plant kingdom with examples.		Level 2 Understanding	Must know	Lecture 6. Problem based learning 7. Flipped Classroom 8. Videos		
Hom UG-HP-1.6.4			Does		4. Identify the plant and its parts used for preparation of homoeopathic medicines	Cognitive	Level 3 Problem solving	Must know	1.Practical Demonstration 2.Procedural Skills Teaching 3. Herbarium 4. Experiential learning (Projects)	1.DOPS 2. OSPE 3. Herbarium	Practical Examination
Hom UG-HP-1.6.5			Shows how		5.Demonstrate care while identifying & collecting the plant drug	Affective	Level 1 Receiving	Nice to know	1.Lecture Demonstration 2. Problem Based	1.Herbarium	Practical Examination

					substances				Learning		

TOPIC: Animal Kingdom

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to identify the animal drug substances for preparation of homoeopathic medicines.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom'sDomain	Guilbert's Levels	Must to know/ desirable to know/Nice to know	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative

Hom UG-HP-1.7.1	Integration of knowledge Synthesis and application of knowledge Classroom to herbarium and lab transfer	Sources of drugs	Knows	Must be able to identify the animal drug substances for preparation of homoeopathic medicines.	1. Explain the part used and drug prepared from animal kingdom	Cognitive	Level 2 Understanding	Must know	1.Lecture Demonstrations 2. Small Group Discussions / Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student Seminars 5. Guest Lecture 6. Problem based learning 7. Flipped Classroom 8. Videos	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's and LAQ's 7. Herbarium	LAQ SAQ MCQ Viva Voce
Hom UG-HP-1.7.2			Knows		2. List any 4 examples of drugs from particular part of the animal.		Level 1 Recall	Must Know			

Hom UG-HP-1.7.3			Knows		3. Explain classification of animal kingdom		Level 2 Understanding	Must Know			
Hom UG-HP-1.7.4			Does		4. Identify the animal and its parts used for preparation of homoeopathic medicines	Cognitive	Level 3 Problem Solving	Must Know	1.Practical Demonstration 2.Procedural Skills Teaching 3. Herbarium 4. Experiential learning (Projects)	1.DOPS 2. OSPE 3. Herbarium	Practical Examination
Hom UG-HP-1.7.5			Shows how		5.Demonstrate care while identifying & collecting the animal	Affective	Level 1 Receiving	Must Know	1.Lecture Demonstration 2. Problem Based Learning	1.Herbarium	Practical Examination

					drug substances						

TOPIC: Mineral Kingdom

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to identify the mineral drug substances for preparation of homoeopathic medicines.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/Nice to know	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative
Hom UG-HP-1.8.1	Integration of knowledge Synthesis and application of knowledge Classroom to	Sources of drugs	Knows	Must be able to identify the mineral drug substances for preparation of	1. Explain the part used and drug prepared from mineral kingdom	Cognitive	Level 2 Understanding	Must know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching	1.Structured Oral Examination 2. Tutorials 3. Assignme	LAQ SAQ MCQ Viva Voce

	herbarium and lab transfer			homoeopathic medicines.					(Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student Seminars 5. Guest Lecture 6. Problem based learning 7. Flipped Classroom 8. Videos	nts 4. MCQ's 5. 2 marks question 6.SAQ's and LAQ's 7. Herbarium	
Hom UG-HP-1.8.2			Knows		2. List any 4 examples of drugs from prepared from minerals.		Level 1 Recall	Must know			
Hom UG-HP-1.8.3			Knows		3. Explain the classification of mineral kingdom		Level 2 Understanding	Must know			
Hom UG-HP-1.8.4			Does		4. Identify the mineral used for preparation of homoeopathic medicines	Cognitive	Level 3 Problem solving	Must know	1.Practical Demonstration 2.Procedural Skills Teaching 3. Herbarium 4.	1.DOPS 2. OSPE 3. Herbarium	Practical Examination

									Experiential learning (Projects)		
Hom UG-HP-1.8.5			Shows how		5.Demonstrate care while identifying &collecting the mineral drug substances	Affective	Level 1 Receiving	Nice to know	1.Lecture Demonstration 2. Problem Based Learning	1.Herbarium	Practical Examination

TOPIC: Sarcodes &Nosodes

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to identify the drug substances from nosodes and sarcodes for preparation of homoeopathic medicines.

Sr. No	Generic Compet	Subject	Miller's	Specific Competenc	Specific Learning	Bloom's	Guilbert's Levels	Must to	Teaching - Learning	Assessment /Evaluation

	encies	Area	Level Does/ Shows how/ Knows how/ Know	ies	Objectives	Domain		know/ desirable to know/Nice to know	Method	Formative	Summative
HomUG-HP-1.9.1	Integration of knowledge Synthesis and application of knowledge Classroom to herbarium and lab transfer	Sources of drugs	Knows	Must be able to identify the drug substances from nosodes and sarcodes for preparation of homoeopathic medicines	1. Explain the part used and drug prepared from nosodes	Cognitive	Level 2 Understanding	Must know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student Seminars 5. Guest Lecture 6. Problem	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's and LAQ's	LAQ SAQ MCQ Viva Voce
HomUG-HP-1.9.2			Knows		2. List any 4 examples of drugs from prepared from nosodes.		Level 1 Recall	Must Know			

HomUG-HP 1.9.3			Knows		3. Explain classification of nosodes.		Level 2 Understanding	Must Know	based learning 7. Flipped Classroom 8. Videos		
HomUG-HP 1.9.4			Knows		4.Explain the part used and drug prepared from sarcodes		Level 2 Understanding	Must Know			
HomUG-HP 1.9.5			Knows		5. List any 4 examples of drugs from prepared from sarcodes		Level 1 Recall	Must Know			
HomUG-HP 1.9.6			Knows		6. Explain classification of sarcodes		Level 2 Understanding	Must Know			

HomUG-HP 1.9.7			Does		7. Identify the sarcode/nosode used for preparation of homoeopathic medicines	Cognitive	Level 3 Problem solving	Must know	1.Practical Demonstration 2.Procedural Skills Teaching 3. Experiential learning (Projects)	1.DOPS 2. OSPE	Practical Examination
HomUG-HP 1.9.8			Shows how		8.Demonstrate care while identifying & collecting the diseased part/secretion for preparation of nosodes&healthy part/secretion for preparation of sarcodes	Affective	Level 1 Receiving	Nice to know	1.Lecture Demonstration 2. Problem Based Learning	1.Monographs	Practical Examination

TOPIC: Imponderabilia

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to identify the drug substances from energy sources for preparation of homoeopathic medicines.

Sr. No	Generic Competencies		Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/Nice to know	Teaching - Learning Method	Assessment /Evaluation	
											Formative	Summative
Hom UG-HP-1.10.1	Integration of knowledge Synthesis and application of knowledge Classroom to herbarium and lab transfer		Sources of drugs	Knows	Must be able to identify the drug substances from energy sources for preparation of homoeopathic medicines.	1. Explain the energy used and drug prepared from imponderabilia	Cognitive	Level 2 Understanding	Must know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4.	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's	LAQ SAQ MCQ Viva Voce
Hom UG-HP-1.10.				Knows		2. List any 4 examples of drugs prepared from		Level 1 Recall	Must know			

2						imponderabilia				Student Seminars 5. Guest Lecture	and LAQ's	
Hom UG-HP-1.10.3				Knows		3. Explain classification of imponderabilia.		Level 2 Understanding	Must know	6. Problem based learning 7. Flipped Classroom 8. Videos		
Hom UG-HP-1.10.4				Does		4. Identify the energy source used for preparation of homoeopathic medicines from imponderabilia	Cognitive	Level 3 Problem solving	Nice to know	1.Practical Demonstration 2.Procedural Skills Teaching 3. Experiential learning (Projects)	1.DOPS 2. OSPE	Practical Examination
Hom UG-HP-1.10.				Shows how		5.Demonstrate care & commitment while	Affective	Level 1 Receiving	Nice to know	1.Lecture Demonstration	1.Monographs	Practical Exami

5						identifying & collecting the different energy sources for preparation of imponderabilia medicines				2. Problem Based Learning		nation

TOPIC: Allersodes, Isodes, Synthetic Source

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to identify drug substances of Allersodes, Isodes, Synthetic Source for preparation of homoeopathic medicines.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/Nice to	Teaching - Learning Method	Assessment /Evaluation	
										Form	Summ

								know		ative	ative
Hom UG-HP-1.11.1	Integration of knowledge Synthesis and application of knowledge Classroom to herbarium and lab transfer	Sources of drugs	Knows	Must be able to identify drug substances of Allersodes, Isodes, Synthetic Source for preparation of homoeopathic medicines.	1. Explain the preparation of Allersodes, Isodes& Synthetic Source of homoeopathic medicines	Cognitive	Level 2 Understanding	Must know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student Seminars 5. Guest Lecture 6. Problem based learning 7. Flipped Classroo	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's and LAQ's	LAQ SAQ MCQ Viva Voce
Hom UG-HP-1.11.2			Knows		2. List any 4 examples of drugs prepared from Allersodes, Isodes&Synthetic Source		Level 1 Recall	Must know			

									m 8. Videos		
Hom UG-HP-1.11.3			Does		3. Identify the part used for preparation of Allersodes, Isodes& Synthetic Source.	Cognitive	Level 3 Problem solving	Must know	Experiential learning (Projects)	Projects	Practical Examination
Hom UG-HP-1.11.4			Shows how		4.Demonstrate care & commitment while identifying & collecting the different parts for preparation of Allersodes, Isodes& Synthetic Source	Affective	Level 1 Receiving	Nice to know	1.Lecture Demonstration 2. Problem Based Learning	1.Projects	Practical Examination

TOPIC: Collection of Drug Substances

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to collect a particular part/ source for preparation of homoeopathic drugs

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/Nice to know	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative
HomUG-HP-1.1	Problem solution	Collection of Drug Substances	Knows	Must be able to collect a particular part/	1. Explain the general rules for collecting drugs from	Cognitive	Level 2 Understanding	Must know	1.Lecture Demonstrations	1.Structured Oral Examinatio	LAQ SAQ MCQ Viv

2.1	Integration of Knowledge Synthesis and application of knowledge			source for preparation of homoeopathic drugs	vegetable kingdom.				2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student Seminars 5. Guest Lecture 6. Flipped Classroom 7. Videos	n 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's and LAQ's 7.Projects 8. Herbarium	a Voce
HomUG-HP-1.12.2	Classroom to Herbarium transfer Practice based learning and improvement		Knows		2. Explain the particular rules for collecting drugs from vegetable kingdom.		Level 2 Understanding	Must know			
HomUG-HP-1.12.3			Knows		3. Explain the general rules for collecting drugs from animal kingdom.		Level 2 Understanding	Must know			
HomUG-HP-			Knows		4. Explain the particular rules for		Level 2 Understanding	Must know			

1.12.4					collecting drugs from animal kingdom.						
HomUG-HP-1.12.5			Knows		5. Explain the collection of drugs from mineral kingdom.		Level 2 Understanding	Must know			
HomUG-HP-1.12.6			Knows		6. Explain collection of Nosodes, Sarcodes &Imponderabilia.		Level 2 Understanding	Must know			
HomUG-HP-1.12.7			Does		7. Collect the drugs from vegetable kingdom.	Psycho motor	Level 3 Automation	Must know	1. Practical Demonstrations 2. Procedural Skills Teaching	1.DOPS 2.OSPE 3.Projects 4.Spotting	Practical Examination

									3.Experiential Learning	5.Herbariu m.	
HomUG-HP-1.12.8			Does		8. Collect the drugs from animal kingdom.		Level 3 Automation	Must know			
HomUG-HP.1.12.9			Does		9. Collect the drugs from nosodes, sarcodes & imponderabilia.		Level 2 Control	Must know			
HomUG-HP-1.12.10			Shows how		10. Demonstrate care & commitment while collecting drugs from vegetable kingdom, animal	Affective	Level 1 Recieving	Nice to know	1. Lecture Demonstration 2. Practical Demonstration	Herbarium	Practical Examination

					kingdom, nosodes, sarcodes &impondera bilia.						

TOPIC: Cleansing

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to clean the instruments used in homoeopathic pharmaceutical laboratory.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/Nice	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative

			Know					toknow			
Hom UG-HP-1.13.1	Integration of Knowledge Synthesis and application of knowledge Classroom to Lab transfer Practice based learning and improvement	Clean sing of instru ments	Knows	Must be able to clean the instrume nts used in homoeo pathic pharmac eutical laborator y	1. Explain the cleansing of mortar & pestle.	Cogniti ve	Level 2 Understand ing	Must know	1.Lecture Demonstrati ons 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student Seminars 5. Flipped Classroom	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's 7.Projects	LAQ SAQ MCQ Viva Voce
Hom UG-HP-1.13.2			Knows		2. Explain the cleansing of spatula.		Level 2 Understand ing	Must know			
Hom UG-HP.1.13.3			Knows		3. Explain the cleansing of glass bottles.		Level 2 Understand ing	Must know			
Hom UG-HP.1.13.4			Knows		4. Explain the cleansing of corks.		Level 2 Understand ing	Must know			

Hom UG-HP.1.13.5			Knows		5. Explain the cleansing of wooden instruments.		Level 2 Understanding	Must know			
Hom UG-HP.1.13.6			Does		6. Demonstrate the cleansing of mortar & pestle.	Psycho motor	Level 3 Automatism	Must know	1. Practical Demonstrations 2. Procedural Skills Teaching 3.Experiential Learning	1.DOPS 2.OSPE 3.Spotting	Practical Examination
Hom UG-HP.1.13.7			Does		7. Demonstrate the cleansing of spatula		Level 3 Automatism	Must know			
Hom UG-HP-1.13.8			Does		8. Demonstrate the cleansing of glass bottles.		Level 3 Automatism	Must know			

Hom UG-HP-1.13.9			Does		9. Demonstrate the cleansing of corks.		Level 3 Automatism	Must know			
Hom UG-HP-1.13.10			Does		10. Demonstrate the cleansing of wooden instruments.		Level 3 Automatism	Must know			
Hom UG-HP-1.13.11			Shows how		11. Demonstrate care while cleaning the instruments.	Affective	Level 1 Receiving	Nice to know	1. Lecture Demonstration 2. Practical Demonstration	1.DOPS 2.OSPE	Practical Examination

TOPIC: Lab Methods

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to select and apply a particular lab method for preparation of homoeopathic medicines and for standardization of homoeopathic medicines.

Sr.	Generic	Subject		Miller'	Specific	Specific	Bloom'	Guilbe	Must to	Teaching -	Assessment

no	Competencies	Area		s Level Does/ Shows how/ Knows how/ Know	Competencies	Learning Objectives	s Domain	rt's Levels	know/ desirable to know/Nice to know	Learning Method	/Evaluation	
											Formative	Summative
Hom .UG-HP-1.14.1	Problem solution Integration of Knowledge Synthesis and application of knowledge Classroom to lab transfer Practice based learning and improvement	Lab Methods		Knows	Must be able to select and apply a particular lab method for preparation of homoeopathic medicines and for standardization of homoeopathic medicines	1. Define decantation, sedimentation, filteration, distillation, sublimation, precipitation.	Cognitive	Level 1 Recall	Must know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student Seminars 5. Guest Lecture 6. Problem based	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's and LAQ's 7.Projec	LAQ SAQ MCQ Viva Voce

										learning 7. Flipped Classroom 8. Videos	ts
Hom.UG-HP-1.14.2				Knows		2. Explain the process of decantation,sedimentation, filteration, distillation, sublimation,precipitation		Level 2 Understanding	Must know		
Hom.UG-HP-1.14.3				Knows		3.Explain the homoeopathic uses of decantatio, sedimentation,filteration,distillation,sublimation,precipitation		Level 2 Understanding	Must know		

Hom.UG-HP-1.14.4				Knows how		4.Differentiate between filteration&distillation		Level 2 Understanding	Must know			
Hom.UG-HP-1.14.5				Knows how		5. Differentiate between decantation &filteration in detail.		Level 2 Understanding	Must know			
Hom.UG-HP-1.14.6				Does		6. Select a specific lab method according to the different processes carried out in a homoeopathic pharmacy laboratory.		Level 3 Problem solving	Desirable to know			
Hom.UG-HP-1.14.7				Does		7. Demonstrate the processes decantation,sedimentation,filteration,distillation,subl	Psycho motor	Level 2 Control	Desirable to know	1. Practical Demonstrations 2. Procedural Skills	1.DOPS 2.OSPE 3.Projects	Practical Examination

						imation,precipitation				Teaching 3.Experiential Learning		
Hom.UG-HP-1.14.8				Shows how		8.Demonstrate care & commitment while carrying out the different lab methods involved in preparation of homoeopathic medicine	Affective	Level 1 Receiving	Nice to know	1. Lecture Demonstration 2. Practical Demonstration	DOPS	Practical Examnation

TOPIC: Standardization of homoeopathic drugs

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to select an appropriate method for standardization of homoeopathic medicines.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows	Specific Competencies	Specific Learning Objectives	Bloom'sDomain	Guilbert's Levels	Must to know/ desirable to know/Nic	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative

			how/ Know					e to know			
Hom. UG-HP-1.15.1	Integration of Knowledge Synthesis and application of knowledge Classroom to Lab transfer Practice based learning and improvement	Standardization of homoeopathic drugs	Knows	Must be able to select an appropriate method for standardization of homoeopathic medicines	1. Enumerate the different methods of standardization of homoeopathic drugs	Cognitive	Level 1 Recall	Must know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student Seminars 5. Flipped Classroom 6. Videos	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's 7.Projects	LAQ SAQ MCQ Viva Voce
Hom. UG-HP-1.15.2			Knows		2. Explain the individual method of standardization of homoeopathic drugs	Cognitive	Level 2 Understanding	Must know			
Hom. UG-HP-1.15.3			Does		3. Estimate the standard of homoeopathic drugs before and after manufacturi		Level 2 Control	Desirable to know			

					ng of homoeopathic medicines.	Psycho motor					
Hom. UG-HP-1.15.4			Does		4. Demonstrate the microscopic study of triturations.	Psycho motor	Level 2 Control	Desirable to know	1. Practical Demonstrations 2. Procedural Skills Teaching 3.Experiential Learning 4. Research Projects	1.Spotting 2. Assessment of research project output	Viva Voce & Practical Examinations
Hom. UG-HP-1.15.5			Does		5. Identify the drug specimen applying the different methods of standardization of drugs	Cognitive	Level 3 Problem solving	Desirable to know			
Hom. UG-HP-1.15.6			Does		6. Analyze the purity of mother tincture with the help of HPTLC.	Psycho motor	Level 2 Control	Nice to know			

Hom. UG-HP-1.15.7			Does		7. Analyze and identify the purity of mother substances and dilutions with the help of U.V. Spectroscopy.	Psycho motor		Nice to know			
Hom. UG-HP-1.15.8			Shows how		8.Abide by the rules of standardization of homoeopathic drugs laid down by HPL & value the importance of genuine medicine in homoeopathic practice.	Affective	Level 3 Internalizing	Nice to know	1. Lecture Demonstration 2. Monographs	Herbarium Assignments	Viva Voce

TOPIC: Quality Control in Homoeopathy

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to conduct the quality control as per the appropriate method

Sr. No	Generic	Subject	Miller's	Specific	Specific	Bloom's	Guilbert	Must to	Teachin	Assessment

	Competencies	Area	Level Does/ Shows how/ Knows how/ Know	Competencies	Learning Objectives	Domain	's Levels	know/ desirable to know/Nice to know	g-Learning Method	/Evaluation	
										Formative	Summative
Hom.UG-HP-1.16.1	Integration of Knowledge Synthesis and application of knowledge	Quality control	Knows	Must be able to conduct the quality control as per the appropriate method	1. Enumerate the different methods of quality control.	Cognitive	Level 1 Recall	Must Know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4.	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question	LAQ SAQ MCQ Viva Voce
Hom.UG-HP-1.16.2	Classroom to Lab transfer Practice based learning and improvement		Knows		2. Explain the individual method of quality control in homoeopathy		Level 2 Understanding	Must Know			

Hom.UG-HP-1.16.3			Knows		3.Explain the functions of HPL in quality control of Homoeopathic medicines		Level 2 Understanding	Must Know	Student Seminars 5. Flipped Classroom 6. Videos	6.SAQ's 7.Projects	
Hom.UG-HP-1.16.4			Does		4. Determine the quality of homoeopathic medicine based on the parameters of quality control		Level 3 Problem solving	Nice to Know			
Hom.UG-HP-1.16.5			Does		5. Take part in the process of quality control at different stages of preparation of homoeopathic medicines.		Level 3 Problem solving	Nice to Know			

Hom.UG-HP-1.16.6			D oes, shows how		6. Demonstrate the microscopic study of triturations.	Psycho motor	Level 2 Control	Nice to Know	1. Practical Demonstrations 2. Procedural Skills Teaching 3.Experiential Learning 4. Research Projects	1.Spotting 2.Assessment of the outcome of research projects	Viva Voce & Practical Examinations
Hom.UG-HP-1.16.7					7. Analyze the purity of mother tinctures with the help of HPTLC.		Level 2 Control	Nice to know			
Hom.UG-HP-1.16.8			Does		8. Analyze and identify the purity of mother substances and dilutions with the help of U.V. Spectroscopy.			Nice to know			

Hom.UG-HP-1.16.9			Does		9.Abide by the rules of quality control laid down by HPL & value the importance of genuine medicine in homoeopathic practice.	Affective	Level 3 Internalizing	Nice to know	1. Lecture Demonstration 2. Practical Demonstration	SAQ/LAQ Projects Assignments	Practical Examination

TOPIC: Ideal Laboratory

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to –

1. State the pre requisites of an Ideal Laboratory

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/Nice to	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative

								know			
Hom.UG-HP-1.17.1	Integration of Knowledge Synthesis and Application of knowledge Problem formulation Classroom to lab transfer	Ideal Laboratory	Knows	Must be able to state the pre requisites of an ideal laboratory	List the pre requisites for an ideal Laboratory	Cognitive	Level 2 Understanding	Must Know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student Seminars 5. Guest Lecture 6. Problem based learning	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's and LAQ's	LAQ SAQ MCQ Viva Voce
Hom.UG-HP-1.17.2			Knows		Formulate the Laboratory Safety Rules		Level 3 Problem solving	Nice to know			
Hom.UG-HP-1.17.3			Knows		Describe the role of Laboratory in Homoeopathic Pharmacy education		Level 2 Understanding	Desirable to know			

TOPIC: Industrial Pharmacy

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to –
Correlate the provisions under Schedule M-I

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/Nice to know	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative
Hom. UG-HP-1.18.1	Integration of Knowledge Synthesis and Application of knowledge	Industrial Pharmacy	Knows	Must be able to correlate provisions related to Schedule M1	Explain in details the provisions under Schedule M-I	Cognitive	Level 2 Understanding	Must Know	1.Lecture Demonstrations 2. Small Group Discussions / Peer teaching (Think-Pair-Share, Jigsaw	1.Structured Oral Examination 2. Tutorials 3. Assignments	LAQ SAQ MCQ Viva Voce

	Problem formulatio Classroom to lab transfer								Strategy) 3. Field Visit	4. MCQ's 5. 2 marks questi on 6.SAQ' s and LAQ's

TOPIC: Homoeopathic Vehicles- Solid Vehicles

Topic: Homoeopathic Vehicles- Solid Vehicles

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to select a particular solid vehicle for preparation or dispensing of homoeopathic medicines.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/ Nice to	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative

								know			
Hom.UG-HP-1.19.1	Integration of Knowledge Synthesis and Application of knowledge Problem formulation Classroom to lab transfer	Vehicles	Knows	Selecting a particular solid vehicle for preparation or dispensing of homoeopathic medicines.	1.Define Vehicle	Cognitive	Level 1 Recall	Must Know	1.Lecture Demonstrations 2. Small Group Discussions / Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student Seminars 5. Guest Lecture 6. Problem based learning	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's and LAQ's	LAQ SAQ MCQ Viva Voce
Hom.UG-HP-1.19.2			Knows		2.Classify vehicles in detail		Level 2 Understanding	Must Know			
Hom.UG-HP-1.19.3			Knows		3. List all the solid vehicles used in homoeopathy.		Level 1 Recall	Must Know			
Hom.UG-HP-1.19.4			Knows		4. Explain the preparation, properties and uses of all solid vehicles		Level 2 Understanding	Must Know			

Hom.UG-HP-1.19.5			Does		5. Select the appropriate solid vehicle for dispensing of homoeopathic medicines, potentisation etc.		Level 3 Problem Solving	Must Know			
Hom.UG-HP-1.19.6			Does		6. Identify the given solid vehicle.	Cognitive	Level 3 Problem solving	Must Know	1.Practical Demonstration 2.Procedural Skills Teaching 3. Problem Based Learning 4. Experiential learning	1.DOPS 2. OSPE	Practical Examination
Hom.UG-HP-1.19.7			Show How		7. Estimate the purity of the given solid vehicle.	Psychomotor	Level 2 Control	Must know			
Hom.UG-HP-1.19.8			Shows how		8.Demonstrate care and commitment in preparing & dispensing of homoeopath	Affective	Level 1 Receiving	Nice to know	1.Lecture Demonstration 2.Procedural Skills Teaching	1.DOPS	Practical Examination

					ic medicine with accuracy				3. Problem Based Learning 4. Experiential learning 5. Practical Demonstration		

TOPIC: Homoeopathic Vehicles- Liquid Vehicles

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to select a particular liquid vehicle for preparation or dispensing of homoeopathic medicines.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objective	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/Nice to know	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative
Hom.UG-HP-	Integration of	Vehicles	Knows	Selecting a	1.Define Vehicle	Cognitive	Level 1	Must Know	1.Lecture Demonstrat	1.Structured	LAQ SAQ

1.20.1	Knowledge Synthesis and Application of knowledge Problem formulation Classroom to lab transfer			particular liquid vehicle for preparation or dispensing of homoeopathic medicines.			Recall		ions 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student Seminars 5. Guest Lecture 6. Problem based learning	Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's and LAQ's	MCQ Viva Voce
Hom.UG-HP-1.20.2			Knows		2.Classify vehicles in detail		Level 2 Understanding	Must Know			
Hom.UG-HP-1.20.3			Knows		3. List all the liquid vehicles used in homoeopathy.		Level 1 Recall	Must Know			
Hom.UG-HP-1.20.4			Knows		4. Explain the preparation, properties and uses of all liquid vehicles.		Level 2 Understanding	Must Know			
Hom.UG-HP-1.20.5			Does		5. Select the appropriate liquid vehicle for dispensing of homoeop		Level 3 Problem solving	Must Know			

					athic medicines , potentisation etc.						
Hom.UG-HP-1.20.6			Does		6. Identify the given liquid vehicle.	Cognitive	Level 2 Understanding	Must Know	1.Practical Demonstration 2.Procedural Skills Teaching 3. Problem Based Learning 4. Experiential learning	1.DOPS 2. OSPE	Practical Examination
Hom.UG-HP-1.20.7			Shows how		7. Estimate the purity of the given liquid vehicle.	Psycho motor	Level 2 Control	Must Know			
Hom.UG-HP-1.20.8			Shows how		8.Demonstrate care and commitment in preparing & dispensing of	Affective	Level 1 Receiving	Nice to Know	1.Lecture Demonstration 2.Procedural Skills Teaching 3. Problem Based	1.DOPS	Practical Examination

					homoeopathic medicine with accuracy				Learning 4. Experiential learning 5. Practical Demonstration		

TOPIC: Homoeopathic Vehicles- Semi-solid Vehicles

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to select a particular semi solid vehicle for preparation or dispensing of homoeopathic medicines.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/Nice to know	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative
Hom.UG-HP-1.21.	Integration of Knowl	Semisolid Vehicl	Knows	Selecting a particular semi-solid	1.Define Vehicle	Cognitive	Level 1 Recall	Must know	1.Lecture Demonstrations	1.Structured Oral Examination	LAQ SAQ MCQ Viva

1	edge Synthesis and Application of knowledge Problem formulation Classroom to lab transfer	es		vehicle for preparation or dispensing of homoeopathic medicines.					2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student Seminars 5. Guest Lecture 6. Problem based learning	2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's and LAQ's	Voce
Hom.UG-HP-1.21.2			Knows how		2.Classify vehicles		Level 2 Understanding	Must Know			
Hom.UG-HP-1.21.3			Knows		3. List all the semi-solid vehicles used in homoeopathy		Level 1 Recall	Must Know			
Hom.UG-HP-1.21.4			Knows		4. Explain the preparation, properties and uses of all semi-solid vehicles		Level 2 Understanding	Must Know			
Hom.UG-HP-1.21.5			Does		5. Select the appropriate semi-solid vehicle for dispensing of homoeopathic medicines, preparation of		Level 3 Problem solving	Must Know			

					external applications etc.						
Hom .UG-HP-1.21.6			Does		6. Identify the given semi-solid vehicle.	Cognitive	Level 3 Problem solving	Must know	1.Practical Demonstration 2.Procedural Skills Teaching 3. Problem Based Learning 4. Experiential learning	1.DOPS 2. OSPE	Practical Examination
Hom .UG-HP-1.21.7			Shows how		7. Estimate the purity of the given semisolid vehicle.	Psychomotor	Level 2 Control	Must know			
Hom .UG-HP-1.21.8			Shows how		8.Demonstrate care and commitment in preparing & dispensing of homoeopathic medicine with accuracy	Affective	Level 1 Receiving	Nice to know	1.Lecture Demonstration 2.Procedural Skills Teaching 3. Problem Based Learning 4. Experiential learning	1.DOPS	Practical Examination

									5. Practical Demonstration		

TOPIC: External Applications

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to prescribe an external application as per the scope and limitations of external applications.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom'sDomain	Guilbert's levels	Must to know/ desirable to know/ Nice to know	Teaching - Learning Method	Assessment /Evaluation		Integration
										Formative	Summative	
Hom.UG-HP-1.22.1	Integration of Knowledge Synthesis and Application	External Applications	Knows	Prescribing an external application as per its scope	1.Define External Application	Cognitive	Level 1 Recall	Must know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching	1.Structured Oral Examination 2. Tutorials 3. Assignment	LAQ SAQ MCQ Viva Voce	Horizontal with Organon Medicine

	of knowledge Problem formulation			and limitations					(Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student Seminars 5. Guest Lecture 6. Problem based learning 7. Flipped Classroom	s 4. MCQ's 5. 2 marks question 6.SAQ's and LAQ's		
Hom.UG-HP-1.22.2	Classroom to lab transfer		Knows		2. List all the external applications used in homoeopathy		Level 1 Recall	Must know				
Hom.UG-HP-1.22.3			Knows		3. Explain the preparation &uses of specific homoe		Level 2 Understanding	Must know				

					opathic external applications							
Hom.UG-HP-1.22.4			Knows		4. Explain the scope & limitations of external applications in homoeopathy		Level 2 Understanding	Must know				
Hom.UG-HP-1.22.5			Does		5. Select the appropriate vehicle for		Level 3 Problem solving	Must know				

					preparation of external application.							
Hom.UG-HP-1.22.6			Does		6. Select appropriate external application as per the case.		Level 3 Problem solving	Desirable to Know				
Hom.UG-HP.1.22.7			Does Shows how		7.Demonstrate the preparation of specific external applications	Psychomotor	Level 2 Control	Must know	1.Practical Demonstration 2.Procedural Skills Teaching 3. Problem Based Learning 4. Experiential learning	1.DOPS 2. OSPE	Practical Examination	

Hom .UG-HP-1.22.8			Shows how Does		8.Demonstrate care and commitment in preparing & dispensing of external application with accuracy	Affective	Level 1 Receiving	Nice to know	1.Lecture Demonstration 2.Procedural Skills Teaching 3. Problem Based Learning 4. Experiential learning 5. Practical Demonstration	1.DOPS	Practical Examination	

TOPIC: Metrology

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to select appropriate scale of measurement in the homoeopathic pharmaceutical laboratory.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's levels	Must to know/ desirable to know/Nice to know	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative
Hom.UG-HP-1.23.1	Problem solving Problem formulation Integration of Knowledge	Metrology	Knows	Must be able to select appropriate scale of measurement in the homoeopathic pharmaceutical laboratory.	1. Enumerate the different scales of measurement for preparation of homoeopathic drugs	Cognitive	Level 1 Recall	Must Know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Problem Based learning 5. Flipped classroom	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question	LAQ MCQ Voce

	Synthesis and application of knowledge Classroom to lab tyransfer									6.SAQ's	
Hom.UG-HP-1.23.2			Knows		2. Explain the different scales of measurement for preparation of homoeopathic drugs		Level 2 Understanding	Must Know			
Hom.UG-HP-1.23.3			Does		3. Select appropriate scale of measurement for		Level 3 Proble	Must Know			

					preparation of homoeopathic drugs.		m solving				
Hom.UG-HP-1.23.4			Does		4. Measure the given quantity of the drug substance and vehicle for preparation of homoeopathic medicines	Psychomotor	Level 3 Automatism	Must know	1. Practical Demonstrations 2.Experiential Learning	1. DOPS 2. OSPE	Viva Voce & Practical Examinations
Hom.UG-HP-1.23.5			Shows how		5.Show care while measuring the drugs for preparation of homoeopathic medicines	Affective	Level 2 Respond	Must know	1. Lecture Demonstration 2. Practical Demonstration	1.DOPS 2.OSPE	Theory & Practical Examination

TOPIC: Potentisation& Scales of Potentisation

Learning Outcomes (LO): At the end of the topic of Potentisation, I-BHMS student must be able to:

1. Prepare Homoeopathic Medicine according to the scale.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's level	Must to know/ desirable toknow /Nice to know	Teaching - Learning Method	Assessment /Evaluation		Integration
										Formative	Summative	
Hom.UG-HP-1.24.1	Problem solution Integration of knowledge Practice based learnin	Potentisation	Knows	Prepare Homoeopathic Medicine according to the scale.	1. Explain the different scales of potentisation	Cognitive	Level 2 Understanding	Must Know	1.Lecture Demonstrations 2.Practical Demostrations 3. Small Group Discussions/Peer teaching (Think-Pair-Share, Jigsaw Strategy) 4. Problem based learning	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. SAQ's and LAQ's 5. MCQ's	LAQ SAQ MCQ Viva Voce	Organon o Medicine- Horizontal

Hom.UG-HP-1.24.2	g and improvement Synthesis and Application of knowledge Classroom to lab Practical skills		Knows		2.Explain the two methods potentisation	Cognitive	Level 2 Understanding	Must Know	5. Student Seminars 6.Study Tour (Field Visit) 7. Integrated Teaching with Organon of Medicine	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. SAQ's and LAQ's 5. MCQ's		
Hom.UG-HP-1.24.3			Does		3. Select the appropriate vehicles used for potentisation.	Cognitive	Level 3 Problem solving	Must Know		DOPS Spotting OSPE Assessment of PBL		
Hom.UG-HP-1.24.4			Shows How		4. Demonstrate trituration according to the scale of potentisati	Psychomotor	Level 3 AUTOMATISM	Must Know	1. Practical Demonstration 2.Procedural Skills Teaching	1.DOPS 2. OSPE	Practical Examination	

					on.							
Hom.UG-HP-1.24.5			Shows How		5. Demonstrate succussion according to the scale of potentisation.	Psycho motor	Level 3 AUTOMATISM	Must Know	1. Practical Demonstration 2.Procedural Skills Teaching	1.DOPS 2. OSPE		
Hom.UG-HP-1.24.6			Shows How		6. Prepare 8X (Liq) potency from 6X (Triturate) (Jumping Potency)	Psycho motor	Level 3 AUTOMATISM	Must Know	1. Practical Demonstration 2.Procedural Skills Teaching	1.DOPS 2. OSPE		
Hom.UG-HP-1.24.7			Knows how Shoes how		7.Demonstrate care and commitment in preparing medicine with accuracy	Affective	Level 1 RECIEVING	Nice to Know	Practical Demonstration	DOPS	Practical Examination	

TOPIC: Old Methods of Preparation of Homoeopathic Drugs

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to prepare the homoeopathic medicines as per the old methods.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/ Nice to know	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative
Hom.UG-HP-1.25.1	Problem solution Integration of Knowledge Synthesis	Old Methods of Preparation of Homoeopathic Drugs	Knows	Must be able to prepare the homoeopathic medicines	1. Classify Old Methods of preparation of homoeopathic drugs.	Cognitive	Level 2 Understanding	Must know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy)	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question	LAQ SAQ MCQ, Viva Voce(Formative &Summative)

	and application of knowledge Classroom to lab transfer Practice based learning and improvement			as per the old methods					3. Quiz 4. Student Seminars 5. Guest Lecture 6. Problem based learning 7. Flipped Classroom	6.SAQ's and LAQ's 7.Projects	
Hom.UG-HP-1.25.2			Knows		2.Enlist the fundamental rule, drug strength, drug: vehicle ratio nature of drug substances & 5 examples of drugs under Class I-IX according to Old methods.		Level 1 Recall	Must know			
Hom.UG-HP-1.25.3			Knows		3.Explain the preparation &potentisation of mother tinctures under class I-IV according to the scale.		Level 2 Understanding	Must know			
Hom.UG-HP-1.25.4			Knows		4.Explain the preparation &potentisation of mother solutions under Class V		Level 2 Understanding	Must know			

					& VI according to the scale.					
Hom.UG-HP-1.25.5			Knows		5.Explain the potentisation of mother substances under Class VII, VIII & IX according to the scale.		Level 2 Understanding	Must know		
Hom.UG-HP-1.25.6			Does		6. Demonstrate the preparation of mother tincture under Class I-IV according to Old Methods.	Psychomotor	Level 3 Automatism	Must know	1. Practical Demonstrations 2. Procedural Skills Teaching	1. DOPS 2. OSPE Practical Examination
Hom.UG-HP.1.25.7			Does		7. Demonstrate the potentisation of mother tincture		Level 3 Automatism	Must Know		

					according to the scale under Class I-IV according to Old Method.					
Hom.UG-HP-1.25.8			Does		8.Demonstrate the preparation of mother solution under Class V-VI according to Old Methods.		Level 3 Automatism	Must Know		
Hom.UG-HP-1.25.9			Does		9. Demonstrate the potentisation of mother solution according to the scale under Class V-VI according to Old Method		Level 3 Automatism	Must Know		

Hom.UG-HP-1.25.10			Does		10. Demonstrate the potentisation of mother substances according to the scale under Class VII, VIII & IX according to Old Method.		Level 3 Automatism	Must Know			
Hom.UG-HP-1.25.11			Shows how		11.Demonstrate care & commitment in preparing and dispensing medicine with accuracy according to the scale and Class under Old Methods.	Affective	Level 1 Receiving	Nice to know	1. Practical Demonstration	DOPS	Practical Examination

TOPIC: New Methods of Preparation of Homoeopathic Drugs

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to prepare the homoeopathic medicines as per the new methods.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/ Nice to know	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative
HomUG-HP-1.26.1	Problem solution Integration of Knowledge Synthesis and application of knowledge	New Methods of Preparation of Homoeopathic Drugs	Knows	Must be able to prepare the homoeopathic medicines as per the new methods	1. Define Maceration & Percolation.	Cognitive	Level 1 Recall	Must know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student Seminars 5. Guest Lecture 6. Problem based learning 7. Flipped	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's and LAQ's 7.Projects	LAQ SAQ MCQ Viva Voce
HomUG-HP-1.26.2			Knows		2. Explain the process of maceration		Level 2 Understanding	Must know			
HomUG-HP-1.26.3			Knows		3.Explain the process of percolation		Level 2 Understanding	Must know			

HomUG-HP-1.26.4	Classroom to lab transfer Practice based learning and improvement		Knows how		4.Differentiate between old & new methods of preparation of homoeopathic drugs		Level 2 Understanding	Must know	Classroom 8. Videos		
HomUG-HP-1.26.5			Knows how		5.Differentiate between maceration & percolation in detail.		Level 2 Understanding	Must know			
HomUG-HP-1.26.6			Knows		6. Define the terms-merc, magma, menstrum		Recall	Must know			
HomUG-HP-1.26.7			Does		7. Demonstrate the preparation of mother tincture by maceration	Psychomotor	Level 2 Control	Must know	1. Practical Demonstrations 2. Procedural Skills Teaching 3.Experiential Learning	1.DOPS 2.OSPE 3.Projects	Practical Examination

HomUG-HP-1.26.8			Does		8.Demonstrate the preparation of mother solution by percolation		Level 2 Control	Must know			
HomUG-HP-1.26.9			Does		9. Demonstrate the towing of a percolator		Level 2 Control	Desirable to know			
HomUG-HP-1.26.10			Shows how		10.Demonstrate care &commitment in preparing of homoeopathic medicine with accuracy according	Affective	Level 1 Receiving	Nice to know	1. Lecture Demonstration 2. Practical Demonstration	DOPS	Practical Examination

					to the New methods of preparation of homoeopathic drugs.						

TOPIC: Pharmaconomy

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to select appropriate route of administration of homoeopathic medicines.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does / Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/ Nice to know	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative

Hom UG-HP-1.27.1	Integration of Knowledge Synthesis and application of knowledge Classroom to Clinic transfer	Pharmaconomy	Knows	Must be able to select appropriate route of administration of homoeopathic medicines	1. Enumerate the different routes of administration of homoeopathic medicines.	Cognitive	Level 1 Recall	Must know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Flipped Classroom 6. Videos	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's 7.Projects	LAQ SAQ MCQ Viva Voce
Hom UG-HP-1.27.2			Knows		2. Explain the different routes of administration of homoeopathic medicines.		Level 2 Understanding	Must know			
Hom UG-HP-1.27.3			Does		3. Select appropriate route of administration of homoeopathic medicines according to the case		Level 3 Problem solving	Desirable to know			
Hom UG-HP-					4. Administer the homoeopathi	Psychomotor	Level 2 Control	Nice to know	1. Practical Demonstrations	1. Case based assessment 2. Simulation	Viva Voce

1.27.4			Shows how		c medicine through appropriate route of administration according to the case				2.Experiential Learning 3. Projects 4. Case based Learning 5. Simulation teaching	based assessment		
Hom UG-HP-1.27.5			Knows how		5.Show care while administering homoeopathic medicine via different routes	Affective	Level 2 Respond	Desirable to know	1. Lecture Demonstration 2. Practical Demonstration 3. Case based Learning 4. Simulation teaching	Case based assessment 2. Simulation based assessment	LAQ MCQ Voce	SAQ Viva

TOPIC: Dispensing of Medicines

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be to

1. Select an appropriate dosage form for dispensing of homoeopathic medicines.
2. Dispense homoeopathic medicine to patients.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/ Nice to know	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative
Hom UG-HP-1.28.1	Problem solution Integration of Knowledge Synthesis and Application of Knowledge Classroom to	Dispensing of homoeopathic medicines	Knows	Select an appropriate dosage form for dispensing of homoeopathic medicines. Dispense homoeopathic medicine to patients	1. Enumerate the different dosage forms.	Cognitive	Level 1 Recall	Must know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student Seminars 5. Problem based learning 6. Guest Lecture	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's and LAQ's	LAQ SAQ MCQ Viva Voce
Hom UG-HP-1.28.2			Knows		2. Explain the various modes for dispensing of solid dosage forms		Level 2 Understanding	Must know			

Hom UG-HP-1.28.3	OPD/IPD/ Pharmacy transfer		Knows		3. Explain the various modes for dispensing of liquid dosage forms		Level 2 Understanding	Must know			
Hom UG-HP-1.28.4			Knows		4. Enlist the vehicles used for dispensing of various dosage forms		Level 1 Recall	Must know			
Hom UG-HP-1.28.5			Knows		5. Explain the quality assurance while dispensing homoeopathic medicines.		Level 2 Understanding	Nice to know			
Hom UG-HP-1.28.6			Shows how Does		6. Demonstrate the dispensing of liquid dosage forms	Psychomotor	Level 2 Control	Must know	1.Practical Demonstration 2.Procedural Skills Teaching 3. Problem Based Learning 4. Experiential learning	1.DOPS 2. OSPE	Practical Examination
Hom UG-HP-1.28.			Shows how Does		7. Demonstrate the dispensing of solid dosage		Level 2 Control	Must know			

7					forms						
Hom UG-HP-1.28.8			Does		8. Demonstrate care and commitment while dispensing of homoeopathic medicines.	Affective	Level 1 Receiving	Nice to know	1.Lecture Demonstration 3. Problem Based Learning	1.DOPS	Practical Examination

TOPIC: Placebo

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to indicate placebo in a particular case

Sr. No	Generic Competencies	Subject Area	Miller's Level Does / Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's levels	Must to know/ desirable to know/Nice to know	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative

Hom UG-HP-1.29.1	Problem solution Integration of Knowledge	Placebo	Knows	Must be able to indicate placebo in a particular case	1. Define Placebo	Cognitive	Level 1 Recall	Must Know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Case based learning	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's, 7.Projects	LAQ MCQ Voce	SAQ Viva
Hom UG-HP-1.29.2	Synthesis and application of knowledge		Knows		2. Enumerate the vehicles used as placebo		Level 1 Recall	Must Know				
Hom UG-HP-1.29.3	Classroom to clinic transfer		Knows		3. Explain the indications of placebo		Level 2 Understanding	Must Know				
Hom UG-HP-1.29.4			Does		4.Select a placebo for a particular case		Level 3 Problem solving	Must Know				

TOPIC: Preservation of Homoeopathic Medicines

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to preserve homoeopathic medicines for long shell life.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/Nice to know	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative
Hom UG-HP-1.30.1	Integration of Knowledge	Preservation of Homoeopathic medicine	Knows	Must be able to preserve homoeopathic medicines for long shell life	1. Enumerate the different methods of preservation of homoeopathic medicines	Cognitive	Level 1 Recall	Must Know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's	LAQ SAQ MCQ Viva Voce
Hom UG-HP-1.30.2	Synthesis and application of knowledge		Knows		2. Explain the individual method of preservation of homoeopathic medicine.		Level 2 Understanding	Must Know			

Hom UG-HP-1.30.3	Classroom to Clinic transfer Practice based learning and improvement		Does		3. Select an appropriate mode of preservation of homoeopathic medicines.		Level 3 Problem solving	Must Know		7.Projects	
Hom UG-HP-1.30.4			Does		4. Demonstrate the method of preservation of mother substances & preparations	Psychomotor	Level 2 Control	Desirable to Know	1. Practical Demonstrations 2. Procedural Skills Teaching 3.Experiential Learning 4. Projects	Viva Voce Practical Examination	Practical Examination
Hom UG-HP-1.30.5			Does		5. Demonstrate the method of preservation of potentised homoeopathic medicines			Desirable to Know			

Hom UG-HP-1.30.6			Does		6. Demonstrate the method of preservation of homoeopathic mother tinctures			Desirable to Know			
Hom UG-HP-1.30.7			Shows how		7.Show care & commitment while preserving homoeopathic preparations and potentised medicine.	Affective	Level 2 Respond	Nice to know	1. Lecture Demonstration 2. Practical Demonstration	SAQ, 2 marks question Projects Assignments Tutorials Viva Voce Practical Examination	Practical Examination

TOPIC: Pharmacovigilance and adverse drug reaction

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to identify any adverse drug reaction and comprehend the necessity of pharmacovigilance in homoeopathy

Sr.	Generic	Subject	Miller's	Specific	Specific	Bloom's	Guilber	Must to	Teaching -	Assessment /Evaluation

No	Competencies	Area	Level Does/ Shows how/ Knows how/ Know	Competencies	Learning Objectives	Domain	t's levels	know/ desirable to know/Nice to know	Learning Method	Formative	Summative
Hom UG-HP-1.31.1	Problem solution Integration of Knowledge Synthesis and application of knowledge Classroom to clinic transfer	Pharmacovigilance and adverse drug reaction	Knows	Must be able to identify any adverse drug reaction Comprehend the of pharmacovigilance in homoeopathy	1. Define adverse drug reaction	Cognitive	Level 1 Recall	Must Know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Case based learning	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's, 7.Projects	LAQ MCQ Voce SAQ Viva
Hom UG-HP-1.31.2			Knows		2. Enumerate the types of adverse drug reactions		Level 1 Recall	Must Know			
Hom UG-HP-1.31.3			Knows		3. Explain the management of adverse drug reactions in homoeopathy		Level 2 Understanding	Must Know			
Hom UG-HP-1.31.4			Knows		4.Define pharmacovigilance		Level 1 Recall	Desirable to Know			

Hom UG-HP-1.31.5			Knows		5.Explain in detail the process of pharmacovigilance in Homoeopathy		Level 2 Understanding	Desirable to know			

TOPIC: Doctrine of Signature

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to apply doctrine of signature while selecting a Homoeopathic simillimum.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Domain	Guilbert's Levels	Must to know/ desirable to know/Nice toknow	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative
Hom UG-HP-1.32.1	Problem formulation Integration of Knowl	Doctrine of Signature	Knows	Must be able to apply doctrine of signature while selecting a	1. Define Doctrine of Signature	Cognitive	Level 1 Recall	Must Know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question	LAQ SAQ MCQ Viva Voce
Hom UG-HP-1.32.2			Knows		2. Explain doctrine of signature with suitable examples		Level 2 Understanding	Must Know			

Hom UG-HP-1.32.3	edge Synthesis and application of knowledge		Knows how	Homoeopathic similimum	3.Apply the logic behind doctrine of signature in patients showing the same signs particularly in one sided case.		Level 3 Problem solving	Nice to know	Seminars 5. Case based learning 6.Case Simulation 7. Experiential Learning	6.SAQ's 7.Projects 8.Assessment of case 9. Simulation assessment	
Hom UG-HP-1.32.4			Shows how		4.Select a remedy for a one -sided case based on the doctrine of signature		Level 3 Problem solving	Nice to know			
Hom UG-HP-1.32.5			Shows hows		5.Demonstrate care, professionalism &commitment while prescribing on the basis of doctrine of signature	Affective	Level 2 Respond	Nice to know	1. Case based learning 2. Case Simulation 3.Experiential Learning	1. Assessment of case 2. Simulation assessment	Viva Voce

TOPIC: Drug Proving

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to prove a given drug on healthy human being

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's level	Must to know/ desirable to know/Nice to know	Teaching - Learning Method	Assessment /Evaluation		Integration
										Method Formative	Type (Summative)	
HomUG-HP-1.33.1	Problem Solution Integration of Knowledge Synthesis and application of knowledge	Drug Proving	Knows	Proving a given drug on healthy human being	1. Define Drug Proving.	Cognitive	Level 1 Recall	Must Know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 4. Quiz 5. Student Seminars 6. Guest Lecture 7. Integrated	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5.SAQ's and LAQ's 6. 2 marks questions	LAQ SAQ MCQ Viva Voce	Horizontal with Organon of Medicine
HomUG-HP-1.33.2			Knows		2. Illustrate the qualities of an ideal prover.	Cognitive	Level 1 Recall	Must Know				
HomUG-HP-1.33.3			Shows how		3. Apply the selection criteria (inclusion & exclusion) for provers during drug proving.	Cognitive	Level 3 Problem Solving	Desirable to know				

HomUG-HP.1.33.4	Problem solving		Knows		4. Explain the methodology for drug proving.	Cognitive	Level 2 Understand	Must Know	Teaching with Organon of Medicine			
HomUG-HP-1.33.5			Does		5. Design the protocol for Drug Proving.	Cognitive	Level 3 Problem Solving	Nice to know	1. Lecture Demonstration 2.Procedural Skills Teaching 3. Problem Based Learning 4. Role Plays 5. Experiential learning 6. Team based learning	1.Simulation based assessment	LAQ SAQ Viva Voce	
HomUG-HP-1.33.6			Does		6. Select ideal prover for drug proving		Level 3 Problem Solving	Desirable to know				
HomUG-HP-1.33.7			Does		7. Prepare the test substance for drug proving.	Psychomotor	Level 2 Control	Nice to know				
HomUG-HP-1.33.8			Does		8. Formulate the team for drug proving	Cognitive	Level 3 Problem Solving	Nice to know				
HomUG-HP-1.33.9			Does		9. Record the symptoms of drug proving	Psychomotor	Level 2 Control	Nice to know				

HomUG-HP-1.33.10			Does		10. Interprete the provers symptoms	Cognitive	Level 3 Problem solving	Nice to know				
HomUG-HP-1.33.11			Does		11. Translate the provers symptoms in Materia Medica language		Level 3 Problem solving	Nice to know				
HomUG-HP-1.33.12			Shows how		12. Show professionalism and care during drug proving towards the provers.	Affective	Level 2 Responding	Nice to know	1. Lecture Demonstration 2.Procedural Skills Teaching 3. Problem Based Learning 4. Role Plays 5. Experiential learning 6. Team based learning	1.Simulation based assessment	Viva Voce	
HomUG-HP-1.33.13			Does		13. Value the privacy & integrity of the provers.		Level 3 Internalize	Nice to know				
HomUG-HP-1.33.14			Does		14. Value the consent of the prover.		Level 3 Internalize	Nice to know				

HomUG-HP-1.33.15			Does		15. Value the ethical considerations during drug proving.		Level 3 Internalize	Nice to know				

TOPIC: Posology

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to

1. Select a particular potency for a particular case.
2. Select a particular dose for a particular case.
3. Repeat the dose as per the criteria for repletion of doses.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable	Teaching - Learning Method	Assessment /Evaluation		Integration
										Formative	Summative	

			how/ Know					to know/ Nice to know				
HomUG-HP-1.34.1	Problem solution Integration of Knowledge Practice based learning and improvement Synthesis and application of knowledge	Posology	Knows	Selecting a particular potency for a particular case. Selecting a particular dose for a particular case. Repeating the dose as per the criteria for repletion of doses.	1.Define posology	Cognitive	Level 1 Recall	Must Know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student Seminars 5. Guest Lecture 6. Integrated Teaching with Organon of Medicine 7. Case based learning 8. Case simulation learning	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's and LAQ's 7. Simulation based assessment 8. Case based assessment	LAQ SAQ MCQ Viva Voce	Horizontal with Organon of Medicine
HomUG-HP-1.34.2			Knows		2.Explain the criteria for selection of potency		Level 2 Understand	Must know				
HomUG-HP-1.34.3			Knows how		3.Apply the criteria for selection of potency for a particular		Level 3 Problem solving	Desirable to know				

	Classroom to OPD/IPD transfer				case.							
HomUG-HP-1.34.4			Knows		4. Enlist the different types of doses		Level 1 Recall	Must know				
HomUG-HP-1.34.5			Knows		5. Explain the criteria for repetition of doses.		Level 2 Understanding	Must know				
HomUG-HP-1.34.6			Shows how		6.Apply the criteria for repetetion of doses for a particular case.		Level 3 Problem Solving	Desirable to know				
HomUG-HP-1.34.7			Does		7. Choose the correct potency for a particular case		Level 3 Problem Solving	Desirable to know	1. Lecture Demonstration 2.Procedural Skills Teaching 3. Problem Based Learning 4. Experiential learning	1.Simulation based assessment 2. Case based assessment 3. OSPE	LAQ SAQ MCQ Practical Examination	

									5. Team based learning 6.Case based learning 7. Case simulation learning			
HomUG-HP-1.34.8			Does		8. Choose the proper dosage for a particular case		Level 3 Problem Solving	Desirable to know				
HomUG-HP-1.34.9			Does		9. Design the dosage and repetition for a particular case		Level 3 Problem Solving	Nice to know				
HomUG-HP-1.34.10			Shows how		10.Show professionalism and care while selection of potency & dose.	Affective	Level 2 Respond	Nice to know	1.Lecture Demonstration 2.Procedural Skills Teaching 3. Problem Based Learning 4. Experiential	1.Simulation based assessment	Viva Voce	

HomUG-HP-1.34.11			Shows how		11. Value the privacy & integrity of the patient/case		Level 3 Internalize	Nice to know	learning 5. Team based learning 6. Case based learning 7. Case simulation learning			
HomUG-HP-1.34.12			Shows how		12. Value the ethical considerations during selection of potency, dose and repetition of doses		Level 3 Internalize	Nice to know				
HomUG-HP-1.34.13			Shows how		13. Value the importance of rational prescription		Level 3 Internalize	Nice to know				

TOPIC: Prescription Writing

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must have knowledge of writing an ideal prescription

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Level	Must to know/ desirable to know/Nice to know	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative
Hom UG-HP-1.35.1	Integration of Knowledge Practice based learning and improvement Synthesis and application of	Prescription Writing	Knows	Writing an ideal prescription	1.Define Prescription writing.	Cognitive	Level 1 Recall	Must Know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student Seminars 5. Guest Lecture 6. Case based	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's and LAQ's	LAQ SAQ MCQ Viva Voce
Hom UG-HP-1.35.2			Knows		2.Explain the parts of an ideal prescription.		Level 2 Understanding	Must Know			
Hom UG-HP-1.35.3			Knows		3. List the abbreviations used in prescription writing with		Level 1 Recall	Must Know			

	knowledge				meaning.				learning 7. Case simulation learning		
Hom UG-HP-1.35.4	Problem solution Classroom to OPD/IPD Transfer		Knows		4. Explain the advantages of prescription to the patients and to the physician.		Level 2 Understanding	Must Know			
Hom UG-HP-1.35.5			Shows how		5. Critically analyse a prescription for any faults.		Level 3 Problem solving	Nice to know			
Hom UG-HP-1.35.6			Does		6. Write an ideal prescription	Psychomotor	Level 2 Control	Must know	1. Lecture Demonstration 2.Procedural Skills Teaching 3. Problem Based Learning 4. Experiential learning	1.Simulation based assessment 2. Case based assessment 3. OSPE	Practical Examination
Hom UG-HP-			Shows how		7. Criticize a wrong prescription	Cognitive	Level 3 Problem	Nice to know			

1.35.7							solving		5. Team based learning 6.Case based learning 7. Case simulation learning 8. Practical Demonstration		
Hom UG-HP-1.35.8			Shows how		8.Show professionalism and commitment while writing a prescription with accuracy.	Affective	Level 2 Respond	Nice to know	1.Lecture Demonstration 2.Procedural Skills Teaching 3. Problem Based Learning 4. Experiential learning 5. Team based learning 6. Case based learning 7. Case simulation learning	1.Simulation based assessment	Practical Examination
Hom UG-HP-1.35.9					9. Value the privacy & integrity of the prescription.		Level 3 Internalize	Nice to know			

Hom UG-HP-1.35.10					10. Value the ethical considerations during writing a prescription		Level 3 Internalize	Nice to know	8. Practical Demonstration		
Hom UG-HP-1.35.11					11. Value the importance of rational prescription		Level 3 Internalize	Nice to know			

TOPIC: Legislation

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to follow and practice ethically all the laws that govern homoeopathic pharmacy.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows	Specific Competencies	Specific learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/Ni	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative

			how/ Know					ce to know				
Hom UG-HP-1.36.1	Integration of Knowledge Synthesis and Application of knowledge Problem solution	Legislation	Knows	Must be able to follow and practice ethically all the laws that govern homoeopathic pharmacy.	1.List all the acts that govern the legal aspects of homoeopathic pharmacy.	Cognitive	Level 1 Recall	Must know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student Seminars 5. Guest Lecture 6. Problem based learning 7. Flipped Classroom	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's and LAQ's	LAQ Voce	Viva
Hom UHP-1.36.2			Knows		2. Illustrate the provisions under the Drugs & Cosmetic Act		Level 2 Understanding	Must know				
Hom UG-HP-1.36.3			Knows		3. Illustrate the provisions under the Schedule M1		Level 2 Understanding	Must know				
Hom UG-HP-1.36.4			Knows		4. Illustrate the provisions under the Drugs & Magic Remedies Act		Level 2 Understanding	Must know				

Hom UG-HP-1.36.5			Knows		5. Illustrate the provisions under the Medicinal & Toilet Preparation Act		Level 2 Understanding	Must know			
Hom UG-HP-1.36.6			Knows		6. Illustrate the provisions under the Dangerous Drugs Act		Level 2 Understanding	Must know			
Hom UG-HP-1.36.7			Knows		7. Illustrate the provisions under the Prevention of Illicit Traffic in Narcotic Drugs & Psychotropic Substances Act		Level 2 Understanding	Must know			
Hom UG-HP-1.36.8			Knows		8. Illustrate the provisions under the Homoeopathic Central Council Act		Level 2 Understanding	Must know			
Hom UG-HP-1.36.			Does Shows how		9.Demonstrate the labelling of homoeopathic medicine	Psychomotor	Level 2 Control	Must know	1.Practical Demonstration 2.Procedural	1.DOPS 2. OSPE	LAQ Practical Examination

9					according to Part IX of the Drugs & Cosmetic Act 1940				Skills Teaching 3. Problem Based Learning 4. Experiential learning		
Hom UG-HP-1.36.10			Knows		10.Demonstrate care and commitment and abide by the provisions laid down in the various acts.	Affective	Level 1 Receiving	Nice to know	1.Lecture Demonstration 3. Problem Based Learning	Role Play Assessment	Viva Voce

TOPIC: Drug Action

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to differentiate the different mechanisms of drug action of homoeopathic medicines

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/Nice to know	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative

Hom UG-HP-1.37.1	Integration of Knowledge Synthesis and application of knowledge Classroom to Clinic transfer	Drug Action	Knows how	Must be able to differentiate the different mechanisms of drug action of homoeopathic medicines	1. Classify the different types of drug action.	Cognitive	Level 2 Understanding	Nice to Know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Flipped Classroom 6. Videos 7. Integrated Teaching	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's 7.Projects 8. Spotting	LAQ SAQ MCQ Practical Examination Viva Voce
Hom UG-HP-1.37.2			Knows		2. Explain the individual family drug action according to their sphere of action.		Level 2 Understanding	Desirable to Know			
Hom UG-HP-1.37.3			Knows		3. Explain the individual family drug action according to nature of drug & family relationship.		Level 2 Understanding	Desirable to Know			
Hom UG-HP-1.37.4			Does		4. Analyze the action of drug on patients.	Cognitive	Level 3 Problem solving	Nice to know	1. Practical Demonstrations 2.Experiential Learning	1. Spotting 2. Pharmaco-logical action of 30 drugs as specified	----------

Hom UG-HP-1.37.5			Does		5. Co-relate the action of drugs with the family characteristics.			Nice to know	3. Projects	in journal 3. Projects	
Hom UG-HP-1.37.6			Knows		6.Show care in prescribing homoeopathic medicine based on action of drugs and drug relationships.	Affective	Level 2 Respond	Must know	1. Lecture 2. Integrated teaching of Pharmacological drug action with Materia Medica	Journal Assessment	----------

TOPIC: Relation of Pharmacy with Materia Medica, Anatomy, Physiology

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to correlate homoeopathic pharmacy with Materia Medica, Anatomy and Physiology

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/Nice	Teaching - Learning Method	Assessment /Evaluation	
										Form	Summa

			how/ Know					to know		ative	tive
HomUG-HP 1.38.1	Problem formulation Integration of Knowledge Synthesis and application of knowledge	Relation of Pharmacy with Materia Medica	Knows	Must be able to correlate homoeopathic pharmacy with material medica, Anatomy and Physiology	1. Explain the correlation of homoeopathic pharmacy with the basics of Homoeopathic Materia Medica.	Cognitive	Level 2 Understanding	Desirable to Know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student Seminars 5. Flipped Classroom	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's, LAQ's 7.Projects	SAQ Viva Voce
HomUG-HP- 1.38.2			Knows		2. Explain the correlation of homoeopathic pharmacy with the basics of Anatomy			Desirable to Know			
HomUG-HP- 1.38.3			Knows		3. Explain the correlation of homoeopathic pharmacy and Physiology			Desirable to Know			

HomUG-HP-1.38.4			Knows how		4.Apply the principles of posology during case taking after selection of similimum based on knowledge of Homoeopathic Materia Medica.	Cognitive	Level 3 Problem Solving	Desirable to know	1. Practical Demonstration 2. Lecture Demonstration 3. Experimental Research projects 4. Case based learning 5. Problem based learning 6. Case simulation	1. DOPS 2. OSPE 3. Evaluation of projects 4. Evaluation of case based learning 5. Evaluation of PBL 6. Evaluation of Case simulation	-------
HomUG-HP-1.38.5			Knows how		5. Apply the knowledge of drug action based on familial relationship and remedy relationship as noted in Homoeopathic Materia Medica and organ affection with anatomy			Desirable to know			
HomUG-HP-			Knows how		6. Apply the knowledge of sources of			Desirable to know			

1.38.6					drugs and collection of drugs while preparation of homoeopathic medicines according to the scale of potentisation.						
HomUG-HP-1.38.7			Knows how		7. Apply the knowledge of pharmacological action of drugs with the normal physiology of human body			Desirable to know			
HomUG-HP-1.38.8			Knows how		8.Demonstrate care, professionalism & commitment & follow all the guidelines meticulously as given in 6th edition of Organon of	Affective	Level 1 Receiving	Nice to know	1. Practical Demonstration 2. Lecture Demonstration 3. Experimen	1. DOPS 2. OSPE 3. Evaluation of projects 4. Evaluation of case based	Viva Voce

					medicine while selecting a particular homoeopathic medicine in a particular potency.				tal Research projects 4. Case based learning 5. Problem based learning 6. Case simulation	learning 5. Evaluation of PBL 6. Evaluation of Case simulation	
HomUG-HP-1.38.9					9. Demonstrate care, professionalism & commitment & follow all the guidelines meticulously as given in 6th edition of Organon of medicine while preparation of homoeopathic medicine according to the scale of potentisation.						

HomUG-HP-1.38.10					10. Demonstrate care, professionalism & commitment & follow all the guidelines meticulously as given in 6th edition of Organon of medicine while prescribing a particular external application for a particular case.						
HomUG-HP-1.38.11					11. Should ensure that all the resources are used to the fullest without any wastage while preparing homoeopathic						

					medicine.						

TOPIC: Recent advancements and scope of research in Homoeopathic Pharmacy

Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to undertake a short term research in Homoeopathic Pharmacy

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's levels	Must to know/ desirable to know/Nice toknow	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative
HomUG-HP-1.39.1	Problem solution Integra	Recent advancements and scope of research in	Knows	Must be able to undertake a short term research in	1.Enumerate the types of research in homoeopathic pharmacy	Cognitive	Level 1 Recall	Nice to know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching	1.Structured Oral Examination 2. Assignments 3. MCQ's	---------

	tion of Knowledge Synthesis and application of knowledge Classroom to lab transfer	Homoeopathic Pharmacy		Homoeopathic Pharmacy					(Think-Pair-Share, Jigsaw Strategy) 3. Visit to research laboratories	4.SAQ's	
HomUG-HP-1.39.2			Knows		2.Explain the recent advancements in the field of homoeopathic pharmacy		Level 2 Understanding	Nice to Know			
HomUG-HP-1.39.3			Does		3.Design the protocol for a short term research proposal in homoeopathic pharmacy		Level 3 Problem solving	Nice to know			

Non-Lecture Activities

1. Collection of 30 drugs for herbarium
2. Visit to a Large-scale manufacturing unit of Homoeopathic medicine (GMP compliant).
3. Visit to a Medicinal Plant /Botanical Garden & shall keep details Visit report
4. Clinical Class: Visit to IPD, OPD to take note on prescriptions as per Homoeopathic Principles and keep record

5. Visit to Hospital dispensing section to observe & gain knowledge on Dispensing techniques & Keep Records

8.PRACTICAL TOPICS

Homoeopathic Pharmacy Practicals	
Sr No.	**Particulars of Experiments**
1	Estimation of size of globules
2	Medication of globules (Small Scale)
3	Purity test of Sugar of milk
4	Purity test of water
5	Purity test of Ethyl alcohol
6	Determination of Specific gravity of a given liquid Vehicle & identifying the same.
7	Preparation of dispensing alcohol from strong alcohol.
8	Preparation of dilute alcohol from strong alcohol.
9	Trituration of drug in Old Method (One each of Class VII, VIII & IX)
10	Trituration of one drug as per HPI
11	Succussion in decimal scale from Mother Tincture (Prepared in Old Method) to 3X potency.
12	Succussion in decimal scale from Mother Tincture (Prepared in New Method) to 3X potency
13	Succussion in centesimal scale from Mother Tincture (Prepared in Old Method) to 3C
14	Succussion in centesimal scale from Mother Tincture (Prepared in New Method) to 3C
15	Conversion of Trituration to liquid potency: Decimal scale 6X to 8X potency.

16	Conversion of Trituration to liquid potency: Centesimal scale 3C to 4C potency.
17	Preparation of 0/2 potency (Solid form) (LM scale) of 1 Drug from 3rd Degree Trituration.
18	Preparation of external applications – Lotion
19	Preparation of external applications – Glycerol
20	Preparation of external applications – Liniment
21	Preparation of external applications – Ointment
22	Writing of prescription & Dispensing the Medicine in Water with preparation of Doses
23	Writing of prescription & Dispensing the Medicine in Sugar of Milk with Preparation of Doses
24	Preparation of mother tinctures according to Old Hahnemannian method (Class I, II, III, IV)
25	Preparation of mother solutions according to Old Hahnemannian method (Class Va, Vb, VIa, VIb)

Demonstration

1. Homoeopathic pharmaceutical instruments and appliances with their cleaning (List provided in Appendix C)

2. Estimation of moisture content using water bath

3. Paper chromatography & TLC of any mother tincture

4. Laboratory methods – Sublimation, distillation, decantation, filtration, crystallization.

5. Preparation of mother tincture – Maceration and Percolation

6. Study & demonstration of Drug Substances (listed in Appendix B)-

i)Macroscopic Characteristic (Any 15)

ii) Microscopic characteristic (Any 05)

7. Study & demonstration of vehicles (Solid, Liquid & Semi solid – as available)

8. Microscopical study of Trituration (One drug up to 3X Potency)

9. Medication of Globule (Large Scale)

Activities

1. Collection of 30 drugs for herbarium
2. Visit to a Large-scale manufacturing unit of Homoeopathic medicine (GMP compliant).
3. Visit to a Medicinal Plant /Botanical Garden & shall keep details Visit report
4. Clinical Class: Visit to IPD, OPD to take note on prescriptions as per Homoeopathic Principles &keep record
5. Visit to Hospital dispensing section to observe & gain knowledge on Dispensing techniques & Keep Records

Demonstration

1. Homoeopathic pharmaceutical instruments and appliances with their cleaning (List provided in Appendix C)-06 Hours
2. Estimation of moisture content using water bath-02 Hours
3. Paper chromatography & TLC of any mother tincture-04 Hours
4. Laboratory methods – Sublimation, distillation, decantation, filtration, crystallization.-04 Hours
5. Preparation of mother tincture – Maceration and Percolation- 04 Hours
6. Study & demonstration of Drug Substances (listed in Appendix B)- 10 Hours

i)Macroscopic Characteristic (Any 15)

ii) Microscopic characteristic (Any 05)

7. Study & demonstration of vehicles (Solid, Liquid & Semi solid – as available)- 02 Hours
8. Microscopical study of Trituration (One drug up to 3X Potency)-02 Hours
9. Medication of Globule (Large Scale)-1 Hour

Clinical Hospital Work – Maintain Record (Activities/Posting in Dispensing Section, Prescriptions based on Homoeopathic Principles in IPD/OPD) – Record to be maintained as per format in Appendix G- 20 Hours

Seminar – Maintain Record on Seminar Presentation on Topics of Homoeopathic Pharmacy as assigned- 07 Hours

9. ASSESSMENT

Assessment Summary

9A- Number of papers and Mark Distribution

Sr. No.	Course Code	Papers	Theory	Practical	Viva Voce	Internal Assessment-Practical	Electives Grade Obtained		Grand Total
1	HomUG-HP	1	100	50	40	10			100

9B - Scheme of Assessment (formative and Summative)

Sr. No	**Professional Course**	**1st term (1-6 Months)**			**2nd Term (7-12 Months)**			**3rd Term (13-18 Months)**	
1	First Professional BHMS	1st PA	1ST TT		2nd PA	2ND TT		3rd PA	UE
		10 Marks Practical/Viva	50 Marks Theory	50 Marks Practical/ Viva	10 Marks Practical/Viva	50 Marks Theory	50 Marks Practical/ Viva	10 Marks Practical/Viva	

For Internal assessment, Only Practical/Viva marks will be considered. Theory marks will not be counted.

Method of Calculation of Internal Assessment Marks for Final University Examination:

PA1 Practical/Viva (10 Marks) **A**	PA2 Practical/Viva (10 Marks) **B**	PA3 Practical/Viva (10 Marks) **C**	Periodical Assessment Average PA1+PA2+PA3/3 **D**	TT1 Practical/Viva (50 Marks) **E**	TT2 Practical/Viva (50 Marks) **F**	Terminal Test Average TT1+TT2/100*10 **G**	Final Internal Assessment Marks **D+G/2**

PA- Periodical Assessment **TT-** Terminal Test **UE**- University Examination

9C - Evaluation Methods for Periodical Assessment

Sr. No	Evaluation Criteria
1	Practical Performance
2	Viva Voce

9 D- Paper Layout

MCQ	**10 marks**
SAQ	**40 marks**
LAQ	**50 marks**

9 E– I - Distribution of Theory exam

Sr. No	Paper			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	General Concepts and Orientation	I	Refer Next Table	Yes	Yes	Yes
2	Raw Material: Drugs and Vehicles	I		Yes	Yes	Yes
3	Homoeopathic Pharmaceutics	II		Yes	Yes	Yes
4	Pharmacodynamics	III		Yes	Yes	Yes
5	Quality Control	II		No	Yes	No
6	Legislations pertaining to Homoeopathic Pharmacy	III		No	No	Yes
7	Homoeopathic Pharmacy - Relationships	III		No	Yes	No

9 E – II - Theme table

Theme*	Topics	Term	Marks	MCQ's	SAQ's	LAQ's
A	General Concepts and	I	16	Yes	Yes	Yes

	Orientation					
B	Raw Material: Drugs and Vehicles	I	25	Yes	Yes	Yes
C	Homoeopathic Pharmaceutics	II	23	Yes	Yes	Yes
D	Pharmacodynamics	III	16	Yes	Yes	Yes
E	Quality Control	II	05	No	Yes	No
F	Legislations pertaining to Homoeopathic Pharmacy	III	10	No	No	Yes
G	Homoeopathic Pharmacy - Relationships	III	05	No	Yes	No

9 F Question paper Blueprint

A **Question Serial Number**	**B** **Type of Question**	**Question Paper Format** **(Refer table 7 F II Theme table for themes)**
Q1	Multiple choice Questions (MCQ) 10 Questions 1 mark each All compulsory Must know part: 6 MCQ Desirable to know: 2 MCQ. Nice to know: 2 MCQ	1. Theme A 2. Theme B 3. Theme B 4. Theme B 5. Theme B 6. Theme B 7. Theme C 8. Theme C 9. Theme C 10. Theme D
Q2	Short answer Questions (SAQ) 8 Questions 5 Marks Each All compulsory Must know part: 9 SAQ Desirable to know: 1 SAQ	1. Theme A 2. Theme B 3.Theme B 4. Theme C 5. Theme C 6. Theme D 7. Theme E

	Nice to know: Nil	8. Theme G
Q3	Long answer Questions (LAQ) 5 Questions 10 marks each All compulsory All questions on must know No Questions on Nice to know and Desirable to know	1. Theme A 2.Theme B 3. Theme C 4. Theme D 5. Theme F

9 G - Distribution of Practical Exam

Practical, Viva& Internal Assessment→ 100 marks

Spotting	20 marks
Experiment	20 marks
Journal	10 marks

Viva voce	40 marks
Internal assessment	10 marks

10.LIST OF RECOMMENDED BOOKS

Text Books

1. Dr. Partha Mandal &Dr. Biman Mandal, A Textbook of Homoeopathic Pharmacy, Revised and Enlarged 3rd Edition, 2012, New Central Book Agency Publishers.
2. Dr.Sumit Goel, Art and Science of Homoeopathic Pharmacy, 4TH Enlarged Revised Edition, 2021, IBPP Publishers.
3. Dr. D.D. Banerjee, Augmented Textbook of Homoeopathic Pharmacy, 2 nd Edition, 2012, B. Jain Publishers.
4. Dr. K.P. Mujumdar, Textbook of Homoeopathic Pharmacy, 2013, New Central Book Agency Publishers

Reference Texts

1.Banerjee SK & Sinha N. (Reprint edition, 1993). A Treatise on Homoeopathic Pharmacy. B Jain Publishers, New Delhi.

2. Govt. of India, Ministry of Health & Family Welfare, New Delhi (1971 to 2006). Homoeopathic Pharmacopoeia of India (1-9 Vol.)

3. Hughes R (Reprint edition, 1999). A Manual of Pharmacodynamics. B Jain Publishers, New Delhi.

4. Dr. P.N. Verma &Dr. (Mrs.) InduVaid, Encyclopaedia of Homoeopathic Pharmacopoeia, Vol- I,II,III, Edition 2002,B. Jain Publishers.

APPENDIX – A			
List of drugs included in the syllabus of Homoeopathic Pharmacy for study of Pharmacological action: -			
1.	Aconitum Napellus	16.	Glonoinum
2.	Adonis vernalis	17.	Hydrastis Canadensis
3.	Allium cepa	18.	Hyoscyamus niger
4.	Argentum Nitricum	19.	Kali bichromicum
5.	Arsenicum album	20.	Lachesis
6.	Atropa Belladonna	21.	Lithium carbonicum

7.	Cactus grandifloras	22.	Mercurius corrosivus
8.	Cantharis vesicatoria	23.	Naja tripudians
9.	Cannabis indica	24.	Nitricum acidum
10.	Cannabis sativa	25.	Nux vomica
11.	Cinchona officinalis	26.	Passiflora incarnate
12.	Coffea cruda	27.	Stannum metallicum
13.	Crataegus oxyacantha	28.	Stramonium
14.	Crotalus horridus	29.	Symphytum officinale
15.	Gelsemium sempervirens	30.	Tabacum

APPENDIX – B

List of drugs for identification

i. **Vegetable Kingdom**

1. Aegle folia
2. Anacardium orientale
3. Andrographis paniculata
4. Calendula officianlis
5. Cassia sophera
6. Cinchona officinalis
7. Cocculus indicus
8. Coffea cruda

9. Colocynthis 10. Crocus sativa 11. Croton tiglium 12. Cynodon dactylon 13. Ficus religiosa 14. Holarrhenaantidysenterica 15. Hydrocotyle asiatica 16. Justicia adhatoda 17. Lobelia inflata 18. Nux vomica 19. Ocimum sanctum 20. Opium 21. Rauwolfia serpentina 22. Rheum 23. Saraca indica 24. Senna 25. Stramonium 26. Vinca minor
ii. **Chemicals or Minerals**
1. Acetic acid 2. Alumina

3. Argentum Metallicum
4. Argentum Nitricum
5. Arsenicum Album
6. Calcarea Carbonica
7. Carbo Vegetabilis
8. Graphites
9. Magnesium Phosphoric
10. Natrum Muriaticum
11. Sulphur

iii. **Animal Kingdom**

1. Apis mellifica
2. Blatta orientalis
3. Formica rufa
4. Sepia
5. Tarentula cubensis

Appendix C

List of Instrument & Appliances for Demonstration & Study

Crucible with lid	Test Tube	Tripod stand	Hot Air Oven
Porcelain Basin	Conical Flask	Wire gauze	Water bath
Mortar & Pestle Porcelain	Volumetric flask	Spatula	Macerating Jar
Ointment Slab	Minim glass	Leather pad	Percolator
Chemical Balance	Thermometer	Stop watch	Microscope
Hydrometer	Mortar & Pestle - Glass	Chopping Board	pH Meter
Alcoholometer	Glass Phials	Chopping Knife	Burette
Lactometer	Pyknometer	Sieve	Pipette
Spoon	Measuring Cylinder	Tincture Press	Dropper
Beaker	Graduated Conical Flask	Funnel	Glass Rod

Appendix – D (List of Important Vehicles for Study)

Appendix – D (List of Important Vehicles for Study)		
Solid	**Liquid**	**Semisolid**
Sugar of Milk	Water	Vaseline
Globules	Ethyl Alcohol	Beeswax
Tablets	Glycerine	Lanolin
Cane Sugar	Olive Oil	Spermaceti
	Simple Syrup	Isin glass

	Lavender Oil, Sesame Oil, Rosemary Oil, Almond Oil	

Appendix E
Format for Maintaining Record on visit to Homoeopathic Manufactory (GMP Compliant)
Date of Visit No. of Visiting Students & Teaching Faculty Name of Teaching Faculty Detail of the Instructor/s at the Manufactory How the Tour was arranged Name & Location of the Homoeopathic Manufactory History about the Manufactory Different Sections of the manufactory with its working process Activities of R&D Dept How the visit helped in correlation with topics studied in Theory Conclusion **(Any other related information, not mentioned in format, if required can be included)**

Appendix F
Format for Maintaining Record on visit to Medicinal Plant Garden
Date of the Visit No. of visiting Students & Teaching Faculty Name of Teaching Faculty Detail of Instructor/s How the Tour was arranged Name & Location of the Medicinal Plant Garden History & about the Medicinal Plant Garden A list Medicinal Plants seen with brief description, Conclusion

Appendix G
Format for maintaining record on Hospital Activities (Visit to OPD/IPD & Dispensing Section)
Record on Prescriptions based on Homoeopathic Principles in IPD/OPD No of Cases: Total 10 cases (5 Acute, 5 Chronic) Format - Patient ID Complaint Diagnosis

Details of 1st Prescription – Name of Medicine, Potency, Dose with its Repetition, Second Prescription (if Record is available) Conclusion at the end of Acute & Chronic Cases on Lessons learnt on Homoeopathic Principles
Record on Activities/Posting in Hospital Dispensing Section Total No. of Patients Date wise, Sl No as per Prescription Register, Dosage form- Liquid/solid, Name of Vehicle used, Medication Process etc Conclusion at the end on Lessons learnt on Homoeopathic Dispensing Techniques

Appendix H
Format for Maintaining record on Departmental Seminars

Maintenance of Record on Seminar Presentation on Topics of Homoeopathic Pharmacy as assigned
Circular/Notice of Departmental Seminar
Title of Topic for Presentation,
Date
Presented by Name of Student/s
Brief Report on the Seminar
Any New Information provided by the Speakers
Rating on a Scale of 10
No of Students & Faculty Members attending the Seminar
Photos
Signed by the Departmental Head

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COMPETENCY BASED DYNAMIC CURRICULUM FOR

FIRST BHMS PROFESSIONAL COURSE

(Applicable from Batch 2022-2023 onwards for 5 years or until further notification by National Commission for Homoeopathy whichever is earlier)

(Homoeopathic Materia Medica)

HOMOEOPATHY EDUCATION BOARD

NATIONAL COMMISSION FOR HOMOEOPATHY

MINISTRY OF AYUSH, GOVERNMENT OF INDIA

JAWAHAR LAL NEHRU BHARTIYA CHIKITSA AVUM HOMOEOPATHY ANUSANDHAN BHAVAN

No.61-65, Institutional Area, opp. 'D' block, Janak Puri, New Delhi-110 058

Subject- Homoeopathic Materia Medica

Subject code: HomUG-HMM-I

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1. PREAMBLE

Homoeopathic Materia Medica is the study of the action of drugs on healthy human being as a whole taking into consideration individual susceptibility and its reaction to various circumstances and time. A good prescription by a homoeopath mainly depends upon the case receiving, processing and a sound knowledge of Homoeopathic Materia Medica.

Each drug in Materia Medica not only has its own personality with its mental and physical constitution but also has its own affinity to an area, direction, spread, tissue, organ, system. Study of a drug in context of altered sensation, function and structure covers the pathology caused by it, which is also expressed in the pathogenesis of the drugs. Materia Medica also has symptoms from toxicological and clinical proving. All this knowledge is of utmost importance in order to apply the remedies in various clinical conditions. This can be achieved only by integrating the study of Materia Medica with other parallel subjects taught during the course.

Apart from the source books of Materia Medica there are different types of Materia Medica constructed on different philosophical backgrounds by different authors. Materia Medica also forms the platform of various repertories. Therefore, it becomes very important for a student of homoeopathy to learn the plan and construction of all the basic Materia Medica in order to understand their practical utility in practice.

It is also important to keep in mind that the end point of the teaching of HMM is not to burden the student with information of more number of remedies but to equip with an approach which will help to develop the vision towards self-guided study and apply the knowledge in practice.

This self-directed learning can ultimately lead to a critical approach of studying Materia Medica hence empowering evidence based practice and initiate the process of lifelong learning. Exploring Materia Medica is an endless journey as newer illnesses will keep on emerging and newer drugs or undiscovered facets of existing drugs will be needed to explore for managing these situations.

2. PROGRAM OUTCOMES:

At the end of BHMS program, a student must

1. Develop the competencies essential for primary health care in clinical diagnosis and treatment of diseases through the judicious application of homoeopathic principles

2. Recognize the scope and limitation of homoeopathy and to apply the Homoeopathic Principles for curative, prophylactic, promotive, palliative, and rehabilitative primary health care for the benefit of the individual and community.

3. Discern the relevance of other systems of medical practice for rational use of cross referral and life saving measures, so as to address clinical emergences

4. Develop capacity for critical thinking and research aptitude as required for evidence based homoeopathic practice.

5. Demonstrate aptitude for lifelong learning and develop competencies as and when conditions of practice demand.

6. Be competent enough to practice homoeopathy as per the medical ethics and professionalism.

7. Develop the necessary communication skills to work as a team member in various healthcare setting and contribute towards the larger goals of national policies such as school health, community health, environmental conservation.

8. Identify and respect the socio-demographic, psychological, cultural, environmental & economic factors that affect health and disease and plan homoeopathic intervention to achieve the sustainable development Goal.

3. COURSE OUTCOMES

At the end of BHMS I course, the students should be able to-

1. Define the homoeopathic Materia Medica.
2. Understand the philosophy of homoeopathic Materia Medica.
3. Describe evolution, sources and construction of different types of Homoeopathic Materia Medica.
4. Enumerate the scope and limitations of Homoeopathic Materia Medica.
5. Evolve the portrait and symptomatology of a particular drug using the knowledge of pharmacy, psychology, anatomy, physiology and Organon of medicine.
6. Observe the symptoms of a particular medicine in a clinical set-up with emphasis on individualizing symptoms.

Learning Objectives

1. To define the homoeopathic Materia Medica and grasp the basic concept with philosophy of it based on Hahnemannian directions.
2. To discuss different sources and types of homoeopathic Materia Medica.
3. To understand the drug in context of its pharmacological data, constitution, temperament, sphere of action, pathogenesis, both mental and physical generals, particular symptoms, characteristic/ individualising symptoms, general and particular modalities, relationship with other remedies including doctrine of signature.
4. To study and understand the bio-chemic system of medicine.
5. To identify the symptoms of a sick individual corresponding to the symptoms of a particular drug.
6. To develop an insight into scopes and limitations of homoeopathic Materia Medica.

4. TEACHING HOURS

Distribution of Teaching Hours:

Homoeopathic Materia Medica		
Year	**Teaching hours- Lectures**	**Teaching hours- Non-lectures**
1st BHMS	120	75

4. A. Teaching Hours Theory:

S. no.	**List of Topics**	**Hours**
1.	Definition and introduction of Materia Medica	3
2.	Types of Homoeopathic Materia Medica	3
3.	Sources of Homoeopathic Materia Medica	4
4.	Study of drug picture (term I)	32
5.	Study of drug picture (term II)	33
6.	Theory of Bio chemic salts	2
7.	Individual bio chemic salts	14
8.	Study of drug picture (term III)	28
9.	Scope and Limitation of HMM	1
	Total	120

4.B. Teaching Hours Non-lecture:

Sr. No	**A** **Study Setting**	**B** **Term**	**C** **Teaching Hours**
1	OPD/IPD/Classroom	II & III	75

Non-Lecture Activities (Practical)-

Sr. No	**Non Lecture Teaching Learning methods**	**Time Allotted per Activity**

		(Hours)
1	Group Discussions	5
2	Problem based learning	5
3	Tutorials	10
4	Case Based Learning (live case)	55
	Total	**75**

5. COURSE CONTENTS BHMS I (Theory)

1. Introductory Lectures

a. Definition and introduction of basic Materia Medica. Contrast between Materia Medica and Homoeopathic Materia Medica.
b. Sources, types, construction,scope and limitation of Homoeopathic Materia Medica
c. Theory of biochemic system of medicine, its comparison with Homoeopathy and study of **12 biochemic tissue salts** with their physico-chemical reaction.

2. Homoeopathic medicines:

1. Aconite	18. CalcareaPhos	35. Hypericum
2. Aethusa Cynapium	19. Calendula	36. Ignatia
3. Allium Cepa	20. Carbo Veg	37. Ipecac
4. Aloe Soc	21. Chamomilla	38. Ledum Pal
5. Ammonium Carb	22. Cina	39. Lycopodium
6. Ammonium Mur	23. Cinchona	40. Natrum Carb
7. Antim Crude	24. Cocculus	41. Natrum Mur
8. Antim Tart	25. Coffea Cruda	42. Nux Vomica
9. Apis Mel	26. Colchicum	43. Podophyllum
10. Arnica Montana	27. Colocynth	44. Pulsatilla
11. Ars Alb	28. DioscoriaVillosa	45. Rhus Tox
12.Arum Triph	29. Croton Tig	46. Ruta
13. Baryta Carb	30. Drossera	47. Silicea
14. Belladona	31. Dulcamara	48. Spongia
15. Borax	32. Euphrasia	49. Sulphur
16. Bryonia Alba	33. Gelsemium	50. Symphytum
17. Calc Carb	34. HeparSulph	

3. Biochemic tissue salts:

1. Calc Flour	5. Kali Mur	9. Nat Mur*
2. Calc Phos*	6. Kali Phos	10. Nat Phos
3. Calc Sulph	7. Kali Sulph	11. Nat Sulph

4. FerrPhos	8. Mag Phos	12.Silicea*

**Also included in the list of Homoeopathic medicines, hence total no. of medicines shall remain 59 for BHMS I.*

Contents for Term I:

I. Introductory Lectures

a. Definition and introduction of basic Materia Medica, contrast between Materia Medica and Homoeopathic Materia Medica
b. Sources, types and construction of Homoeopathic Materia Medica

II. Homoeopathic medicines:

1. Arnica montana	8.Natrum Mur
2.Bryonia	9.Rhus tox
3.Baryta carb	10.Ruta
4.Calc Carb	11.Silicea
5.Calendula	12.Sulphur
6.Hypericum	13.Symphytum
7. Ledum pal	

Contents for Term II:

I. Homoeopathic medicines:

1. Aconite nap	11.Colchicum
2.Aloes soc	12. Colocynth
3. Apis mellifica	13.Dioscorea
4. Arsenic Alb	14. Dulcamara
5.Belladona	15. Gelsemium

6.Cina	16. Ignatia
7.Chamomila	17. Lycopodium
8.Carbo veg	18. Nux vomica
9.Cinchona	19. Podophyllum
10.Cocculus	20. Pulsatilla nig.

II. Theory of biochemic system of medicine, its comparison with Homoeopathy

III. Study of 5 **biochemic tissue salts** with their physico-chemical reaction:

1. Calc Flour
2. Calc Phos
3. Calc Sulph
4. Natrum Phos
5.Natrum sulph

Contents for Term III:

I. Homoeopathic medicines:

1. Aethusa cyn	9. Coffea cruda
2. Alliun cepa	10. Croton tig
3. Ammon Carb	11. Drosera
4. Ammon Mur	12. Euphrasia
5. Antim Crud	13.Hephar Sulph
6. Antim Tart	14.Ipecacuanha
7. Arum triph	15.Natrum carb
8. Borax	16.Spongia

II. Study of 5 **biochemic tissue salts** with their physico-chemical reaction:

1. FerrPhos
2. Kali Mur
3. Kali Phos
4. Kali Sulph
5. Mag Phos

III. Scope and limitations of Homoeopathic Materia medica

6. TEACHING LEARNING METHODS

Lectures (Theory)	**Non-lectures (Practical)**
Lectures	Clinical demonstration
Small group discussion	Problem based discussion
Integrated lectures	Case Study
Assignments	
Library reference	

Different teaching-learning methods must be apply for understanding holistic and integrated Materia Medica. There has to be classroom lectures, small group discussions, case discussion where case based learning (CBL) and problem based learning (PBL) are specially helpful. In the applied Materia Medica, case discussion (CBL-PBL) method is beneficial for students. Audio visual (AV) methods for classroom teaching may be an innovative aid in order to demonstrate the related graphics and animations etc. In case of clinical demonstration – DOAP (Demonstration – Observation – Assistance – Performance) is very well applicable.

7. CONTENT MAPPING (COMPETENCIES TABLE)

Topic 1- Definition and introduction of Materia Medica

Sr. No.	Generic Competency	Subject Area	Millers Level: Does / Shows how / Knows how / Knows	Specific Competency	SLO/ Outcome	Blooms Domain	Guilbert's Level	Must Know/ Desirable to know/ nice to know	T-L Methods	Formative Assessment	Summative Assessment	Integration Departments- Horizontal / Vertical/ Spiral
HomUG-HMM-I-1.1	Information Gathering	Definition and introduction of	Knows	Knowledge of fundamen	Define the basic MM and HMM	Cognitive	Remember/ recall	Must Know	Lecture	MCQ, SAQ,	SAQ, Viva voce	Horizontal Integration with

Sr. No.	Generic Competency	Subject Area	Millers Level: Does / Shows how / Knows how / Knows	Specific Competency	SLO/ Outcome	Blooms Domain	Guilbert's Level	Must Know/ Desirable to know/ nice to know	T-L Methods	Formative Assessment	Summative Assessment	Integration Departments- Horizontal / Vertical/ Spiral
HomUG-HMM-I-1.2	Integration of information	materia medica		tals of HMM	Explain what sign and symptoms are with examples		Understand			Viva Voce		Organon of Medicine

Sr. No.	Generic Competency	Subject Area	Millers Level: Does / Shows how / Knows how / Knows	Specific Competency	SLO/ Outcome	Blooms Domain	Guilbert's Level	Must Know/ Desirable to know/ nice to know	T-L Methods	Formative Assessment	Summative Assessment	Integration Departments- Horizontal / Vertical/ Spiral
HomUG-HMM-I-1.3					Contrast between MM and HMM							
HomUG-HMM-I-1.4					Discuss the history of MM with emphasis on Hahneman							

Sr. No.	Generic Competency	Subject Area	Millers Level: Does / Shows how / Knows how / Knows	Specific Competency	SLO/ Outcome	Blooms Domain	Guilbert's Level	Must Know/ Desirable to know/ nice to know	T-L Methods	Formative Assessment	Summative Assessment	Integration Departments- Horizontal / Vertical/ Spiral
					nian directions							

Topic 2- Types of Materia Medica

Sr. No.	Generic Competency	Subject Area	Millers Level : Does / Shows how/ Knows how/ Knows	Specific Competency	SLO/ Outcome	Blooms Domain	Guilbert's Level	Must Know/ Desirable to know/ nice to know	T-L Methods	Formative Assessment	Summative Assessment	Integration Departments- Horizontal / Vertical/ Spiral
HomUG-HMM-I-2.1	Information Gathering Integration of	Types of Materia Medica	Knows	Identify various types of HMM	Describe various types of HMM	Cognitive	Remember/ recall Understand	Must Know	Lecture, small group discussion, demonstration	MCQ, SAQ, Viva Voce	SAQ, Viva voce	Horizontal Integration with Organon of Medicine and Pharmacy
HomUG-HMM-I-2.2					Enumerate types of HMM							

HomUG-HMM-I-2.3	information				Classify Homoeopathic Materia Medica as per its types.							
HomUG-HMM-I-2.4			Knows how		Discuss the characteristics of each type of HMM based on practical utility.			Desirable to know				

Topic 3- Sources of Homoeopathic Materia Medica

Sr. No.	Generic Competency	Subject Area	Millers Level:	Specific Competency	SLO/ Outcome	Blooms	Guilbert's Level	Must Know/ Desira	T-L Methods	Formative	Summative	Integration Departme

			Does/Shows how/ Knows how/ Knows			**Domain**		**ble to know/ nice to know**		**Assessment**	**Assessment**	**nts- Horizontal / Vertical/ Spiral**
HomUG-HMM-I-3.1	Information Gathering Integration of information	Sources of HMM	Knows	Identify various sources of HMM	Describe the sources of HMM	Cognitive	Remember/ recall Understand	Must know	Lecture, Small Group discussion, Demonstration	MCQ, SAQ, Viva Voce	SAQ, LAQ, Viva voce	Horizontal Integration with Organon of Medicine, Homoeopathic pharmacy Vertical and spiral integration with FMT
HomUG-HMM-I-3.2					Understand the concept of source books of HMM							
HomUG-HMM-I-3.3					List the source books of HMM							

HomUG-HMM-I-3.4					Discuss the plans and construction of source books of HMM							

Sr. No.	Generic Competency	Subject Area	Millers Level: Does/Shows how/ Knows how/ Knows	Specific Competency	SLO/ Outcome	Blooms Domain	Guilbert's Level	Must Know/ Desirable to know/ nice to know	T-L Methods	Formative Assessment	Summative Assessment	Integration Departments- Horizontal / Vertical/ Spiral
HomUG-HMM-I-3.5	Information Gathering Integration of information	Sources of HMM	Knows	Identify various sources of HMM	Enumerate different types of proving as sources of HMM	Cognitive	Remember/ recall Understand	Must know	Lecture, Small Group discussion, Demonstration	MCQ, SAQ, Viva Voce	SAQ, LAQ, Viva voce	Horizontal Integration with Organon of Medicine, Homoeopathic pharmacy Vertical and spiral integration with FMT
HomUG-HMM-I-3.6			Knows how		Describe various proving sources of HMM							

HomUG-HMM-I-3.7					Understand the basic concept of various types proving as source of HMM							
HomUG-HMM-I-3.8				Insight into structure of various HMM	Differentiate the construction of different source books of HMM			Desirable to know			SAQ, Viva voce	

Sr. No.	Generic Competency	Subject Area	Millers Level: Does/Shows how/ Knows how/ Knows	Specific Competency	SLO/ Outcome	Blooms Domain	Guilbert's Level	Must Know/ Desirable to know/ nice to know	T-L Methods	Formative Assessment	Summative Assessment	Integration Departments- Horizontal / Vertical/ Spiral
Hom UG-HMM-I-3.9	Information Gathering Integration of information	Sources of HMM	Knows how	Identify various sources of HMM	Understand the construction of various HMM as a compilation based on the source books.	Cognitive	Remember/ recall Understand	Nice to know	Lecture, Small Group discussion, Demonstration	Viva voce	Viva voce	Horizontal Integration with Organon of Medicine, Homoeopathic pharmacy
Hom UG-HMM-I-3.10					Draw the time line of Homoeopathic							

					Materia Medica based on their history, evolution and philosophy							

Topic 4- Homoeopathic Medicines

Sr. No.	Generic Competency	Subject Area	Millers Level: Does/Shows how/ Knows how/ Knows	Specific Competency	SLO/ Outcome	Blooms Domain	Guilbert's Level	Must Know/ Desirable to know/ nice to know	T-L Methods	Formative Assessment	Summative Assessment	Integration Departments- Horizontal/ Vertical/ Spiral
HomUG-HMM-I-4.1	Information Gathering Integration of information Problem formulation	Homoeopathic medicines included in: Term I, II and III	Knows, Knows how, Shows how	1.Evolve the symptom-tology of a particular drug 2. Observe the symptoms of a particular medicin	Describe the drug picture of homoeopathic medicines with following details- pharmacological data, constitution, temperament, sphere of action, doctrine of	Cognitive, Psychomotor	Remember/ recall Understand Interpret	Must Know	Lecture, Small Group discussion, Demonstration (clinical classes in OPD), Problem based learning	MCQ, SAQ, LAQ, Practical, Viva Voce	SAQ, LAQ, Practical, Viva voce	Horizontal Integration with pharmacy, psychology, anatomy, physiology and organon of medicine.

	Practical Skills			e in a clinical set-up	signature, pathogenesis, both mental and physical generals, particular symptoms, characteristic/ individualizing symptoms, general and particular modalities, relationship							Longitudinal and spiral with all allied subjects in BHMS

Sr. No.	Generic Competency	Subject Area	Millers Level: Does/Shows how/ Knows how/ Knows	Specific Competency	SLO/ Outcome	Blooms Domain	Guilbert's Level	Must Know / Desirable to know / nice to know	T-L Methods	Formative Assessment	Summative Assessment	Integration Departments- Horizontal/ Vertical/ Spiral
Hom UG-HMM-I-4.2	Information Gathering Integration of information Problem formulation	Homoeopathic medicines included in: Term I, II and III	Knows, Knows how, Shows how	1.Evolve the symptom-tology of a particular drug 2. Observe the symptoms of a particular	.Formulate the drug picture/ symptomatology of a particular drug using the knowledge of pharmacy, psychology, anatomy, physiology and organon of medicine.	Cognitive, Psychomotor	Remember/ recall Understand Interpret	Must Know	Lecture, Small Group discussion, Demonstration (clinical classes in OPD), Problem based learning	MCQ, SAQ, LAQ, Practical, Viva Voce	SAQ, LAQ, Practical, Viva voce	Horizontal Integration with pharmacy, psychology, anatomy, physiology and organon of medicine.

	Practical Skills			medicine in a clinical set-up								Longitudinal and spiral with all allied subjects in BHMS
Hom UG-HMM-I-4.3					Understand the symptomatology of a particular medicine in regard to a particular system/organ of the body.							

Sr. No.	Generic Competency	Subject Area	Millers Level: Does/Shows how/ Knows how/ Knows	Specific Competency	SLO/ Outcome	Blooms Domain	Guilbert's Level	Must Know / Desirable to know / nice to know	T-L Methods	Formative Assessment	Summative Assessment	Integration Departments- Horizontal/ Vertical/ Spiral
Hom UG-HMM-I-4.4	Information Gathering Integration of information Problem formulation	Homoeopathic medicines included in: Term I, II and III	Knows, Knows how, Shows how	Evolve the symptom-tology of a particular drug	Identify the symptom similarity of a patient with a particular medicine in a clinical set up	Cognitive, Psychomotor	Remember/ recall Understand Interpret	Must Know	Lecture, Small Group discussion, Demonstration (clinical classes in OPD), Problem based learning	MCQ, SAQ, LAQ, Practical, Viva Voce	SAQ, LAQ, Practical, Viva voce	Horizontal Integration with pharmacy, psychology, anatomy, physiology and organon of medicine.
Hom UG-HMM-I-4.5					State the relationship of a medicine with other medicines							

Hom UG-HMM-I-4.6	Practical Skills		Knows how	Observe the symptoms of a particular medicine in a clinical set-up	Understand the relationship status of a medicine and its background	Cognitive	Remember/ recall Understand	Desirable to know	Lecture, Small Group discussion,	MCQ, Viva Voce	Viva voce	Longitudinal and spiral with all allied subjects in BHMS
Hom UG-HMM-I-4.7			Knows how		Observe the variations in symptomatology of a particular medicine in most commonly used HMM of eminent authors	Cognitive	Remember/ recall Understand	Nice to know	Lecture, Small Group discussion, Demonstration	Viva Voce	Viva voce	

Topic 5- Theory of Bio chemic tissue salts, its comparison with homoeopathy and study of 12 tissue remedies with their physico-chemical reaction:

Sr.No.	Generic Competency	Subject Area	Millers Level: Does/Shows how/ Knows how/ Knows	Specific Competency	SLO/ Outcome	Bloom s Domain	Guilbert's Level	Must Know/ Desirable to know/ nice to know	T-L Methods	Formative Assessment	Summative Assessment	Integration Departments- Horizontal / Vertical/ Spiral
HomUG-HMM-I-5.1	Information Gathering, synthesis and application of knowledge in class room	Theory of Bio chemic tissue salts	Knows	Describe the Theory of Bio chemic tissue salts	Describe the Theory of Bio chemic tissue salts	Cognitive	Remember/ recall Understand	Must Know	Lecture, Small Group discussion	MCQ. Viva, Quiz Assignment	SAQ, MCQ	**Horizontal** Pharmacy, Biochemistry and Physiology **Spiral** Can compare the drug pathogenesis with Homoeopa
HomUG-HMM-I-5.2					compare and contrast Homoeopathic system of medicine with Bio chemic tissue salts							

Sr.No.	Generic Competency	Subject Area	Millers Level: Does/Shows how/ Knows how/ Knows	Specific Competency	SLO/ Outcome	Blooms Domain	Guilbert's Level	Must Know/ Desirable to know/ nice to know	T-L Methods	Formative Assessment	Summative Assessment	Integration Departments- Horizontal / Vertical/ Spiral
												thic medicines **Vertical**
HomUG-HMM-I-5.3					co-relate the importance of knowledge of Biochemistry in better understanding of Biochemic tissue salts							Can explore the utility of Biochemic salts in treating deficiencies in Medicine, OBG etc

Sr.No.	Generic Competency	Subject Area	Millers Level: Does/Shows how/ Knows how/ Knows	Specific Competency	SLO/ Outcome	Blooms Domain	Guilbert's Level	Must Know/ Desirable to know/ nice to know	T-L Methods	Formative Assessment	Summative Assessment	Integration Departments- Horizontal / Vertical/ Spiral
HomUG-HMM-I-5.4					List the 12 Bio chemic tissue salts							

Sr. No.	Generic Competency	Subject Area	Millers Level: Does/Shows how/ Knows how/ Knows	Specific Competency	SLO/ Outcome	Blooms Domain	Guilbert's Level	Must Know / Desirable to know/ nice to know	T-L Methods	Formative Assessment	Summative Assessment	Integration Departments- Horizontal/ Vertical/ Spiral
Hom UG-HMM-I-5.5	Information Gathering Integration of information Problem formulation	12 Biochemic medicines included in: Term II and III	Knows, Knows how, Shows how	1.Describe individual Biochemic tissue salts 2.Evolve the symptom-tology of a particular drug	*In addition to the competencies for homoeopathic medicines,* Describe individual Bio chemic tissue salts	Cognitive, Psychomotor	Remember/ recall Understand Interpret	Must Know	Lecture, Small Group discussion, Demonstration (clinical classes in OPD), Problem based learning	MCQ, SAQ, LAQ, Practical, Viva Voce	SAQ, LAQ, Practical, Viva voce	Horizontal Integration with pharmacy, psychology, anatomy, physiology and organon of medicine. Longitudinal and

Hom UG-HMM-I-5.6	Practical Skills			3.Observe the symptoms of a particular medicine in a clinical set-up	Explain the pathogenesis and symptomology of each Bio chemic tissue salts as per Dr, Wilhelm H. Schuessler.							spiral with all allied subjects in BHMS
Hom UG-HMM-I-5.7					Justify the portrait of each tissue salt in correlation with the knowledge of							

					Biochemistry.							

Topic 6- Scope and limitation of homoeopathic Materia Medica:

Sr. No.	Generic Competency	Subject Area	Millers Level: Does/Shows how/ Knows how/ Knows	Specific Competency	SLO/ Outcome	Blooms Domain	Guilbert's Level	Must Know/ Desirable to know/ nice to know	T-L Methods	Formative Assessment	Summative Assessment	Integration Departments- Horizontal / Vertical/ Spiral
HomUG-HMM-I-6.1	Information Gathering	Scope and Limitations of HMM	Knows	Must be able to comprehend the scope and limitations	List the scope and limitations of HMM	Cognitive	Remember/ recall	Must Know	Lecture. Small group	LAQ SAQ Viva,	LAQ SAQ Viva,	Horizontal Integration with pharmacy, psycholog

HomUG-HMM-I-6.2	Integration of information		Knows how	of Homoeopathic Materia Medica	Discuss the scope and limitations of HMM		Understand	Must Know	discussion Case Based learning Problem Based Learning			y, anatomy, physiology and organon of medicine. Longitudinal and spiral with all allied subjects in BHMS
HomUG-HMM-I-6.3			Knows		Discuss the solutions to overcome the limitations of HMM		Understand	Nice to know				

8. ASSESSMENT

Assessment Summary

8A- Number of papers and Mark Distribution

Sr. No.	Course Code	Papers	Theory	Practical (Assignment+ Spotting)	Viva Voce	Internal Assessment- Practical*	Grand Total
1	HomUG-HMM-I	1	100	20+10= 30	60	10	200

*Note- *For Internal assessment, only Viva marks obtained in three PAs and two TTs will be considered as explained in table 8B-1 and to be calculated as per the table 8B-2 given below. Theory marks shall not be taken into account for this purpose.*

8B-I - Scheme of Assessment (formative and Summative)

Sr. No	**Professional Course**	**1st term (1-6 Months)**		**2nd Term (7-12 Months)**		**3rd Term (13-18 Months)**	
1	**First Professional BHMS**	First PA + 1ST TT		2nd PA+2ND TT		3rd PA+UE	
		1st PA	1st TT	2nd PA	2nd TT	3rd PA	UE

		10 marks practical/viva	50 marks theory	50 marks viva	10 marks practical/viva	50 marks theory	50 marks viva	10 marks practical/viva	As per table 8A

PA: Periodical Assessment to be done only through practical/viva; TT: Term Test shall include both theory and viva; UE: University Examinations shall include both theory and viva as per table 8A

8B-II- Method of calculation of internal assessment marks for final university examination:

PA1 Practical/Viva (10 Marks)	**PA2 Practical/Viva (10 Marks)**	**PA3 Practical/Viva (10 Marks)**	**Periodical Assessment Average PA1+PA2+PA3/3**	**TT1 Practical/ Viva (50 Marks)**	**TT2 Practical/ Viva (50 Marks)**	**Terminal Test Average TT1+ TT2/10**	**Final Internal Assessment Marks**
A	**B**	**C**	**D= A+B+C/3**	**E**	**F**	**G=E+F/10**	**D+G/2**

8C - Paper Layout

Summative assessment:

Theory- 100 marks

MCQ	**10 marks**
SAQ	**40 marks**
LAQ	**50 marks**

8 D– I - Distribution of Theory exam

Sr. No	**Paper**			**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	Definition and introduction of basic materia medica and HMM; compare HMM and other Materia Medica	I	Refer Next Table	Yes	Yes	No
2	Sources, types, construction, scope and limitation of Homoeopathic Materia Medica	I,III		Yes	Yes	Yes
3	Theory of Biochemic system of medicine, its comparison with Homoeopathy and study of **12 Biochemic tissue salts** with their physico-chemical reaction	II		Yes	Yes	Yes

4	Drug Picture- 50 Homoeopathic Medicines	II & III		Yes	Yes	Yes

8D– II - Theme table

Theme*	Topics	Term	Marks	MCQ's	SAQ's	LAQ's
A	Definition and introduction of basic materia medica and HMM; compare HMM and other Materia Medica	I	7	Yes	Yes	No
B	Sources, types, construction, scope and limitation of Homoeopathic Materia Medica	I,III	17	Yes	Yes	Yes
C	Theory of Biochemic system of medicine, its comparision with Homoeopathy and study of **12 Biochemic tissue salts** with their physico-chemical reaction	II & III	22	Yes	Yes	Yes
D	Drug Picture- 50 Homoeopathic Medicines	I,II& III	54	Yes	Yes	Yes

8E- Question paper Blue print

Question Serial Number	Type of Question	Question Paper Format (Refer table 8D- II Theme table for themes)
Q1	Multiple choice Questions	1. Theme A

	(MCQ) 10 Questions 1 mark each All compulsory Must know part: 7 MCQ Desirable to know: 2 MCQ. Nice to know: 1 MCQ	2. Theme A 3. Theme B 4. Theme B 5. Theme C 6. Theme C 7. Theme D 8. Theme D 9. Theme D 10. Theme D
Q2	Short answer Questions (SAQ) Eight Questions 5 Marks Each All compulsory Must know part: 6 SAQ Desirable to know: 2 SAQ Nice to know: 0 SAQ	1. Theme A 2. Theme B 3. Theme C 4. Theme C 5. Theme D 6. Theme D 7. Theme D 8. Theme D
Q3	Long answer Questions (LAQ) Five 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 D 4. Theme D 5. Theme D

8F - Distribution of Practical Exam

Practical & Viva-100 marks

Viva voce	60 marks
Practical (Assignment)*	20 marks
Practical (Spotting)	10 marks
Internal assessment**	10 marks (viva/ clinical assessment)

*Assignment shall comprise of compilation of complete drug-portrait of 6 polychrest remedies and 4 biochemic salts

** Method of calculation explained in table no. 8B-II

9. LIST OF RECOMMENDED REFERENCE BOOKS:

- Allen HC, 2005, Keynotes Rearranged and Classified with Leading Remedies of the Materia Medica and Bowel Nosodes, Reprint edition, B.Jain Publishers, New Delhi
- Choudhuri NM, 2006, A Study On Materia Medica Enriched with real case studies, Reprint revised edn, B.Jain Publishers, New Delhi
- Kent JT, 2015, Lectures On Homoeopathic Materia Medica, Reprint edn, B.Jain Publishers, New Delhi
- Burt W, 2009, Physiological Materia Medica, Third edn, B.Jain Publishers, New Delhi
- Boericke W, Dewey W, 2016, The Twelve Tissue Remedies By Schessler, Reprint edn, B.Jain Publishers, New Delhi
- All source books may be referred whenever required.

10. LIST OF CONTRIBUTORS

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COMPETENCY BASED DYNAMIC CURRICULUM FOR

FIRST BHMS PROFESSIONAL COURSE

(Applicable from Batch 2022-2023 onwards for 5 years or until further notification by National Commission for Homoeopathy whichever is earlier)

(HOMOEOPATHIC REPERTORY and CASE TAKING)

HOMOEOPATHY EDUCATION BOARD

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HOMOEOPATHIC REPERTORY and CASE TAKING(I PROFESSIONAL BHMS)

1. COURSE CODE: HomUG-R-I

SUBJECT NAME: HOMOEOPATHIC REPERTORY and CASE TAKING

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1.PREAMBLE

The Homoeopathic Materia Medica has expanded manifold since the proving of “Cinchona Bark” by Dr. Samuel Hahnemann and today we have over five thousand remedies in the Materia Medica. It is impossible for any human mind to memorise all the symptoms of each drug and to recall those symptoms while prescribing. Therefore, the need of indexing of these symptoms along with the drugs producing those symptoms were felt by Dr. Samuel Hahnemann himself and subsequently by other homoeopaths for prescribing at the bedside of the patient.

Homoeopathic Repertory is a Dictionary or Storehouse or an index to the huge mass of symptoms of the Homoeopathic Materia Medica. The repertory is organized in a practical form indicating the relative gradation of drugs. Repertories not only contain symptoms of proving but also clinical and pathological symptoms found in the Homoeopathic Materia Medica. Repertories serve as an instrument at the disposal of the physician for sifting through the maze of symptoms of the vast Homoeopathic Materia Medica.

Repertories aim at simplifying the work of the physician to find the indicated remedy by eliminating the non-indicated remedies**.**Repertorisation is not the end but a means to arrive to the simillimum and reference to Homoeopathic Materia Medica based on sound principles of Philosophy is the final court of appeal.

Each repertory has been compiled on the basis of distinct philosophy, structure and utility. In order to use these instruments effectively, one must understand thoroughly its conceptual base, construction and utility and limitations. Even though there are a number of repertories, the student at the under graduate level is expected to learn the philosophy and application of basic core repertories namely Kent, Boger’s BoenninghausenCharacteristics and Repertory and Boenninghausen’s Therapeutic Pocket Book.The subject of Repertory must not be taught in isolation but must be taught in horizontal integration with Anatomy, Physiology in I BHMS;Pathology, Surgery, Gynaecology and Practice of Medicinein II BHMS; Surgery, Gynaecology, Practice of Medicine in III BHMS and Practice of Medicine in IV BHMS and vertically integrated with Homoeopathic Materia Medica and Organon and Homoeopathic Philosophy in all the years. Integrated teaching in all the years will help the student to grasp and understand the subjects better and connect repertory to all other subjects.

Similarly, case taking demands virtual integration of all the subjects taught from the Ist BHMS to IV BHMS in the consulting room or at the bedside. The physician can never say that he has learnt all that is to the case taking process. Every new patient has a new lesson to teach.

The advent of computerization and resulting software has opened up vast newer avenues to collate and correlate the vast information found in the Homoeopathic Materia Medica through the repertories. Continued exploration of these connections will generate new data, newer repertories and the newer application to existing or newer illnesses.

2.PROGRAMME OUTCOMES:

At the end of the course of the undergraduate studies, the homoeopathic physician must

1.Develop the knowledge, skills, abilities and confidence as a primary care homoeopathic practitioner to attend to the health needs of the community in a holistic manner
2.Correctly assess and clinically diagnose common clinical conditions prevalent in the community from time to time
3.Identify and incorporate the socio-demographic, psychological, cultural, environmental & economic factors affecting health and disease in clinical work
4.Recognize the scope and limitation of homoeopathy in order to apply Homoeopathic principles for curative, prophylactic, promotive, palliative, and rehabilitative primary health care for the benefit of the individual and community
5.Be willing and able to practice homoeopathy as per medical ethics and professionalism.
6.Discern the scope and relevance of other systems of medical practice for rational use of cross referrals and role of life saving measures to address clinical emergencies
7.Develop the capacity for critical thinking, self-reflection and a research orientation as required for developing evidence based homoeopathic practice.
8.Develop an aptitude for lifelong learning to be able to meet the changing demands of clinical practice
9.Develop the necessary communication skills and enabling attitudes to work as a responsible team member in various healthcare settings and contribute towards the larger goals of national health policies such as school health, community health and environmental conservation.

3.COURSE OUTCOMES (CO):

At the end of course in Repertory, the Final BHMS student shall be able to

1. Describe the philosophical background, construction, utility and limitations of various repertories
2. Demonstrate case taking and show empathy with the patient and family during case taking
3. Demonstrate various steps for systematic case processing viz. analysis of case, evaluation of symptoms as per Homoeopathic principles to form Totality of symptoms
4. Choose the appropriate repertorial approach, Method and Technique to repertorize a case
5. Utilize Repertory as a tool to find out simillimum in all types of cases and in the study of Materia Medica
6. Integrate other subjects in understanding the construction and utility of repertories
7. Utilize different software for Repertorization, patient data management and record keeping.
8. Demonstrate aptitude to utilize repertory for research in Homoeopathy and lifelong learning

COURSE OUTCOMES OF REPERTORY FOR I BHMS

At the end of IBHMS, the student should be able to,

1. Define Repertory.
2. Explain the need and utility of repertory to find simillimum and in the study of Materia Medica
3. Define various terminologies used in repertory and explain their utility
4. Locate different rubrics related to anatomy, physiology and psychology in Kent's Repertory
5. Illustrate the construction of Kent's Repertory as per the Hahnemannian Anatomical schema

4.TEACHING HOURS

Total Number of Teaching Hours: 21			
Course Name	**Lectures**	**Non-Lectures**	**Total**
Homoeopathic Repertory and Case Taking (HomUG-R-I)	21	-	21

5. COURSE CONTENT(HomUG-R-I)

S. No	List of Topics	Lecture Hours
1	**Introduction to Repertory, Definition and Meaning of Repertory** ❖ General Introduction to Repertory ❖ Origin of Repertory ❖ Need of Repertory ❖ Definition of Repertory ❖ Meaning of REPERTORIUM	3
2	**Need and uses of repertory and repertorization** ❖ Uses and Scopes of Repertory ❖ Limitations of Repertory ❖ Definition of Repertorization ❖ Introduction to Methods and Techniques of Repertorization	3
3	**Terminologies relevant toRepertory** ❖ Repertory ❖ Rubric ❖ Gradation ❖ Cross Reference ❖ Synonym ❖ Repertorization ❖ Totality of Symptoms ❖ Repertorial Totality ❖ Potential Differential Field ❖ Conceptual Image	3

	❖ Case taking ❖ Analysis of a case ❖ Evaluation of a Case ❖ Longitudinal case Study ❖ Cross Section Study of a case ❖ General Repertory ❖ Regional Repertory ❖ Logico-Utilitarian Repertory ❖ Puritan Repertory	
4	**Schematic representation of chapters in Kent's repertory** ❖ Introduction to Kent'sRepertory ❖ Listing of Chapters in Kent's Repertory ❖ Correlation of Chapters in Kent's Repertory to Hahnemannian Anatomical Schema ❖ Chapters and Rubrics related to anatomical structures, physiological processes and psychology in Kent's Repertory	**6**
5	**Correlation of Anatomy, Physiology and Psychology with Repertory** ❖ Introduction to correlationwithAnatomy, Physiology and Psychology with Repertory ❖ Chapters and Rubrics related to Anatomical parts in Dr. Kent's Repertory ❖ Chapters and Rubrics related to Physiology in Dr. Kent's Repertory ❖ Rubrics related to emotions, intellect and memory in Mind chapter of Dr. Kent's Repertory	**6**

6.Teaching Learning Methods

Theory	**Practicals/ Clinics**
Lectures	Clinical Bedside Teaching
Small Group Discussion	Integrated Clinics
Integrated Lectures	Case Study
Integrated Seminars	Rubric Banks
Assignments	
Rubric Banks	
Library Reference	

7.Content Mapping (Theory) of Course HomUG-R-I

S. No	Generic Competency	Subject Area	Millers Level: Does/Shows how/ Knows how/ Knows	Specific Competency	SLO/ Outcome	Blooms Domain	Guilbert's Level	Must Know / Desirable to know / nice to know	T - L Methods	Formative Assessment	Summative Assessment	Integration Departments- Horizontal/ Vertical/ Spiral
	Topic 1- Introduction to Repertory, Definition and Meaning of Repertory											
HomUG-R-I-1.1	Gathering and Integration of information	Introduction to Repertory	Knows	Get acquainted with tools required to search for remedy.	*Define* the term Repertory	Cognitive	Level I (Remember/ recall)	Must Know	Lecture, Small Group discussion	MCQ, SAQ, Viva Voce	--------	Horizontal Integration with Materia Medica and Organon of medicine, Spiral Integration in II, III and IV BHMS
HomUG-R-I-1.2			Knows		*Explain* the meaning of Repertory	Cognitive	Level I (Remember/ recall)	Desirable to know	Lecture, Small Group discussion	MCQ, SAQ, Viva Voce	--------	
HomUG-R-I-1.3			Knows		*Discuss* the origin of the	Cognitive	Level II (Understand)	Nice to know	Lecture, Small Group	MCQ, SAQ, Viva	--------	

					word Repertory				discussion	Voce		
HomUG-R-I-1.4			Knows		*List* three uses and three limitations of Repertory	Cognitive	Level I (Remember/ recall)	Must Know	Lecture, Integrated teaching (with Materia Medica) Small Group discussion	MCQ, SAQ, Viva Voce	--------	
	TOPIC 2: Need and uses of repertory and repertorisation											
HomUG-R-I-2.1	Gathering and Integration of information	Need and uses of repertory and repertorisation	Knows	Get acquainted with tools required to search for remedy.	*Explain* the need of repertory	Cognitive	Level II (Understand)	Must know	Lecture, Small Group discussion	MCQ, SAQ, Viva Voce	--------	Horizontal Integration with Materia Medica and Organon of medicine, Spiral Integration in II, III and IV

												BHMS
HomUG-R-I-2.2			Knows		*Explain* the need of Repertorization to find a simillimum	Cognitive	Level II (Understand)	Desirable to know	Lecture, Small Group discussion	MCQ, SAQ, Viva Voce	--------	
HomUG-R-I-2.3			Knows		*Describe* the uses of Repertory	Cognitive	Level II (Understand)	Must know	Lecture, Small Group discussion	MCQ, SAQ, Viva Voce	--------	
HomUG-R-I-2.4			Knows		*Describe* the limitations of Repertory	Cognitive	Level II (Understand)	Must know	Lecture, Small Group discussion	MCQ, SAQ, Viva Voce	--------	
HomUG-R-I-2.5			Knows		*Discuss* the use of Repertory as a tool to select the remedy for a given case	Cognitive	Level II (Understand)	Desirable to know	Lecture, Small Group discussion, Clinical Teaching	MCQ, SAQ, Viva Voce	--------	

	TOPIC 3: Terminologies relevant to Repertory											
HomUG-R-I-3.1	Gathering and Integration of information	Terminologies used in repertory	Knows	To understand the definition of various terminologies used in repertory in order to apply them for Repertorization	*Define* different terminology associated with repertory	Cognitive	Level I (Remember/ recall)	Must know	Lecture, Small Group discussion,	MCQ, SAQ, Viva Voce	--------	Horizontal Integration with Materia Medica and Organon of medicine, Spiral Integration in II, III and IV BHMS
HomUG-R-I-3.2			Knows		*Explain* the meaning and use of each terminology	Cognitive	Level II (Understand)	Must know	Lecture, Small Group discussion, Clinical teaching	MCQ, SAQ, Viva Voce	--------	
HomUG-R-I-3.3			Knows		*Apply* the terminology in the process of Repertoriz	Cognitive	Level II (Understand)	Must know	Lecture, Small Group discussion,	MCQ, SAQ, Viva Voce	--------	

					ation				Clinical teaching			
	TOPIC 4: Schematic representation of chapters in Kent's repertory											
HomUG-R-I-4.1	Gathering and Integration of information, Problem Solving	Schematic representation of chapters in Kent's repertory	Knows	To understand the arrangement of Chapters in Dr. Kent's Repertory	*List*the 37 chapters of Kent's Repertory in the proper order	Cognitive	Level I (Remember/ recall)	Must know	Lecture, Small Group discussion, Clinical teaching	MCQ, SAQ, Viva Voce, OSPE	-------	Horizontal Integration with Materia Medica and Organon of medicine, Spiral Integration in II, III and IV BHMS
HomUG-R-I-4.2			Shows how		*Demonstrate*the relation of chapters in Kent's Repertory to Anatomy and Physiology and mental rubrics to	Cognitive	Level II (Understand)	Must know	Lecture, Small Group discussion, Clinical teaching	MCQ, SAQ, Viva Voce, OSPE	-------	

					Psychology							
HomUG-R-I-4.3			Knows		*Discuss the correlation of chapters*in Kent's Repertory to the schematic representation of remedies in Materia Medica	Cognitive	Level II (Understand)	Desirable to know	Lecture, Small Group discussion, Clinical teaching	MCQ, SAQ, Viva Voce, OSPE	-------	
TOPIC 5: Correlation of Anatomy, Physiology and Psychology with Repertory												
HomUG-R-I-5.1	Gathering and Integration of information, Problem Solving	Correlation of Anatomy, Physiology and Psychology with Repert	Knows	To correlate the knowledge of Anatomy, physiology And Psychology in construction of	Apply the correlation of Anatomical Structures to Chapters and Rubrics in Kent's Repertory	Cognitive	Level II (Understand)	Must know	Lecture, Small Group discussion, Clinical teaching	MCQ, SAQ, Viva Voce, OSPE	-------	Integrated teaching with Anatomy

		ory		Repertory and Rubrics								
HomUG-R-I-5.2			Knows		Relate physiological Processes to the Chapters and Rubrics in Kent's Repertory	Cognitive	Level II (Understand)	Must know	Lecture, Small Group discussion, Clinical teaching	MCQ, SAQ, Viva Voce, OSPE	-------	Integrated teaching with Physiology
HomUG-R-I-5.3			Knows		Apply the correlation of psychology in Mind Chapterand Rubrics in Kent's Repertory	Cognitive	Level II (Understand)	Must know	Lecture, Small Group discussion, Clinical teaching	MCQ, SAQ, Viva Voce, OSPE	-------	Integrated teaching with Psychology
HomUG-R-I-5.4			Shows how		Locate rubrics related to Anatomy, Physiology and Psycholog	Psycho motor	Level II (Control)	Must know	Lecture, Small Group discussion, Clinical teachin	MCQ, SAQ, Viva Voce, OSPE	-------	

					y in Kent's repertory				g			
HomUG-R-I-5.5			Knows		*Apply* rubrics related to Anatomy, Physiology and Psychology in understanding remedies in Materia Medica and Repertory	Cognitive	Level II (Understand)	Must know	Lecture, Small Group discussion, Clinical teaching	MCQ, SAQ, Viva Voce, OSPE	-------	Integrated teaching with Materia Medica

8.List of Practical Topics

S. No	Name of Topic	Activity/ Practical	TL Method
1	Basic Structure of Repertory showing arrangement of rubric of anatomy, physiology and psychology	Arrangement of Chapters and rubrics related to anatomical structures, physiology and psychology (Emotions, intellect and behaviour) in Kent's Repertory	Integrated teaching in Clinics in I BHMS

9. Internal Assessment

9A –Scheme of Assessment (Formative)

Sr.No	Professional Course	1st term(1-6 Months)	2nd Term(7-12 Months)	3rd Term(13-18 Months)	
1	First Professional BHMS	FirstPA+1ST TT	2nd PA+2ND TT	3rd PA	------

Sr. No	Professional Course	1st term(1-6Months)		2nd Term(7-12Months)		3rd Term(13-18Months)
1	First Professional BHMS	1st PA	1ST TT	2nd PA	2ND TT	3rd PA
		10 Marks Viva	50 Marks Practical/Viva	10 Marks Viva	50 Marks Practical/Viva	10 Marks Viva

9B: Calculation Table of Marks

PA1 Practical/ Viva (10Marks)	PA2 Practical/Viva (10 Marks)	PA3 Practical/ Viva (10 Marks)	Periodical Assessment Average PA1+PA2+PA3/3	TT1 Practical/ Viva (50Marks)	TT2 Practical/ Viva (50Marks)	Terminal Test Average TT1+TT2/10 0*10	Final Internal Assessment Marks
A	B	C	D	E	F	G	D+G/2

PA-Periodical Assessment; **TT-**Terminal Test

9C: Evaluation Methods for Internal Assessment

PA-PeriodicalAssessment	**TT-**TerminalTest
Viva Voce	Viva Voce
	OSPE
	Rubric Hunting
	Short case

10. **List of Recommended Books**

- Dhawale ML (2000) - Principles and Practice of Homoeopathy
- Hahnemann S (2017). Organon of Medicine 6th Edition
- Kent, JT- Repertory of the Homoeopathic Materia Medica (Sixth American Edition)
- Kishore, Jugal (2004) -Evolution of Homoeopathic Repertories and Repertorization
- Munir Ahmed R (2016). Fundamentals of Repertories: Alchemy of homeopathic methodology
- Patel, R.P (1998): The Art of Case Taking and Practical Repertorization
- Tiwari, Shashikant (2005) - Essentials of Repertorisation

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I PROFESSIONAL BHMS

Subject NAME: Organon of Medicine and Homoeopathic philosophy and Fundamentals of Psychology

Subject CODE: HomUG-OM-I

TEACHING HOURS:

1st BHMS

Organon of Medicine and Homoeopathic Philosophy, and Fundamentals of Psychology

YEAR	**TEACHING HOURS-**	
	LECTURES	**NON-LECTURE**
1ST BHMS	180	100

Preamble-

Organon of Medicine with Homoeopathic Philosophy is a central fulcrum around which education and training of a homoeopathic physician revolves. It lays down the foundations of homoeopathic practice, education, training and research. It not only elaborates on the fundamental laws but also how to apply them in practice. It defines the qualities of a healer, guides the homoeopathic physician in inculcating values and attitude and develop skills.

Nature nurtures us. It is well depicted in our science. Therefore, Homoeopathy is in sync with Nature. The need to keep life force within us well balanced with nature is well established in Organon. Hahnemann as an ecologist was well ahead of his time. Philosophically, it connects man and his actions to the dynamic forces available in nature, thus bringing to fore the holistic approach. Lateralization of these concepts helps the student to develop insight into various facets of Life & Living. Organon orients the students to homoeopathy as an Art & Science. Its comprehensive understanding needs a core competency in logic and the concepts of generalization and individualization. Its treatment of disease process and relating to the concept of Miasm makes it a study of the process of scientific investigation.

The biggest challenge in teaching-learning of Organon is to first understand the fundamentals according to the Master's writing and then demonstrate them in practice. Quality and real time integration with other subjects helps a student to conceive the holistic perceiving of Man and Materia Medica. The concepts and knowledge required by the

Physician with operational knowledge of management of patients and their diseases will need horizontal and vertical integration with Homoeopathic subjects and clinical subjects. First BHMS will need horizontal integration with Anatomy, Physiology, Homoeopathic Pharmacy and Homoeopathic Materia Medica. Organon will have spiral integration with itself and vertical integration with clinical subjects. Second year will need integration with pathology, community medicine, forensic medicine, along with other homoeopathic subjects. Third and fourth year establishes links with clinical subjects, research methodology and pharmacology.

Science is never static. Since the time of Hahnemann, medical science has advanced by leaps and bounds. Since Homoeopathy is based on principles rooted in nature, they would stand the test of time. However, their application in the changing times and circumstances would find newer avenues to heal. This is an opportunity for a homoeopath to connect the current advances while relating with the fundamental laws. Mastering all this will make him a master healer and will move him towards higher purpose of existence.

INDEX

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1. Course Code and Name of Course

Course Code	Name of Course
HomUG-OM-I	Organon of Medicine and Homoeopathic philosophy and Fundamentals of Psychology.

2.COURSE OUTCOMES (CO):

At the end of course in Organon of Medicine and Homoeopathic philosophy and Fundamentals of Psychology, the BHMS student shall be able to:

1. Explain the Cardinal Principles and Fundamental laws of Homoeopathy.
2. Describe the concept of Health, Disease and Cure in Homeopathy
3. Interpret a case according to the Hahnemannian Classification of Disease
4. Apply the Theory of Chronic Disease to determine the miasmatical background in a case.
5. Demonstrate case taking and show empathy with the patient and family during case taking
6. Demonstrate Analysis, evaluation of the case to form the Portrait of disease
7. Apply the concept of Susceptibility to determine posology in a given case
8. Interpret the action of the medicine in a case on the basis of Remedy reactions.
9. Apply knowledge of various therapeutic modalities, auxiliary measures & its integration with prevalent & other concepts in the management of patients.
10. Identify the various obstacles to cure and plan treatment accordingly.
11. Display qualities, duties & role**s** of a Physician as true practitioner of healing art
12. Develop the competencies essential for primary health care in clinical diagnosis and treatment of diseases through the judicious application of homoeopathic principles
13. Recognize the scope and limitation of homoeopathy and to apply the Homoeopathic Principles for curative, prophylactic, promotive, palliative, and rehabilitative primary health care for the benefit of the individual and community.
14. Discern the relevance of other systems of medical practice for rational use of cross referral and life saving measures, so as to address clinical emergences
15. Develop capacity for critical thinking and research aptitude as required for evidence based homoeopathic practice.
16. Demonstrate aptitude for lifelong learning and develop competencies as and when conditions of practice demand.

17. Be competent enough to practice homoeopathy as per the medical ethics and professionalism.
18. Develop the necessary communication skills to work as a team member in various healthcare setting and contribute towards the larger goals of national policies such as school health, community health, environmental conservation.
19. Identify socio-demographic, psychological, cultural, environmental & economic factors that affect health and disease and plan homoeopathic intervention to achieve the sustainable development Goal.

Specific Objectives of Organon of Medicine and Homoeopathic philosophy in1st BHMS

1. Recall the history of medicine and history of homoeopathy to relate its evolution
2. Correlate the first six aphorisms of Organon of Medicine for the study of anatomy, physiology, pharmacy.
3. Discuss the concept of health, indisposition and disease and its importance ~~in~~to the learning of anatomy, physiology, pharmacy and psychology
4. Discuss concept of Dynamization with health, disease and drug
5. Develop portrait of drug in the context of knowledge of anatomy, physiology, psychology and pharmacy
6. Explain the procedure and ethics of Drug proving

COURSE OUTCOMES (CO)of Organon of Medicine and Homoeopathic Philosophy for I BHMS

At the end of I BHMS, the student should be able to,

1. Summarize the important milestones in the History of Medicine and development of Homoeopathy.
2. Value the contributions and qualities of Dr. Hahnemann as a physician and person
3. Recall the contributions of stalwarts in development of Homoeopathy
4. Explain the Cardinal Principles and Fundamental laws of Homoeopathy
5. Explain the Homoeopathic concept of Health, Disease and Cure in light of modern concepts
6. Apply Inductive and Deductive Logic in the study of the Basic principles of Homoeopathy
7. Describe the important features of the various editions and Ground plan of Organon of Medicine
8. Explain the meaning and significance of aphorisms§1-27
9. Relate the concepts of homoeopathic philosophy with other pre-, para-, and clinical skills by way of horizontal, vertical and spiral integration.

3. Contents of Course HomUG-OM-I

Course Contents-

1. Introduction:

    1.1. History of medicine

    1.2. History of Homoeopathy

    Short history of Hahnemann's life, his contributions, and situation leading to discovery of Homoeopathy

    1.3. Brief history and contributions of Boenninghausen, Hering, Kent, R L Dutt, M L Sircar& B K Sarkar.

    1.4 History and Development of Homoeopathy in brief in India, U.S.A. and European countries

    1.5. Fundamental Principles of Homoeopathy.

    1.6. Basic concept: Individualistic, Holistic& Dynamic

    1.6.1. Life; Hahnemann's concept and modern concept.

    1.6.2. Health: Hahnemann's concept and modern concept.

    1.6.3. Disease: Hahnemann's concept and modern concept.

    1.6.4. Cure.

    1.7. Understanding Homoeopathy in vertical, horizontal & spiral integration with pre, para & clinical subject.

2. Logic: To understand Organon of medicine and homoeopathic philosophy, it is essential to be acquainted with the basics of LOGIC to grasp inductive and deductive reasoning. Preliminary lectures on inductive and deductive logic (with reference to philosophy book of Stuart Close Chapter 3 and 16).

3. § 1 to 27 of Organon of medicine, § 105 to 145

4. The physician – purpose of existence, qualities, duties and knowledge

5. Vital force- dynamization- homoeopathic cure- natures law of cure & its Implications- drug proving

1: Topics with reference list referring to Chapters from the text books				
Topic	Kent	Roberts	Close	Dhawale
Understanding the first six aphorisms and its application in the study of anatomy, physiology, pharmacy.	1-6	1	6	4
Concept of health, indisposition and disease and its importance in learning anatomy, physiology, pharmacy and psychology	1 to 9	2, 3, 4	6	2
Dynamization and relating with health, disease and drug	10, 11	2-6	14, 15	2, 16
Developing portrait of drug with help of knowledge of anatomy, physiology, psychology and pharmacy	13,21-25,26	15	15	16

Non lectures– community – OPD/IPD -

Students will be exposed to OPD/PD-community from first BHMS:

Students will understand the first six aphorisms in action and will get sensitized to socio-cultural-political-economical perspective of the community. They should develop insight into what constitutes health and how disease develops.

Introduce Journals from 1st year–

Habit of collecting evidence and noting them down vis-a-vis the expected objective will train them for evidence-based learning and inculcating the habit of using logic so inherent in Homoeopathic practice.

They also will realize the importance of skill and attitude and relevance of each subject in relation to Organon and Homoeopathic philosophy

They will write their experience of the clinic/OPD in relation to Observation/Cure/relief/Mission/Prevention/acute/chronic/indisposition etc.

(i) 5 medicines from HMM to correlate with Physiology-Anatomy-Pharmacy.

(ii) 5 cases observed in OPD

Teaching Learning Method

Assignments- Group work

Problem Based Learning through Cases- Literature

Group Discussion – Problem based learning

Project work with its presentations in class

Practicing Evaluation & Feedback system- after Project work, assignments & Group Discussions.

Teaching Hours-

1st BHMS Organon Classroom teaching and non-lecture hours		
YEAR	**TEACHING HOURS-** **LECTURES**	**Non-lecture**
1ST BHMS	130	78

Teaching Hours Theory

Sr. No.	List of Topics	Term	Lectures	Non-Lectures
1	History of medicine in brief History and Development of Homoeopathy In brief in India, U.S.A. & European Countries	I	5	5
2	Short history of Hahnemann's life, his contributions & situation leading to discovery of Homoeopathy	I	5	5
3	Brief History & Contributions of Boenninghausen, Hering, Kent, RL Dutt, ML Sircar & BK Sirkar	I	15	
4	Logic: To understand organon of medicine & homoeopathic philosophy, it is essential to be acquainted with the basics of LOGIC to grasp inductive & deductive reasoning. Preliminary lectures on inductive & deductive logic with reference to philosophy of Stuart Close.	I	5	5
5	Science & Art in Homoeopathy	I	5	
6	Different Editions & Constructions of Hahnemann's Organon of Medicine	I	10	5
7	Fundamental Principles of Homoeopathy	II	20	5
8	Basic concept of: Individualistic & Holistic Life: Hahnemann's concept & Modern Concept Health: Hahnemann's Concept & Modern Concept Disease: Hahnemann's Concept & Modern Concept Cure: Hahnemann's Concept & Modern Concept	II	5	5
9	§1-27&105-145 of Organon of medicine	II/III	60(20+40)	48
			130	78

4. Table 2-Learning Objectives (Theory) of Course HomUG-OM-I

Generic Competency	Subject Area	Millers Level: Does/Shows how/ Knows how/ Knows	Specific Competency	SLO/ Outcome	Blooms Domain	Guilbert's Level	Must Know / Desirable to know / nice to know	T-L Methods	Formative Assessment	Summative Assessment	Integration Departments- Horizontal/ Vertical/ Spiral
TOPIC 1(1.1) – HISTORY OF MEDICINE											
Acquiring and Integration of Information	History of Medicine as it is evolved with important milestones	Knows	Explain History of Medicine with important milestones	Describe the evolution of Medicine	Cognitive	Level II Understand and interpret	Must Know	Lecture, small group discussion, Seminars	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	**Practise of medicine**
		Knows		Summarize important Milestones in Development and Evolution of Medicine	Cognitive	Level II Understand and interpret	Nice to Know	Lecture, small group discussion, Seminars	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	**Practise of medicine**
		Knows		Describe the contribution of various	Cognitive	Level II Understand and interpret	Nice to Know	Lecture, small group	MCQ, SAQ, LAQ,	MCQ, SAQ, LAQ,	**Practice of medicine**

				Stalwarts in development of medicine				discussion, Seminars	Quiz	Viva	
TOPIC 1(1.2) – HISTORY OF HOMOEOPATHY											
Acquiring and Integration of Information	History of Homoeopathy as it is evolved with important milestones	Knows	Describe History of Homoeopathy	Describe History of Homoeopathy	Cognitive	Level II Understand and interpret	Must Know	Lecture small group discussion Seminars	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	**Materia Medica repertory**
				Describe the important	Cognitive	Level II Understand	Must Know	Lecture small	MCQ, SAQ,	MCQ, SAQ,	**Materia Medica**

				milestones in the evolution of Homoeopathy		and interpret		group discussion Seminars Quiz	LAQ, Quiz	LAQ, Viva	**repertory**
				Discuss the significance of important milestones in the evolution of Homoeopathy	Cognitive	Level II Understand and interpret	Must Know	Lecture small group discussion Seminars Quiz	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	**Materia Medica repertory**
TOPIC 1(1.2) – LIFE HISTORY OF DR. HAHNEMANN											

Acquiring and Integration of Information	Hahnemann's Life History	Knows	Describe Hahnemann's Life History	Explain in detail the Life history of Dr. Hahnemann with his contribution towards Homoeopathy	Cognitive	Level II Understand and interpret	Must Know	Lecture Small Group Discussions Presentation	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	Materia Medica
				Discuss the contribution and qualities of Dr.Hahneman n as a physician and person	Affective	Level II Understand and interpret	Must Know	Lecture Small Group Discussions Presentation	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	
TOPIC 1(1.3) – LIFE HISTORY OF STALWARTS OF HOMOEOPATHY											
Acquiring and Integration of Information	Stalwarts of Homoeopathy	Knows	Life History of Different Stalwarts In Homoeopathy	Describe Life History of Following stalwarts Dr. Kent, Dr. Boger, Dr.Boenninghausen. Dr, Hering, Dr. T.F. Allen, Dr. M.L. Sircar	Cognitive	Level II Understand and interpret	Desirable to know	Lecture Small Group Discussion Seminars	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	Materia Medica Repertory

				Discuss the Contributions of stalwarts in development of Homoeopathy	Cognitive	Level II Understand and interpret	Desirable to know	Lecture Small Group Discussion Seminars	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	Materia Medica Repertory
TOPIC 1(1.4) – HISTORY & DEVELOPMENT OF HOMOEOPATHY IN INDIA. USA & EUROPEON COUNTRIES											
Acquiring and Integration of Information	History & Development of Homoeopathy in India, USA & European Countries	Knows	History & Development of Homoeopathy in India, USA & European Countries	Explain the History & development of Homoeopathy in India, USA and European countries	Cognitive	Level II Understand and interpret	Desirable to know	Lecture Small Group Discussion Seminars	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	Materia Medica
		Knows		Discuss the Contributions of stalwarts in development of Homoeopath	Cognitive	Level II Understand and interpret	Desirable to know	Lecture Small Group Discussion	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	Materia Medica Repertory

				y in India, USA and European countries				Seminars			
TOPIC 1(1.5): Fundamental Principles of Homoeopathy											
Acquiring and Integration of Information	Fundamental Principles of Homoeopathy	Knows	Understanding the Fundamental Principles that govern Homoeopathy	Enumerate the cardinal principles of Homoeopathy	Cognitive	Level II Understand and interpret	Must know	Lecture Small Group Discussion Seminars	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	Materia Medica **Pharmacy**
		Knows		Explain the Cardinal Principles and Fundamental laws of Homoeopathy	Cognitive	Understand (Level II)	Must know	Lecture Small Group Discussion Seminars	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	**Materia Medica Pharmacy**
		Knows		Describe the significance and importance of Cardinal Principles and Fundamental	Cognitive	Understand (Level II)	Must know	Lecture Small Group Discussion Seminar	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	**Materia Medica Pharmacy**

				laws				s			
TOPIC 1(1.6): Concept of Health Disease and Cure as per Hahnemann's concept and correlation with modern concept.											
Acquiring and Integration of Information	Concept of Health Disease and Cure	Knows	Knowledge and application of concept of Health, Disease and Cure	Define the terms Health, disease and cure according to Dr. Hahnemann	Cognitive	Remember (Level I)	Must know	Lecture Small Group Discussion Seminars	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	**Anatomy physiology pharmacy Materia Medica**
		Knows		Define the terms Health, disease and cure according to modern concept.	Cognitive	Remember (Level I)	Must know	Lecture Small Group Discussion Seminars	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	**Anatomy physiology pharmacy**
		Knows		Explain Health, disease and cure according to Dr Hahnemann	Cognitive	Understand (Level II)	Must know	Lecture Small Group Discussion Seminars	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	**Anatomy, physiology, pharmacy**
		Knows		Differentiate the Hahnemannian concept of health, disease and cure from the	Cognitive	Understand (Level II)	Must know	Lecture Small Group Discussion Seminar	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	**Materia Medica Anatomy Physiology Pharmacy**

				modern concept				s			
TOPIC 1(1.7): Different editions and Constructions of Organon of Medicine											
Acquiring and Integration of Information	Different editions and Constructions of Organon of Medicine	Knows	Significance of Different editions and Constructions of Organon of Medicine	Explain the history & development different editions and Constructions of Organon of Medicine	Cognitive	Understand (Level II)	Must know	Lecture Small Group Discussion Seminars	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	**Materia Medica physiology and pharmacy**
		Knows		Differentiate between Different editions and Constructions of Organon of Medicine	Cognitive	Understand (Level II)	Must know	Lecture Small Group Discussion Seminars	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	**Materia Medica Pharmacy**
Topic 2: Logic											
Acquirin	Logic in	Knows	Utility and	Explain	Cognit	Level 2	Must	Lecture	MCQ,	MCQ,	**Materia**

g and Integration of Information	Homoeopathy		Correlating Logic to Homoeopathy	Inductive Logic 2.Deductive Logic	ive	Understand and interpret	know	Small Group Discussion Seminars	SAQ, LAQ, Quiz	SAQ, LAQ, Viva	**Medica Repertory**
		Knows		Differentiate between inductive and deductive logic using examples	Cognitive	Level 2 Understand and interpret	Must know	Lecture Small Group Discussion Seminars	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	
		Knows		Apply the concept of Inductive and Deductive Logic to the Fundamental Principles of Homoeopathy	Cognitive	Level III Decision/problem solving	Must know	Lecture Small Group Discussion Seminars	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	**Repertory**
Topic3: Aphorisms 1-27 and 105-145											
Acquiring and Integration of Information	Aphorism	Knows	Understanding the meaning of Aphorisms	Explain the meaning and significance of Aph. 1-27	Cognitive	Understand (Level II)	Must know	Lecture Small Group Discussion Seminars	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	**Anatomy, Physiology Pharmacy Materia Medica**
				Explain	Cognit	Understand	Must	Lecture	MCQ,	MCQ,	Integrate

				Drug proving as per Aph 105-145	ive	(Level II)	know	Small Group Discussion, seminar	SAQ, LAQ, Quiz	SAQ, LAQ, Viva	d teaching with Homoeopathic Pharmacy
Topic 4 :Physician- Purpose of existence, qualities, duties and knowledge											
Acquiring and Integration of Information	Homoeopathic Physician	Knows	Qualities and Attributes of a Physician	Recognize the qualities, duties and knowledge expected from a physician	Affective	Receiving	Desirable to know	Lecture Small Group Discussion Seminars	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	
				Explain the Mission, qualities, duties & role of a Physician as true practitioner of healing art	Cognitive	Understand (Level II)	Must know	Lecture Small Group Discussion Seminars	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	

Topic 5: Vital force- dynamisation- homoeopathic cure- natures law of cure & its Implications- drug proving											
Acquiring and Integration of Information	Concept of Vital Force and Drug Dynamization	Knows	Importance of Vital Force in health, disease and Cure and Drug Dynamization	Explain the roleof vital force in health, disease and cure	Cognitive	Understand (Level II)	Must know	Lecture Small Group Discussion Seminars	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	**Materia Medica Pharmacy**
		Knows		Explain the concept of Homoeopathic Dynamization	Cognitive	Understand (Level II)	Must know	Lecture Small Group Discussion Seminars	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	**Materia Medica Pharmacy**
		Knows		Enumerate the methods of Homoeopathic Dynamization	Cognitive	Remember (Level I)	Must know	Lecture Small Group Discussion Seminars	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	**Pharmacy**
		Knows		Explain the Nature's therapeutic law of cure	Cognitive	Understand (Level II)	Must know	Lecture Small Group Discussion Seminars	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	

		Knows		Apply Nature therapeutic law of cure to Homoeopathy	Cognitive	Understand (Level III)	Must know	Lecture Small Group Discussion Seminars	MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	
		Knows		Explain Drug Proving					MCQ, SAQ, LAQ, Quiz	MCQ, SAQ, LAQ, Viva	Pharmacy

Table 3. Non-Lecture Activities

Sr. No	Non-Lecture Teaching Learning methods	Total Time Allotted per Activity (Hours)
1	Seminars/ Workshops	78 hours
2	Group Discussions	
3	Problem based learning	
4	Integrated Teaching	
5	Case Based Learning	
6	Self-Directed Learning	
7	Tutorials, Assignments, Projects	
	Total	**78 hours**

Psychology

Preamble

Mind is an invisible dynamic force operating on the body which can be seen and felt with its expressions at multiple levels. While understanding Man it is important to know how he behaves, feels and thinks in general of his life and in different situations.

Health is that balanced condition of the living organism in which the integral, harmonious performance of the vital functions tends to the preservation of the organism ensuring the normal development of the individual. In a similar way, study of mind is an inseparable component of the study of man and is essential for prescribing. Thus mind remains an integral component of Homoeopathic prescribing.

In § 5 of Organon of Medicine, Dr Hahnemann talked of basic knowledges required for Homoeopathic practice of Holistic cure. According to him homoeopathic physician has to have knowledge of :

a. Constitution of Man
b. His moral & intellectual character
c. Mode of living habits
d. His social & domestic relations
e. His adaptations with the environment

Above knowledge will help the Homoeopathic physician not only to understand the person in the patient but also to identify the cause of suffering by delving in to detailed enquiry. This may take the form of exploring evolutionary aspects from childhood to present, from family history – past history to present illness - all of which will indicate the qualities of the human in health as well as in disease.

Psychology is a science of mind and behaviour which is important and necessary in all areas of life including the growth and development of human being. Theoretically, psychology examines psychological phenomena and behavioural patterns that appear as individual's external behavioural reactions against any stimulus - be it Biological–Psychological– Emotional –Social-Spiritual.

Modern concept of psychology has talked of Mental Health and Hygiene which indicates the importance and great need for ensuring psychological wellbeing in us. This state is under constant stress due to the rapid changes taking place in the life situation due to internal pressures and external environment.

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Course outcomes:

1. Explain the concept of Mind as perceived by Hahnemann and other stalwarts
2. Define the structure of the mind as conscious and unconscious and its various constituents / components in terms of Emotion, Thinking, Behaviour, Sleep and Dreams
3. Identify the conscious expressions of Mind as Emotion, Thought and Behaviour
4. Explain the neurophysiological basis of mental functioning

5. Discuss the relationship between the growth of the brain and the mind and its correlation with physical growth of the from infancy to old age and psychosocial development.
6. Evaluate the role that emotions and intellectual functions play in our daily lives
7. Derive the importance of the role of 'Learning' in human adaptation and change
8. Discuss 'Personality' as a synthesis of inborn traits and learnt responses occurring over the growing years
9. Realize the various forms of 'conflict', their origins and their role in determining the quality of our personal and social lives
10. Integrate the concept of mind as conceived in homoeopathic philosophy with that in modern psychology
11. Demonstrate the importance of the study of the Mind in approaching the study of Repertory and Materia Medica
12. Realize how a healthy individual experiences the harmonious functioning of the different constituents of the mind
13. Summarise the importance of knowledge of Psychology in Modern life and in Homoeopathic practice

General Instructions

1. Instructions in psychology should be planned in such a way that students should be able to present a basic understanding of the structure of mind, brain and its functioning with the kind of interrelationship they are sharing with each other.
2. Each topic should be planned in parallel with others subjects of Homeopathy where ever relevant to achieve integration with other subjects.
3. Since this subject is dealing with the human mind and its functions, topic should be dealt in more interactive ways where maximum learning will be achieved by doing rather than memorizing the things.
4. Emphasis would be more on the organization of the brain areas, their functions and correlated with the medical concept and philosophical concept of Mind.
5. Student should learn the psychological organization with learning the importance of special senses and their functions in great details that forms the foundation of the subject.
6. Most of the basic topics can be studied in interactive ways, discussion based on clinical case or any relevant event/ incidence of daily life.
7. Topics having philosophical connection should be taught with the help of discussion or in the form of story -telling with connections to the principles of philosophy.
8. Topics requiring a lot of analysis of information can be taught with role-play with directed observation method followed by discussion on the same pointing out its relevance and importance.
9. Nice to know topics along with a lot of community related information should be dealt with survey methods
10. Topics which are interrelated with other subjects of Homoeopathy should be presented and discussed.

11. Lectures or demonstration on the clinical and applied part of psychology should be arranged in the 3rd semester of the course and it should aim at demonstrating the structural-physiological –psychological basis of mental expressions of the symptoms and its value in Homeopathy.
12. Learning of applied psychology would be more qualitative in the various OPDs/Peripheral OPDs where contact with community will improve their knowledge, observation skills, attitude of communication with the community.
13. Some of the theoretical lectures should conclude with discussion on the learning achieved with its importance.
14. Periodical seminars on general topics related to philosophical aspect and its connection with psychology should be arranged for vertical, horizontal and spiral integration.
15. Role of observation and correlation should be demonstrated while discussing the intricacies of the subject of psychology.
16. Inter-departmental or joint seminars should be planned
17. While working on community survey- purpose should be kept very broad with the following objectives.
    (i) Experiencing the community in actuality for the demographic configuration, different cultural traditions, different practices and inter-relationship and its effect on Mind and Body as a joint system.
    (ii) Learning the functioning of human being in multiple situations of stress and process of getting adapted with those.
    (iii) Quality of Mental Health of the community and its varied expressions
    (iv) Quality of Inter-relationship within different castes, communities, religions and its impact on Individuals

Course contents:

Note: Each topic should be related with relevant clinical examples and the relationship with the subjects of Homoeopathic Philosophy, Materia Medica and Repertory must be made.

1. Introduction to the study of Mind in Homoeopathy
   A. Concept of Mind- i. Contemporary schools of psychology
   ii. Concept of Mind by Hahnemann
2. Psychological organization and the interrelationship of Thought (Cognition), Feelings (Affect) and Behaviour (Conation); Conscious and Unconscious elements

A. Psychological Organisation i. Definition of Emotions and its types
ii. Definition of Thinking and its types
iii. Definition of Behaviour and its types

B. Effects on Thought (Cognition), Feelings (Affect) and Behaviour (Conation) on Mind and Body
C. Interrelationship of Thought (Cognition), Feelings (Affect) and Behaviour (Conation) on Mind and Body
D. Representation of Thought (Cognition), Feelings (Affect) and Behaviour (Conation) in Materia Medica
E. Representation of Thought (Cognition), Feelings (Affect) and Behaviour (Conation) in Repertory

3. Physiological and Evolutionary basis of behaviour -
   A. Instincts, Conditioned and unconditioned reflexes
   B. Conscious and unconscious behaviour
   C. Scientific study of Behaviour and its expressions
   D. Evolutionary study of behaviour
   E. Understanding Relationship of Behaviour to Emotions and Thought
   F. Expressions of Behaviour in Repertory and Materia Medica

4. Understanding Emotion, its different definitions and expressions in Repertory and Materia Medica
   A. Scientific study of Emotions i. Definition of Emotions and its types
   ii. Effects Emotions on Mind and Body
   iii. Effect of emotions on sexual behaviour
   iv. Interrelationship of Emotions on Mind and Body
   B. Representation of Emotions in Materia Medica-
   C. Representation of Emotions in Repertory

5. Understanding Intellect: Attention, memory and its function and expression in Repertory and Materia Medica
   Basic concepts of Thinking
   A. Definition of Thinking and its types
   B. Intelligence and its measurement
   C. Effects of Thinking /Thought (Cognition) on Mind and Body
   D. Representation of Thinking /Thought (Cognition) in Materia Medica
   E. Representation of Thinking /Thought in Repertory

6. Motivation and their types with role in our lives
   Study of Motivation and its types
   Importance of study of Motivation for Homoeopathic Physicians

7. Learning and its place in adaptation
   A. Study Learning:
      Definition of Learning and its types
      Study of relevance of Learning for Homoeopathic Physician
      Study of disturbances/ malfunctioning of Learning
   B. Adaption
      Definition and its dynamic nature
      Successful and unsuccessful adaptation

8. Growth and development of Mind and its expressions from Infancy to old age
   Study of Developmental Psychology
      i. Normal developments since birth to maturity (both physical and psychological)
      ii. Deviations- in Growth and Development and its effects on later behaviour
      iii. Understanding the bio-psycho-socio-cultural-economical-political-spiritual concept of evolution
      iv. Importance of above study to understand Materia Medica drug proving

9. Structure of Personality, the types, their assessment, relationship to Temperament and representation in Materia Medica
      i. Definition of Personality and its types
      ii. Various constituents of Personality like Traits and Temperament
      iii. Theories of Personality by psychologists
      iv. Measures for the assessment of Personality, relationship to Temperament and representation in Materia Medica

10. Conflicts: their genesis and effects on the mind and body
      i. Conflicts and their types
      ii. Genesis of Conflicts and effects on the mind and body
      iii. Genesis of Conflicts and related Materia Medica images

11. Applied Psychology: Clinical, Education, Sports, Business, Industrial
    Application of knowledge of Psychological Components and its Integration in understanding
    i. Psychological basis of Clinical Conditions
    ii. Education
    iii. Sports
    iv. Business

12. Psychology and Its importance in Homoeopathic Practice for Holistic management of the Patient.

Semester 1 Topic 1: 1. Introduction to Psychology with overview of different schools

Sr.No 1	Generic competency	Subject area	Millers Know/ Know how/ Show how/ Does	Specific competency	Specific Learning Objectives / Outcomes	Bloom's domain	Guilbert's level	Must know / desirable to know / nice to know	TL method / media	Formative Assessment	Summative Assessment	Integration - Horizontal / Vertical / Spiral
HomUG-OM-I.1.1	Information collection	What is Psychology	Knows	Discuss Psychology as a science	Define Psychology	Cognitive	Recall level I	Must know	Class room Lecture	MCQ	SAQ LAQ	
	Information collection		know		Discuss the psychology as a science	cognitive	understand level II	Desirable to know	Lecture	True /False sentences	Short Note	Concept of Logic-Inductive /Deductive Logic from Organon
	Information		Knows		Discuss the factors	Cognitive	Understand	Must	Lecture	MCQ	SAQ	

	Analysis				which make Psychology as a science		Level II	know			Viva	
	Integration of information		Knows how		Explain the utility of the subject for a Homoeopath	Cognitive	Interpret Level II	Desirable to know	Lecture with discussion	MCQ	SAQ Viva	Horizontal integration with Organon
HomUG-OM-I.1.2	Information collection	Different schools of Psychology	Knows	Know the different schools of Psychology	Classify different schools of psychology based on their Concept and objectives and methods.	Cognitive	Understand Level II	Must know	Class room lecture	SAQ	SAQ Viva	Concept of Man/ Individualization from the Organon(useful as a preparation of concept for next topic)

Semester 1: Topic 2-Concept of Mind in Psychology and Homoeopathy

Sr.No 2	Generic competency	Subject area	Millers Know / Know how/ Show how/Does	Specific competency	Specific Learning Objectives / Outcomes	Bloom's domain	Guilbert's level	Must know / desirable to know / nice to know	TL method / media	Formative Assessment	Summ -ative Assessment	Integration - Horizontal / Vertical / Spiral
Hom UG-OM-I.2.1	Information collection	Concept of Mind in Psychology and Homoeopathy	Knows	Describe the concept of Mind	Describe concept of Mind in different schools of psychology	Cognitive	Understand and interpret Level II	Must know	Lecture/(use of 'Story telling')/ and Discussion on concept of Mind	MCQ	LAQ / SAQ	Organon -Concept of Mind as per Hahnemann/ Kent /BB/ Boger
Hom UG-OM-I.2.2	Information organization and synthesis		Knows	Relate concepts of Mind in psychology and homoeopathy	Discuss concept of Mind as in Organon	Cognitive	Integrate Level III	Must know	Small group discussion Charts / Models Audio-visual aids	Quiz True-false test items	LAQ/SAQ/ Viva	Horizontal Organon

	Analysis		Knows		Compare and contrast concept of mind in Organon with that in different schools of psychology	Cognitive	Understand and Level II	Nice to know	Lecture	MCQ	SAQ	

Semester 1 –Topic- 3-Psychological organization of Mind and its interrelationship with Thought (Cognition), Feelings (Affect) and Behaviour (Conation)

Sr.No 3	Generic competency	Subject area	Millers Know / Know how/ Showhow/ Does	Specific competency	Specific Learning Objectives / Outcomes	Bloom's domain	Guilbert's level	Must know / desirable to know / nice to know	TL method / media	Formative Assessment	Summ-ative Assess ment	Integration - Horizontal / Vertical / Spiral
Hom UG-OM-I.3.1	Information synthesis	Organization of Mind and interrelationship of its constituent	Knows how	Identify the topography of the mind	Classify the divisions of the mind into conscious, unconscious and sub-conscious elements	Cognitive	Understand Level II	Must know	Caselets and discussion	DOPS Full form to be written ?	LAQ / SAQ	
Hom UG-OM-I.3.2	Information collection		Knows how	Identify the constituents of the conscious	Distiguish the conscious mental expressi	Cognitive	Interpret Level II	Must know	Caselets and Matching exercis	MCQ	LAQ, / SAQ/ Viva	Integration with concept of Mental and BehavioralExpressions or symptoms

				mind	ons as Emotion , Thought and Behavio ur				es			from the Organon
Hom UG-OM-I.3.3	Informati on Interpret ation Self reflection	Interrelatio nship of Emotions/ Thinking/ Behaviour and Mind and Body	Know s how	Recognize the interrelatio nship of mental constituent s and effects of Mind and Body	Identify the relation ship of mental expressi ons in terms of Emotion , Thinking and Behavio ur on Mind and Body	Affect ive	Receive Level I	Must	Audio-visual media	Casele ts with check list	SAQ	Horizontal integration Organon

HomUG-OM-I.3.4	Information Demonstration	Demonstration of abilities of observation	Shows How	Observe the mental expressions in terms of Emotion, Thinking and Behaviour	Identify the evidences of psychological expressions of Emotion, Thinking and Behaviour	Affective	Receive Level I	Must know	Audio-visual means in Small groups	Film viewing	Viva	
	Analysis and intergation	Demonstration of abilities of integration	Knows how	Distinguish the expressions into Emotion, Thinking and Behaviour	Align the observations conducted above with the knowledge about emotions, thoughts and behaviour	Cognitive	Understand Level II	Must know	Process the observations	Check list on the film shown	MCQ	
HomUG-OM-I.3.5	Analytical	Application of knowledge in practice	Shows how	Identify the mental expressions in Repertory	Demonstrate the rubrics from the given case scenarios	Psychomotor	Imitate Level I	Must know	Case-based learning Teaching with Repertory	Assignments	SAQ	Hor learning with Repertory

Semester 1 Topic 4 Physiological basis of Emotions, Thought and Behaviour

Sr.No. 4	Generic competency	Subject area	Millers Know/ Knowhow/ Show how/ Does	Specific competency	Specific Learning Objectives / outcomes	Bloom's domain	Guilbert's level	Must know / desirable to know / nice to know	TL method / media	Formative Assessment	Summ-ative Assessment	Integration - Horizontal / Vertical / Spiral
Hom UG-OM-I.4.1	information Collection	Physiological basis of the mind	Knows	Understanding the parts of the brain important in understanding mental functions	List thepartsof the Brain relevant to understanding the mental functioning	Cognitive	Recall Level I	Must know	Lecture with a demonstration with model of brain	MCQ	SAQ	Anatomy - Brain structures can be dealt simultaneously
Hom UG-OM-I.4.2	information collection		Knows		Explain the different parts of the brain which are the seat of the emotions	Cognitive	Understand and interpret Level II	Must know	Demonstration of brain model with discussion	MCQ	SAQ	

					of aggression, love, anger and anxiety							
Hom UG-OM-I.4.3			Knows		Explain the different parts of the Brain which are the seat of intellectual functions of attention, memory and executive functions	Cognitive	Understand and interpret Level II	Must know	Demonstration of brain model with a discussion	MCQ	SAQ	
Hom UG-OM-I.4.4			Knows		Explain the different parts of the Brain which are responsible for simple	Cognition	Understand and interpret Level II	Desirable to know	Group discussion	MCQ	SAQ	

					behaviour							
Hom UG-OM-I.4.5	Information Interpretation and Synthesis		Knows how	Discuss the genesis of Emotions, Thinking, Behaviour	Integrate the manner in which the emotions, intellectual and behavioural function are coordinated	Cognitive	Problem solving Level III	Must know	Lecture with PPT	MCQ	SAQ	Integration with Psycho-physiology

Semester 1: Topic 5: Understanding behaviour, its origins and its representation in repertory and Materia medica

Sr.	Generic	Subject	Miller	Specific	Specific	Bloom'	Guilbert's	Must	TL method	Format	Summ	Integration -

No	Competency	area	s Know/ Know how/ Show how/ Does	competency	Learning Objectives / Outcomes	s domain	level	know / desirable to know / nice to know	/ media	ive Assess ment	-ative Assess ment	Horizontal / Vertical / Spiral
	Information	Behaviour and Functioning and the origins	Knows	Instincts and reflexes and their importance	Define instinct and reflex	Cognitive	Recall Level I	Must know	Lecture	MCQ	MCQ	Physiology
	Information		Knows		Enumerate the instincts seen across the animal species	Cognitive	Recall Level I	Must know	Lecture	MCQ	MCQ	
	Information		Knows		Enumerate the reflexes seen in the new born	Cognitive	Recall Level I	Must know	Lecture	MCQ	MCQ	
	Information Analysis		Knows		Discuss the role and limitations of these ensuring in	Cognitive	Understand and interpret	Must know	Lecture	SAQ	SAQ/Viva	

					our survival		Level II					
	Information		Knows		Define Conditioned and Unconditioned reflex	Cognitive	Recall Level I	Must know	Lecture	MCQ	MCQ	
	Information		Know	Define Behavior and Functioning	Define Behaviour as externally observed expressions	Cognitive	Recall Level I	Must know	Lecture and AV methods	MCQ	MCQ	Organon + Repertory – Concept of symptomatology- Physical symptoms
	Information Analysis Self awareness		Knows		Differentiate behaviour as being of conscious and unconscious	Cognitive	Understand and interpret Level II	Must know	Lecture	SAQ	SAQ/Viva	
	Information collection		Know		Define functioning as expressions of the system which needs special	Cognitive	Recall Level I	Must know	Lecture and Demonstration	MCQ	MCQ	

					instruments to measure							
	Information Analysis		Know how		Elaborate on the difference between Behaviour and Functioning	Cognitive	Understand and and interpret Level II	Must know	Lecture	SAQ	SAQ/Viva	
	Information System thinking		Knows		Discuss the scientific methods of studying behaviour	Cognitive	Understand and and interpret Level II	Must know	Lecture	LAQ	LAQ	
	Information		Knows	Origins and function of Behaviour	Draw a list of species specific behaviours in birds, fish and primates	Cognitive	Recall Level I	Must know	Lecture	MCQ	MCQ	
	Information Analysis		Knows		Discuss the function of these specific behaviours	Cognitive	Understand and and interpret Level II	Must know	Lecture	SAQ	SAQ Viva	
	Information	Control of Behaviour	Knows	Factors influencing	Discuss the factors which	Cognitive	Understand and and interpret	Must know	Lecture	SAQ	SAQ	

				behaviour	regulate any two of the species specific behaviours listed above		Level II				Viva	
	Information Synthesis		Knows		Differentiate innate and learned behaviour as originating from unconditioned and conditioned reflexes	Cognitive	Understand and and interpret Level II	Must know	Lecture	LAQ	LAQ	
	Analytical		Knows		Discuss how emotions are the determinants of behaviour and functioning	Cognitive	Understand and and interpret Level I	Must know	Lecture	SAQ	SAQ Viva	
	Analytical		Knows		Discuss how	Cognitive	Understand and	Must know	Lecture	SAQ	SAQ	

					thoughts are is the determinant of behaviour and functioning		interpret Level II				Viva	
	Information Analysis	BehaviourBehaviourand Homoeopathy	Knows	Representation of Behaviour in the repertory	Illustrate the place of behaviour in repertory	Cognitive	Understand and interpret Level II	Must know	Demonstration	Checklist	MCQ / Viva	Repertory
	Information Synthesis		Knows	Representation of behaviour in Materia Medica	Illustrate the representation of behaviour in Materia Medica	Cognitive	Understand and interpret Level II	Must know	Demonstration	Checklist	MCQ / Viva	Materia Medica

Semester 2 Topic 1-Understanding emotions and their representation in the repertory and Homoeopathic Materia Medica(HMM)

Sr. No	Generic Competency	Subject area	Millers Know/ Kno	Specific competency	Specific Learning Objectives / Outcomes	Bloom's domain	Guilbert's level	Must know / desirable to know	TL method / media	Formative Assessment	Summ -ative Assessment	Integration - Horizontal / Vertical / Spiral

			w how / Show how / Does					/ nice to know				
	Information	Understanding emotions, the types and their origins	Knows	Define emotions and differentiate from feeling and mood	Define emotions, mood and feelings	Cognitive	Recall Level I	Must know	Lecture	MCQ	MCQ	
	Analysis		Knows how		Differentiate the above three from each other	Cognitive	Understand and interpret Level II	Must know	Lecture	Caselets	SAQ/Viva	
	Observation Empathy		Shows	Recognition of facial expressions	Recognize different emotions exhibited on the screens	Affective	Receive Level I	Must know	Images of facial expressions	Spotters	MCQ	
	System		Kno		Discuss	Cognit	Underst	Must	Lecture	MCQ	MCQ	

	thinking		w		the different ways that emotional expression is perceived by us	ive	and and interpret Level II	know				
	Information		Knows	Classification of emotions	Discuss the classification of emotions Primary and Secondary; Positive and negative	Cognitive	Understand and interpret Level II	Nice to know	Lecture	MCQ	MCQ	
	Analysis		Knows		Discuss the implications and limitation of the above classification	Cognitive	Understand and interpret Level II	Nice to know	Lecture	SAQ	SAQ/Viva	Integration with Kent's concept of hierarchy of mental symptoms

	Information collection		Knows	Understand theories of emotions and their significance	Describe the prominent theories of emotions James Lange Cannon-Bard Schaster-Singer Cognitive Mediational theory	Cognitive	Understand and interpret Level II	Nice to know	Lecture with cassettes	SAQ	SAQ/Viva	Integration with signs and symptoms from HMM of few prominent remedies studied simultaneously
	Information collection		Knows		The Bhava-Rasa theory of emotions	Cognitive	Recall level-I	Nice to know	Lecture with multimedia-e.g. video films or images demonstrating the theory of Bhav-Rasa	SAQ	SAQ	Integration with the concept of channelization and its importance in the healing process or cure from the 1st aphorism of Organono

												n
	Information Analysis		Knows		Differentiate the five theories from each other	Cognitive	Understand and interpret Level II	Nice to know	Lecture	LAQ Essay writing/Model preparation on each theory (can be considered as a project for practical)	LAQ	
	Information Synthesis Problem solving		Knows		Evaluate the implications of each of the theories in understanding emotions	Cognitive	Problem solving level -III	Nice to know	Discussion with examples	LAQ	LAQ	
	Information collection	Biological view of emotions	Knows	Biological basis of emotions	Enumerate the constituents of the limbic system	Cognitive	Recall Level	Must know	Lecture with model	MCQ	MCQ/ Viva	Anatomy + Physiolog

					important in the understanding of emotions							y
	Information Analysis and Synthesis		Knows		Discuss the role of the different constituents of the limbic system in expression and regulation of emotions	Cognitive	Understand and and interpret Level II	Must know	Discussion with models	LAQ	LAQ	
	Information Analysis		Knows		Discuss the effects of hormones in influencing emotions	Cognitive	Understand and and interpret Level II	Must know	Lecture	SAQ	SAQ/Viva	Physiology
	Information Synthetic		Knows	Sex and emotions	Define sexual activity in terms of emotional	Cognitive	Understand and and interpret Level II	Must know	Lecture	LAQ	LAQ	

					arousal							
	Information Synthesis		Knows		Describe the participation of brain systems in sexual behaviour	Cognitive	Understand and interpret Level II	Must know	Lecture	LAQ	LAQ	
	Information interpretation		Knows		Discuss the effect of early influences on sexual behaviour	Cognitive	Understand and interpret Level II	Must know	Lecture	SAQ	SAQ/Viva	
	Information Synthesis		Knows		Discuss the effects of socio-cultural surroundings on sexual behaviour	Cognitive	Understand and interpret Level II	Must know	Lecture	SAQ	SAQ/Viva	
	Information collection		Knows		Enumerate the varieties of sexual orientation seen	Cognitive	Recall Level -I	Must know	Lecture	MCQ	MCQ	

	Information		Knows		Identify gender identity and sexual identity	Cognitive	Recall Level -1	Must know	Lecture	MCQ	MCQ/ Viva	
	Self awareness		Knows		Recognize the challenges faced by differently sexually oriented persons in society	Affective	Receive Level-II	Must know	Visual clips of cases Role play	SAQ	SAQ/Viva	
	Information collection	~~Wholistic~~ Holistic approach to Emotional health	Knows	Emotions and their effects on the self and others	List the effects of emotions on the human system in terms of cognitive, behavioural and physical system	Cognitive	Recall Level-I	Must know	Lecture	MCQ	MCQ/ Viva	
	Systems thinking		Knows		Discuss the pathways through which	Cognitive	Understand and interpret Level	Must know	Lecture with demonstrative	LAQ	LAQ	

					emotions affect cognition, behaviour and physical system		II		examples			
	Information collection		Knows	Positive emotions and their effect on health	Define happiness, joy and peace	Cognitive	Recall Level I	Must know	Lecture with demonstrative examples	SAQ Essay	SAQ/ Viva	
	Information Analysis		Know		Describe the brain mechanisms responsible for states of happiness, joy and peace	Cognitive	Understand and interpret Level II	Must know	Lecture	SAQ	SAQ	Anatomy
	Information Synthesis		Know		Discuss the effects of states of happiness, joy and peace on human systems	Cognitive	Understand and interpret Level II	Must know	Lecture	LAQ	LAQ	Physiology

	Holistic approach Self awareness		Knows		Explore the different mechanisms for maintaining a state of joy and peace	Affective	Receive Leve-I	Must know	Lecture with demonstrative examples	LAQ	LAQ	Integration with concept of harmoniums way life or balance life from Organon
	Information collection		Knows	Influence of Cultural on expressions of emotions	Enumerate the effects of different cultures on emotional expression	Cognitive	Recall level-I	Nice to know	Lecture	MCQ Project on collection of information from different culture and their concept of emotions and its expressions	MCQ/ Viva	
	~~Holsitic~~ Holistic approach		Knows		Discuss the implications of cultures affecting	Cognitive	Understand and interpret Level II	Nice to know	Lecture/ Films	SAQ above exercise will be useful	SAQ/Viva	

					emotional expression					here as well		
	Information Analysis	Emotions and Homoeopathy	Knows	Representation of Emotions in the repertory	Illustrate the place of emotions in repertory	Cognitive	Understand and interpret Level II	Must know	Demonstration	DOPS	MCQ	Repertory
	Information Synthesis		Knows	Representation of emotions in Materia Medica	Illustrate the representation of emotions in Materia Medica	Cognitive	Understand and interpret Level II	Must know	Demonstration	DOPS	MCQ	Materia Medica

Semester 2 Topic 2-Understanding intellect and its representation in repertory and materia medica – Part-I Attention, concentration and memory

Sr. No	Generic Competency	Subject area	Millers Know/ Knowhow/ Showhow/ Does	Specific competency	Specific Learning Objectives / Outcomes	Bloom's domain	Guilbert's level	Must know / desirable to know / nice to know	TL method / media	Formative Assessment	Summ-ative Assessment	Integration - Horizontal / Vertical / Spiral
	Information collection	Introduction to attention and concentration the underlying psycho-physiological mechanisms, regulation and applied aspects	Knows	Definition of terms with psycho-physiological mechanisms	Define attention and concentration	Cognitive	Recall Level I	Must know	Lecture	MCQ	MCQ/ Viva	
	Information interpretation		Knows		Enumerate the brain regions which are involved in these functions	Cognitive	Recall Level I	Must know	Lecture with model	MCQ	MCQ/ Viva	Anatomy
	Information		Knows		Discuss the neural	Cognitive	Understand and interpre	Must know	Lecture	SAQ	SAQ/Viva	Physiology

	synthesis				processes which are responsible for regulating attention and concentration		t Level II					
	Information Interpretation		Knows	Control over attention and concentration	Discuss the factors which affect attention and concentration	Cognitive	Understand and interpret Level II	Must know	Lecture	MCQ	MCQ/ Viva	
	Information Interpretation and synthesis		Knows		Realize the above processes in our daily life	Affective	Receive Level-I	Must know	Demonstration	- ? ? survey on attention span with the help of multimedia or any activity	-	

	Information collection		Knows		Discuss the different physical and psychological methods used for regulating attention and concentration	Cognitive	Understand and interpret Level II	Must know	Lecture	LAQ	LAQ	
	Information Interpretation	Applied aspects of attention	Knows	Application of attention and concentration	Discuss the effects of disturbed attention in childhood and adult life	Cognitive	Understand and interpret Level II	Must know	Lecture Video	SAQ	SAQ/Viva	Spiral integration with anatomy and physiology
	Information Interpretation		Knows	Representation of attention and concentration in the repertory	Identify the rubrics representing attention and concentration in	Cognitive	Understand and interpret Level II	Must know	Demonstration	DOPS	MCQ	use of all the 3 repertories

					the repertory							
	Information Interpretation		Knows	Reflection of attention in Materia Medica	Identify the reflection of attention and concentration in remedies	Cognitive	Understand and interpret Level II	Must know	Demonstration	SAQ	SAQ/Viva	Sources of HMM
	Information collection	Memory types, processes and applied aspects	Knows	Types of Memory and processes	Enumerate the types of memory	Cognitive	Recall Level I	Must know	Lecture	MCQ	MCQ	
	Information Interpretation		Knows		Discuss the models of memory Information-processing And neural network	Cognitive	Understand and interpret Level II	Must know	Lecture	SAQ Project on models of Memory	SAQ/Viva	Integration with anatomy and physiology
	Information Analysis		Know		Discuss the function of the	Cognitive	Understand and interpret Level	Must know	Lecture	LAQ Activity on memory	LAQ	

					types of memory in our daily lives		II			games and its importance in day to day to life		
	Information collection		Know	Factors affecting memory and their regulation	Enumerate the factors which affect different types of memories	Cognitive	Recall Level I	Must know	Lecture	MCQ	MCQ/ Viva	
	Information Interpretation		Know how		Discuss different ways of assessing different types of memory	Cognitive	Understand and interpret Level II	Must know	Lecture	SAQ Activity based on memory games (connection can be linked to concept of MSE/MMSE)	SAQ/Viva	
	Information Collection	Forgetting, its mechanis	Know	Forgetting, the types and the	Discuss the reasons	Cognitive	Understand and interpre	Must know	Lecture	SAQ	SAQ/Viva	

	and Interpretation	ms and implications		implications	for forgetting		t Level II					
	Information Synthesis		Know how		Discuss ways of enhancing recall	Cognitive	Understand and interpret Level II	Must know	Lecture Demonstration with examples	SAQ Memory games with concept of mnemonics	SAQ/ Viva	
	Information collection		Knows		Describe the state of memory with senescence	Cognitive	Recall Level I	Must know	Lecture	SAQ	SAQ/Viva	
	Information Analysis and Interpretation		Knows		Discuss the implications of loss of memory with advancing age	Cognitive	Understand and interpret Level II	Must know	Lecture	SAQ survey on state of memory function with advancing age (a small article can be publishe	SAQ/Viva	Integration with anatomy and physiology

										d with the help of survey findings)		
	Information Interpretation	Applied aspects of Memory	Knows	Memory changes	Describe ways in which memory can get distorted	Cognitive	Understand and interpret Level II	Nice to know	Lecture	-	-	
	Information Analysis and Interpretation		Knows		Discuss ways of reconstructing a lost memory	Cognitive	Understand and interpret Level II	Nice to know	Lecture	-	-	
	Information Interpretation		Knows		Discuss the implications of the dangers of reconstruction of memory in our everyday life	Cognitive	Understand and interpret Level II	Nice to know	Lecture	-	-	
	Information	Homoeopathic aspects of	Knows	Representation of sharp and	Identify the rubrics	psychomotor	Understand and	Must kno	Demonstration	DOPS	MCQ	

	collection ,Interpretation	memory		loss of memory in the repertory	representing memory issues in the repertory		interpret Level I	w				
	Information collection and Interpretation		Knows	Reflection of memory issues in Materia Medica	Identify the reflection of memory in remedies	Cognitive	Understand and interpret Level I	Must know	Demonstration	SAQ	SAQ/Viva	

Semester 2 Topic 3-Understanding intellect and its representation in repertory and materia medica –Part-**II Perception and Intelligence**

Sr.No	Generic Competency	Subject area	Millers Know/ Know how / Show how	Specific competency	Specific Learning Objectives / Outcomes	Bloom's domain	Guilbert's level	Must know / desirable to know / nice to know	TL method / media	Formative Assessment	Summ-ative Assessment	Integration - Horizontal / Vertical / Spiral

			/ Does									
Hom UG-OM-2.2.1	Information collection	Discuss Perceptual organization	knows	Describe Perception and differentiate from sensations and thinking	Define Perception.	Cognition	Recall level I	Must know	Small group discussion	MCQ	MCQ	Horizontal Anatomy and Physiology
	Information organization and Interpretation				Relate perception to sensory processes and differentiate from thinking	Cognition	Understand and interpret Level II	Must know	Visual films	SAQ	SAQ	
Hom UG-OM-2.2.2	Information Synthesis		know	Genesis of perception and importance of ground ---	Describe the Psychophysiology of perception	Cognition	Understand and interpret Level II	Must know	Small group discussion	MCQ	MCQ	
Hom UG-OM-2.2.3	Information interpretation		Knows how	Dynamics of perception and perceptu	Describe the role of attention and state of the mind,	Cognitive	Understand and interpret	Must know	Small group activities	Observation Examples or	MCQ/ Viva	

				al errors	depth, constancy, movement in Perception		Level II			Activity indicating the role of in attention in perception		
Hom UG-OM-2.2.4	Information synthesis		Know		Explain the physiological and psychological basis for Perceptual errors.	Cognitive	Understand and interpret Level II	Desirable to know	Films and images	Project	MCQ/ Viva	
Hom UG-OM-2.2.5	Information synthesis		Know	Social perception and its impact on our lives	Discuss determinants of social perception	Cognitive	Understand and interpret Level II	Must know	Class room lecture	MCQ + Survey on this topic demonstrating the impact of social factors	LAQ/SAQ	
	Self reflection		Know		Realize the effect of perception on	Affective	Receive Level I	Must know	Media and discussio	SAQ	SAQ/Viva	Integration with the concept of disposition

					interpersonal and community relationships				n + Role Play followed by directed discussion			–Mental specifically / individualization
Hom UG-OM-2.2.6	Holistic approach		Knows	Gestalt perception and its importance to Homoeopathy	Observe gestalt perception	psycho motor	Observe/ imitate Level II	Must know	Small group activity + Role Play followed by directed discussion	Presentation performance	MCQ	
					Illustrate its importance to Homoeopathy in case taking	Cognitive	Understand and interpret Level II	Desirable to know	Visual films Demonstration in OPD/videos		LAQ	Horizontal/ Vertical with Organon
HO MU G OM	information Synthesi		Knows	Applied aspects of Perceptio	Understand the perceptual difficulties	Cognitive	Understand and interpret	Must know	Caselets and visual graphics		SAQ/Viva	Vertical integration Psychiatry

2.2.7	s			n	of Dyslexia Know the phenomena of hallucination		Level II					
HOM UGOM 2.2.8	Information management		Shows how	Perception in Repertory and Materia Medica	Derives rubrics and remedies related to perceptual phenomena	Cognitive	Understand Level II	Must know	Demonstrate	DOPS	SAQ / Viva	Horizontal integration Repertory and HMM
	Information collection	Intelligence and its measurement	Knows	Conceptual models of Intelligence	Define Intelligence	Cognitive	Recall level I	Must know	Lecture	MCQ	MCQ/ Viva	
	Information Analysis and information Interpretation		Knows		Detail the different approaches to viewing Intelligence i. Multiple intelligences (Gardne	Cognitive	Understand and interpret Level II	Nice to know	Lecture	SAQ	SAQ/Viva	

					r) ii. Triarchic theory (Sternberg) iii. Fluid and Crystallized (Catell's) iv. PASS theory							
	Information collection		Knows	Measurement of Intelligence	Define Intelligence Quotient (IQ)	Cognitive	Recall level I	Must know	Lecture	SAQ	SAQ/Viva	
	Information Analysis and interpretation		Knows		Discuss the contribution of heredity and environment to intelligence	Cognitive	Understand and interpret Level II	Must know	Lecture	SAQ	SAQ/Viva	
	Informaiton		Knows		Discuss the pros and cons of	Cognitive	Understand and	Must know	Lecture	SAQ	SAQ/Viva	

	Analysis				measurement of IQ		interpret Level II					
	Information		Knows		Enumerate the methods of assessing intelligence	Cognitive	Recall level I	Nice to Know	Lecture	MCQ	MCQ/ Viva	
	Information collection	Intelligence as a force	Knows	Emotional intelligence and its uses	Define emotional intelligence	Cognitive	Recall level I	Must know	Lecture	MCQ	MCQ/ Viva	
	Information collection		Knows		Define the components of Emotional intelligence	Cognitive	Recall level I	Must know	Lecture	MCQ	SAQ/Viva	
	System thinking and self awareness		Knows		Discuss the ways in which Emotional intelligence is useful to individuals and groups	Cognitive	Understand and interpret Level II	Must know	Lecture and discussion	LAQ Activity indicating the usefulness of Emotional Intelligen	LAQ	

										ce in day to dayactivity / functioning		
	Information collection		Knows	Creativity and its growth	Define creativity	Cognitive	Recall level I	Must know	Lecture	SAQ	SAQ/Viva	
	Information Systems thinking		Knows		Illustrate the process of creativity	Cognitive	Understand and interpret Level II	Must know	Lecture	Project or activity on any theme indicating the creativity		
	Systems thinking		Knows		Discuss the ways in which creativity can be fostered	Cognitive	Understand	Must know	Lecture	SAQ	SAQ/Viva	
	Information collection	Applied aspects of Intelligence	Knows	Extremes of intelligence	List the types of extreme intelligence on the Bell-shaped	Cognitive	Recall level I	Must know	Lecture	SAQ	SAQ/Viva	

					curve							
	Information Analysis		Knows		Discuss the special needs of the persons occupying the extremes of intelligence	Cognitive	Understand and interpret Level II	Nice to know	Lecture	SAQ	SAQ/Viva	
	Information Analysis	Intelligence and Homoeopathy	Knows	Representation of Intelligence in the repertory	Illustrate the place of Intelligence in repertory	Cognitive	Understand and interpret Level II	Must know	Demonstration	DOPS	MCQ	Repertory
	Information Synthesis		Knows ? Shows	Representation of intelligence in Materia Medica	Illustrate the representation of intelligence in Materia Medica	Cognitive	Understand and interpret Level II	Must know	Demonstration	DOPS	SAQ/Viva	Materia Medica

Semester 2 Topic 4-Motivation, its types and its relevance for Homoeopath

Sr.No 10	Generic Competency	Subject area	Millers Know/ Know how/ Show how/ Does	Specific competency	Specific Learning Objectives / Outcomes	Bloom's domain	Guilbert's level	Must know / desirable to know / nice to know	TL method / media	Formative Assessment	Summ-ative Assessment	Integration - Horizontal / Vertical / Spiral
Hom UG-OM-2.10.1	Information collection	Motivation, the types and its role in daily living	Knows	Describe motivation	Define motivation	Cognitive	Recall level I	Must know	Class room lecture	MCQ	LAQ/SAQ	
Hom UG-OM-2.10.2	Information collection		Knows	Understand the nature and types of motivation	Enumerate the types of motivation	Cognitive	Recall level I	Must know	Class room lecture	MCQ	LAQ/SAQ	
Hom UG OM 2.10.3	Self reflection		Knows how		Recognize the types of motivation influencing our thinking and emotions	Affective	Receive level I	Must know	Audio-visual Discussion	SAQ	SAQ/Viva	
Hom	Informa	Use of	Knows	Models of	Describe	Cognitive	Understan	Must	Small	Assign	LAQ	

UG-OM-2.10.4	tion Interpretation	Maslow's model of motivation in our personal and professional lives		Motivation	the Maslow's self-actualization model		d and interpret Level II	know	group discussion	ment		
HOM UG OM 2.10.5	Self reflection and awareness		Knows how		Recognize the importance of the model in knowing human beings	Affective	Receive level I	Must know	Group discussion with caselets	Checklist	SAQ/Viva	
UG HOM 2.10.6	Information Synthesis	Utility of Motivation for a Homoeopath	Shows how	Reflection of motivation in Repertory and HMM	Derives rubrics and remedy images related to motivation	Cognitive	Understand and interpret Level II	Must know	Demonstrate	Checklist	MCQ	

Semester 2 Topic 5-Learning, its types and its relevance in daily functioning of Humans

Sr.No 8	Generic Competency	Subject area	Millers Know / Know	Specific competency	Specific Learning Objectives / Outcomes	Bloom's domain	Guilbert's level	Must know / desirable to know / nice to	TL method / media	Formative Assess ment	Summ -ative Assess ment	Integration - Horizontal / Vertical / Spiral

			how/ Show how/ Does					know				
Hom UG-OM-I.6.1	Information collection	Learning and adaptation	Knows	Define learning and its role in bringing about adaptation to change	Define learning and adaptation	Cognitive	Recall level I	Must know	Class room lecture	MCQ	LAQ / SAQ	
	Information Synthesis				Derive the relationship between the two	Cognitive	Understand and interpret Level II	Must know	Caselets	Caselets	Problem	
Hom UG-OM-I.6.2	Information collection	Learning forms and their implication for us	Knows	Forms of learning	Explain the three forms of learning viz. Classical conditioning, Instrumental conditioning and observational learning	Cognitive	Understand and interpret Level II	Must know	Class room lecture	Checklist	LAQ/SAQ	
Hom UG-OM-I.6.3	Holistic thinking		Does	Differentiate the forms or types of learning and their	Explain the significance of the above three forms in our daily lives	Cognitive	Understand and interpret Level II	Must to know	Demonstration	Project	MCQ	

				significance								
	Information collection		Know	Determinants of learning and their significance	Enumerate the various factors which determine the quality of learning	Cognitive	Recall level I	Must know	Lecture	MCQ	MCQ	
	Problem solving		Know how		Derive the ways in which these factors can be used for enhancing learning	Cognitive	Problem solving level II	Must know	Assignments	Caselets	SAQ / Viva	
	Analytical		Knows		Identify the factors which would inhibit learning and which would need to be attended to	Cognitive	Understand and interpret Level II	Must know	Assignment	SAQ	SAQ/Viva	
	Information collection	Assessment of learning	Knows	Know the methods of assessing learning	List the methods whereby learning is assessed	Cognitive	Recall level I	Must know	Lecture	MCQ	MCQ/Viva	
	Analytical				Evaluate the respective value of the different methods to assess	Cognitive	Problem solving level III	Must know	Assignment	SAQ	SAQ/Viva	

					learning							
	Information Synthesis	Utility of Learning and adaptation for a Homoeopath	Shows how	Reflection of learning and adaptation in Repertory and HMM	Derives rubrics and remedy images related to learning and adaptation	Cognitive	Understand and interpret Level II	Must know	Demonstrate	DOPS	MCQ	

Semester 3 Topic 1-Evolution of Mind with Growth and Development: Normal developments since birth to maturity: physical and psychological

Sr.No	Generic Competency	Subject area	Millers Know/ Know how/Show how/Does	Specific competency	Specific Learning Objectives / Outcomes	Bloom's domain	Guilbert's level	Must know / desirable to know / nice to know	TL method / media	Formative Assessment	Summ-ative Assessment	Integration - Horizontal / Vertical / Spiral
	Information collection and analysis	Concept and process of Human	Knows	Discuss areas of human Growth and	Define and distinguish between Growth and Development	Cognitive	Interpret	Must know	Lecture	SAQ	SAQ/Viva	

Hom UG-OM-I.4.1	Information collection	Develop m	Knows	Development	List the three domains of development Physical, Cognitive and psychosocial development	Cognitive	Remember- level I	Must know	Class room Lecture	MCQ	LAQ / SAQ	
Hom UG-OM-I.4.2	Information Analysis ~~Analytical~~		Knows how		Distinguish the characteristics of physical, cognitive and psychosocial development	Cognitive	Understand and interpret Level II	Must know	Small group discussion on Charts / Models Audio-visual aids	Quiz True-false test items	LAQ/SAQ	
	Information analysis Analyitcal		Knows how	Discuss determinants of developme nt	Distinguish between the contribution of nature and nurture in development	Cognitive	Understand and interpret Level II	Must know	Lecture	LAQ	LAQ	
	information collection and Interpretation		Knows		Define the concept of developmental milestones in childhood	Cognitive	Recall	Must know	Lecture	MCQ	MCQ	

Hom UG-OM-I.4.3	Information Organization ~~Analytical~~	Developmental stages of Psychosexual, cognitive and psychosocial development	Knows how	Discuss the theories of cognitive and psychosocial development	Discuss the theory of psychosexual development as proposed by Freud	Cognitive	Understand and interpret Level II	Must know	Small group demonstration, peer group activities.	MCQ	MCQ	Horizontal integration with Anatomy, physiology
	Information Analytical		Knows how		Discuss the theory of cognitive development proposed by Piaget	Cognitive	Understand and interpret Level II	Must know	Lecture with examples	LAQ	LAQ	
	Information Analytical		Knows how		Discuss the theory of psychosocial development of Erik Erikson	Cognitive	Understand and interpret Level II	Must know	Lecture	LAQ	LAQ	
	Information collection and Interpretation and Analysis	Human Development across the Life span	Knows how	Discuss the development of the human being across the lifespan	Discuss the different stages of physical, emotional and cognitive development of childhood	Cognitive	Understand and interpret Level II	Must know	Lecture	LAQ	LAQ	

	Information collection Self reflection		Knows		Discuss parental styles appropriate to help optimal growth in childhood	Cognitive	Understand and interpret Level II	Must know	Lecture	LAQ Essay on most suitable parenting style	LAQ	
	Information collection and Interpretation ~~Analysis~~		Knows how		Discuss the different stages of physical, psychosocial and cognitive development of adolescence	Cognitive	Understand and interpret Level II	Must know	Lecture	LAQ	LAQ	
	Information Self reflection		Knows how / Show how		Discuss the role of home, school and society on the development of the adolescent	Cognitive ?Affective	Understand and interpret Level II	Must know	Lecture	LAQ	LAQ	
	Information Analysis		Knows how		Discuss the different stages of physical, psychosocial and cognitive	Cognitive	Understand and interpret Level II	Must know	Lecture	LAQ	LAQ	

					development of adulthood							
	Information Analysis		Knows how		Discuss the different stages of physical, psychosocial and cognitive development of old age and senescence	Cognitive	Understand and interpret Level II	Must know	Lecture	LAQ	LAQ	
	Information Self reflection and awareness	Significance of knowledge of Growth and Development for a homoeopath	Knows how	Discuss significance of growth and development in homoeopathy	Recognize the impact on knowledge of Growth and Development in case taking	Affective	Receive level I	Must know	Lecture	LAQ	LAQ	Hor. with Organon
	Information Analysis		Knows		Identify the significance of knowledge of Growth and Development in use of Repertory	Psychomotor	Imitation level I	Must know	Lecture	LAQ	LAQ	Hor. with Repertory
	Information organiza		Knows		Locate the significance of	Cognitive	Understand and interpret	Must know	Lecture	LAQ	LAQ	Hor. with HMM

	tion ~~Analysis~~				knowledge of Growth and Development in Homoeopathic Materia Medica		Level II					

Semester 3 Topic 2- Development of Personality, types, Traits, Temperament

Sr.No	Generic Competency	Subject area	Millers Know/ Know how/Show how/Does	Specific competency	Specific Learning Objectives / Outcomes	Bloom's domain	Guilbert's level	Must know / desirable to know / nice to know	TL method / media	Formative Assessment	Summ -ative Assessment	Integration - Horizontal / Vertical / Spiral
HomUG-OM-I.9.1	Information collection	Concept of Personality. Temperament and trait	Knows	Discuss the concept of personality	Define the concept of personality	Cognitive	Recall level I	Must know	Lecture with discussion	MCQ	SAQ/Viva	Concept to be discuss with Organon
	Informa		Knows	Discuss the	Discuss the concept of	Cognitiv	Understand and	Must	Lecture	SAQ	SAQ	

	tion collection , information interpretation and Synthesis			concept of Temperament and its evolution	temperament and its relation to Body type	e	interpret Level II	know				
Hom UG-OM-I.9.4	Information collection + Information Interpretation		Knows	Discuss the concept of traits and its utility	Describe the scientific concept of 'Traits' and their importance	Cognitive	Understand and interpret Level II	Must know	Lecture with case let discussion	MCQ	SAQ/Viva	Concept to be discuss with Organon
Hom UG-OM-I.9.5	Information collection interpretation and Analysis Synthesi	Theories of Personality and developmental process	Knows	Discuss the Theories of Personality	Explain the following theories of personality 1. Biological 2. Behaviouristic 3. Learning 4. Humanistic	Cognitive	Understand and interpret Level II	Desirable to know	Lecture with case discussion or suitable example	MCQ Essay on each theory	SAQ/Viva	

	s				proposed by various psychologists and their implications to a physician							
Hom UG-OM-I.9.6	Information Holistic approach		Knows how	Discuss the development of Personality and factors determining it	Illustrate the process of personality development	Cognitive	Understand and interpret Level II	Desirable to know	Case scenario discussion	MCQ	SAQ	
Hom UG-OM-I.9.7	Information collection and Case Interpretation of data		Knows		Enumerate the Factors determining the Personality	Cognitive	Recall level I	Desirable to know	Case scenario discussion	MCQ	SAQ/Viva	
Hom UG-OM-I.9.9	Information Analysis Synthesis		Knows how	Assessment of personality	Describe the techniques of assessing Personality	Cognitive	Understand and interpret Level II	Nice to know	Case scenario discussion	MCQ	SAQ/Viva	
Hom UG-OM-	Information collectio	Personality and Homoeo	Knows	Implications of study of	Discuss the relevance of concept of	Cognitive	Understand and	Must know	Discussion with case	MCQ	LAQ	Hor with Organ

I.9.10	n	pathy		personality to homoeopath	Personality to a homoeopath		interpret Level II		scenario			on
Hom UG-OM-I.9.11	Problem Solving		Knows		Discuss the relevance of studying Personality from the perspective of Materia Medica	Cognitive	Understand and interpret Level II	Desirable to know	Discussion with scenario	MCQ	LAQ	Hor with MM

Semester 3 Topic 3-Bio-Psycho-Social development of Human Being

Sr.No 7	Generic Competency	Subject area	Millers Know/ Know how/Show how/Does	Specific competency	Specific Learning Objectives / Outcomes	Bloom's domain	Guilbert's level	Must know / desirable to know / nice to know	TL method / media	Formative Assessment	Summ-ative Assessment	Integration - Horizontal / Vertical / Spiral
Hom UG-OM-I.5.1	Information	Concept of Bio-Psycho-Social model for	Knows	Describe concept of Bio-Psycho-Social developm	Define the Bio-Psycho-Social model	Cognitive	Recall level I	Must know	Lecture	Ess	LAQ/ SAQ	Anatomy, Physiology

	Information Analysis Synthesis	holistic care	Knows	ent of Human Being	Illustrate how each of the constituent of the Bio-psycho-social model gives a more comprehensive understanding of a human being	Cognitive	Understand and interpret Level II	Must know	Lecture	LAQ	LAQ	
	Holistic approach System based thinking		Knows how	Implications of the Bio-psycho-social approach	Discuss the significance of the Bio-psycho-social approach to a human being	Cognitive	Understand and interpret Level II	Must know	Lecture	LAQ	LAQ	
	Synthesis		Knows	Implications in homoeopathic care	Discuss the similarity between homoeopathic approach to a human being with Bio-psycho-social approach	Cognitive	Understand and interpret Level II	Must know	Lecture	LAQ	LAQ	Hor with Organon

Hom UG-OM-I.5.5	Information Synthesis		Knows how	Discuss Socio cultural basis of Behavior	Defines the role of culture in shaping human behavior.	Cognitive	Recall level I	Must know	Small group discussion	Chart preparation Assignment	SAQ	

Semester 3 Topic 4Concept of Stress-Conflict: their genesis, types and effects on the mind and body

Sr.No	Generic Competency	Subject area	Millers Know/ Know how/Show how/Does	Specific competency	Specific Learning Objectives / Outcomes	Bloom's domain	Guilbert's level	Must know / desirable to know / nice to know	TL method / media	Formative Assessment	Summ-ative Assessment	Integration - Horizontal / Vertical / Spiral
Hom UG-OM-I.10.1	Information collection	Stress, Conflicts and Coping Mechanisms	Knows	Discuss the Concept of Stress and types of stress	Define Stress	Cognitive	Remember and Recall Level I	Must know	Presentation with case let	MCQ	LAQ	Observation in any departmental OPD/ IPD
Hom UG-OM-I.10.2	Information and analysis		Knows		Classify the types of stress	Cognitive	Understand and interpret Level II	Must know	Presentation with case let	MCQ	LAQ	

Hom UG-OM-I.10.3	Information		Knows how		Identify the sources of Stress	Cognitive	Understand and interpret Level II	Must know	Presentation with case let	MCQ	SAQ/Viva	
Hom UG-OM-I.10.4	Organize the data		Knows how		Discuss the effect of Stresses on Mind and Body	Cognitive	Understand and interpret Level II	Desirable to know	Presentation with case let	MCQ	SAQ/Viva	
Hom UG-OM-I.10.5	Information		Knows	Concept of Conflict and types	Define Conflict	Cognitive	Recall level I	Must know	Presentation with case let	MCQ	SAQ/Viva	Observation in any departmental OPD/ IPD
Hom UG-OM-I.10.6	Information collection		Knows		State the stages of Conflict	Cognitive	Recall Level I	Must know	Presentation with case let	MCQ	SAQ/Viva	Observation in any departmental OPD/ IPD
Hom UG-OM-I.10.	Organize the data		Knows how		Enumerate the types of Conflict	Cognitive	Recall Level I	Must know	Presentation with case let	MCQ	SAQ/Viva	Observation in any departmental OPD/

7												IPD
Hom UG-OM-I.10.8	Analysis Synthesis		Know	Describe the relationship between stress and conflict	Discuss the relationship between Stress and Conflict	Cognitive	Understand and interpret Level II	Desirable to know	Presentation with case let	MCQ	SAQ/Viva	Observation in any departmental OPD/ IPD
Hom UG-OM-I.10.9	Information		Know	Discuss the concept of Coping Mechanisms and their use	Define Coping mechanism	Cognitive	Recall Level I	Must know	Presentation with case let	MCQ	SAQ/Viva	Observation in any departmental OPD/ IPD
Hom UG-OM-I.10.10	Information		Knows how		Enumerate the types of Coping mechanisms	Cognitive	Recall Level I	Must know	Presentation with case let	MCQ	SAQ/Viva	Observation in any departmental OPD/ IPD
Hom UG-OM-I.10.1	Problem solving		Knows how		Discuss the utility of Coping mechanism while dealing	Cognitive	Understand and interpret Level II	Must know	Presentation with case let	MCQ	MCQ	Observation in any departmental OPD/ IPD

1					with Stress							
	Holistic approach System based thinking		Knows how	Discuss successful resolution of conflict	Evaluate the role of learning and adaptation in ensuring resolution of stress	Cognitive	Understand and interpret Level II	Must know	Lecture with case example	LAQ	LAQ	
	Synthetic	Application of stress-conflict in Homoeopathy	Shows How	Exploring effects of stress-conflict in Homoeopathy	Explore the reflection of conflict in Hom Materia Medica	Cognitive	Problem solving III	Must know	Lecture	LAQ	LAQ	

Semester 3 Topic- 5- Applied Psychology: Clinical, Education, Sports, Business and Industrial

Sr.No	Generic Competency	Subject area	Millers Know/ Know how/ Show how/	Specific competency	Specific Learning Objectives / Outcomes	Bloom's domain	Guilbert's level	Must know / desirable to know / nice to know	TL method / media	Formative Assessment	Summ-ative Assessment	Integration - Horizontal / Vertical / Spiral

			Does									
Hom UG-OM-I.11.1	Information Collection	Applied Psychology	Knows	Understand the application of Psychology in the different fields of Clinical, Education, Sports, Business, Industrial	Define the following terms in Applied Psychology viz Clinical, Business, Education, Sports, Industrial	Cognitive	Recall Level I	Must know	Discussion on the utility of the subject in multiple human resources areas	MCQ	SAQ	
	Information management		Knows		Illustrate the utility of subject Psychology in various fields	Cognitive ? Psycho-motor	Understand and interpret Level II	Desirable to know	Library references	SAQ	SAQ/Viva	

Semester 3 Topic 6: Psychology and its importance in Homoeopathic practice for Holistic Management of the patient

	Generic Competency	Subject area	Millers Know/ Know how/ Show how/ Does	Specific competency	Specific Learning Objectives / Outcomes	Bloom's domain	Guilbert's level	Must know / desirable to know / nice to know	TL method / media	Formative Assessment	Summ-ative Assessment	Integration - Horizontal / Vertical / Spiral
	Systems thinking	Psychology and	Knows	Summarizing the	Discuss the ways in	Cognitive	Understand and	Must know	Lecture and	LAQ	LAQ	

		Homoeopathy for Holistic management		course of Psychology	which Psychology may contribute to the holistic management of the patient		interpret Level II		discussion			

Teaching-Learning Methods

a. Classroom teaching
    i. Lecture
    ii. Demonstration
    iii. Group discussion
    iv. Problem based learning
b. Practical
    i. Psychological theories –Models / Experiments / Any activity
    ii. Facial recognition spotting
c. Individual learning
    i. Assignment
    ii. Short project -e.g. searching MM or Repertory for representation of emotions, thoughts and behaviour

V Practical – Lab work – Field – Clinical Hospital work

a. Journal club: a team of students to present the understanding of current development inpsychological aspects of every day events

b. Field work - Some survey for identification of psychological disturbance in Common Man
c. Clinical Hospital Work- Small project on psychometric tests.

VI No of Teaching Hours: Theory

Sr. No	Topic	No of lectures	Non-lectures
1.	Introduction to the study of Mind in Homoeopathy	3	-
2.	Psychological organization and the interrelationship of Thought (Cognition), Feelings (Affect) and Behaviour (Conation); Conscious and Unconscious elements	2	1
3.	Physiological basis of behaviour - the place of conditioned and unconditioned reflex	3	1
4.	Understanding Behavior and Functioning and expressions in Repertory and Materia Medica	4	2
5.	Understanding Emotion, its different definitions and expressions in Repertory and Materia Medica	5	3
6.	Understanding Intellect: Attention, memory and its function and expression in Repertory and Materia Medica	4	3
7.	Understanding Intellect: Perception and expressionsin Repertory and Materia Medica	3	2
8.	Understanding Intellect: Thinking, intelligence and its measurementand expressions in Repertory and Materia Medica	4	2
9.	Motivation and their types with role in our lives	2	2
10.	Learning and its place in adaptation	4	2

11.	Growth and development of Mind and its expressions from Infancy to old age	4	2
12.	Structure of Personality, the types, their assessment, relationship to Temperament and representation in Materia Medica	4	2
13.	Conflicts: their genesis and effects on the mind and body	3	1
14.	Applied Psychology: Clinical, Education, Sports, Business, Industrial	2	-
15.	Psychology and its importance in Homoeopathic practice	2	-
	Total	50	22

8.Assessment

8A- Number of papers and Mark Distribution

Sr. No.	Course Code	Papers	Theory	Practical	Viva Voce	Internal Assessment Practical	Grand Total
1	HomUG-OM-I	1	100	50	40	10	200

8B - Scheme of Assessment (formative and Summative)

Sr. No	**Professional Course**	**1st term (1-6 Months)**	**2nd Term (7-12 Months)**	**3rd Term (13-18 Months)**	
1	First Professional BHMS	First PA + 1ST TT	2nd PA+2ND TT	3rd PA	UE

8 C - Evaluation Methods for Periodical Assessment

Sr. No	Evaluation Dimensions
1	Practical/Clinical Performance
2	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3	Open Book Test (Problem Based)
4	Reflective writing
5	Class Presentations; Work Book Maintenance
6	Problem Based Assignment
8	Co-curricular Activities, (Social Work, Public Awareness, Surveillance/ Prophylaxis Activities, Sports or Other Activities which may be decided by the Department).
9	Small Project

8D - Scheme of Assessment (formative and Summative)

Sr. No	Professional Course	1st term (1-6 Months)			2nd Term (7-12 Months)			3rd Term (13-18 Months)	
1	First Professional BHMS	1stPA	1ST TT		2nd PA	2ND TT		3rd PA	UE
		10 Marks Practical/Viva	50 Marks Theory	50 Marks Practical/ Viva	10Marks Practical/Viva	50 Marks Theory	50 Marks Practical/ Viva	10Marks Practical/Viva	

For Internal assessment, Only Practical/Viva marks will be considered. Theory marks will not be counted)

8E - Method of Calculation of Internal Assessment Marks for Final University Examination:

PA1 Practical/Viva (10 Marks) **A**	PA2 Practical/Viva (10 Marks) **B**	PA3 Practical/Viva (10 Marks) **C**	Periodical Assessment Average PA1+PA2+PA3/3 **D**	TT1 Practical/Viva (50 Marks) **E**	TT2 Practical/Viva (50 Marks) **F**	Terminal Test Average TT1+ TT2/ 100*10 **G**	Final Internal Assessment Marks **D+G/2**

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

8 F - Paper Layout

Summative assessment:

Theory- 100 marks

Organon -50 marks

MCQ	**5 marks**
SAQ	**20 marks**
LAQ	**25 marks**

Psychology - 50 marks

MCQ	**5 marks**
SAQ	**20 marks**
LAQ	**25 marks**

Sr. No.	Paper			D Type of Questions “Yes” can be asked. “No” should not be asked

	A List of Topics	B Terms	C Marks	MCQ (1mark)	SAQ (5 Marks)	LAQ (10 Marks)
1	Introductory Topics	I	Refer Next Table	Yes	Yes	No
2	Logic	I		No	Yes	No
3	§1-27&105-145 of Organon of medicine, Vital Force – Dynamisation – Homoeopathic Cure – Natures Law of Cure & Implications – drug proving	II & III		No	Yes	Yes
4	The Physician – Purpose of Existence, Qualities, Duties, Knowledge	III		No	No	Yes

8 G – I – Distribution of Theory Exam - Organon

8 G – II – Theme Table - Organon

Theme*	Topic	Term	Marks	MCQ's	SAQ's	LAQ's
A	Introductory Topics	I	10	Yes	Yes	No
B	Logic	I	05	No	Yes	No
C	§1-27&105-145 of Organon of medicine, Vital Force – Dynamisation – Homoeopathic Cure – Natures Law of Cure & Implications – drug proving	II & III	25	No	Yes	Yes
D	The Physician – Purpose of Existence, Qualities, Duties, Knowledge	III	10	No	No	Yes

Theme table: -Psychology

Theme*	Topics	Term	Marks	MCQ's	SAQ's	LAQ's
A	Introduction to psychology	I	05	NO	Yes	No
B	Psychological organization of Mind –Structural and Functional	I	01	Yes	No	No
C	Understanding	I	16	Yes	Yes	Yes

	Emotion/thinking/ Behaviour					
D	Motivation and their types with role in our lives	I	05	No	Yes	No
E	Growth and development	II	11	Yes	No	Yes
F	Personality development and stress management	III	06	NO	Yes	No
G	Applied Psychology	III	06	Yes	Yes	No

8 H Question paper Blue print :

<u>Organon -50 marks +Psychology - 50 marks</u>

A **Question Serial Number**	**B** **Type of Question**	**Question Paper Format** **(Refer table 4FII theme table for themes)**
Q1Organon 05 Marks	Multiple Choice Questions (MCQ) 5 Questions 1 mark each All Compulsory Must Know part – 3 MCQ Desirable to know – 2 MCQ Nice to know – NIL	Theme A Theme A Theme A Theme A Theme A
Q1 Psychology 05 Marks	All compulsory Multiple choice Questions (MCQ) 5 Questions - 1 mark each Must know – 3MCQ Desirable to know-1 MCQ Nice to know -1 MCQ	Theme B+C+E+F+G

Q2 Organon 15 Marks	Short Answer Questions (SAQ) 3 Questions 5 Marks Each All Compulsory Must Know part – 3SAQ Desirable to Know – NIL Nice To Know - NIL	Theme A Theme B Theme C
Q2 Psychology 25 Marks	Short answer Questions (SAQ) 5 Questions 5 Marks Each All compulsory Must know part: 4 SAQ Desirable to know: 1 SAQ	Theme A+C+D+F+G
Q3 Organon 30 Marks	Long Answer Questions (LAQ) 3 Questions of 10 Marks Each Respectively All Compulsory All questions on must know Desirable to Know – NIL Nice To Know - NIL	Theme C (10 Marks) Theme C (10 Marks) Theme D (10 Marks)
Q3 Psychology 20 Marks	Long answer Questions (LAQ) 2 Questions of 10 marks each All compulsory Must know part: 2 LAQ	Theme C=10 marks Theme E=10 marks

8 I - Distribution of Practical Exam

Practical -100

Practical Organon: 50 marks

Practical	25 marks
Viva voce	20 marks
Internal assessment	5 marks

Practical Psychology: 50 marks

Practical	25 marks
Viva voce	20 marks
Internal assessment	5 marks

9. References

I. Text book/s

1. Hahnemann S. Organon of medicine. 6ed (2016) New Delhi: Indian Book & Periodicals Publishers;.
2. Sarkar. B. K. Hahnemann's organon of medicine. (2014) Reprint ed. Birla Publications Pvt.Ltd;.
3. Roberts H. A. The principles and Art of cure by homoeopathy. student ed. (2014) New Delhi: B. Jain Publisher's (P) Ltd; 2006.
4. Kent J. T. Lecture's on homoeopathic philosophy. Reprint ed. New delhi: B Jain Publisher's (P) Ltd;
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8. Allen J Henry: The Chronic MiasmWith Repertory, Reprint ed. New Delhi:B Jain Publisher's (P)Ltd.
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1. Arya M.P (2018): A study of Hahnemann's Organon of medicine. 6thed. New Delhi: B Jain Publisher's(P) Ltd.
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3. Vithoulkas George (2002): Science of Homoeopathy. B Jain Publisher's(P) Ltd.

References/ Resources: Standard textbook: for Psychology

1. Shelley E Tylor. 10th edition (2018) Health psychology
2. Shashi Jain 4th edition (2014) Introduction to psychology, Kalyani.
3. Psychology textbook for class XI.7th edition (2013) National Council for Educational Research and training
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5. Morgan Clifford Thomas 7th edition (2017) Introduction to Psychology, Tata McGraw-Hill
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7. Chavan (2013), Community Mental Health in India,Jaypee Brothers Medical
8. Munn (2010) Norman Normal Psychology, Boston,Houghton Mifflin
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11. Diana Papilia (2001) Developmental psychology, Colombia: Editorial McGraw Hill
12. Atkinsons & Hilgard (2015) Introduction to Psychology, Cengage India Private Limited

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COMPETENCY BASED DYNAMIC CURRICULUM FOR

FIRST BHMS PROFESSIONAL COURSE

(Applicable from Batch 2022-2023 onwards for 5 years or until further notification by National Commission for Homoeopathy whichever is earlier)

(Yoga for Health Promotion)

HOMOEOPATHY EDUCATION BOARD

NATIONAL COMMISSION FOR HOMOEOPATHY

MINISTRY OF AYUSH, GOVERNMENT OF INDIA

JAWAHAR LAL NEHRU BHARTIYA CHIKITSA AVUM HOMOEOPATHY ANUSANDHAN BHAVAN

No.61-65, Institutional Area, opp. 'D' block, Janak Puri, New Delhi-110 058

Subject: Yoga for Health Promotion

Subject Code: Hom UG-YOGA I

Program Outcome (PO): The student shall learn the basic concept of Yoga and its philosophy, with a clear idea of the different sections of asana, pranayama, kriya and meditation, with a combination of theory and practical classes. Special emphasis should be given on practical methods and clinical yoga therapy.

Course Outcome (CO): The students shall be trained in understanding the relationship between Yoga and Homoeopathy in a wholistic approach, and the point of application of yoga in part of treatment.

Teaching Hours: 30 hours of class (including Theory and Practical)

Course content: The topic and respective allotted hours are as follows:

S. No.	Topic	No. of hrs.
1.	Yoga definition, concept, types, benefits, and origin.	01 hr
2.	History and Patanjali, yoga philosophy and development of yoga.	01 hr
3.	Astanga, yoga, hatha yoga.	01 hr
4.	Asana-types, examples, benefits.	01 hr
5.	Correlation of vital force and prana.	01 hr
6.	Meditation-types, methods, benefits.	01 hr
7.	Kriya-types, methods, benefits.	01 hr
8.	Relationship of yoga and homoeopathy on wholistic plane.	01 hr
9.	Application of yoga in terms of Hahnemann's accessory circumstances.	01 hr
10.	Pranayama, types, benefits.	01 hr
11.	Practical learning about asanas (postures)-Pawanmuktasana, backstreching, sun salutation, classical sequences.	05 hrs
12.	Practical learning about Breathing, pranayama including abdominal, thoracic, clavicular, hasthamudra, vilom, lung sensitizing.	05 hrs
13.	Practice of relaxation, tense and relax, short yoganidra, extended, savasana, yoganidra, sankalpa.	05 hrs
14.	Meditation practice, sitting posture, kaya sthairam, omchanting, trataka.	05 hrs

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COMPETENCY BASED DYNAMIC CURRICULUM FOR

2nd

BHMS PROFESSIONAL COURSES

(Applicable from Batch 2022-2023 onwards for 5 years or until further notification by National Commission for Homoeopathy whichever is earlier)

HOMOEOPATHY EDUCATION BOARD

NATIONAL COMMISSION FOR HOMOEOPATHY

MINISTRY OF AYUSH, GOVERNMENT OF INDIA

JAWAHAR LAL NEHRU BHARTIYA CHIKITSA AVUM HOMOEOPATHY ANUSANDHAN BHAVAN

No.61-65, Institutional Area, opp. 'D' block, Janak Puri, New Delhi-110 058

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PREAMBLE TO THE COMPETENCY BASED DYNAMIC CURRICULUM

The National Commission for Homoeopathy (NCH) has undertaken major revisions in the educational regulations in the last year and has devised a new Syllabus to ensure that the student who completes the homoeopathic undergraduate course grows into a homoeopathic physician who is informed and capable of performing as a professional with competency to deliver services as required for addressing the health needs of the person and society at large. It is based on the premise that a correct adherence to homoeopathic principles and knowledge imparted will enable the physician to deliver results in all aspects of health, viz. preventive promotive, curative and rehabilitative.

There is a significant change in the approach and contents in the newly designed curriculum, with the intention of making it more coherent for the present and future needs of society. The designing of curriculum is based on the sound theories of educational methodology as applicable for the health professionals' education, and therefore, the outcomes are quite transparent and achievable.

The Homoeopathic Education Board (HEB) is obliged by the NCH Act 26 (b) to "develop a competency based dynamic curriculum for Homoeopathy at all levels in accordance with the regulations made under this Act, in such manner that it develops appropriate skill, knowledge, attitude, values and ethics among the graduates, postgraduate and super-specialty students and enables them to provide healthcare, to impart medical education and to conduct medical research".

Competency based medical education (CBME) has been around in the medical world for more than three decades. It has undergone several revisions and adaptations through this period which has placed the NCH in an advantageous position to learn from the varied experiences of curriculum formulation, implementation and assessment.

It should be emphasized that the switch over to CBME involves a sea change in the understanding of the processes and outcomes for which all stakeholders need to be adequately sensitized and the teachers trained to minimize the difficulties inevitable in any transition. The following four pillars need a special mention to grasp the nature of the change being brought about (Frank Jason R, et al 2010).

1. The focus is on ensuring that the end user of the health care services is benefited. Hence itis important that the outcomes of the training are defined in clear terms so that the teacher, the student and the community are aware of what can be expected from the training.

2. The second logical focus is on bringing the abilities of the physician to the level when the outcomes defined above are realized. This involves the definition of the competencies required in the discharge of various functions of the physician. This would involve certain domains of competencies to be achieved. Thiscoupling of the outcome and abilities leads automatically to the third pillar.

3. We have been used to consider all training as time bound as the BHMS course is 5 1/2 years duration. But when we realize that the rate of mastering different abilities would vary from student to student, we should de-emphasize the fixed period of training and instead lookat how the student can be helped to master the specific competency.

4. The fourth pillar becomes the student herself/himself. The entire education and training become learner centered and hence the teacher takes a great effort in defining the outcomes, competencies, teaching and learning methods and most important of all, assessment which is predominantly formative and hence intends to shape the evolving capacities of the learner.

While formulating the competency based dynamic curriculum (CBDC) for the homoeopathy undergraduate, we must bear in mind the central role that homoeopathy philosophy and the principle of holistic care plays in the therapeutic actions of the homoeopathic interventions. This is a distinctive aspect which has hardly received the attention it deserves despite Hahnemann's clear recommendations in the first six Aphorisms of the Organon. The revised syllabus has brought this change and the formulation of the competency-based curriculum provides an opportunity to incorporate this approach at all levels of teaching and training. The implications lie in bringing about a sensitive and effective integration (horizontal/vertical/spiral) of all aspects of the syllabus throughout the five and half years of the undergraduate course.

There are five compelling factors that form the fulcrum to drive the change (Harris Peter, et al, 2010):

1. Design of curriculum: This needs careful attention due to its novelty. Homoeopathy, as a holistic discipline resting on the foundations of philosophy, needs a holistic approach from the first year itself. Several novel situations will need to be envisaged and catered to. And yet, a number of issues will remain. This is the dynamic nature of the enterprise, and we must be prepared to accept the well-known adage: Change, the only constant!
2. Teacher training: Our teachers have discharged the role of information providers and the teaching-learning process calls for a transformation in the role of the teacher (Sidhu Navdeep S. et al2022). The future will need them to wear multiple hats and hence they will need to develop competencies viz. planner, facilitator, assessor, education manager, role model, etc, to be effective for these roles.
3. Assessment: Assessment practices must be based on a robust platform of validity, reliability, and objectivity, so that the tools of assessment blend fluidly with the academic flow. In this background, the focus is to shift the assessment approach from the monopoly of summative assessment to a significant allowance for formative assessment, which are supportive for learning and correction on-the-go.
4. Student issues: Along with the parents and the community, a significant re- orientation is called for while changing it from that of a 'last-minute' sprinter to a long range 'racer'! All stakeholders should be on the same page so that the processes can operate in a well-oiled manner. Glitches are to be expected when a largely 'rights' based social mind set has to shift gears to adopt a competency oriented one. Understanding that change needs patience and good will go a long way to make the latter orientation a way of life.
5. Systems: All educational systems from the colleges to universities need to incorporate the multiple changes within their systems. We are used to consider results as 'pass' and 'fail' with the latter carrying the stigma. While there is an expressed need to wish to cater to all categories of learners – fast, normal, slow – the need to bring about changes in the systems is not so readily accepted. The institutions need to develop as 'learning organisations' that spur the 'growth mind-set' of its members – the teachers, students, and all those who are in the loop of curricular or co-curricular management.

The HEB considers the CBDC as a work in progress. Considerable thoughts and efforts are invested into the design and planning of the curriculum. But as has been mentioned above, this is a pioneering work and would always benefit from suggestions that spring from critical thinking and reflection subsequent to sincere attempts in implementation.

The next sections provide details of operational clarity to implement the program. Training of teachers is the key component which will make all the difference. The NCH is committed to make it happen and the cooperation of all stakeholders is earnestly solicited.

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I - STEPS TAKEN TO FORMULATE HOMOEOPATHY CBDC MANUAL

In this section we will detail the process undertaken in the formulation of this manual. The account will be of use to the users viz. the academicians, teachers and students to better grasp the significance of the effort and the role that each would have to play. The subsequent section will outline the correct use of the manual in order to derive the maximum benefit.

I- Defining National Goals and Programme Outcomes

The process of identifying competency is a complex one. Defining the outcome clearly helps in defining the relevant competency thus enabling a person acquiring it with relative ease. In case of the medical graduate, the outcome or goal is determined by the health care needs of the community as perceived by the statutory authorities and the ability of the particular health care system to respond to this need. India has a pluralistic health tradition and the community accesses the several health care systems to fulfil their multiple health needs. Scientific evidence is generally relied upon to determine and differentiate the role of each system in providing health care. This, however, may not always be forthcoming to the required degree of precision.

Considering the above, the NCH has formulated broad national goals which a Homoeopathic graduate would be expected to be able to achieve.

NATIONAL GOALS:

At the end of undergraduate program, the homoeopathic medical student should be able to:

a. Recognize the strength of homoeopathy, its applicability and limitations in health care of society and the individual.
b. Integrate Homoeopathy along with conventional line of treatment for effective delivery of health care.
c. Recognize the purpose of the National Health Policy and “Health for all” as a national goal and health right of all citizens and undergo training to achieve the realization of this social responsibility
d. Develop a scientific temper, acquire educational experience for proficiency in profession and promote healthy living based on the tenets of homoeopathy.
e. Become an exemplary citizen by observing medical ethics and fulfilling social and professional obligations so as to respond to national aspirations.
f. Achieve competence in the practice of homoeopathy with holistic approach, encompassing promotive, preventive, curative and rehabilitative aspects of common

diseases.

g. Establish Homoeopathy as an evidence-based system of medicine & practice it with zeal so that it stands at par to other scientific healing methods.

The above goals, though desirable, are broad. To realize them, the student entering into the undergraduate homoeopathic programme needs to be equipped with a set of competencies which would fall in the domains of knowledge, skills and attitudes. The broadgoals need to be defined in specific actionable terms which will form the Programme outcomes. These will enable all the stakeholders to be clear of the nature of functioning expected from the homoeopathic physician at the end of the training. Accordingly, the teamof resource persons worked together to formulate Programme Outcomes

PROGRAMME OUTCOMES:

At the end of the programme of the undergraduate studies, the homoeopathic physician must

1) Develop the knowledge, skills, abilities and confidence as a primary care homoeopathic practitioner to attend to the health needs of the community in a holistic manner

2) Correctly assess and clinically diagnose common clinical conditions prevalent in the community from time to time

3) Identify and incorporate the socio-demographic, psychological, cultural, environmental & economic factors affecting health and disease in clinical work

4) Recognize the scope and limitation of homoeopathy in order to apply Homoeopathic principles for curative, prophylactic, promotive, palliative, and rehabilitative primary health care for the benefit of the individual and community

5) Be willing and able to practice homoeopathy as per medical ethics and professionalism.

6) Discern the scope and relevance of other systems of medical practice for rational use of cross referrals and role of life saving measures to address clinical emergencies

7) Develop the capacity for critical thinking, self-reflection and a research orientation as required for developing evidence based homoeopathic practice.

8) Develop an aptitude for lifelong learning to be able to meet the changing demands of

clinical practice

9) Develop the necessary communication skills and enabling attitudes to work as a responsible team member in various healthcare settings and contribute towards the larger goals of national health policies such as school health, community health and environmental conservation.

Defining the Programme outcomes is a crucial step since this allows us to derive the competencies the homoeopathic graduate should possess at the end of the period of training. Care is taken to ensure that the National goals are covered as much as possible by the various aspects of the Programme Outcomes. Further, the annual course objectives for each academic year will be formulated separately based on the Courses studied and the nature of clinical or community activities undertaken each year. Accordingly, the corresponding competencies for the respective years have been defined.

Domains of Competencies for Homoeopathic Medical Graduate

The training of undergraduates in homoeopathy is now based on the philosophy of enabling competencies. The graduates are expected to demonstrate professional competencies as required and relevant for basic homoeopathic practice. In this background, the domains of performance need to be clearly projected for mapping the professional performance for both training and assessment.

Therefore, drawing on the proposals made in the ACGME, and CanMEDS documents, a taxonomy of competencies for homoeopathic graduates is proposed with six domains – knowledge & scholarship; patient care; homoeopathic orientation, communication skills, practice-based learning& improvement; and professionalism.

A detailed clarity on the six domains of competencies is provided as follows:

I. Knowledge and Scholarship

To acquire relevant and optimal levels of knowledge of the basic, clinical, and behaviouralsciences, and apply these in the context of patient care.

1. Describe the normal structure and function of the human body and each of its major organ systems.
2. Recognise the altered structure and function of major organ systems that are seen in common diseases and conditions.
3. Relate the clinical, laboratory, and radiologic manifestations of common disease

and conditions.

4. Correlate the behavioural, psychosocial, genetic, and cultural factors associated with the origin, progression, and treatment of common diseases and conditions.
5. Identify the epidemiological dimensions of common diseases and conditions within a defined population.

II. Patient care

To provide individualised therapeutic and individualised and community-wide preventive care fora range of conditions.

1. Gather accurate, complete, and unbiased information through history taking, physical examination, and laboratory & imaging data.
2. Interpret the symptoms and correlate them with the outcomes of physical examination, and laboratory & imaging data.
3. Prioritise the outcomes of interpretation to prepare the basis for patient care decisions.
4. Plan for the management of therapeutic care on the basis of disease state, patient individuality, and the psycho-social influencers.
5. Plan for a community-based preventive care on the basis of socio-cultural, and health belief paradigms.
6. Engage the patients, family / care givers, and the community members to empower them for therapeutic / preventive care.
7. Provide evidence-based information for the patient and community to introspect and develop self-sufficiency for continued care.

III. Homeopathic orientation

To make evidence-based decisions that are anchored into the spirit of homeopathy for both individual and community care, and for therapeutic and preventive care.

1. Relate the patient's history, physical examination, and laboratory & imaging data for developing a picture of homeopathic diagnosis.
2. Position the case in Hahnemann's disease classification.
3. Identify the operating school of philosophy in the case.
4. Assess the prognostic possibilities as per Dake's hypothesis.
5. Track the progress of disease and specify its current state.
6. Select the prescription approach as materia medica-based, therapeutics-based, or repertory- based.
7. In the case of repertory-based prescription, select the appropriate repertorisation medium.

8. Identify the similimum including the potency and dosage.
9. Assess the remedy reaction as per Hering's Law or Direction of Cure, and Kent's 12 Observations.
10. Mange the case in line with principles of homeopathy.

IV. Communication Skills

Shall be able to communicate and interact effectively with patients, their families and members of the inter-professional healthcare team.

1. Practice empathic and patient-centered interviewing and communication.
2. Obtain an accurate and complete medical history considering the patient's culture, beliefs, personal preferences and level of health literacy.
3. Communicate effectively, both orally and in writing, with patients, families and members of the healthcare team / other healthcare professionals.
4. Function as a member of a healthcare team, collaborating effectively with other healthcare professionals in caring for patients.

V. Practice-Based Learning and Improvement

Develop the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning

1. Recognize strengths, deficiencies and limitations in their knowledge and skills.
2. Articulate the goals for self-regulated learning and improvement.
3. Perform learning activities that address gaps in the knowledge, skills and / or attitudes.
4. Use information technology to optimize learning.
5. Demonstrate commitment to continuously improve knowledge, skills and/or attitudes byincorporating formative evaluation and feedback into daily practice.
6. Participate in the education of patients, families, trainees, peers and other health professionals.
7. Obtain information about individual patients, populations of patients or communities ofpatients to improve care.
8. Practice life-long learning skills by continually identifying, analysing and implementing new knowledge, guidelines, standards, technologies, products or services.

VI. Professionalism.

Demonstrate a commitment to upholding professional duties guided by ethical principles.

1. Demonstrate respect for patients by using the appropriate form of address, attending to a patient's comfort, displaying appropriate attire and grooming, and honouring a patient's privacy and right to make decisions.
2. Demonstrate responsibility in actions by being punctual, managing emotions when confronted with adversity and confrontation, and recognizing personal and peer impairments.
3. Demonstrate honour and integrity by being honest about role and experience level, admitting mistakes and shortcomings, appropriately attributing sources of ideas and data, and respectingboundaries between patients, peers, and educators.
4. Demonstrate reverence for human life, understanding that sympathy for suffering is a fundamental concern of the medical profession and that the needs of the patient are paramountand should govern a physician's actions.
5. Demonstrate knowledge of the principles that govern ethical decision-making and rules and regulations regarding healthcare delivery, incorporating them into clinical practice and research

Teachers implementing this curriculum shall use these guardrails to guarantee that the curriculum implementation is firmly on track, and is transparent for monitoring and verification of progress.

This now equips us to chart the competencies against the expanded functions of the homoeopathic physician in each of the areas mentioned above. The components of each of the areas has been expanded to include all actions which the trained student would be expected to undertake.

This also helps us to zero down on the tasks which the homoeopathic student would need to be trained to perform. With this background, we should be able to approach the Manual which is being issued for 2nd, 3rd and 4th BHMS. It will be noted that the 6 domains of competencies will be aligned with the specific learning objectives for each item of learning.

Considerable fresh thought has gone into the framing of this document of CBDC for 2nd, 3rd and 4th BHMS. The existing templates were unable to satisfy the very foundations on

which homoeopathic practice rests and have been extensively elaborated and modified in the Preamble to the CBDC for 2nd, 3rd and 4th BHMS. The two features which may be emphasized here are:

1. Close adherence to homoeopathic philosophy and principles at every stage of education and training
2. This is turn demands a rare amount of integration at horizontal, vertical and spiral forms

The next section will deal with how the Competency table was formulated and how it should be used.

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II- UNDERSTANDING THE COMPETENCY TABLE

The Competency Table has been designed keeping in mind the domains of competencies required by the learner to attain the overall Program Outcomes (PO) as well as Course Outcomes (CO) of all courses.

A. Methodology in preparation of the Competency Table

The following methodology was adopted in preparing the Competency table for each course (or subject) of 2nd, 3rd and 4th year of the BHMS program once the National Goals, Programme Outcomes, and domains of competencies were identified:

- Course Outcomes (CO) were identified for each course (or subject) that were in alignment with the National goals and Programme Outcomes (PO)
- Finalizing the syllabus or the list of topics which will help to achieve not only the Course Outcomes (CO) but also the overall Program Outcomes (PO)
- Aligning the competencies from the 6 domains with the content.
- Identifying the Learning Objectives and Specific Learning Objectives (SLO) for each topic.
- Identifying the level of Miller's Pyramid for each Specific Learning Objectives (SLO)
- Classifying each Specific Learning Objective (SLO) as per Bloom's Taxonomy andGuibert's Level
- Defining the priority of each Specific Learning Objective (SLO) into 'Must know' or 'Desirable toknow' or 'Nice to know' categories
- Choosing the appropriate Teaching Learning method/s and media and the assessment method/srequired for achieving each objective or outcome
- Identifying the Horizontal, Vertical and Spiral Integration with other courses (or subjects) required for holistic understanding of the topic

We will now illustrate how the Competency table is to be read with respect to the Community Medicine Course (subject)

Illustrative Diagrammatic Representation of Competencies Table with example of the Community Medicine Course

	Concepts of Health, Disease Causation & Prevention and Homoeopathy									
Competency No	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM I-T 2.1	KS	KH	Concept of health	Discuss the history of health Discuss the biomedical, ecological, psychological, and spiritual dimensions of holistic health	C-II	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	Organon of Medicine
Hom UG CM I-T 2.2	KS	K	Health	Define the term "Health" as per WHO.	C-I	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ,	

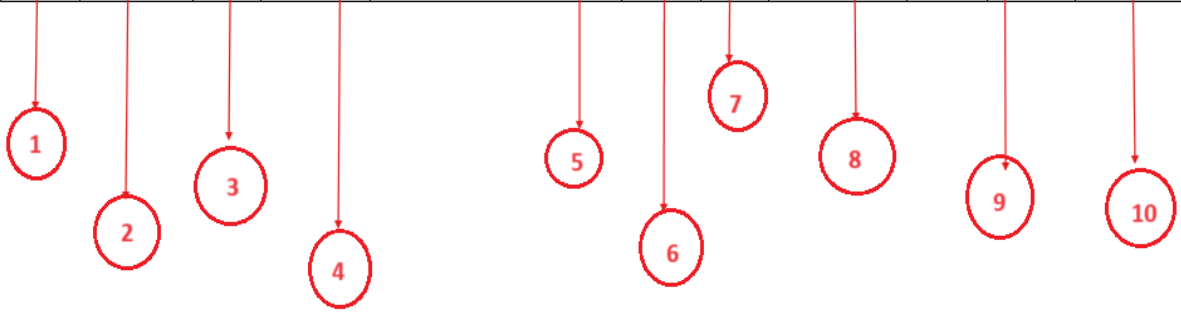

Table 1: Description of the Competencies table

S.No	Description
1	Unique number of the competency /outcome (Hom UG CM I-T 2.1) Hom UG CM I-T 2.1 to be read as Homoeopathy Under Graduate Program, Community Medicine course 3rd BHMS, Theory Component Unit , Topic 2.followed by serial number of the Specific Learning Objectives (SLO)
2	Domain of Competency covered by the topic- Domain Competency: KS-Knowledge and Scholarship PC- Patient care HO- Homoeopathic orientation CS- Communication Skills PBL- Practice-Based Learning and Improvement PRF- Professionalism
3	Mapping of the Level of Specific Learning Objectives (SLO) to Miller's Pyramid- Knows (K)/ Knows How (KH)/ Shows How (SH)/ Does (D)
4	Content to be covered from the topic
5	Description of Specific Learning Objectives (SLO) for the topic
6	The Blooms Domain addressed by the Specific Learning Objectives (SLO)- Cognitive (C) or Affective (A)or Psychomotor (P) Domain and Mapping of the Specific Learning Objective (SLO) to Guilbert's Level of Learning in the Cognitive or Affective or Psychomotor Domain
7	Assigning priority to Specific Learning Objective (SLO) as per Must know (MK) or Desirable to know (DK) or Nice to know (NK) areas
8	Teaching Learning methods and media for each SLO
9	Assessment methods for each SLO classified under formative and summative assessment
10	Vertical or horizontal integration with other courses to improve understanding. If the subject is taught for more than 1 year, it must be integrated spirally in all the years.

III. USING THE COMPETENCY TABLE

A Competency Based Dynamic Curriculum necessitates that each topic in a course (orsubject) be elaborated in terms of the outcomes that are to be achieved by the learner at theend of the particular topic. This in turn will help the learner to achieve the competencies at the course and overall, at the program level.

1. Linking the Specific learning Objective (SLO) to the competencies and Miller's Level

	Concepts of Health, Disease Causation & Prevention and Homoeopathy									
Competency No	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM I-T 2.1	KS	KH	Concept of health	Discuss the history of health Discuss the biomedical, ecological, psychological, and spiritual dimensions of holistic health	C-II	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	Organon of Medicine
Hom UG CM I-T 2.2	KS	K	Health	Define the term "Health" as per WHO.	C-I	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ,	

Each Specific learning Objective (SLO) will help the learner to acquire the required domains of competencies (abilities that a basic homoeopathic doctor would be trusted to have acquired as a consequence of his / her learning).

The Specific learning Objective (SLO) also indicates at what level the competencyis defined in the Miller's Pyramid which in the above example is at the level of 'Knows' and 'Knows How'– the ability to recall facts and ideas and the domain of competency covered is Knowledge and

Scholarship.

2. Specific learning Objective (SLO) for each topic

	Concepts of Health, Disease Causation & Prevention and Homoeopathy									
Competency No	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM I-T 2.1	KS	KH	Concept of health	Discuss the history of health Discuss the biomedical, ecological, psychological, and spiritual dimensions of holistic health	C-II	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	Organon of Medicine
Hom UG CM I-T 2.2	KS	K	Health	Define the term "Health" as per WHO.	C-I	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ,	

Specific Learning Objectives (SLOs) start with the "Action Verb" as per the Domain and level and describe what students should know or be able to do at the end of a learning session.

3. Bloom/ Guilbert's level of SLO

	Concepts of Health, Disease Causation & Prevention and Homoeopathy									
Competency No	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM I-T 2.1	KS	KH	Concept of health	Discuss the history of health Discuss the biomedical, ecological, psychological, and spiritual dimensions of holistic health	C-II	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	Organon of Medicine
Hom UG CM I-T 2.2	KS	K	Health	Define the term "Health" as per WHO.	C-I	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ,	

The SLOs are written as per the Blooms Domain (Cognitive or Affective or Psychomotor) under which they are categorized.

In the above example three Specific Learning Objectives (SLOs) have been described that belong to the Cognitive domain.

They are then mapped to Guilbert's Level of Learning in the Cognitive or Affective or Psychomotor Domain.

In the above example, the first two SLOs belong to level-II of Guilbert's level of learning under cognitive domain whereas the third SLO belongs to level-I of Guilbert's level of learning under cognitive domain.

4. Priority of Learning of SLO

	Concepts of Health, Disease Causation & Prevention and Homoeopathy									
Competency No	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM I-T 2.1	KS	KH	Concept of health	Discuss the history of health Discuss the biomedical, ecological, psychological, and spiritual dimensions of holistic health	C-II	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	Organon of Medicine
Hom UG CM I-T 2.2	KS	K	Health	Define the term "Health" as per WHO.	C-I	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ,	

The priority of learning is represented as 'Must know', 'Desirable-to-know', and 'Nice-to-know'. Prioritization is a critical component of curriculum design because it classifies the specific learning objectives on the basis of their importance and usefulness for the ultimate professional standards. The priority of learning is objectively assigned by a formula that gives weightage on the basis of multiplying 'frequency and impact' of the learning for professional needs.

In the above example, all the three SLOs are 'Desirable to Know'.

5. Teaching Learning methods and media for each topic

	Concepts of Health, Disease Causation & Prevention and Homoeopathy									
Competency No	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM I-T 2.1	KS	KH	Concept of health	Discuss the history of health Discuss the biomedical, ecological, psychological, and spiritual dimensions of holistic health	C-II	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	Organon of Medicine
Hom UG CM I-T 2.2	KS	K	Health	Define the term "Health" as per WHO.	C-I	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ,	

The Teaching- Learning methods and media have been identified that are most suitable to the SpecificLearning Objectives (SLOs) formed for each topic and as per the Domain of eachof the Specific Learning Objectives (SLOs).

In the above example, Lectures, Small Group Discussions are the Teaching- Learning methods to be adopted for achieving the SLO. The media could be projectors, models, whiteboard etc.

The Teaching Learning Methods and media will vary as per the Specific Learning Objectives (SLO) and the Domains they cover.

6. Assessment methods for each topic

	Concepts of Health, Disease Causation & Prevention and Homoeopathy									
Competency No	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM I-T 2.1	KS	KH	Concept of health	Discuss the history of health Discuss the biomedical, ecological, psychological, and spiritual dimensions of holistic health	C-II	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	Organon of Medicine
Hom UG CM I-T 2.2	KS	K	Health	Define the term "Health" as per WHO.	C-I	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ,	

The Assessment methods have been identified that are most suitable to the Specific Learning Objectives (SLOs) formed for each topic and as per the Domain of each Specific Learning Objectives (SLOs) to assess the learner.

In the above example, Multiple Choice Questions (MCQ), Short Answer Questions (SAQ), Viva Voce and Quiz are the assessment methods to be adopted for assessing the SLO. The Assessment Methods will vary as per the SLO and the Domain it covers.

They are further classified into formative and summative assessment methods.

Formative assessment methods will be used at the end of every topic to assess whether the student has achieved the desired SLOs and give feedback. In the above example, MCQ's, Viva, Quiz are the formative assessment methods to be used to assess the particular SLOs.

Summative assessment methods will be used to assess the student on a particular topic for internal assessment and the Final University Examination. In the above example, MCQ's, SAQ's are the summative assessment methods that would be used to assess whether the student has achieved these SLOs.

7. Integrated Learning

	Concepts of Health, Disease Causation & Prevention and Homoeopathy									
Competency No	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM I-T 2.1	KS	KH	Concept of health	Discuss the history of health Discuss the biomedical, ecological, psychological, and spiritual dimensions of holistic health	C-II	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	Organon of Medicine
Hom UG CM I-T 2.2	KS	K	Health	Define the term "Health" as per WHO.	C-I	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ,	

Horizontal or Vertical Integrated Learning with other subjects is required for a holistic understanding of the topic from different points of view.

In the above example, the above topic should be integrated with Organon of Medicine for betterunderstanding of the topic.

Spiral integration is required as the subject will be taught in II, III and IV BHMS.

Legend: Abbreviations

Sr. No	Acronym	Description
1.	PO	Programme outcomes
2.	CO	Course outcomes
3.	ACO	Annual Course Objectives
4.	SLO	Specific Learning Objective
5.	KS	Knowledge and Scholarship
6.	PC	Patient Care
7.	HO	Homoeopathic Orientation
8.	CS	Communication Skills
9.	PBL	Practice Based Learning and Improvement
10.	PRF	Professionalism
11.	K	Knows
12.	KH	Knows How
13.	SH	Shows How
14.	D	Does
15.	C-I/II/III	Cognitive Domain- Guilbert's Level-I/II/III
16.	P-I/II/III	Psychomotor Domain- Guilbert's Level-I/II/III
17.	A-I/II/III	Affective Domain- Guilbert's Level-I/II/III
18.	MK	Must Know
19.	DK	Desirable to Know
20.	NK	Nice to Know
21.	MCQ	Multiple Choice Question
22.	SAQ	Short Answer Question

23.	LAQ	Long Answer Question
24.	OSPE	Objective Structured Practical Examination
25.	OSCE	Objective Structured Clinical Examination

IV- Glossary of terms used in the template.

Goals

These are broad outcomes expected of a student at the end of the course of studies. These are to be contrasted with Objectives/Outcomes which are more specifically and narrowly defined.

Programme

A range of learning experiences offered to students in a formal manner over a period of one-to-four years leading to certificates/ diplomas/ degrees. Examples: BA (Economics) BSc (Physics). All possible formal degree Programmes are identified by UGC. BHMS is one such Programme

Programme Outcome

Programme Outcomes (POs) are what knowledge, skills and attitudes a graduate should have at the time of graduation. The Programme Outcomes of professional disciplines are identified at national level by the concerned accrediting agency. In this case, it would be the National Commission of Homoeopathy which would be involved.

Course

Course for the purpose of this Manual represents a subject e.g. Anatomy. In homoeopathic education some of the courses extend over several years e.g. Materia Medica. The relevance of this is in the formulation of Course Outcome

Course Outcome

Course Outcomes are statements that describe what students should be able to do at the end of a course. Where a Course extends over a number of years, it is necessary to define distinct Course Outcomes over the entire teaching programme of the subject. These will vary in depth and extent of the coverage of the subject.

Annual Course Objectives (ACO)

Annual course objectives are overarching goals or outcomes that educators set for an academic course to guide teaching, learning, and assessment for the particular year. These objectives serve as a roadmap for both teachers and students, outlining what is expected to be achieved by the end of the year in the course. They typically encompass the essential knowledge, skills, and competencies that students should acquire within the specified timeframe.

Competency

An observable ability of a health professional, integrating multiple components such as knowledge, skills, values, and attitudes. Since competencies are observable, they can be measured and assessed to ensure their acquisition.

Content:

Content is the group of sub-topics to be covered under each broad topic.

Millers Levels:

Miller's Pyramid is a diagrammatic representation of the convergence of learning. It maps the pathway of learning to show a person gains the ability and competence in a series of increasingly progressive phases of learning.

The broad base of this pyramid - 'Knows' – has the ability to recall facts and ideas that form the bedrock of professional requirements. 'Knows How' is the next phase of learning, where the students gains the insight into the relationships between the various units of 'knows' andcan relate them meaningfully to reach the 'knows how' capacity. These phases would largelybe in the Cognitive Domain of Bloom's Taxonomy of Learning Objectives.

Learning is not just about knowing and knowing how, but also to enable that the 'know how'is put into practice. This is the third phase of Miller's Pyramid – the 'Shows How'. During this phase of learning, the student is able to demonstrate the reasoning ability that he / she has acquired in controlled or real situations. This ability also includes the psychomotor dimensionof Bloom's Taxonomy. The summit of pyramid, i.e., 'Does' also includes the emotional aspect

of learning in the form of values, attitudes, communication, etc, that denote the 'Affective Domain' of Bloom's Taxonomy.

The Miller's Pyramid is a valuable tool to represent the increasing levels of competencies that the students need to acquire, and also a framework to assess the level of competency that is achieved. Interestingly, the framework focuses on what the learner would be doing, rather than on what the teacher would be doing.

Specific Learning Objectives:

Specific Learning Objectives / Outcomes (SLOs) describe what students should know or be able to do at the end of a learning session, that they couldn't do before. These are written and communicated in a 'low context communication style', that is to say, whoever reads the SLO would have the same understanding that the person who wrote it had. That is, there would be no communication gap.

That is the reason why the SLOs are written specifically and exclusively as units of learning in one of the domains of Bloom, and further at one of the levels of Guilbert. This will ensure that the learning that is expected is clearly communication among all those who refer to it, including those who set the assessment and evaluate the student performance. Further, the SLOs are ALWAYS written with an ACTIVE verb, so as to make the statement observable and measurable.

Bloom's domain:

Bloom's Taxonomy of Educational Objectives is a tool for classifying learning under the categories of 'knowledge', 'skill', and 'attitude / value / communication', represented by the technical terms 'Cognitive', 'Psychomotor', and 'Affective' domains respectively. Each of these domains distinguish the dimension of learning in a particular area. The importance of such classification is that it offers a clear model for both teaching and students' assessment.

Guilbert's level:

Guilbert's Hierarchy is a tool that describes the various levels of learning that can be mapped and managed in the Bloom's domains of learning – cognitive, psychomotor, and affective. This tool also has the additional benefit to identify the appropriate teaching – learning methods / media, and also the assessment strategies.

In the ‘knowledge’ domain Guilbert’s approach to learning proceeds from recall of facts to understanding / interpreting the different sets of data, and finally to the ability to make decisions and solve problems on the basis of the understanding / interpretation. This simple three-step process builds a sequential order of learning; it clearly brings out that decisions shall be made NOT on the basis of facts alone, but through a process of understanding and interpretation.

The ‘skill’ domain builds the learning from the stage of observing and imitation to gaining control over the skills and culminating in automatism of the skill. In simple terms, any skill will be learnt initially by observing its performance, and imitating the same in the sequential order. In the next phase, the learner tries to gain control over the skill initially under the supervision, and ultimately will be able to perform it independently.

Learning in the affective domain proceeds from the stage where the learner is open and receptive to the stimulus or trigger situation, responding to it in a desirable manner, and finally internalizing the responses.

Priority of learning:

The priority of learning is represented as ‘Must know’, ‘Desirable-to-know’, and ‘Nice-to-know’. Prioritization is a critical component of curriculum design because it classifies the learning outcomes on the basis of their importance and usefulness for the ultimate professional standards. The priority of learning is objectively assigned by a formula that gives weightage on the basis of ‘frequency and impact’ of the learning for professional needs.

TL Method / Media:

The teaching-learning (TL) methods and media are the vehicles that enable the acquisition of stated outcomes. Teaching method is simply ‘what the teacher does or what the teacher enables the students with’, such as giving a lecture, conducting a demonstration, or facilitating a group discussion. Teaching-learning media is ‘what the teacher or the students use’ to enable the learning; with examples such as a board, or projector, or model, or specimen, among others.

The teaching-learning methods and media are specific to the domains and levels in the domains. It must also be remembered that learning is a continuum, and a range of methods and media would be appropriate in the different phases in the continuum of learning.

Assessment:

Assessment of learning is an important component of curriculum. This measures the

performance of the students in comparison to the expected outcomes of learning. Therefore the specific learning outcomes must be stated and communicated clearly and objectively to all the stakeholders of education. Assessment strategy is based on the domain and the level of domain in which the outcome is to be measured. Assessment could be judgemental for the extent and quality of outcomes, when it is called 'assessment of learning', or it could also be supportive for learning, when it is called as 'assessment for learning'. There are two major approaches to assessment – formative, and summative. The tools of assessment are provided in the annexure.

Formative Assessment:

Formative assessment is NOT judgmental, in that it does not brand the learner as 'pass' or 'fail'. The formative assessments measure the extent and quality of learning with reference to the expected learning outcomes, so that the students can be given feedback to improve on their performance. The formative assessments promote mastery learning, that is to say, each students achieves the stated level of mastery of performance because of the feedback and support. Formative assessment is also called as continuous assessment.

Summative Assessment:

Summative assessment has the mandate to judge the achievement of the learner at the end of a period of learning, and label him / her as 'pass' or 'fail, assign a rank, approve for eligibility to be promoted or eligibility to be admitted to a course. These assessments also serve as quality check to ensure that those who are being certified conform to a minimum standard of professional competence.

Objective Structured Practical Examination:

The Objective Structured Practical Examination (OSPE) is a type of assessment commonly used in medical education. It's designed to evaluate a student's practical skills and competencies in a structured and standardized manner.

In an OSPE, students rotate through a series of stations, each presenting a different task or scenario. These stations typically involve procedural techniques, or interpretation of diagnostic tests. At each station, students are assessed based on predefined criteria and checklist.

Objective Structured Clinical Examination:

The Objective Structured Clinical Examination (OSCE) is a widely used method of assessing clinical skills in medical education. It's designed to evaluate various competencies such as clinical reasoning, communication skills, physical examination techniques, and professionalism in a standardized and objective manner.

In an OSCE, candidates rotate through a series of stations, each representing a different clinical scenario or task. At each station, candidates are typically required to interact with simulated patients, perform specific clinical tasks, or respond to clinical questions within a set time frame, usually ranging from 5 to 15 minutes per station.

Scenarios can cover a wide range of clinical contexts, including history-taking, physical examination, clinical decision-making, counseling, and procedural skills. Trained assessors evaluate candidates based on predefined criteria, often using structured checklists or rating scales to provide consistent and objective feedback.

Integration:

Integration of learning is an essential requirement for aligning various data points of knowledge and skills for getting a holistic understanding and enabling a unified performance. Integration can be achieved at various dimensions and at various levels.

The dimensions of integration could be temporal in the form of Horizontal, Vertical, or Spiral. Horizontal integration is the alignment of learning on a longitudinal timeline, where the comparable contents of various subjects in the same term or year are integrated.

Vertical integration is seen in the subjects that build on the pre-existing knowledge and skillsof another subject. For example, the integration between clinical subjects like Practice of Medicine with the para-clinical subjects such as pathology.

Spiral integration is where a subject is recurring at various levels in the same course. For example, Materia medica is learnt from the first to final BHMS, and the focus of the subject is not the same in each year. There would be iteration of the same knowledge from different perspectives and capabilities across the different phases of BHMS.

The levels of integration represent the increasing approximation of knowledge from different

subjects, so as to reach an approximation of fusion. The attempt to integration may begin with arranging the comparable contents of different subjects at the same cross sections of timeline. Further, there could be positioning the content of one subject into another subject to bring some kind of co-existence. Still further, the contents can be seamlessly merged to create an aligned learning content. Such integrative efforts can bring about holistic learning for a meaningful homeopathic capacity-building.

Subject: Homoeopathic Materia Medica

Subject code: HomUG-HMM-II

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1. Preamble

Homoeopathic Materia Medica is the study of the action of drugs on healthy human being as a whole taking into consideration individual susceptibility and its reaction to various circumstances and time. A good prescription by a Homoeopath mainly depends upon the case receiving, processing and a sound knowledge of Homoeopathic Materia Medica.

Each drug in Materia Medica not only has its own personality with its mental and physical constitution but also has its own affinity to an area, direction, spread, tissue, organ; system.Study of a drug in context of altered sensation, function and structure covers the Pathology caused by it, which is also expressed in the pathogenesis of the drugs. Materia Medica also has symptoms from Toxicological and Clinical proving. All this knowledge is of utmost importance in order to apply the remedies in various clinical conditions. This can be achieved only by integrating the study of Materia Medica with other parallel subjects taught during the course.

Apart from the source books of Materia Medica there are different types of Materia Medica constructed on different philosophical backgrounds by different authors. Materia Medica also forms the platform of various repertories. Therefore, it becomes very important for a student of Homoeopathy to learn theplan and construction of all the basic Materia Medica in order to understand their practical utility in practice.

It is also important to keep in mind that the end point of the teaching of HMM is not to burden the student with information of a greater number of remedies but to equip with an approach which will help to develop the vision towards self-guided study and apply the knowledge in practice.

This self-directed learning can ultimately lead to a critical approach of studying Materia Medica hence empowering evidence-based practice and initiate the process of lifelong learning. Exploring Materia Medica is an endless journey as newer illnesses will keep on emerging and newer drugs or undiscovered facets of existing drugs will be needed to explore for managing these situations.

2. Course outcomes

i. To grasp the basic concept and philosophy of Homeopathic Materia Medica based on Hahnemannian directions

ii. To understand the different sources and types of Materia Medica

iii. To mould Homoeopathic students by equipping them to readily grasp the symptoms of the sick individual corresponding to the symptoms of the drug.

iv. To understand the drug with its pharmacological data, adaptability, sphere of action, along with characteristic sensations and functions both at level of mind and body along with doctrine of signatures.

v. To construct the portrait of the drug with its predisposition, disposition both mental and physical, diathesis and disease expression with Miasmatic correlation and its susceptibility expression at various times taking in to consideration of the environment around him/ her.

vi. To understand the drug from its therapeutic application in various pathological conditions and allied clinical subjects like practice of medicine, surgery, obstetrics and gynaecology.

vii. To understand the group characteristics of the drugs and the individualizing symptoms of the individual remedies of the group.

viii. To differentiate medicines arising from the reportorial process and to arrive at an appropriate similimum.

ix. To grasp the concept of remedy relationship and its application in practice

x. To understand the Miasmatic expressions and evolution in a given drug

xi. To understand and apply the bio-chemic system of medicine in practice

xii. To understand and apply the utility of mother tinctures in practice

3. Learning objectives

At the end of BHMS II course, the students should be able to-

i. Discuss the different approaches for studying Homoeopathic Materia Medica.
ii. Understand the drug picture of medicines in the syllabus of II BHMS in context of its pharmacological data, constitution, temperament, sphere of action,pathogenesis, ailments from, modalities, mentals, physical generals and particulars,miasm and relationship with other remedies including the doctrine of Signature.
iii. Integrate the knowledge of Anatomy, Physiology, Pharmacy, Psychology, Organonof Medicine, Pathology and Toxicology for the understanding of a particular drug.
iv. Compare and contrast symptomsof similar remedies of I and II BHMS syllabus.
v. Demonstrate the steps of case taking as per guidelines given in Organon of medicine.
vi. Demonstrate basic physical examination skills.
vii. Recognisethe importance ofinterpretation of basic investigations in a given case.
viii. Analyse the symptoms of a case to categorize them as Mentals, Physical Generals and Particulars.
ix. Recognise the PQRS of a drug in the case taken.

4. Course content and its term-wise distribution(theory)

4.1 Introductory lectures

4.1.1 Assessment of Entry Behaviour for I BHMS syllabus
4.1.2 Different approaches for studying Homoeopathic Materia Medica
4.1.3 Integrating the knowledge of Pathology, Toxicology, Practice of Medicine, Surgery and Gynaecology-Obstetrics in a better understanding of Homoeopathic Materia Medica

4.2 Homoeopathic medicines:

1. Acetic Acid	17.Cactus Grandiflorus	33. Helleborus Niger
2. ActeaRacemosa	18. Calcarea Arsenicosa	34. Hyoscyamus Niger
3. Aesculus Hippocastanum	19.Calcarea Iodata	35. Kali Bichromicum
4. AgaricusMuscarius	20. Camphora	36. Kali Bromatum
5. Agnus Castus	21. Cannabis Indica	37. KaliCarbonicum
6. Alumina	22. Cannabis Sativa	38. Moschus
7. Ambra Grisea	23. Cantharis	39. Nux Moschata
8. AnacardiumOrientalis	24. Cardus Marianus	40. Opium
9. Antimonium Arsenicosum	25. Causticum	41. Petroleum
10. ApocynumCannabinum	26. Ceanothus Americanus	42. Phosphorus
11. Arsenicum Iodatum	27. Chelidonium Majus	43. Secale Cornutum
12. Argentum Nitricum	28. Chininum Arsenicosum	44. Sepia
13. BaptisiaTinctoria	29. Digitalis Purpurea	45. Stramonium
14. Berberis Vulgaris	30. Echinacea Angustifolia	46. Thuja Occidentalis
15. Bellis Perennis	31. Equisatum Hyemale	47. Urtica Urens
16. Bromium	32. Ferrum Metallicum	48. Veratrum Album

4.3 Content for Term I

4.3.1 Introductory Lectures:

4.3.1.1 Assessment of Entry Behavior for I BHMS syllabus

4.3.1.1.1 Different approaches for studying Homoeopathic Materia Medica

4.3.1.2 Integrating the knowledge of Pathology, Toxicology, Practice of Medicine, Surgery and Gynaecology-Obstetrics in better understanding of Homoeopathic Materia Medica

4.3.2 Homoeopathic medicines:

1. Acetic Acid	9. Cardus Marianus	17. Kali Bromatum
2. Aesculus Hippocastanum	10. Causticum	18. Kali Carbonicum
3. Agaricus Muscarius	11. Ceanothus Americanus	19. Moschus
4. Alumina	12. Chelidonium Majus	20. Opium
5. Anacardium Orientalis	13. Chininum Arsenicosum	21. Thuja Occidentalis
6. Apocynum Cannabinum	14. EchinaceaAngustifolia	22. Urtica Urens
7. Baptisia Tinctoria	15. Helleborus Niger	
8. Bellis Perrenis	16. Kali Bichromicum	

4.4 Contents for Term II:

Homoeopathic medicines:

1. Actea Racemosa	11. Calcarea Iodatum	21. Petroleum
2. Agnus Castus	12. Camphora	22. Phosphorus
3. Ambra Grisea	13. Cannabis Indica	23. Secale Cornuatum
4. AntimoniumArsenicosum	14. Cannabis Sativa	24. Sepia
5. Argentum Nitricum	15. Cantheris	25. Stramonium
6. Arsenicum Iodatum	16. DigitalisPurpurea	26. Veratrum Album
7. Berbers Vulgaris	17. EquisatumHyemale	
8. Bromium	18. Ferrum Metallicum	
9. Cactus Grandifloria	19. Hyoscyamus Niger	
10. Calcarea Aarsenicosum	20. Nux Moschata	

Non-lectures shall be equally distributed to both term I and II, as per the feasibility of individual institution

5. Teaching hours

5.1. Gross division of teaching hours

Homoeopathic Materia Medica		
Year	**Teaching hours- Lectures**	**Teaching hours- Non-lectures**
II BHMS	150	100

5.2. Teaching hours theory

S. No.	List of Topics	Hours
1.	Assessment of Entry Behavior of I BHMS syllabus	2
2.	Different approaches for studying Homoeopathic Materia Medica	4
3.	Integrating the knowledge of Pathology and Toxicology, Practice of Medicine, Surgery and Gynaecology-Obstetrics in better understanding of Homoeopathic Materia Medica	2
4.	Study of Drug pictures (Term I)	70
5.	Study of Drug pictures (Term II)	72
	Total	**150**

5.3. Teaching hours Non-lecture

Sr. No	Non-Lecture Teaching Learning methods	Term	Time Allotted per Activity (Hours)
1	Clinical(to be integrated with topics under Pathology, Practice of Medicine, Surgery and ObGy)	I & II	75
2	Demonstrattion	I & II	25 (Distribution as mentioned below)
2(a)	Seminar / Tutorials		10
2(b)	Problem based learning/ Case Based Learning		10
2(c)	Assignment/ Symposium / Group discussion		5
	Total		**100**

6. Content mapping (competencies table)

6.1 Competencies table theory

Sl. No.	Competency	Millers Level:	Content	SLO/ Outcome	Blooms Domain / Guilbert's Level	Priority	T-L Methods/ media	Assessment		Integration
								Formative	Summative	
HomUG-HMM-II-1.	K & S PC HO	KH K	Assessment of Entry Behaviour of I BHMS syllabus	Recall the knowledge of I BHMS syllabus for Materia Medica	C1	MK	Group Discussion	MCQ, viva	MCQ SAQ LAQ	**Spiral integration** with Homoeopathic Materia Medica **Vertical integration** with Anatomy,Physiology,Pharmacy, Psychology, Organon)
HomUG-HMM-II-2.1			Different approaches for studying Homoeopathic Materia medica	Enumerate the different approaches for studying Homoeopathic Materia medica	C2	MK	Lecture PPT Library references	MCQ Assignment Project viva	SAQ	**Horizontal integration** with subjects of Pathology , Toxicology , Physiology Organon , Anatomy , Psychology and Homoeopathic pharmacy
HomUG-HMM-II-2.2				Explore the scope and limitation of each approaches for studying Homoeopathic Materia Medica						

Sl. No.	Competency	Millers Level:	Content	SLO/ Outcome	Blooms Domain / Guilbert's Level	Priority	T-L Methods/ media	Assessment		Integration
								Formative	Summative	
HomUG-HMM-II-3.			Integrating the knowledge of Pathology, Toxicology, Practice of Medicine, Surgery and Gynaecology-Obstetrics in better understanding of Homoeopathic Materia medica	Integrate the knowledge of Pathology, toxicology, Practice of Medicine, Surgery and Gynaecology-Obstetrics in understanding the evolution of symptoms of remedies	C2	MK	Lecture Team teaching	MCQ Assignment Project viva	SAQ	**Horizontal integration** with subjects of Pathology Toxicology , and Organon
HomUG-HMM-II-4.1	K & S PC HO	KH K	Individual Homoeopathic medicines	Mention the common name, source/ family/kingdom and the prover	C1	NK	Lecture/ Specimen	MCQ Viva	MCQ	**Vertical integration** with Pharmacy
HomUG-HMM-II-4.2				Correlate with doctrine of signature	C2	NK	Lecture/ Specimen	MCQ Viva	MCQ	**Vertical integration** with Pharmacy and Physiology
HomUG-HMM-II-4.3				List the sphere of action	C1	MK	Lecture Self – learning	Assignment Project	LAQ SAQ MCQ	**Horizontal**

Sl. No.	Competency	Millers Level:	Content	SLO/ Outcome	Blooms Domain / Guilbert's Level	Priority	T-L Methods/ media	Assessment		Integration
								Formative	Summative	
								MCQ	Viva	**Integration**with Pathology, Toxicology,
HomUG-HMM-II-4.4				Narrate the 'ailments from'	C1		Small Group Discussion Black Board PPT Handouts Role play PBL	Viva		ObGy,PM, Surgery and Organon **Vertical integration** with Anatomy Pharmacy , Psychology and Physiology
HomUG-HMM-II-4.5				Describe the constitution and temperament	C1					
HomUG-HMM-II-4.6				Explain the mental symptoms	C1					
HomUG-HMM-II-4.7				Explain the physical generals	C1					
HomUG-HMM-II-4.8				Outline the general modalities	C1					
HomUG-HMM-II-4.9				Describe the particular symptoms and modalities	C2					
HomUG-HMM-II-4.10				Correlate pathogenesis with knowledge of Toxicology, Pathology, Practice of Medicine, Surgery and	C2					

Sl. No.	Competency	Millers Level:	Content	SLO/ Outcome	Blooms Domain / Guilbert's Level	Priority	T-L Methods/ media	Assessment		Integration
								Formative	Summative	
				Gynaecology-Obstetrics and miasm						
HomUG-HMM-II-4.11				Mention the Relationships of medicines	C2					
HomUG-HMM-II-4.12				Compare and contrast from the related remedies of First and Second BHMS Syllabus	C2					

6.2 Competencies table practical/clinical

S. No.	Domain of Competency	Millers Level:	Content	SLO/ Outcome	Blooms Domain / Guilbert's Level	Priority	T-L Methods/media	Assessment		Integration
								Formative	Summative	
HomUG-HMM-II-5.1	K & S PC HO CS PBLI Prf	SH KH	Case taking	Demonstrate the steps of case taking as per guidelines given in Organon of medicine.	P/A2	MK	Demonstration Checklist	CBD Small project	Clinical performance	**Horizontal Integration** with Pathology, ObGy, Surgery, Practice of Medicine and Organon
HomUG-HMM-II-5.2			Clinical examination	Demonstrate the basic clinical examination skills	P/A2					
HomUG-HMM-II-5.3			Interpretation of investigation	Recognise the importance of interpretation of basic investigations.	C2					
HomUG-HMM-II-5.4			Case analysis	Analyse the symptoms to segregate the characteristic Mentals,Physical General and Particulars	C2					

7. Teaching learning methods

Lectures (Theory)	**Non-lectures (Practical/Demonstrative)**
Lectures	Clinical demonstration
Small group discussion	Problem based discussion
Integrated lectures	Case based learning
	Tutorials
	Seminars
	Symposium
	Assignments
	Library reference
	Self-learning

8. Details of assessment

8.1 Overall Scheme of Assessment (Summative)

Sr. No	Professional Course	Term I (1-6 Months)		Term II (7-12 Months)		
1	Second Professional BHMS	PA I (end of 3 months)	TT I (end of 6 months)	PA II (end of 9 months)	FUE (end of 12 months)	
		10 Marks Viva	50 Marks Practical/ Viva i) Viva voce -25 marks ii) Clinical performance – 25 marks (Case Taking and analysis of symptoms)	10 Marks Viva	100 marks theory	100 marks (Clinical/practical+ Viva+ IA)

PA: Periodical Assessment; TT: Term Test; FUE: Final University Examinations; IA: Internal Assessment

8.2 Number of papers and marks distribution for Final University Examination (FUE)

Sr. No.	Course Code	Papers	Theory	Practical/ Clinical	Viva Voce	Internal Assessment**	Grand Total
1	HomUG-HMM-II	01	100 marks*	50 marks i) Journal -10 marks (Five acute and 5 chronic cases) ii) Case taking and analysis of symptoms --- 40 marks	40 marks	10 marks (Marks of PA I + TT I + PA II)	200marks

***30 % of questions shall be from I BHMS syllabus and 70 % of questions shall be from II BHMS syllabus.**

****Method of calculation of Internal Assessment marks for Final University Examination:**

Marks of IA- **(**Marks of PA-1 + Marks of TT + Marks of PA-2) / 70 X 10

8.3 Paper Layout

Summative assessment (FUE): Theory- 100 marks

MCQ	**10 marks**
SAQ	**40 marks**
LAQ	**50 marks**

8.4 Distribution of questions for theory exam

Sr. No	**Paper**			**D Type of Questions**		
	A List of Topics	**B Term**	**C Marks**	**MCQ (1 Mark)**	**SAQ (5 Marks)**	**LAQ (10 Marks)**
1	BHMS I Syllabus	-	Refer to table 8.5 below	05	03	01
2	Different approaches for studying Homoeopathic Materia Medica	I		0	01	0
3	Integrating the knowledge of Pathology and Toxicology in better understanding ofHomoeopathic Materia Medica	I		0	0	0
4	Homoeopathic Medicines of II BHMS (48)	I&II		05	04	04

8.5 Theme-wise distribution:

Theme	Topics	Term	Marks	MCQ's	SAQ's	LAQ's
A-D	BHMS I Syllabus	-	30	5	3	1
E	Different approaches for studying Homoeopathic Materia Medica	I	5	0	1	0
F	Homoeopathic Medicines of II BHMS (48)	I&II	65	5	4	4

8.6 Question paper blueprint

A Question Serial Number	B Type of Question	Question Paper Format (Refer table 8.5 for themes)
Q1	Multiple Choice Questions(MCQ) 10 Questions 1 mark each All compulsory Must know part: 7 MCQ Desirable to know: 2 MCQ. Nice to know: 1 MCQ	1. Theme A-D 2. Theme A-D 3. Theme A-D 4. Theme A-D 5. Theme A-D 6. Theme F 7. Theme F 8. Theme F 9. Theme F 10. Theme F

Q2	Short answer Questions (SAQ) Eight Questions 5 Marks Each All compulsory Must Know part: 6 SAQ Desirable to Know: 2 SAQ	1. Theme A-D 2. Theme A-D 3. Theme A-D 4. Theme E 5. Theme F 6. Theme F 7. Theme F 8. Theme F
Q3	Long answer Questions (LAQ) Five Questions 10 marks each All compulsory All questions on Must Know No Questions on Nice to Know and Desirable to Know	1. Theme A-D 2. Theme F 3. Theme F 4. Theme F 5. Theme F

9. List of recommended text/reference books

- Allen H.C. (2005). Keynotes Rearranged and Classified with Leading Remedies of the Materia Medica and Bowel Nosodes, (Reprint edition), B.Jain Publishers, New Delhi
- ChoudhuriN.M.(2006).A Study On Materia Medica Enriched with real case studies,(Reprint revised edition).B.Jain Publishers, New Delhi.
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- FarringtonE.A. (2007) Lectures on Clinical Materia Medica in family order (Fourth edition.)B Jain Publishers Pvt Ltd, New Delhi.
- FarringtonE.A. (2005), Comparative Materia Medica. (Reprint edition.) B.Jain Publishers, New Delhi.
- Boericke W,Dewey W,2016,The Twelve Tissue Remedies by Schussler,Reprint edition,B.Jain Publishers,New Delhi
- All source books.

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Subject Name: Organon of Medicine and Homeopathic Philosophy
Subject Code: HomUG-OM-II

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1. Preamble

Organon of Medicine with Homoeopathic Philosophy is a central fulcrum around which education and training of a homoeopathic physician revolves. It lays down the foundations of homoeopathic practice, education, training and research. It not only elaborates on the fundamental laws but also how to apply them in practice. It defines the qualities of a healer, guides the homoeopathic physician in inculcating values and attitude and develop skills.

Nature nurtures us. It is well depicted in our science. Therefore, Homoeopathy is in synchronization with nature. The need to keep life force within us well balanced with nature is well established in the Organon of Medicine by Dr Hahnemann. Dr Hahnemann as an ecologist was well ahead of his time. Philosophically, it connects man and his actions to the dynamic forces available in nature, thus bringing to fore the holistic approach. Lateralization of these concepts helps the student to develop insight into various facets of Life & Living. Homoeopathic philosophy orients the students to homoeopathy as an Art & Science. It's comprehensive understanding needs a core competency in logic and the concepts of generalization and individualization. Its treatment of disease process and relating to the concept of miasm makes it a study of the process of scientific investigation.

The biggest challenge in teaching-learning of homoeopathic philosophy is to first understand the fundamentals acoording to the Master's writing and then demonstrate them in practice. Quality and real time integration with other subjects helps a student to conceive the holistic perceiving of Man and Materia Medica. The concepts and knowledge required by the Physician with operational knowledge of management of patients and their diseases will need horizontal and vertical integration with Homoeopathic subjects and clinical subjects. First BHMS will need horizontal integration with Anatomy, physiology, pharmacy and HMM. Homoeopathic philosophy will have spiral integration with itself and vertical integration with clinical subjects. Second year will need integration with pathology, community medicine, forensic medicine, along with other homoeopathic subjects. Third and fourth year establishes links with clinical subjects, research methodology and pharmacology.

Science is never static. Since the time of Dr.Hahnemann, medical science has advanced by leaps and bounds. Since Homoeopathy is based on principles rooted in nature, they would stand the test of time. However, their application in the changing times and circumstances would find newer avenues to heal. This is an opportunity for a homoeopath to connect the current advances while relating with the fundamental laws. Mastering all this will make him a master healer and will move him towards higher purpose of existence.

2. Course outcomes

At the end of the BHMS program, a student will be able to-

i. Understand Mission of a Physician & Higher Purpose of Existence as per the Master's thoughts and words
ii. Understand Hahnemannian concept of man and integrating it with the conceptfrom the bio-psycho-social perspective.
iii. Know homoeopathy as a Holistic & Individualistic medical science
iv. Understand the concept of dynamism and vital force to get insight in health, disease, diathesis and disease.
v. Relate concepts of Prevention, Promotion & Cure with the Hahnemannian approach
vi. Know the Healer within the Homoeopathic Physician and work towards bringing forth the qualities of healing.
vii. Understand Philosophy of Life & Health by applying basic fundamental laws of Homoeopathy.
viii. Understand homoeopathic philosophy in the context of research

3. Learning outcomes

i. Understanding the evolution of chronic disease in view of pathogenesis
ii. Knowing Hahnemannian classification of diseases and its importance
iii. Correlation of Microbiology and Homeopathy with miasms.
iv. Correlation of laboratory investigation with the evolution of pathology and miasm
v. Learning the concept of prevention of disease
vi. Understanding the concept of causation and relating to homoeopathy
vii. Classification and analysis of symptoms and correlation with repertory.
viii. Developing a portrait of disease by integrating the Hahnemannian concept

4. Course content and its term-wise distribution

Sl. No.	Topic
	Term I
1.	Natural Disease vs Artificial Disease (Aphorisms 28-33)*
2.	The Correctness of Homoeopathic Therapeutic Law of Nature (Aphorisms 34-51)*
3.	Classification of Diseases (Hahnemannian Classification of Disease) with Introduction to Miasm (Aphorisms 71-82)*
4.	Case Taking (Aphorisms 83-103)*
5.	Homoeopathic Philosophy:
5.1	Symptomatology: Details regarding Symptomatology are to be comprehended by referring to the relevant aphorisms of Organon of medicine and chapters of the books on homoeopathic philosophy.
5.2	Case taking: The purpose of homoeopathic case-taking is not merely the collection of disease symptoms from the patient but comprehending the patient as a whole, with the correct appreciation of the factors responsible for the genesis and maintenance of illness. Hahnemann's concept and method of case-taking, as stated in Organon is to be stressed. Case receiving-perceiving techniques and symptoms-grading needs to be introduced and discussed. The prerequisite of the physical environment & of the physician also needs to be outlined.
5.3	Case processing: This includes-
5.3.1	Analysis of Symptoms
5.3.2	Evaluation of Symptoms
5.3.3	Totality of symptoms
5.3.4	Susceptibility
	Term II
6.	Record Keeping (Aphorism 104)*
7.	Various Systems of Medicine (Aphorisms 52-70)*
8.	Causation: Thorough comprehension of the evolution of disease, taking into account pre-disposing, fundamental, exciting and maintaining causes.
9.	Individuality- individualization- its process
10.	Anamnesis- evolution of disease
11.	Disease-its progress- complex disease relation with miasm
12.	Introduction to the concept of suppression

5. Teaching hours

5.1. Gross division of teaching hours

Organon of Medicine and Homoeopathic Philosophy		
Year	**Teaching hours- Lectures**	**Teaching hours- Non-lectures**
II BHMS	150	100

5.2 Teaching hours theory

Sl. No	List of Topics	Hours
1.	Natural Disease vs Artificial Disease	05
2	The Correctness of Homoeopathic Therapeutic Law of Nature	20
3	Classification of Diseases with introduction to Miasm	20
4	Case Taking (Aphorisms 83-103)	20
5	Symptomatology	07
6	Case taking (Homoeopathic Philosophy)	12
7	Case processing	15
8	Various systems of Medicine	15
9	Record Keeping	02
10	Causation	15

11	Anamnesis-evolution of disease, Disease its progress-complex disease, Individualization-its process, Susceptibility- types and factors modifying it	16
12	Introduction to the concept of suppression	3
	Total	**150**

5.3. Teaching hours Non-lecture

Sr. No	Non-Lecture Activity	Term	Time Allotted per Activity (Hours)
1	Clinical(to be integrated with topics under Pathology, Practice of Medicine, Surgery and ObGy)	I & II	75
2	Demonstrative	I & II	25
2(a)	Seminar / Tutorials		10
2(b)	Problem based learning/ Case Based Learning		10
2(c)	Assignment/ Symposium / Group discussion		5
	Total		**100**

6. Competencies tables

6.1 Natural disease vs artificial disease (Aphorism 28-33)

Sl. No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-OM-II 1.1	K& S HO	K	**Aphorism 28-33** Artificial disease is stronger than Natural disease	Define modus opernadi of homoeopathic cure	Cognitive Understand and interpret Level II	Must Know	Lecture Small Group Discussion	MCQ SAQ	MCQ SAQ, Viva	Spiral Pharmacy
HomUG-OM-II 1.2				Define and differentiate between Natural and Artificial Disease						
HomUG-OM-II 1.3				Identify factors differentiating Natural & Artificial Disease						
HomUG-OM-II 1.4				Compare the strength of Natural Disease vis-à-vis Artificial Disease						
HomUG-OM-II 1.5				Justify the superiority of Artificial Disease						

6.2 The correctness of Homeopathic therapeutic law of nature(Aphorisms 34-51)

Sl. No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-OM-II 2.1	K & S HO	K	**Aphorism 34-35** Therapeutic Law of Nature	Describe the factors needed to cure a disease	Cognitive Understand and interpret Level II	Must Know	Lecture Small Group Discussion	MCQ SAQ	MCQ SAQ, Viva	
HomUG-OM-II 2.2		K	**Aphorism 36-42** Discuss what happens when two dissimilar diseases meet in nature	Compare the different scenarios viz. Natural diseases meet, Natural and Artificial Disease meet	Cognitive Understand and interpret Level II	Must Know	Lecture Small Group Discussion	MCQ SAQ	MCQ SAQ, Viva	
HomUG-OM-II 2.3		K	**Aphorism 43-45** Discuss what happens when two Similar diseases meet in nature	Compare the scenarios viz. Natural diseases meet, Natural and Artificial	Cognitive Understand and interpret Level II	Must Know	Lecture Small Group Discussion	MCQ SAQ	MCQ SAQ, Viva	

HomUG-OM-II 2.4	K & S HO	K	**Aphorism 45-46** Examples of Homeopathic Cure	List the examples of cure in nature	Cognitive Recall LevelI	Must Know	Lecture Small Group Discussion	SAQ	MCQ, SAQ, Viva	
HomUG-OM-II 2.5		K	**Aphorism 47-49** Learning from Nature	Discuss the learning from the nature's examples of cure	Cognitive Understand and interpret Level II	Must Know	Lecture Small Group Discussion	MCQ, SAQ	SAQ, LAQ, Viva	
HomUG-OM-II 2.6		K	**Aphorism 50** Hazardous Homoeopathic Remedy	Discuss the effect of Natural diseases used for treating similar Natural Diseases	Cognitive Understand and interpret Level II	Must Know	Lecture Small Group Discussion	MCQ, SAQ	SAQ, LAQ, Viva	
HomUG-OM-II 2.7		K	**Aphorism 51** Advantage of Homoeopathic medicines	Discuss artificial morbific agents and their advantage over natural diseases	Cognitive Understand and interpret Level II	Must Know	Lecture Small Group Discussion	MCQ, SAQ	SAQ, LAQ, Viva	**Pharmacy (V) Materia Medica (V)**

6.3 Classification of disease (Hahnemannian classification of disease) with introduction of miasm (Aphorisms 71-82)

Sl. No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-OM-II 3.1	K & S HO	K	**Aphorism 71** Homeopathic System of Medicine	List the points necessary in the operation of curing	Cognitive Understand and interpret Level II	Must Know	Lecture Small Group Discussion	MCQ SAQ	MCQ SAQ Viva	**Organon (Spiral) Aphorism 3**
HomUG-OM-II 3.2				Discuss Hahnemann's classification of disease						
HomUG-OM-II 3.3	K & S HO P C	K H	**Aphorism 72** General Survey of Diseases	Define Acute disease Define Chronic disease Illustrate with examples	Cognitive Understand and interpret Level II	Must Know	Caselet Lecture Small Group Discussion	MCQ SAQ	MCQ SAQ Viva	**Organon (Spiral)** Vital force
HomUG-OM-II 3.4		K	**Aphorism 73** Acute Diseases	List the types of acute diseases Illustrate with examples of each	Cognitive Understand and interpret Level II	Must Know	Caselet Lecture Small Group Discussion	MCQ SAQ Quiz	MCQ SAQ LAQ Viva	**Practice of Medicine (H/V)**
HomUG-OM-II 3.5		K	**Aphorism 74-76** Chronic Diseases	List examples of Chronic diseases Define Iatrogenic Disease with examples Management of Iatrogenic Diseases	Cognitive Understand and interpret Level II	Must Know	Caselet Lecture Small Group Discussion	MCQ SAQ	MCQ SAQ LAQ Viva	Modern Pharmacology **(H)**

HomUG-OM-II 3.6		K	**Aphorism 77** Pseudo-chronic Diseases	Define Inappropriately named chronic diseases List the causes of the same Examples	Cognitive Understand and interpret Level II	Must Know	Caselet Lecture Small Group Discussion	MCQ SAQ	MCQ SAQ LAQ Viva	
HomUG-OM-II 3.7	K & S HO P C	K	**Aphorism 78** True Chronic Diseases	Define and discuss true natural Disease	Cognitive Understand and interpret Level II	Must Know	Caselet Lecture Small Group Discussion	SAQ	MCQ SAQ LAQ Viva	
HomUG-OM-II 3.8		K	**Aphorism 79** Syphilis & Sycosis	Define Miasm Recognise the miasms Identify the primary presentation of miasm	Cognitive Understand and interpret Level II	Must Know	Caselet Lecture Small Group Discussion	SAQ	MCQ SAQ LAQ Viva	**Pathology (H)**
HomUG-OM-II 3.9		K	**Aphorism 80-81** Psora	Identify the primary presentation of Psora List the types of presentations of Psora Summarise footnote 77 List the causes that influence transformation of Psora	Cognitive Understand and interpret Level II	Must Know	Caselet Lecture Small Group Discussion	SAQ	MCQ SAQ LAQ Viva	**Pathology (H)**

HomUG-OM-II 3.10		K	**Aphorism 82** Management of Chronic Diseases	Discuss the management of Chronic diseases	Cognitive Understand and interpret Level II	Must Know	Caselet Lecture Small Group Discussion	SAQ	SAQ Viva	

6.4 Case taking (Aphorisms 83-103)

Sl. No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-OM-II 4.1	K & S HO P C	K H	**Aphorism 83** Prerequisites for case taking	List the prerequisites for case taking Discuss techniques to develop and improve on these	Cognitive Understand and interpret Level II	Must Know	Lecture Small Group Discussion Case simulation	MCQ SAQ Viva	MCQ SAQ Viva	
HomUG-OM-II 4.2	K & S HO P C P B L C S	K K H S H	**Aphorism 84-89** History taking	Explain the steps of case taking Discuss the dos and don'ts of case taking	Cognitive Understand and interpret Problem solving Level II& III	Must Know	Lecture Case simulation Case discussion OPD/IPD in small groups	MCQ SAQ	MCQ SAQ Viva	
HomUG-OM-II 4.3	K & S HO P B L	K H S H D	**Aphorism 90** Physician's observation	List the various headings to observe in a patient	Cognitive Understand and	Must Know	Lecture Movies /clips	MCQ SAQ Check-list	MCQ SAQ Viva	**Anatomy/ Physiology (Spiral)**

				Discuss the importance of these observations Co-relate with Materia Medica and Repertory	interpret Level II Psychomotor Level I & II		Case simulation			**Practice of Medicine (Horizontal) Materia Medica (H & S) Repertory (H & S)**
HomUG-OM-II 4.4	K & S HO P B L	K K H	**Aphorism 91** Original Unmodified Picture	Discuss the importance of noting the original form of disease	Cognitive Understand and interpret Level II	Must Know	Lecture Caselet	MCQ SAQ	MCQ SAQ Viva	
HomUG-OM-II 4.5	K & S P C	K	**Aphorism 92** Case taking in acute disease	Discuss the importance of case taking in acute cases	Cognitive Understand and interpret Level II	Must Know	Lecture Small Group Discussion Caselet	MCQ SAQ	MCQ SAQ Viva	
HomUG-OM-II 4.6	K & S HO P C P B L C S	K K H	**Aphorism 93** Obvious cause of the Disease	Discriminate between various causes of sensitive nature Ask relevant questions	Affective Level I	Must Know	Lecture Small Group Discussion Role play	MCQ SAQ	MCQ SAQ Viva	Fundamentals of Psychology (S)
HomUG-OM-II 4.7	K & S HO P C C S	K H	**Aphorism 94** General cause of the Disease	Plan the case taking to ascertain the maintaining cause if any	Cognitive Decision /Problem Solving Level III	Must Know	Lecture Small Group Discussion Case simulation OPD/IPD	MCQ SAQ	MCQ SAQ Viva	**Aphorism 5 Organon (S)**

HomUG-OM-II 4.8	K & S HO P C	K H	**Aphorism 95** Case taking in chronic disease	Design the case taking in chronic disease Evaluate the importance of accessory symptoms	Cognitive Decision /Problem Solving Level III	Must Know	Lecture Small Group Discussion Case simulation OPD/IPD	MCQ SAQ	MCQ SAQ LAQ Viva	
HomUG-OM-II 4.9	K & S HO C S	K	**Aphorism 96-97** Dispositions of patients in case taking	Differentiate the dispositions of patients while answering Differentiate between Hypochondriacs and Feigners (malingering) Analyse the reasons behind the disposition	Cognitive Understand and interpret Level II	Must Know	Lecture Small Group Discussion Case simulation OPD/IPD	MCQ SAQ	MCQ SAQ Viva	Fundamentals of Psychology (S) **Symptomatology Organon**
HomUG-OM-II 4.10	K & S HO P B L C S	K	**Aphorism 98** Demands of Case taking	Analyse the answers given by the friends and attendants Compare that with the patient's answer Listen to the patients' answers	Cognitive Understand and interpret Level II Affective Level I	Must Know	Lecture Small Group Discussion Case simulation OPD/IPD	MCQ SAQ	MCQ SAQ Viva	**Psychology (S)**
HomUG-OM-II 4.11	K & S HO	K	**Aphorism 99**	Discuss the advantages of case taking in	Cognitive Understand and	Must Know	Lecture	MCQ SAQ	MCQ SAQ Viva	

			Case taking in acute disease	acute diseases vis-à-vis chronic case	interpret Level II		Small Group Discussion			
HomUG -OM-II 4.12	K & S HO P C Community Health	K	**Aphorism 100-103** Case taking in epidemic and sporadic disease	Discuss the salient points of case taking in an epidemic or sporadic disease Differentiate between common and characteristic symptom in above cases Discuss the concept of Genus epidemicus	Cognitive Understand and interpret Level II	Must Know	Lecture Small Group Discussion	MCQ SAQ	MCQ SAQ Viva	**Organon (S)**

6.5 Symptomatology

Sl. No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-OM-II 5.1	K & S	K	Define Symptoms and their importance	Define Objective and subjective symptoms	Cognitive Understand and interpret Level II	Must Know	Class room lecture, Group discussions	MCQ SAQ	LAQ	Horizontal with Pathology Vertical with POM, OBG, Surgery
HomUG-OM-II 5.2				Enumerate different types of symptoms						
HomUG-OM-II 5.3		K		Explain symptoms according to Hahnemann's view						
HomUG-OM-II 5.4	K & S	K		Define Totality of symptoms	Cognitive/ Understand & Interpret level II	Must Know	Class room lecture, Group discussions Caselets	MCQ	LAQ VIVA	
HomUG-OM-II 5.5				Explain types of modalities						

HomUG-OM-II 5.6	K & S	K	Define Symptomatology in relevance with Dr. KENT	Understanding the method of forming the TOS for prescribing Identify the nature and value of symptoms	Psychomotor / Problem Solving Level I	Must Know	Caselets P B L	SAQ	LAQ SAQ	Vertical with Repertory
HomUG-OM-II 5.7				Analysis of the case Explain the grade of symptoms of disease						
HomUG-OM-II 5.8				Explain the grade of symptoms of drug						

6.6 Case taking (Homoeopathic Philosophy)

Sl No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-OM-II 6.1	K & S HO P C	K	Roberts Ch 8 Case Taking	Discuss the essentials needed to be recorded in taking the case	Cognitive/ Level III	Must know	Lecture Tutorials	MCQ SAQ	MCQ SAQ LAQ Viva	Record keeping **Organon (S)**
HomUG-OM-II 6.2		S H		List the dos and don'ts of case taking						
HomUG-OM-II 6.3				Difference between acute and chronic case taking						
HomUG-OM-II 6.4		K	Case taking Views of stalwarts	Explain View of Dr. J T Kent on Case Taking Explain View of Dr. Stuart Close on Case Taking						

6.7 Case processing

Sl. No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-OM-II 7.1	K & S P C	K H S H D	Analysis	Define Analysis Identify different groups to analyse the symptoms Justify the analysis	Cognitive Level III	Must Know	Lecture Small Group Discussion Case simulation OPD/IPD	MCQ SAQ Checklist	MCQ SAQ LAQ	
HomUG-OM-II 7.2	P B L		Evaluation	Define Evaluation Justify and defend the evaluated symptoms	Cognitive Level III					
HomUG-OM-II 7.3			Investigation	Discuss the investigation Plan the case	Cognitive Level III					**Pathology (H)**
HomUG-OM-II 7.4			Diagnosis	Examine the case	Cognitive Level III Psychomotor Level I &II					**Practice of Medicine(H)**
HomUG-OM-II 7.5	K & S	K	Develop Portrait of Disease by integrating Hahnemannian concept	Define Disease portrait (Kent -Ch- 30), (Roberts- Ch-9),(Close-Ch- 11, 12)	Cognitive/ Understand & Interpret level II	Must Know	Caselets / Classroom discussion/ DOPS	MCQ SAQ	LAQ	Horizontal with Pathology, Materia Medica, Repertory

6.8 Totality of symptoms

Sl. No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-OM-II 8	K & S	K	Develop Portrait of Disease by integrating Hahnemannian concept	Define Disease portrait (Kent -Ch-30), (Roberts-Ch-9),(Close-Ch- 11, 12)	Cognitive/ Understand & Interpret level II	Must Know	Caselets / Classroom discussion/ DOPS	MCQ SAQ	LAQ	Horizontal with Pathology, Materia Medica, Repertory

6.9 Susceptibility

Sl. No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-OM-II 9.1	K & S HO P C C B L	K	Susceptibility	Define Susceptibility	Cognitive Level II	Must Know	Lecture Small Group Discussion Case based Learning Seminar/ Symposium	MCQ SAQ		**Organon (S)**
HomUG-OM-II 9.2				Discuss the factors modifying susceptibility	Cognitive Level II					
HomUG-OM-II 9.3				Predict the susceptibility of the patient to the drug prescribed	Cognitive Level III					

6.10 Record keeping

Sl. No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-OM-II 10.1	K & S HO P C D	K H	**Aphorism 104** Record keeping	Discuss the importance of Record keeping Legality of case record	Cognitive Decision /Problem Solving Level III	Must Know	Lecture OPD/ IPD Case simulation Project work	MCQ SAQ	MCQ SAQ LAQ Viva	**FMT (H)**
HomUG-OM-II 10.2	K & S	K	Define Record Keeping	Define Record Keeping Explain Case Records	Cognitive / Recall	Desire-able to know	Caselets DOPS	MCQ	SAQ	With Repertory

6.11 Various systems of medicine

Sl. No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-OM-II 11.1	K & S HO	K	**Aphorism 52** Chief Methods of Cure	List and Discuss different methods of Cure	Cognitive Understand and interpret Level II	Must Know	Lecture Small Group Discussion Seminars	MCQ SAQ Quiz	MCQ SAQ, Viva	Spiral Pharmacy
HomUG-OM-II 11.2		K	**Aphorism 53** Homeopathic Method	Discuss the Fundamental Laws	Cognitive Understand and interpret Level II	MustKnow	Lecture Small Group Discussion Seminars	MCQ SAQ Quiz	MCQ, SAQ, LAQ, Viva	**ORGANON (Spiral)**

			Application of Law of Cure							
HomUG-OM-II 11.3		K	**Aphorism 54** Different forms / System of Medicines Allopathic Method	Compare the outcomes of Various theories	Cognitive Understand and interpret Level II	Must Know	Lecture Small Group Discussion Seminars	MCQ SAQ Quiz	MCQ, SAQ, LAQ, Viva	**ORGANON (Spiral)**
HomUG-OM-II 11.4	K & S HO	K	**Aphorism 55-56** Palliation in Allopathy	Discuss the awareness of public to effect of palliative treatment	Cognitive Understand and interpret Level II	Must Know	Lecture Small Group Discussion Seminars	MCQ, SAQ	MCQ, SAQ, LAQ, Viva	**Modern Pharmacology (V) Medicine (V)**
HomUG-OM-II 11.5		K	**Aphorism 57-58** Symptomatic Treatment by Contraria	Explain the symptomatic treatment in contraria	Cognitive Understand and interpret Level II	Must Know	Lecture Small Group Discussion Seminars	MCQ, SAQ	MCQ, SAQ, LAQ, Viva	**Modern Pharmacology (V) Medicine (V)**
HomUG-OM-II 11.6		K	**Aphorism 59** Injurious effects of antipathic Line of Treatment	Analyse the examples of effects of Antipathic line of treatment	Cognitive Understand and interpret Level II	Must Know	Lecture Small Group Discussion Seminars	MCQ, SAQ	MCQ, SAQ, LAQ, Viva	**Modern Pharmacology (V) Medicine (V)**

HomUG-OM-II 11.7	K & S HO	K	**Aphorism 60** Palliation in Allopathy	Discuss the Hazard of increasing doses in palliative treatment	Cognitive Understand and interpret Level II	Must Know	Lecture Small Group Discussion	MCQ, SAQ	MCQ, SAQ Viva	**Modern Pharmacology (V) Medicine (V), Gynaec (H), Surgery(H)**
HomUG-OM-II 11.8		K	**Aphorism 61** Utility of Homoeopathic treatment	Compare the utility of Homoeopathic & Allopathic treatment	Cognitive Understand and interpret Level II	Must Know	Lecture Small Group Discussion	MCQ, SAQ	MCQ, SAQ Viva	**Modern Pharmacology (V) Medicine (V), Gynaec (H), Surgery(H)**
HomUG-OM-II 11.9	K&S HO P C	K	**Aphorism 62-63** Reason for injurious nature of the palliative and sole efficacy of homoeopathic medicine	Define Primary and Secondary Action	Cognitive Understand and interpret Level II	Must Know	Lecture Small Group Discussion	MCQ, SAQ	MCQ, SAQ, Viva	
HomUG-OM-II 11.10		K H	**Aphorism 64** Explanation of Primary and Secondary Action	Differentiate between Primary and Secondary Action	Cognitive Understand and interpret Level II	Must Know	Lecture Small Group Discussion	MCQ, SAQ	MCQ, SAQ, Viva	
HomUG-OM-II 11.11		K	**Aphorism 65** Examples of Primary and	Illustrate with examples of Primary and	Cognitive Understand and	Must Know	Lecture Small Group Discussion	MCQ, SAQ	MCQ, SAQ, LAQ Viva	**Modern Pharmacology (V) Medicine (V)**

			Secondary Action	Secondary Actions	interpret Level II					
HomUG-OM-II 11.12	K & S HO	K	**Aphorism 66** Secondary Curative Action	Analyse the effect of smallest homoeopathic doses in secondary action	Cognitive Understand and interpret Level II	Must Know	Lecture Small Group Discussion	MCQ, SAQ	MCQ, SAQ, LAQ	
HomUG-OM-II 11.13		K	**Aphorism 67** Define and explain Suspended Animation	Discuss the use of antipathic line of treatment in specific cases	Cognitive Understand and interpret Level II	Must Know	Lecture Small Group Discussion	MCQ, SAQ	MCQ, SAQ, LAQ	
HomUG-OM-II 11.14		KH	**Aphorism 68** Analyse the efficacy of Minuteness of Homeopathic medicines in cure	Application of Law of Minimum	Cognitive Understand and interpret Level II	Must Know	Lecture Small Group Discussion	MCQ, SAQ	MCQ, SAQ, LAQ	**Organon (S)**
HomUG-OM-II 11.15	K & S HO	K	**Aphorism 69** Hurtfulness of Antipathic Treatment	Evaluate the effect of Antipathic line of treatment	Cognitive Understand and interpret Level II	Must Know	Lecture Small Group Discussion	MCQ, SAQ	MCQ, SAQ, LAQ	**Modern Pharmacology (H) Medicine (V)**
HomUG-OM-II 11.16	K & S HO	K	**Aphorism 70** Summary of Homeopathic system of Medicine	List the inferences derived from the Aphorisms 1-70	Cognitive Understand and interpret Level II	Must Know	Lecture Small Group Discussion	MCQ, SAQ	MCQ, SAQ, LAQ	

6.10 Causation

Sl. No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-OM-II 12.1	K & S	K	Etiology Concept of Disease	Recall the various concept of disease	Cognitive Level II Understand and Interpret	Must know	Lectures Small group Discussion	MCQ SAQ	MCQ SAQ LAQ Viva	**Organon (S)**
HomUG-OM-II 12.2	K & S		Biological Concept of disease	Discuss the biological concept of disease		Desirable to know				**Pathology (H)**
HomUG-OM-II 12.3	C S		Environmental and Constitutional Factors	Discuss the concept of stress/ strain / Conflict		Must know				**Psychology (S)** Personality Adaptation
HomUG-OM-II 12.4	P C		Importance of diagnosis in Homeopathy	List the importance of diagnosis in daily practice		Must know				**Practice of Medicine (H & V)**
HomUG-OM-II 12.5			Concept of causation & relating it with homoeopathy	Define fundamental(miasm), exciting & maintaining cause	Cognitive Level II Understand and Interpret	Must know	Lectures Small group Discussion	MCQ SAQ	MCQ SAQ LAQ Viva	Horizontal with Pathology, Materia Medica, Repertory
HomUG-OM-II 12.6	K & S and Scholarship	K	Classification of Disease	Classification of disease as per Hahnemann and other stalwarts like Sarkar	Cognitive/ Understand & Interpret level II	Must Know	Classroom discussion Case Based Learning	MCQ SAQ	LAQ	

6.11 Introduction to the evolutionary concept of miasm

Sl. No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-OM-II 13.1	K & S	K	Discovery of Miasm Definition of Miasm Primary basic features of Miasm	Relate to Hahnemann's journey to discover the concept of miasm in chronic diseases	Cognitive Level II Understand and Interpret	Desirable to know	Lecture Small group discussion	MCQSAQ	MCQ SAQ LAQ Viva	**Organon (S)**
HomUG-OM-II 13.2	K & S	K	Hahnemann classification of disease	Define Hahnemann's concept of miasm	Cognitive / Understand & Interpret Level II	Must Know	Class room lecture / Small group Discussions / Caselets	MCQ SAQ	LAQ	Horizontal with Pathology
HomUG-OM-II 13.3				Explain pathological consideration and general survey of disease Hahnemann's theory of Chronic Disease & bacteriology Acute miasm						
HomUG-OM-II 13.4	K & S	K	Miasm	Explain characteristic of Psora	Cognitive / Understand & Interpret level II	Desirable to know	Classroom discussion/ group discussions	MCQ SAQ	LAQ	
HomUG-OM-II 13.5				Explain characteristic of Sycosis						

HomUG-OM-II 13.6				Explain characteristic of Syphilis Foot note: 74, 76, 77, 78, 79, 80						
HomUG-OM-II 13.7	K & S	K	Understanding chronic disease in view of pathogenesis	Co- relate laboratory investigation with evolution of pathology and miasm	Cognitive / Understand & Interpret level II	Desirable to know	Caselets / Classroom discussion/	MCQ SAQ	LAQ	Horizontal with Pathology
HomUG-OM-II 13.8				Co- relate microbiology & homoeopathy with miasm						
HomUG-OM-II 13.9	K & S	K	Miasm & Pathology	Correlation of homoeopathy to pathology with refernce to Dr. Kent, Close, Roberts	Cognitive / Understand & Interpret level II	Nice to know	Classroom discussion/	MCQ SAQ	LAQ	

6.12 Individuality

Sl. No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-OM-II 14.1	K & S	K	Life, Health & Disease	Define Individuality	Cognitive Level II Understand and Interpret	Must know	Lecture Small Group Discussion Case based Learning Seminar	MCQ SAQ	MCQ SAQ LAQ Viva	**Pathology** **Practice of Medicine** **Materia Medica**
HomUG-OM-II 14.2				Describe factors contributing to individualise a patient						
HomUG-OM-II 14.3				Discuss with examples						

6.13 Anamnesis- evolution of disease

Sl. No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-OM-II 15.1	K & S	K	History of Disease and its evolution	Define Anamnesis	Cognitive Level II Understand and Interpret	Must know	Lecture Small Group Discussion Case based Learning Seminar	MCQ SAQ	MCQ SAQ LAQ Viva	**Pathology** **Practice of Medicine** **Materia Medica**
HomUG-OM-II 15.2				Define evolution of disease process and prognosis of disease						

6.14 Disease-its progress- complex disease relation with miasm

Sl. No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-OM-II 16.1	K & S	K	Progression of disease	Define Complex disease	Cognitive Level II Understand and Interpret	Must know	Lecture Small Group Discussion Case based Learning Seminar	SAQ	MCQ, SAQ, LAQ, VIVA	**Organon**
HomUG-OM-II 16.2				Discuss progression of disease in relation with – Psora (Functional Changes) - Sycosis (Infiltration) - Syphylis (Destruction)						

6.15 Introduction to the concept of suppression

Sl. No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-OM-II 17.1	K & S HO P C	K	Suppression Causes Effects and Management	Define Suppression	Cognitive Level II Understand and Interpret	Nice to Know	Lecture Caselet Case based Lerarning	MCQ SAQ	SAQ	**Pathology (H)**
HomUG-OM-II 17.2				Enumerate the types and causes of Suppression						
HomUG-OM-II 17.3				Discuss the effects of Suppression						
HomUG-OM-II 17.4				Explain the management						

7. Teaching learning methods

Lectures (Theory)	Non-lectures (Practical)
Lectures	Clinical demonstration
Small group discussion	Problem based group discussion
Integrated lectures	Case based learning
Assignments	Tutorials
Library reference	Seminars
	Symposium
	Assignments
	Self-learning

There have to be classroom lectures, small group discussions, case discussions where case-based learning (CBL) and problem-based learning (PBL) are especially helpful.
Audiovisual (AV) methods for classroom teaching may be an innovative aid in order to demonstrate the related graphics and animations etc.
In the case of clinical demonstration – DOAP (Demonstration – Observation – Assistance – Performance) is very well applicable.

8. Details of assessment

8.1 Overall Scheme of Assessment (Summative)

Sr. No	Professional Course	Term I (1-6 Months)		Term II (7-12 Months)		
1	Second Professional BHMS	PA I (end of 3 months)	TT I (end of 6 months)	PA II (end of 9 months)	FUE (end of 12 months)	
		10 Marks Viva	50 Marks Practical/ Viva i) Viva voce -25 marks	10 Marks Viva	100 marks theory	100 marks (Clinical/practical+ Viva+ IA)

			ii) Clinical performance – 25 marks Case taking and analysis and evaluation			

8.2 Number of papers and marks distribution for Final University Examination (FUE)

Sr. No.	Course Code	Papers	Theory	Practical/ Clinical	Viva Voce	Internal Assessment**	Grand Total
1	HomUG-OM-II	01	100 marks	50 marks i) Case taking- 10 marks ii) Case processing-25 marks iii) Case presentation- 5 marks iv) Journal*-10 marks	40 marks	10 marks (Marks of PA I + TT I + PA II)	200marks

*****Journal with 10 cases needs to be maintained by the students which should include Case Taking, Case Processing -Analysis & Evaluation, Investigations, Probable Diagnosis, Classification of disease in that case, Susceptibility

****Method of Calculation of Internal Assessment Marks for Final University Examination:**

Marks of IA- **(**Marks of PA-1 + Marks of TT + Marks of PA-2) / 70 X 10

8.3 Paper Layout

Summative assessment (FUE):
Theory- 100 marks

MCQ	**10 marks**
SAQ	**40 marks**
LAQ	**50 marks**

8.4 Distribution of questions for theory exam

Sr. No	**Paper**			**D** **Type of Questions**		
	A **List of Topics**	**B** **Term**	**C** **Marks**	**MCQ** **(1 Mark)**	**SAQ** **(5Marks)**	**LAQ** **(10 Marks)**
1	Aphorism 28- 70 and 83-104	I & II	Refer to table 8.5 below	4	2	2
2	Case taking -receiving-perceiving techniques prerequisites of physician, Symptomatology, Analysis, Evaluation, Totality of Symptoms	I & II		2	2	1

3	Classification of disease with introduction to miasm (Aphorism 71-82); Its correlation with pathogenesis and Homoeopathic management	I		2	1	1
4	Anamnesis-evolution of disease, Disease its progress-complex disease, Individualization-its process, Susceptibility: types and factors modifying it	II			2	
5	Causation; Introduction to the concept of suppression	II			1	1

8.5 Theme-wise distribution

No	Chapter/ Topic	Term	Theme	Marks	LAQ	SAQ	MCQ
1	Aphorism 28-104	I & II	A	34	20	10	4
2	Case taking -receiving-perceiving techniques prerequisites of physician, Symptomatology, Analysis, Evaluation, Totality of Symptoms	I&II	B	22	10	10	2
3	Classification of Disease with respect to Pathogenesis, miasm and correlation with homeopathic management	I	C	17	10	5	2
4	Anamnesis-evolution of disease, Disease its progress-complex disease, Individualization-its process, Susceptibility: types and factors modifying it	II	D	12		10	2
5	Causation; Introduction to the concept of suppression	II	E	15	10	5	

8.6 Question paper blueprint

A **Question Serial Number**	**B** **Type of Question**	**Question Paper Format** **(Refer Table 8.5 for themes)**
Q.1	Multiple choice Questions (MCQ) 10 Questions 1mark each All compulsory Must know part: 7 Desirable to know :3 Nice to know: Nil	1. Theme A 2. Theme A 3. Theme A 4. Theme A 5. Theme B 6. Theme B 7. Theme C 8. Theme C 9. Theme D 10. Theme D
Q.2.	Short answer Questions (SAQ) 8 Questions 5 marks each All Compulsory Must know part:5 Desirable to Know: 2 Nice to know:1	1. Theme A 2. Theme A 3. Theme B 4. Theme B 5. Theme C 6. Theme D 7. Theme D 8. Theme E
Q.3	Long answer Questions (LAQ) 5 Questions 10 marks each All Compulsory Must know part:3 Desirable to Know: 2 Nice to know:Nil	1. Theme A 2. Theme A 3. Theme B 4. Theme C 5. Theme E

9. List of recommended text/reference books

- Hahnemann Samuel,Organon of Medicine 6th edition translated By W. Boericke
- Hahnemann Samuel,Organon of Medicine 5th&6th combined edition translated By R. E. Dudgeon
- Kent J.T. Lectures on Homoeopathic Philosophy
- Roberts H. A. The Principle and Art of Cure By Homoeopathy
- Close Stuart, The Genius of Homoeopathy Lectures and Essay on Homoeopathic Philosophy
- Sarkar B. K., Commentary on Organon
- Das A. K., *A Treatise on Organon of Medicine, Chronic Diseases and Homoeopathic Philosophy 3rd edition*
- Schmidt Pierre, *The Art of Case Taking and Interrogation*
- Goel Sumit, *A study on Organon of Medicine and Homoeopathic Philosophy*

10. List of Contributors

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Subject Name- Homoeopathic Repertory and Case Taking
Subject Code: HomUG-R-II

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1. Preamble

The repertory is a dictionary or storehouse or an index to the huge mass of symptoms of the Materia Medica. The repertory is organized in a practical form indicating the relative gradation of drugs. Repertories not only contain symptoms of proving but also clinical and pathological symptoms found in the Materia Medica and additions made by authors based on their clinical experience. As no mind can memorize all the symptoms of the Materia Medica with their relative grading, repertories serve as an instrument at the disposal of the physician for sifting through the maze of symptoms of the vast Materia Medica. Case taking is the elementary mode of collecting data from the patient and the principles and techniques of case taking will demand constant updating of knowledge of the disease processes and way of interacting with human beings.

Need of the repertory as a tool arose when the number of remedies went on increasing and it was becoming humanly difficult to remember all the symptoms. A simple solution was to index the symptoms with the name of the drug. Repertories aim at simplifying the work of the physician to find the indicated remedy by eliminating the non-indicated remedies**.** Repertorisation is not the end but means to arrive to the simillimum and reference to Materia Medica based on sound principles of Philosophy is the final court of appeal.

Each repertory has been compiled on the basis of distinct philosophy, structure and utility. To use these instruments effectively, one must understand thoroughly its conceptual base, construction and utility and limitations. Even though there are a number of repertories, the student at the undergraduate level is expected to learn the philosophy and application of basic core repertories namely Kent, BBCR and BTPB. The subject of Repertory must not be taught in isolation but must be taught in horizontal integration with Anatomy and Physiology in I BHMS, Pathology in II BHMS, Surgery and Gynaecology in III BHMS and Practice of Medicine in IV BHMS and vertically integrated with Materia Medica and Organon and Homoeopathic Philosophy in all the years. Integrated teaching over all the years will help the student to grasp and understand the subjects better and connect repertory to all other subjects.

Similarly, case taking demands virtually integrating all the subjects taught from the I through IV BHMS in the consulting room or at the bedside. The physician can never say that he has learnt all every new patient has a new lesson to teach.
The advent of computerization and resulting software has opened many new avenues to collate and correlate the vast information found in the Materia Medica through the repertories. Continued exploration of these connections will generate new data, new repertories and the new application to existing or new illnesses.

2. Course outcomes

At the end of BHMS course, the learner will be able to:

i. Explain the need and utility of repertory as a tool to find the similimum and in the study of Materia Medica.

ii. Describe the philosophical backgrounds, construction, utility and limitation of Kent repertory, BTBP, BBCR, Boericke repertory, other clinical repertories and modern repertories.

iii. Able to describe the various dimension of case taking and able to demonstrate case taking in moderate and difficult cases.

iv. Classify the symptoms, evaluate the symptoms according to their importance and construct the totality of symptomsbased on different philosophies (DrKent, Dr Boenninghausen, Dr Hahnemann, Garth Boericke).

v. Choose an appropriate approach for the case, construct the Repertorial Totality and select the appropriate rubrics and technique of repertorisation.

vi. Identify the medium, method, process and technique of repertorization.

vii. Display empathy with the patient and family during case taking.

viii. Communicate to the patient and attendants the need for sharing patient related information for a complete homoeopathic case taking.

ix. Develop ability to apply different case taking skills.

x. Search for the appropriate rubrics in different repertory.

xi. Understanding and evolution of modern repertories, computerized repertories, operate and use software-based repertories for repertorization.

3. Learning objectives

At the end of II BHMS, the learner will be able to:

1. Describe the steps of case taking in acute and chronic cases
2. Perform simple case taking in acute and chronic case under guidance
3. Illustrate the structure of Boericke repertory
4. Locate different pathological rubrics from Boericke repertory and Kent's repertory

4. Course content and its term-wise distribution(theory)

4.1 Case Taking (Term I)

4.1.1 Demonstration of Homoeopathic case taking in simple, acute and chronic cases *(refer to the table in **Annex-A** at the end defining category of the cases)*

4.1.2 Instructions given in Organon regarding case taking

4.2 Correlation of Repertory with Disease and Pathology (Term II)

4.2.1 Introduction to Boericke's repertory

4.2.2 Representation of different pathologies and pathogenesis in Boericke and Kent repertory

4.2.3 Understanding holistic concept of disease, constitution, diathesis, susceptibility and temperament

5. Teaching hours

5.1. Gross division of teaching hours

Homoeopathic Repertory and Case Taking		
Year	**Teaching hours- Lectures**	**Teaching hours- Non-lectures**
II BHMS	50	30

5.2. Teaching hours theory

S. No.	List of Topics	Hours (Total 50 hrs)
	Term I	
1.	Demonstration of Homoeopathic case taking in simple acute cases	09
2.	Demonstration of Homoeopathic case taking in simple chronic cases	08
3.	Instruction given in Organon regarding case taking	05
	Total	**22**
	Term II	
4.	Introduction to Boericke repertory	10
5.	Representation of different pathologies and pathogenesis in Boericke and Kent repertory	06
6.	Understanding holistic concept of disease, constitution, diathesis, susceptibility and temperament	12
	Total	**28**

5.3. Teaching hours Non-lecture

Sr. No	Non-Lecture Activity	Hours
	Term I	
1	Clinical	15
2	Demonstrative	
2(a)	Seminar / Tutorials	01
2(b)	Problem based learning/ Case Based Learning	02
2(c)	Assignment/ Symposium / Group discussion	02
	Term II	
1	Clinical	05
2	Demonstrative	
2(a)	Seminar / Tutorials	01
2(b)	Problem based learning/ Case Based Learning	01
2(c)	Assignment/ Symposium / Group discussion// Rubric hunting exercises	03
	Total	**30**

6. Content mapping

6.1. Topic: - Demonstration of Homoeopathic Case Taking in simple acute cases (importance & its application) and instructions given in Organon regarding case taking

Sl. No.	Domain of Competency	Miller's level	Content	SLO	Bloom/ Guilbert	Priority	Teaching-Learning Method/Media	Assessment		Integration
								F	S	
Hom UG-R-II-2.1	K/HO	Knows	Acquiring knowledge, skill and attitude about patient and doctor communication and examination in simple acute disease	Define an acute Disease	Cognitive/ Level -1 Remembers/ Recalls	Must Know	Lecture Small Group Discussion	SAQ Viva-voce	–	Horizontal integration with Organon of Medicine Spiral Integration in III & IV BHMS
Hom UG-R-II-2.2	K/HO	Knows		Classify diseases as per Hahnemann's Philosophy	Cognitive/ Level -1 Remembers/ Recalls	Desirable to Know	Lecture Small Group Discussion	SAQ Viva-voce	–	
Hom UG-R-II-2.3	K/HO	Knows		State the Aphorisms dealing with Acute Case Taking and classification of acute disease	Cognitive/ Level -1 Remembers/ Recalls	Must know	Lecture Integrated discussion	SAQ Viva-voce	–	
Hom UG-R-II-2.4	K/HO/PC	Knows how		Explain the basic structure of case taking. List the steps of case taking in simple acute cases	Cognitive/ Level -1 Remembers/ Recalls	Must know	Lecture Integrated discussion	SAQ Viva-voce	–	

Sl. No.	Domain of Competency	Miller's level	Content	SLO	Bloom/ Guilbert	Priority	Teaching-Learning Method/Media	Assessment		Integration
								F	S	
Hom UG-R-II-2.5	K/HO/PC	Shows how		Demonstration of simple acute case taking	Psychomotor Level -1 Interpret/ Decide/ DemonstrateCognitive/ Level -2understand/ describe	Desirable	Clinical Class Small Group Discussion (I	SAQ Viva-voce	–	Horizontal integration with Pathology & Practice of Medicine Spiral Integration in III & IV BHMS
Hom UG-R-II-2.6	K/HO/PC	Shows how		Observe the skills of clinical examination of simple acute case	Psychomotor Level -1 Interpret/ Decide/ Demonstrate	Desirable	Clinical Class Small Group Discussion	SAQ Viva-voce	–	

6.2. Topic: - Demonstration of Homoeopathic Case Taking in simple Chronic cases (importance & its application) and instructions given in Organon regarding Case Taking

Sl. No.	Domain of Competency	Miller's level	Content	SLO	Bloom/ Guilbert	Priority	Teaching-Learning Method/Media	Assessment		Integration
								F	S	
Hom UG-R-II-2.7	K/HO	Knows	Acquiring knowledge, skill and attitude about	Define a Chronic Disease as per Hahnemann's Philosophy	Cognitive/ Level -1 Remembers/ Recalls	Must Know	Lecture Small Group Discussion	SAQ Viva-voce	–	Horizontal integration with Organon of Medicine,

Sl. No.	Domain of Competency	Miller's level	Content	SLO	Bloom/ Guilbert	Priority	Teaching-Learning Method/Media	Assessment		Integration
								F	S	
Hom UG-R-II-2.8	K/HO	Knows	patient and doctor communication and examination in chronic disease	Classify chronic diseases as per Hahnemann's Philosophy	Cognitive/ Level -1 Remembers/ Recalls	Desirable to Know	Lecture Small Group Discussion	SAQ Viva - voce	–	Spiral Integration in III & IV BHMS
Hom UG-R-II-2.9	K/HO	Knows		List the aphorisms dealing with Chronic Case Taking	Cognitive/ Level -1 Remembers/ Recalls	Must know	Lecture Integrated discussion	SAQ Viva - voce	–	
Hom UG-R-II-2.10	K/HO/PC	Knows how		Explain the basic structure of chronic case taking. List the steps of chronic case taking	Cognitive/ Level -1 Remembers/ Recalls	Must know	Lecture Integrated discussion	SAQ Viva - voce	–	
Hom UG-R-II-2.11	K/HO/PC	Shows how		Demonstration of case taking simple chronic cases	Psychomotor Level -1 Interpret/ Decide/ Demonstrate	Desirable	Lecture/ Clinical Class Small Group Discussion Integrated discussion	SAQ Viva - voce	–	Horizontal integration with Organon of Medicine,Pathology & Practice of Medicine Spiral Integration in III & IV BHMS
Hom UG-R-II-2.12	K/HO/PC	Shows how		Observe the skills of clinical examination of simple chronic case	Psychomotor Level -1 Interpret/ Decide/ Demonstrate Cognitive/ Level -2 understand/ describe	Desirable	Clinical Class Small Group Discussion	SAQ Viva - voce	–	

6.3. Topic: - Introduction to Boericke's Repertory

Sl. No.	Domain of Competency	Miller's level	Content	SLO	Bloom/ Guilbert	Priority	Teaching-Learning Method/Media	Assessment		Integration
								F	S	
Hom UG-R-II-3.1	K/HO	Knows	Acquiring knowledge about Boericke's Repertory	Discuss the life history of Oscar Boericke with reference to his contributions to repertory	Cognitive/ Level -1 Remembers/ Recalls	Nice to Know	Lecture	Viva - voce	–	Horizontal integration with Organon of Medicine
Hom UG-R-II-3.2	K/HO	Knows		Outline the Plan of Boericke's Repertory	Cognitive/ Level -1 Remembers/ Recalls	Desirable to Know	Lecture Rubric Hunting	SAQ Viva - voce	–	
Hom UG-R-II-3.3	K/HO	Knows		Describe the Construction of Boericke's Repertory	Cognitive/ Level -1 Remembers/ Recalls	Must know	Lecture Rubric Hunting	SAQ Viva - voce	–	
Hom UG-R-II-3.4	K/HO	Knows		Explain the Importance of knowledge of pathology and clinical medicine for using Boericke's Repertory	Cognitive/ Level -2 Remembers/ Recalls	Desirable to Know	Lecture Rubric Hunting	SAQ Viva - voce	–	Horizontal integration with Organon of Medicine, Pathology, Practice of Medicine Spiral Integration in III & IV BHMS
Hom UG-R-II-3.5	K/HO	Knows how		Mention the Scope, Limitation & adaptability of Boericke's Repertory	Cognitive/ Level -2 Understands	Desirable	Lecture Rubric Hunting	SAQ Viva - voce	–	

6.4. Topic: - Representation of different pathologies and pathogenesis in Boericke and Kent

Sl. No.	Domain of Competency	Miller's level	Content	SLO	Bloom/ Guilbert	Priority	Teaching-Learning Method/Media	Assessment		Integration
								F	S	
Hom UG-R-II-4.1	K/HO	Knows How	Identifying Representation of different pathologies and pathogenesis in Boericke and Kent Repertory	Identify the rubrics representing different pathologies and pathogenesis in Boericke repertory	Cognitive/ Level -1 Remembers/ Recalls	Desirable to Know	Lecture Rubric Hunting	MCQ Quiz	–	Horizontal integration with Pathology, Practice of Medicine Spiral Integration in III & IV BHMS
Hom UG-R-II-4.2	K/HO	Knows How		Identify the rubrics representing different pathologies and pathogenesis in Kent repertory	Cognitive/ Level -1 Remembers/ Recalls	Desirable to Know	Lecture Rubric Hunting	MCQ Quiz	–	

6.5. Topic: - Understanding holistic concept of disease, miasm, constitution, diathesis, susceptibility and temperament in Boericke and Kent Repertory

Sl. No.	Domain of Competency	Miller's level	Content	SLO	Bloom/ Guilbert	Priority	Teaching-Learning Method/ Media	Assessment		Integration
								F	S	
Hom UG-R-II-5.1	K/HO	Knows	Understanding the representation of constitution, diathesis, susceptibility and temperament in Boericke and Kent Repertory	Discuss the holistic concept of Health with relation to the study of repertory	Cognitive/ Level - 1 Understands	Desirable to Know	Lecture	Viva-voce		Horizontal integration with Organon of Medicine, Pathology, Practice of Medicine Spiral Integration in III & IV BHMS
Hom UG-R-II-5.2	K/HO	Knows		Discuss the concept of Disease with relation to the study of repertory	Cognitive/ Level - 1 Understands	Desirable to Know	Lecture	Viva-voce		
Hom UG-R-II-5.3	K/HO	Knows		Define Constitution, diathesis, susceptibility& Temperament	Cognitive/ Level - 2 Understands & interpret	Desirable to Know	Lecture	Viva-voce		

Sl. No.	Domain of Competency	Miller's level	Content	SLO	Bloom/ Guilbert	Priority	Teaching-Learning Method/ Media	Assessment		Integration
								F	S	
Hom UG-R-II-5.4	K/HO	Knows How		Identify the rubrics representing different constitution, diathesis, susceptibility and temperament in Boericke repertory	Cognitive/ Level - 2 Understands & interpret	Desirable to Know	Lecture Rubric Hunting	MCQ Quiz	–	
Hom UG-R-II-5.5	K/HO	Knows How		Identify the rubrics representing different constitution, diathesis, susceptibility and temperament in Kent repertory	Cognitive/ Level - 2 Understands & Interpret	Desirable to Know	Lecture Rubric Hunting	MCQ Quiz	–	

7. Teaching Learning Methods

Lectures (Theory)	**Non-lectures (Practical/Demonstrative)**
Lecture	Clinical Class
Small Group Discussion	Rubric hunting exercises
Integrated discussion with subjects of Organon of Medicine, Pathology & Practice of Medicine	Case based learning
	Seminar
	Tutorial
	Group Discussion

8. Details of assessment

Note- ***The assessment in II BHMS shall be done only as Internal Assessment (IA) in terms of*** **Periodical Assessments** ***(PA) and*** **Term Tests (*TT) as detailed below. There shall not be any Final University Examination (FUE) at this level. The marks obtained in IA during II BHMS will be added to the marks of IA in the III BHMS University Examination.***

Overall Scheme of Internal Assessment (IA)*

Professional Course/ Subject	**Term I (1-6 Months)**		**Term II (7-12 Months)**	
II BHMS/ Repertory	PA I (end of 3 months)	TT I (end of 6 months)	PA II (end of 9 months)	TT II (end of 12 months)
	10 Marks Viva- **A**	50 Marks Clinical/Practical and Viva - **E** i) Viva voce -25 marks ii) Clinical/practical- 25 a. Recording of Simple acute case - 20 marks b. Analyse the case for acute and chronic disease as per Hahnemann's classification of disease - 05 marks	10 Marks Viva- **B**	50 Marks Clinical/Practical and Viva – **F** Viva voce -25 marks i) Clinical/practical- 25 a. Recording of Simple chronic case-15 marks c. Analyse the case for acute and chronic disease as per Hahnemann's classification of disease - 05 marks b. Locate the rubrics for pathologies in Boericke & Kent's repertory- 05 marks

***Method of Calculation of Internal Assessment Marks in II BHMS for Final University Examination to be held in III BHMS:**

Marks of PA I	Marks of PA II	Periodical Assessment Average PA I+ PA II /2	Marks of TT I	Marks of TT II	Terminal Test Average TT I + TT II / 100 x 10	Final Internal Assessment Marks
A	**B**	**D**	**E**	**F**	**G**	**D+G/2**

9. List of recommended text/reference books

- Ahmed Munir R(2016). Fundamentals of repertories: Alchemy of homeopathic methodology.
- Bidwell GI.(1915). How to Use the Repertory.
- Boericke, W. (2003). New manual of homoeopathic materia medica and repertory.
- Hahnemann, S. (2014). Organon of Medicine.
- Kent, J. T. (2008). Lectures on Homeopathic Philosophy.
- Kent, J. T. (2016). Repertory of the homeopathic materia medica.
- Kent, J. T: How to study the Repertory, how to use the Repertory.
- Tiwari SK. (2007). Essentials of Repertorization.

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Annexure A (in reference of course content sub clause 4.1.1)

	Simple case	Moderate case	Difficult case
Acute case	A case of acute nature as defined by Hahnemann; which is presenting with complete symptoms of either one location or one system of single malady with no other comorbid conditions. Cases where case processing is easy and constructing totality/ rubric search for reference/ Repertorization is easy.	A case of acute nature as defined by Hahnemann; which is presenting with mixed symptomatology (complete as well incomplete symptoms) of multiple location or of single malady of functional level with other comorbid conditions of functional level. Cases where case processing needs a certain set of knowledge, skill for construction of totality and rubric search/ Repertorization is somewhat more difficult then simple cases.	A case of acute nature as defined by Hahnemann; which is presented with mixed symptomatology of multiple locations with structural changes or a complex disease. Cases where case processing needs a certain set of knowledge, skill for construction of totality and rubric search/ Repertorization is somewhat difficult then moderate cases.
Chronic case	A case of chronic nature as defined by Hahnemann; which is having complete symptoms of either one location or one system of single malady with no other comorbid conditions. Cases where case processing is easy and constructing Repertorial totality/ rubric search/ Repertorization is easy.	A case of chronic nature as defined by Hahnemann; which is presenting with mixed symptomatology (complete as well incomplete symptoms) of multiple locations or of single malady of functional level with other comorbid conditions of functional level. Cases where case processing needs a certain set of knowledge, skill for construction of totality and rubric search/ Repertorization is somewhat difficult then simple cases.	A case of chronic nature as defined by Hahnemann; with mixed symptomatology of multiple locations with structural changes or a complex disease. Cases where case processing needs a certain set of knowledge, skill for construction of totality and rubric search/ Repertorization is somewhat difficult then moderate cases

Subject name: - Forensic Medicine and Toxicology

Subject code: HomUG-FMT

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1. Preamble

Forensic Medicine and Toxicology encompass a multifaceted understanding of the medical, legal, and medico-legal obligations incumbent upon physicians, alongside a profound comprehension of medical ethics, decorum, and the toxicological ramifications of poisons. This field intersects with the elucidation of symptoms associated with homeopathic remedies. It is imperative for every registered Homoeopathic medical practitioner, whether practicing privately or within governmental institutions, to undertake medico-legal examinations as mandated by statute. In the current landscape characterized by burgeoning consumerism in medical services, familiarity with laws pertinent to medical practice, doctrines of medical negligence, and ethical codes assumes paramount importance. Practitioners must be cognizant of their medico-legal responsibilities, adept at making astute observations, drawing logical inferences, and arriving at significant conclusions during investigations into criminal matters and associated medico-legal intricacies.

Furthermore, proficiency in identifying, diagnosing, and studying the management protocols of both acute and chronic poisonings is indispensable. Decisions regarding treatment and referral should be judiciously made, considering the prevailing circumstances and severity of the condition, thereby ensuring timely intervention. Moreover, an understanding of the medico-legal dimensions of poison-related incidents is crucial.

Additionally, recognizing that the toxicological manifestations of poisons may bear resemblance to either the proving or clinical symptoms of certain Homoeopathic remedies underscoring the importance of integration between these disciplines. Such integration not only sheds light on the evolving drug profiles but also enhances comprehension of toxicological and therapeutic principles.

2. Course outcomes

At the end of BHMS II course in Forensic Medicine and Toxicology, the student shall -

i. Identify, examine and prepare reports / certificates in medico-legal cases/situations in accordance with the law of land.
ii. Demonstrate awareness of legal/court procedures applicable to medico legal/medical practice
iii. Acquire knowledge in Forensic medicine and recognize its scope and limitations in Homoeopathic practice
iv. Be conversant with the code of ethics, etiquette, duties and rights of medical practitioners' profession towards patients, profession, society, state and humanity at large; infamous conduct, medical negligence, and punishment on violation of the code of ethics.
v. Be able to identify poisons/poisoning, and management of poisoning within the scope of homoeopathy.

vi. Develop knowledge of Materia Medica by application of knowledge gained by the study of Toxicology
vii. Develop skills in medical documentation
viii. Be aware of the principles of environmental, occupational and preventive aspects of general Toxicology

3. Course content and its term-wise distribution

SI. No.	List of Topics	Term
	Forensic Medicine	
1.	Introduction to Forensic Medicine	I
2.	Medical ethics	I
3.	Legal procedures	I
4.	Personal Identification	I
5.	Death and its medico-legal importance	I
	Toxicology	
1.	General Toxicology	I
2.	Clinical toxicology	I
3.	Injury and its medico-legal importance	II
4.	Forensic psychiatry	II
5.	Post-mortem examination (ML autopsy)	II
6.	Impotence and sterility	II
7.	Virginity, defloration; pregnancy and delivery.(Integration with OBG)	II
8.	Abortion and infanticide (Integration with OBG)	II
9.	Sexual Offences	II
10.	Clinical Toxicology	II
	Legislation relating to medical profession (relevant areas)	
1.	Legislation relating to medical profession	II

4. Teaching hours

4.1 Gross division of teaching hours

Forensic Medicine and Toxicology		
Year	**Teaching hours- Lectures**	**Teaching hours- Non-lectures**
II BHMS	120	50

4.2 Teaching hours theory

S. no.	List of Topics	Hours
1	Introduction to Forensic Medicine	02
2	Medical Ethics	03
3	Legal Procedures	04
4	Personal Identification	07
5	Death and its medicolegal importance	13
6	General Toxicology	07
7	Clinical Toxicology: Part-I	20
8	Injury and its medicolegal importance	10
9	Forensic Psychiatry	04
10	Postmortem Examination (ML Autopsy)	04
11	Impotence and Sterility	03

12	Virginity, Defloration, Pregnancy and Delivery (Integration with OBG)	03
13	Abortion and Infanticide (Integration with OBG)	04
14	Sexual Offences	06
15	Clinical Toxicology: Part-II	25
16	Legislation relating to Homoeopathic Medical Profession	05
	Total	**120**

4.3 Teaching hours: Non-lecture

Sr. No	Non-Lecture Activity	Term	Time Allotted per Activity (Hours)
1	**Practical**	I & II	**35**
1(a)	**Demonstration** a) Weapons b) Toxicology - corrosives, irritants, systemic and miscellaneous poisons, gastric lavage c) Charts, diagrams, photographs, models, bones, x-ray films of medico-legal importance		10
1(b)	**Certificate Writing** a) Various certificates like sickness certificate, physical fitness certificate, death certificate, consent form, birth certificate.		3

	b) Knowledge of injury certificate, examination of rape victim and assailant, drunkenness, post-mortem examination report, age certification		
1(c)	**Consent-** Medical consent, implied consent, patient confidentiality, autonomy, role of care giver, audio-video recording of cases, safety and custody of medical records		2
1(d)	Demonstration of at least ten medico-legal autopsies.		20
2	**Demonstrative**	I & II	**15**
2(a)	Court Procedures (Moot Court)		05
2(b)	Field Visits		10
	Total		**50**

5 Content mapping (competencies tables)

5.1. Topic: Introduction to Forensic Medicine-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-FMT-1.1	KS CS PBL PRF	K	Definition of forensic medicine, medical jurisprudence, History of Forensic medicine in India.	1.Define forensic medicine	C-I	MK	Interactive lecture	MCQ, Viva Voce	Viva voce	None
Hom UG-FMT-1.2		K		2. Define Medical Jurisprudence.	C-I	MK	Interactive lecture	MCQ, Viva Voce	Viva voce	
Hom UG-FMT-1.3		K		2. Describe the history of Forensic medicine in India.	C-I	DK	Interactive lecture	SAQ, Assignment	Theory - SAQ, Viva voce	

5.2. Topic: Medical ethics-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-FMT-2.1	KS PC HO CS PBL PRF	K	Medical Ethics and etiquette – Code of ethics, Infamous conduct, medical negligence, professional secrecy, privileged communication, Rights and duties of doctors and patients etc National Commission for Homoeopathy and	Define medical ethics	C-I	MK	Interactive lecture, Small Group Discussions, Written Case Scenario, Moot court.	MCQ, Assignment	Viva voce	None
Hom UG-FMT-2.2				Discuss professional misconduct with 2 examples.	C-II	MK	Interactive lectures, Written Case Scenario, Moot court.	SAQ LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	

Hom UG-FMT-2.3			State Homoeopathic Medical Councils Structure, functions and legislation Homoeopathic Practitioners (Professional Conduct, Etiquette and Code of Ethics) Regulations ,1982 with amendments (up to 2014) Duties of Registered Homoeopathic Medical practitioner	Discuss medical negligence with 2 examples.	C-II	MK	Interactive lectures, Written Case Scenario, Moot court.	SAQ LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-2.4				Discuss privileged communication in relation to rights and duties of doctors and patients.	C-II	MK	Interactive lectures, Written Case Scenario, Moot court.	SAQ LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	

Hom UG-FMT-2.5			in medico-legal cases. Consent, types of consent and its importance in practice Bioethics - Introduction and principles	Explain the duties of registered Homoeopathic medical practitioner in medicolegal cases.	C-II	MK	Interactive Lectures,	LAQ	Theory - LAQ , Viva voce Examination	
Hom UG-FMT-2.6				Discuss the principles of bioethics.	C-II	DK	Interactive lectures, Problem Based Learning.	Assignment	Viva voce Examination	

Hom UG-FMT-2.7				Explain about the types of consent and its importance in practice	C-II	MK	Interactive lectures	SAQ, LAQ	Theory - SAQ and LAQ Viva voce examination	

5.3. Topic: Legal procedures-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-FMT-3.1	KS CS PBL PRF	K	Understanding legal terms – CrPC, IPC, IEA, offence, civil and criminal cases Inquest, types of inquest Courts of law in India, jurisdiction, hierarchy and	Define CrPC, IPC	C-I	MK	Interactive lecture	MCQ	Theory - Viva voce	None
Hom UG-FMT-3.2				Differentiate between civil and criminal cases	C-II	MK	Interactive lecture	SAQ LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-3.3				Define Inquest	C-I	MK	Interactive lecture	MCQ	Theory - Viva voce	

Hom UG-FMT 3.4			power of different courts of law the sentences passed by them (India) legal procedure Medical evidences in courts, dying declaration, dying deposition, including medical certificates and medico-legal reports.	Explain the different types of Inquest.	C-II	MK	Interactive lecture	SAQ LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-3.5				Classify the different courts of Law in India	C-II	MK	Lecture , Field visits.	MCQ, SAQ LAQ	Theory - SAQ and LAQ , Viva voce	

Hom UG-FMT-3.6			Recording of evidence Witnesses and types Conduct and duties of doctors in witness box	Explain the power of different courts of law in India.	C-II	MK	Lecture , Field visits.	SAQ LAQ	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-3.7				Differentiate between dying declaration and dying disposition	C-II	MK	Interactive lecture	SAQ LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-3.8				Explain the types of witnesses	C-II	MK	Interactive lecture	MCQ, SAQ	Theory - MCQ, SAQ, Viva voce	
Hom UG-FMT-3.6				Explain the duties of doctors in witness box	C-II	MK	Interactive lecture, Moot court, Field visit	SAQ LAQ	Theory - SAQ and LAQ , Viva voce	

5.4. Topic: Personal identification-

Sl. No.	Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-FMT-4.1	KS CS PBL PRF.	K	Determination of age, gender, race, religion in the living and the dead, Dactylography, foot prints. Bones, scars and teeth, tattoo marks, handwriting, anthropome	Explain the procedure for Identification of age, sex, race and religion in living and dead.	C-II	MK	Interactive lecture, , written case scenario.	SAQ LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	None
Hom UG-FMT-4.2				Define Dactylography	C-I	MK	Interactive lecture,	Tutorial Assignment	Viva voce	

Hom UG-FMT-4.3			try and other identification data Examination of biological stains and hair. DNA finger printing Medicolegal importance	Explain the medicolegal importance of dactylography.	C-II	MK	Interactive lecture, written case scenario. Demonstration	MCQ, SAQ LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-4.4				Discuss the methods of identification of data, with specific reference to anthropometry.	C-II	MK	Interactive lecture, written case scenario. Problem Based Learning, Demonstration	MCQ, SAQ LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-4.5				Explain the medicolegal importance of DNA fingerprinting	C-II	MK	Interactive lecture, Demonstration	MCQ, SAQ LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	

5.5. Topic: death and its medicolegal importance-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-FMT-5.1	KS PRF CS	K	Thanatology, Death and its types, their medico-legal importance somatic death, molecular death, asphyxia, coma, syncope,	Define Thanatology	C-I	MK	Interactive lecture, lecture	MCQ, Tutorial Assignment	Viva voce	None
Hom UG-FMT-5.2				Differentiate between various types of death.	C-II	MK	Interactive lecture, lecture demonstration, written case scenario. Field visits.	MCQ, SAQ LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	

Hom UG-FMT-5.3			suspended animation Differentiate cause, manner and mode of death Pathology of asphyxial death, negative autopsy, sudden death and causes Organ transplantation and the laws governing organ transplantation Signs of death (1)	Explain the mechanism of drowning with its signs and symptoms and medicolegal importance.	C-II	MK	Interactive lecture, written case scenario, Problem Based Learning	MCQ, SAQ LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-5.4				Explain the mechanism of hanging with its signs and symptoms and medicolegal importance.	C-II	MK	Interactive lecture, written case scenario, Problem Based Learning	MCQ, SAQ LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	

Hom UG-FMT-5.5			immediate, (2) early, (3) late and their medico-legal importance, estimation of post-mortem interval Asphyxial deaths (mechanical asphyxia and drowning). Death from starvation, cold and heat etc.	Explain the mechanism of coma.	C-II	MK	Interactive lecture, written case scenario, Problem Based Learning	MCQ, SAQ LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-5.6				Explain suspended animation	C-II	MK	Interactive lecture, written case scenario, Problem Based Learning	MCQ, SAQ LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-5.7				Discuss medicolegal aspects of Organ Transplantation and laws governing it	C-II	DK	Interactive lecture, written case scenario, Problem Based Learning	MCQ, SAQ LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	

Hom UG-FMT-5.8				Explain the immediate, early and late signs of death and their medicolegal importance	C-II	MK	Interactive lecture, written case scenario, Problem Based Learning	MCQ, SAQ LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	

5.6. Topic: Injury and its medicolegal importance-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-FMT-6.1	KS CS PBL PRF	K	Mechanical, thermal, firearm, regional, transportation and traffic injuries;	Differentiate between various types of injuries.	C-II	MK	Interactive lecture, lecture demonstration, written case scenario. Field visits.	MCQ, SAQ LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	None

Hom UG-FMT-6.2			injuries from radiation, blast, electrocution and lightning and their medicolegal importance	Explain the types of mechanical injuries with medico-legal importance	C-II	MK	Interactive lecture, lecture demonstration, written case scenario. Field visits.	MCQ, SAQ LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-6.3				Explain the types of thermal injuries with medico-legal importance	C-II	MK	Interactive lecture, lecture demonstration, written case scenario. Field visits.	MCQ, SAQ LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-6.4				Explain the types of firearm injuries with medico-legal importance	C-II	MK	Interactive lecture, lecture demonstration, written case scenario. Field visits.	MCQ, SAQ LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	

Hom UG-FMT-6.5				Explain the types of regional injuries with medico-legal importance	C-II	MK	Interactive lecture, lecture demonstration, written case scenario. Field visits.	MCQ, SAQ LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-6.6				Explain injuries from radiation, blast, electrocution and lightning with medico-legal importance	C-II	DK	Interactive lecture, lecture demonstration, written case scenario. Field visits.	MCQ, SAQ LAQ, Tutorial Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-6.7				Define Ballistics	C-I	MK	Interactive lecture	MCQ, SAQ	Theory - MCQ, Viva voce	

5.7. Topic: Forensic psychiatry-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-FMT-7.1	KS CS PBL PRF	K	Definitions, delusion, delirium, illusion, hallucination, impulse, obsession, mania, ICD-11 classification of Insanity, mental subnormality. Definition and brief overview of common	Explain delusion.	C-II	MK	Interactive lecture, lecture demonstration. Field visits.	SAQ	Theory – SAQ, Viva-voce	None
Hom UG-FMT-7.2				Explain delirium.	C-II	MK	Interactive lecture	SAQ	Theory – SAQ, Viva-voce	

Hom UG-FMT-7.3			mental illnesses. True and feigned mental illness. Civil and criminal responsibilities of a person with mental illness/disability. Development of insanity, diagnosis, admission to mental asylum, care of mentally ill person and discharge.	Explain Illusion.	C-II	MK	Interactive lecture	SAQ	Theory – SAQ, Viva-voce	
Hom UG-FMT-7.4				Explain hallucination.	C-II	MK	Interactive lecture	SAQ	Theory – SAQ, Viva-voce	
Hom UG-FMT-7.5				Explain Impulsive obsession disorder.	C-II	MK	Interactive lecture	SAQ	Theory – SAQ, Viva-voce	
Hom UG-FMT-7.6				Explain mania.	C-II	MK	Interactive lecture	SAQ	Theory – SAQ, Viva-voce	
Hom UG-FMT-7.7				Explain about the ICD-11 classification of Insanity, mental subnormality	C-II	MK	Interactive lecture	MCQ, SAQ LAQ, Assignment	Theory And Practical Examination	

Hom UG-FMT-7.8				Discuss civil and criminal responsibilities of person with mental illness.	C-II	MK		MCQ, SAQ LAQ, Assignment	Theory And Practical Examination	
Hom UG-FMT-7.9				Explain Mental Health Act.	C-II	MK		MCQ, SAQ LAQ, Assignment	Theory And Practical Examination	
Hom UG-FMT-7.10				Discuss about the admission of an insane person to mental asylum, care of mentally ill person and discharge.	C-II	MK		MCQ, SAQ LAQ, Assignment	Theory And Practical Examination	

5.8. Topic: Postmortem examination (ML autopsy)-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-FMT-8.1	KS CS PBL PRF.	K	Purpose, procedure, legal bindings; difference between pathological and medico-legal autopsies. External examination, internal examination of adult, foetus and skeletal remains. Artefacts	Define autopsy	C-I	MK	Interactive lecture	MCQ,	Viva voce examination	None
Hom UG-FMT-8.2				Enlist the objectives of conducting a Medico legal Autopsy	C-II	MK	Interactive lecture, lecture demonstration,Field visits.	SAQ LAQ, Assignment	Theory – SAQ, LAQ And Viva voce Examination	

Hom UG-FMT-8.3			Forensic science Laboratory	Define Artefacts	C-I	MK	Interactive lecture	MCQ, SAQ	Theory And Practical Examination	
Hom UG-FMT-8.4				Discuss in detail about the Forensic science Laboratory	C-II	DK	Interactive lecture, lecture demonstration,Field visits.	Assignment	Theory-SAQ And Viva voce Examination	

5.9. Topic: Impotency and sterility-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-FMT-9.1	KS CS PBL PRF.	K	Impotence, sterility, sterilization , Artificial Insemination, surrogacy, in-vitro fertilization	Define Impotence and Sterility	C-I	MK	Interactive lecture,	MCQ, Assignment	Theory , Viva voce	Integration with OBG
Hom UG-FMT-9.2				Explain the factors leading to impotency and sterility	C-II	MK	Integrated learning	SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	

Hom UG-FMT-9.3			Legal issues related to impotence, sterility and artificial insemination, surrogacy, in-vitro fertilization legitimacy, sperm donation, sperm banks, ova banks, freezing of gametes, frozen embroys, medicolegal importance	Explain Artificial Insemination	C-II	MK	Interactive lecture	SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-9.4				Explain surrogacy with its medico-legal importance	C-II	MK	Interactive lecture	SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	

Hom UG-FMT-9.5				Explain in-vitro fertilization with its medico-legal importance	C-II	DK	Interactive lecture	SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-9.6				Explain the functions of sperm and ova banks with its medicolegal importance	C-II	NK	Interactive lecture	SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	

5.10. Topic: Sexual abuse, exploitation in all genders, defloration; pregnancy and delivery-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-FMT-10.1	KS CS PBL PRF.	K	The presumptive, probable and positive signs of pregnancy, sexual exploitation, sexual abuse, pregnancy, delivery, posthumous child, pseudocyesis, superfoetation,superfecundation, legitimacy and	Discuss about the presumptive, probable and positive signs of pregnancy	C-II	MK	Interactive lecture, lecture demonstration	MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	Integration with OBG
Hom UG-FMT-10.2				Explain the medico Legal aspects of legitimacy	C-II	MK	Interactive lecture, lecture demonstration	MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-10.3				Explain superfoetation with its medicolegal importance.	C-II	MK		MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	

			paternity - legal aspects							
Hom UG-FMT-10.4				Explain superfecundation with its medicolegal importance.	C-II	MK		MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	

5.11. Topic: Abortion and infanticide-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-FMT-11.1	KS CS PBL PRF.	K	Abortion: different methods, complications, accidents following criminal abortion, MTP, medicolegal importance	Define abortion.	C-I	MK	Interactive lecture	MCQ, SAQ	Theory - SAQ, Viva voce	Integration with OBG
Hom UG-FMT-11.2				Explain different methods of abortion with its signs and symptoms and medicolegal importance	C-II	MK	Interactive lecture, , group discussions, Integrated learning	MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	

Hom UG-FMT-11.3			Abortificent drugs and methods Infant death, signs of live birth, legal definitions, battered baby syndrome, cot death, Munchausen's syndrome	Explain various signs of live birth	C-II	MK	Interactive lecture, , group discussions, Integrated learning	MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-11.4				Discuss the regulations of MTP Act 1971	C-II	MK	Interactive lecture, , group discussions, Integrated learning	MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-11.5				Explain battered baby syndrome	C-II	MK	Interactive lecture, , group discussions, Integrated learning	MCQ, SAQ Assignment	Theory - SAQ, Viva voce	
Hom UG-FMT-11.6				Explain cot death.	C-II	MK	Interactive lecture, , group discussions, Integrated learning	MCQ, SAQ Assignment	Theory - SAQ Viva voce	

Hom UG-FMT-11.7				Explain Munchausen's syndrome	C-II	MK	Interactive lecture, , group discussions, Integrated learning	MCQ, SAQ	Theory - SAQ Viva voce	

5.12. Topic: Sexual offences-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-FMT-12.1	KS CS PBL PRF.	K	Natural sexual offenses, Unnatural sexual offenses, Sexual perversions The clinical examination and findings of victim and assailant	Enlist the various sexual offences	C-I	MK	Interactive lecture, small group discussions Integrated learning	Assignment	Theory- SAQ Viva voce	Integration with OBG
Hom UG-FMT-12.2				Classify the various sexual offences.	C-II	MK	Interactive lecture, small group discussions, Integrated learning	MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	

Hom UG-FMT-12.3			The medicolegal aspects of sexual offenses and perversions. IPC, CrPC { Bhartiya Nyay Sanhita Bill 2023 & Bharatiya Sakshya (Second) Bill 2023}	Explain the natural sexual offences.	C-II	MK	Interactive lecture, small group discussions, Integrated learning	MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-12.4				Explain the unnatural sexual offences.	C-II	MK	Interactive lecture, small group discussions, Integrated learning	MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-12.5				Explain the different sexual perversions.	C-II	MK	Interactive lecture, small group discussions, Integrated learning	MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-12.6				Discuss the clinical examination and findings of victim and	C-II	MK	Interactive lecture, small group	SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	

				assailant of a sexual offence			discussions, Integrated learning			
Hom UG-FMT-12.7				Explain the medicolegal aspects of sexual offenses and perversions.	C-II	MK	Interactive lecture, small group discussions, Integrated learning	SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-12.8				Explain the provisions in the Bhartiya Nyay Sanhita Bill 2023 & Bharatiya Sakshya (Second) Bill 2023}	C-II	MK	Interactive lecture, small group discussions, Integrated learning	LAQ, Assignment	Theory - LAQ , Viva voce	

5.13. Topic: General toxicology-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-FMT-13.1	KS PC HO CS PBL PRF.	K	Forensic Toxicology and Poisons, Classification of poisons Medico – legal aspects of poisons, Antidotes and types, Diagnosis of poisoning in living and dead, General principles of management of poisoning,	Classify various types of poisons	C-II	MK	Interactive lecture, lecture demonstration, group discussions, Integrated learning	MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	None
Hom UG-FMT-13.2				Explain the general principles of management of poisoning	C-II	MK		SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-13.3				Explain the types of antidotes And its uses	C-II	MK		MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-13.4				Explain the diagnosis of poisoning in living and dead subjects,	C-II	MK		MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	

			Duties of Homoeopathic Practitioners in cases of poisoning							
Hom UG-FMT-13.5		K		Describe the duties of a medical practitioner in the suspected case of poisoning	C-II	DK		MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	

5.14. Topic: General toxicology-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-FMT-14.1	KS PC HO CS PBL PRF.	K	i) Corrosives , Ii) Irritants iii) Asphyxiants iv) Neurotics v) cardiac	Describe the action, signs and symptoms, fatal dose, fatal period, post mortem findings and circumstances of corrosive poisoning	C-II	MK	Interactive lecture, , group discussions, Integrated learning	MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	Integration with Materia medica

Hom UG-FMT-T14.2			vi) Miscellaneous vii) food Poisoning viii) Drug dependence & drug use.	Describe the action, signs and symptoms, fatal dose, fatal period, post mortem findings and circumstances of asphyxiant poisoning.	C-II	MK	Interactive lecture, , group discussions, Integrated learning	MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-14.3				Describe the action, signs and symptoms, fatal dose, fatal period, post mortem findings and circumstances of neurotic poisoning.	C-II	MK	Interactive lecture, , group discussions, Integrated learning	MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-14.4				Describe the action, signs and symptoms, fatal dose, fatal period, post mortem findings and circumstances of irritant poisoning.	C-II	MK	Interactive lecture, , group discussions, Integrated learning	MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	

Hom UG-FMT-14.5				Describe the action, signs and symptoms, fatal dose, fatal period, post mortem findings and circumstances of cardiac poisoning.	C-II	MK	Interactive lecture, , group discussions, Integrated learning	MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-14.6				Explain Medicolegal aspects in different poisoning	C-II	DK	Interactive lecture, , group discussions, Integrated learning	SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-14.7				Differentiate between the various presentations of Arsenic and Lead poisoning.	C-II	MK	Interactive lecture, , group discussions, Integrated learning	MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	
Hom UG-FMT-14.8				Explain differential diagnosis of Organophosphorus poisoning	C-II	MK	Interactive lecture, , group discussions, Integrated learning	MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	

Hom UG-FMT-14.9				Explain bioterrorism with the bacterial borne / microbial infections,/ biologic positing	C-II	NK	Interactive lecture, , group discussions ,Integrated learning	SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	

5.15. Topic: Legislation relating to medical profession – including latest amendments and superceeding acts as and when applicable-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom /Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-FMT-15	KS PC HO CS PBL PRF.	K	Various acts as described in term wise contents	Explain the medicolegal aspects of various acts under Forensic Medicine and Toxicology	C-II	MK	Interactive lecture, lecture demonstration, Integrated learning	MCQ, SAQ LAQ, Assignment	Theory - SAQ and LAQ , Viva voce	None.

5.16. Topic: Demonstration of weapons, poisons (Practical)-

Sl. No.	Content	Competency / Outcome	Entry behaviour	Specific Learning Objectives	Learner activity	Assessment
Hom UG-FMT-16.1	a) Weapons b) Toxicology - corrosives, irritants, systemic and miscellaneous poisons, gastric lavage c) Charts, diagrams, photographs, models, bones, x-ray films of medico-legal importance	KS CS PBL PRF	Enumerate different types of weapons. Enumerate different types of injuries caused by weapons	Identify various types of weapons	Demonstration, group discussions, Spotting, PBL	Practical Examination
				Classify injury produced by them		
				Explain medicolegal importance of injuries produced by the weapons.		
Hom UG-FMT-16.2			Enumerate the different names of poisons and methods of poisoning	Identify various types of specimens of poisons		
				Classify the poison as per their action		
				Explain medicolegal importance of poisons		
Hom UG-FMT-16.3			Enumerate different emergency conditions related to GIT where gastric lavage is indicated	Explain gastric lavage procedures ,		
				Explain the merits of Gastric Lavage and its indications and contraindications.		

5.17. Topic: Certificate Writing (Practical)-

Sl. No.	Content	Competency / Outcome	Entry behaviour	Specific Learning Objectives	Learner activity	Assessment
Hom UG-FMT-17.1	Various certificates like sickness certificate, physical fitness certificate, death certificate, consent form, birth certificate. Knowledge of injury certificate, examination of rape victim and assailant, drunkenness, post-mortem examination report, age certification	KS CS PBL PRF	Enlist the names of different medical certificates	Write various certificates like sickness certificate, physical fitness certificate, death certificate, consent form, birth certificate.	Certificate writing. Written case scenario.	Practical Examination
Hom UG-FMT-17.2				Write a report of examination of rape victim, Injury Certificate, Post Mortem Examination report, Age Certification. Drunkenness Certificate.		

5.18. Topic: Consent (Practical)-

Sl. No.	Content	Competency / Outcome	Entry behaviour	Specific Learning Objectives	Learner activity	Assessment
Hom UG-FMT-18	Medical consent, implied consent, patient confidentiality, autonomy, role of care giver, audio-video recording of cases, safety and custody of medical records	KS CS PBL PRF	Explain the meaning of consent.	Write consent in given format.	Written case scenario, Group discussion.	Practical Examination

6. Teaching learning methods

Lectures (Theory)	Non-lectures (Practical/Demonstrative)
Lectures	Clinical demonstration
Small group discussion	Problem based discussion
Integrated lectures	Case based learning
Structured interactive sessions	Tutorials
	Seminars
	Video clips
	Assignments
	Field visits (Court visit and Isolation hospitals).
	Self-learning

7. Details of assessment

7.1 Overall Scheme of Assessment (Summative)

Sr. No	Professional Course	Term I (1-6 Months)		Term II(7-12 Months)		
1	Second Professional BHMS	PA I (end of 3 months)	TT I (end of 6 months)	PA II (end of 9 months)	FUE (end of 12 months)	
		10 Marks Viva	50 Marks Practical/ Viva 1. Viva voce -25 marks 2. Practical– 25 marks (Identification of weapons, poisons, X-Rays- 10 Marks, Certificate writing- 10 Marks Case Scenario of consent taking- 5 marks)	10 Marks Viva	100 marks theory	100 marks (Clinical/practical+ Viva+ IA)

PA: Periodical Assessment; TT: Term Test; FUE: Final University Examinations; IA: Internal Assessment

7.2 Number of papers and Marks Distribution for Final University Examination (FUE)

Sr. No.	Course Code	Papers	Theory	Practical/ Clinical	Viva Voce	Internal Assessment*	Grand Total
1	HomUG-FMT	01	100 marks	50 marks**	40 marks	10 marks (Marks of PA I + TT I + PA II)	200marks

***Method of Calculation of Internal Assessment Marks for Final University Examination:**

Marks of IA- **(**Marks of PA-1 + Marks of TT + Marks of PA-2) / 70 X 10

****Details of practical assessment at FUE**

Sr No	Headings	Marks
1	6 spotters – Bones, weapons, Toxicology specimens, Photographs, models – with their medicolegal aspects - 5 marks Each	30
2	Certificate Writing	10
3	Journal	10
	Total	**50**

7.3 Paper Layout

Summative assessment(FUE):

Theory- 100 marks

MCQ	**10 marks**
SAQ	**40 marks**
LAQ	**50 marks**

7.4 Distribution of questions for theory exam

Sr.No	**Paper**			**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 Forensic Medicine& Medical Ethics Legal procedure	I	Refer Next Table 7.5	No	Yes	No
2	Personal Identification	I		Yes	Yes	No
3	Death and Its Medicolegal importance	I		Yes	No	Yes
4	Injury and Its medicolegal importance	II		Yes	No	Yes
5	Impotence and sterility	II		Yes	Yes	Yes

	Virginity , defloration pregnancy and Delivery Abortion and infanticide Sexual offences	II II II				
6	General Toxicology	I		Yes	Yes	No
7	Clinical Toxicology- Corrosive Poisons	I		Yes	Yes	No
8	Clinical Toxicology- Irritant Poisons	I		Yes	No	Yes
9	Clinical Toxicology- Asphyxiant poisons	I		No	Yes	No
10	Clinical Toxicology- Neurotics Poisons	II		No	Yes	No
11	Clinical Toxicology- Cardiac Poisons	II		No	Yes	No
12	Clinical Toxicology- Miscellaneous Poisons	II		Yes	No	No
13	Clinical Toxicology- Food Poisoning, Drug Dependence and drug abuse	II		Yes	No	No
14	Legislation relating to medical profession	II		No	No	Yes

7.5 Theme-wise distribution of questions:

Theme	Topics	Term	Marks	MCQ's	SAQ's	LAQ's
A	Introduction to Forensic Medicine Medical ethics Legal procedure	I	5	0	5	0
B	Personal Identification	I	6	1	5	0
C	Death and Its Medicolegal importance	I	11	1	0	10
D	Injury and Its medicolegal importance	II	11	1	0	10
E	Impotence and sterility Virginity , defloration pregnancy and Delivery, Abortion, Infanticide Sexual offences	II	16	1	5	10
F	General Toxicology	I	6	1	5	0
G	Clinical Toxicology- Corrosive Poisons	I	6	1	5	0
H	Clinical Toxicology- Irritant Poisons	I	11	1	0	10
I	Clinical Toxicology- Asphyxiant poisons	I	5	0	5	0
J	Clinical Toxicology- Neurotics Poisons	II	5	0	5	0
K	Clinical Toxicology- Cardiac Poisons	II	5	0	5	0
L	Clinical Toxicology- Miscellaneous Poisons	II	2	2	0	0
M	Clinical Toxicology- Food Poisoning, Drug Dependence and drug abuse	II	1	1	0	0
N	Legislation relating to medical profession	II	10	0	0	10

7.6 Question paper blueprint

A Question Serial Number	B Type of Question	Question Paper Format (Refer table 7.5 for themes)
Q1	Multiple choice Questions (MCQ) 10 Questions 1 mark each All compulsory Must know part: 6 MCQ Desirable to know: 2 MCQ. Nice to know:2MCQ	1. Theme B 2. Theme C 3. Theme D 4. Theme E 5. Theme F 6. Theme G 7. Theme H 8. Theme L 9. Theme L 10. Theme M

Q2	Short answer Questions(SAQ) 8Questions 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 E 4. Theme F 5. Theme G 6. Theme I 7. Theme J 8. Theme K
Q3	Long answer Questions (LAQ) 5 Questions 10 Marks each All compulsory	1. Theme C 2. Theme D 3. Theme E 4. Theme H 5. Theme N

8. List of recommended Books

- C. K. Parikh, 2019, *Text Book of Medical Jurisprudence Forensic Medicine & Toxicology* (edition 21st) , CBS Publishers
- K.S. Narayan Murty, 2022,*The Essentials of Forensic Medicine & Toxicology*, Jaypee Publication ,
- Modi, N.J ,*A Text Book of Medical Jurisprudence and Toxicology*
- Biswas Gautam, 2015, *Review of Forensic Medicine and Toxicology (Including Clinical & Pathological Aspects),*Jaypee Brothers Medical Publisher (P) Ltd;.
- Nandy Apurba, *Principles of Forensic Medicine Including Toxicology*,
- Sharma D B, 2022,*Essential of Forensic Medicine and Toxicology*, (First edition) , B. Jain Publishers

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Subject name: Pathology and Microbiology

Subject code: HomUG-Path-M

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1. Preamble

Pathology and Microbiology provide comprehensive knowledge of the pathologic basis of disease, to enable a complete understanding of the reaction of man to different morbid factors causing disease -its natural course, clinical manifestations, complications and sequel.

The students must be able to discriminate symptoms of the patient & disease satisfying the Hahnemannian requirements of physicians as mentioned in aphorism 3 of Organon of Medicine, make them competent in diagnosis and to substantiate miasmatic perspective with pathology for an accurate homoeopathic prescription.

Knowledge also helps in deciding the scope, limitation and prognosis of a case through the understanding of susceptibility. Immune-mediated illnesses are becoming important areas where homoeopathic interventions can play a significant part in alleviating suffering and in bringing about a cure. The teaching should be aligned and integrated vertically in organ systems recognizing deviations from normal structure and function and clinically correlated to provide an overall understanding of the aetiology, mechanisms, laboratory diagnosis and management of diseases and horizontally with Homoeopathic Philosophy, Homoeopathic Materia Medica and Repertory to understand the Homeopathic concept of Disease and its management. Pathology will need alignments with Anatomy and Physiology on one side and clinical subjects on the other side with the foundation of homoeopathic subjects.

2. Course outcomes

At the end of the II BHMS course the students will be able to:

1. Recognize the importance of study ofPathology and Microbiology in Homoeopathic systemof medicine
2. Understandthe morphological changes in cell structure in disease and recognize the mechanism of the etiological factors in the causation of such changes
3. Integrate the study of Pathology and Microbiology with Homoeopathic philosophy, Materia Medica, and Repertory.
4. Understand classification of diseases as per Master Hahnemann.
5. Understand common and important diseases based on their evolution, aetio-pathogenesis, pathology, progress and prognosis.
6. Develop skill in the identification of pathological features specifically histo-pathological features, and gross pathological specimens.
7. Able to interpret laboratory reports for diagnosis and treatment purpose.
8. Develop a positive attitude towards the role of Pathology and Microbiology in Homoeopathic system

3. Course content and its term-wise distribution

3.1 Contents for Term I

Theory	
Sr. No.	**Topic**
1.	Introduction to Pathology
2.	General Pathology
3.	Introduction to Microbiology
4.	Sterilisation and Disinfection
5.	Culture medias and methods
6.	Infection and Disease
7.	Human Microbiome
8.	Gram positive bacterias
9.	Introduction to Virology
10.	Introduction to Parasitology
11.	Protozoans
Non –lecture- Practical/Demonstrative	
1.	Demonstration of Instruments
2.	Demonstration of Methods of sterilisation

3.	Demonstration of culture medias
4.	Estimation of haemoglobin
5.	Total count of Red Blood Cells
6.	Total count of White Blood Cells
7.	Bleeding time and clotting time
8.	Blood grouping.
9.	Gram staining
10.	Demonstration of histopathological slides
11.	Demonstration of Pathological specimen/models

3.2 Contents for Term II

Theory	
Sr. No.	**Topic**
1.	Systemic Pathology
2.	Gram negative bacterias
3.	Acid fast bacterias
4.	Spirochaetes
5.	Virology-DNA,RNA virus

6.	Parasitology –Helminths
7.	Mycology
8.	Diagnostic procedures in Microbiology
Non –lecture- Practical/Demonstrative	
1.	Staining of thin and thick films.
2.	Differential count.
3.	Erythrocyte sedimentation rate-demonstration
4.	Urine examination-physical,chemical and microscopical examination.
5.	Examination of Faeces- demonstration
6.	Hanging drop preparation.- demonstration
7.	Acid fast staining –demonstration
8.	Interpretation of laboratory reports (serological tests, LFT, RFT, TFT etc) and its clinico pathological correlation
9.	Demonstration of common pathological specimens/models from each system
10.	Demonstration of common Pathological slides from each system

4. Teaching hours

4.1 Gross division of teaching hours

Pathology & Microbiology		
Year	**Teaching hours- Lectures**	**Teaching hours- Non-lectures**
II BHMS	200	80

4.2 Teaching hours theory

Sr. No	Topic	Hours
	Paper I	
1.	Introduction	3
	General Pathology	
1.	Cell Injury and cellular adaptation	10
2.	Inflammation and repair	10
3.	Neoplasia	10
4.	Immunopathology	8
5.	Haemodynamic disorders	10
6.	Environmental and Nutritional diseases	2

	Systemic Pathology	
1.	Diseases of the Haematopoietic system, bone marrow and blood	9
2.	Diseases of the Respiratory system.	5
3.	Diseases of the the oral cavity,salivary glands and gastro intestinal tract	6
4.	Diseases of liver, gall bladder, and biliary ducts	4
5.	Diseases of the Pancreas	1
6.	Diseases of blood vessels and lymphatics	2
7.	Diseases of Cardiovascular system	5
8.	Diseases of kidney and lower urinary tract	6
9.	Diseases of male reproductive system and prostate	1
10.	Diseases of the female genitalia and breast	4
11.	Diseases of the skin and soft tissue	1
12.	Diseases of the musculo-skeletal system.	2
13.	Diseases of Endocrine glands -thyroid	2
14.	Diseases of nervous system	1
	Total	**102**

	Paper II	
	Microbiology and Parasitology	
1.	General introduction, Bacterial structure, growth and metabolism & genetics	3
2.	Identification and cultivation of bacteria(staining, culture medias, methods)	3
3.	Sterilization and disinfection	2
4.	Infection and disease	2
5.	Gram positive cocci	5
6.	Gram negative cocci	2
7.	Gram positive aerobic bacilli	2
8.	Gram positive anaerobic bacilli	3
9.	Gram negative bacilli	9
10.	Acid Fast Bacterias	4
11.	Spirochaetes	3
12.	Fungi- general characters- cutaneous, systemic mycosis, opportunistic	3
13.	Introduction to parasitology	2
14.	Protozoans	9
15.	Helminths –cestodes, trematodes and nematodes	14
16.	Virology-introduction &,Bacteriophges	2
17.	DNA virus	11
18.	RNA viruses	12
19.	Emerging and re-emerging diseases	2
20.	Human Microbiome- homoeopathic concept	3
21.	Diagnostic procedures in Microbiology	2
	Total	**98**

4.3 Teaching hours Non-lecture

Sl. No.	Practicals	60 hrs
1.	Demonstration of common and latest equipments used in pathology and microbiology laboratory	4
2.	Estimation of haemoglobin (by acidometer)	2
3.	Total count of Red Blood Cells	2
4.	Total count of White Blood Cells,	2
5.	Bleeding time and Clotting time.	2
6.	Blood grouping.	2
7.	Staining of thin and thick films- demonstration	2
8.	Differential count of WBC	2
9.	Erythrocyte sedimentation rate -demonstration	2
10.	Urine examination physical, chemical and microscopical examination.	4
11.	Examination of Faeces- demonstration of physical, chemical (occult blood)and microscopical for ova and protozoa.	2
12.	Demonstration of Methods of sterilisation	2

13.	Common culture medias- demonstration	1
14.	Gram staining	2
15.	Acid fast staining – demonstration	2
16.	Hanging drop preparation.- demonstration	2
17.	Interpretation of laboratory reports (serological tests, LFT, RFT, TFT etc) and its clinico pathological correlation.	5
18.	Demonstration of common pathological specimens/models	10
19.	Demonstration of common histopathological slides	10
	Demonstrative Activities	**20**
1.	Seminar/tutorials/ Symposium	8
2.	PBL/CBL	6
3.	Group discussion	6

5. Content mapping (competencies tables)

5.1. Introduction to Pathology-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-PathM.1.1	KS	K	Basic definitions	Define the terms "Pathology", "Pathophysiology", "Health", "Disease"	C1	MK	Lecture	Viva Voce MCQ	Viva Voce MCQ	
HomUG-PathM.1.2	KS	K	Branches of Pathology	State the branches of Pathology	C1	MK	Lecture Slide presentation	Viva Voce MCQ	Viva Voce MCQ	
HomUG-PathM.1.3	KS	K	Contributions of important scientists to Pathology	List the contribution of important scientists to Pathology	C1	NK	Lecture Slide presentation	Viva Voce MCQ	NA	
HomUG-PathM.1.4	KS	K	Common terms for study of diseases	Enumerate the common terms for study of diseases	C1	MK	Lecture Slide presentation	Viva Voce MCQ	Viva Voce MCQ	
HomUG-PathM.1.5	KS	K	Definition of health as per Homoeopathic philosophy	Define Health according to Homoeopathic concept – Aphorism -9	C1	MK	Lecture Slide presentation	Viva Voce MCQ	Viva Voce MCQ	Organon of Medicine

HomU G-Path M.1.6	KS	K	Definition of disease as per Homoeopathic philosophy	Define Disease according to Homoeopathic concept- Aphorism -11	C1	MK	Lecture Slide present ation	Viva Voce MCQ	Viva Voce MCQ	Organon of Medicine
HomU G-Path M.1.7	KS	K	Homoeopathic concept of evolution of disease and cure	Describe the Homoeopathic concept of evolution of disease and cure	C1	MK	Lecture Slide present ation	Viva Voce SAQ	Viva Voce SAQ	Organon of Medicine

5.2. Cell injury and cellular adaptation-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomU G-Path M 2.1	KS	K	Definition of Cell injury	Define the term “Cell injury”	C 1	MK	Lecture Slide present ation	Viva Voce MCQ	Viva Voce MCQ	
HomU G-Path M 2.2	KS	K	Etiology of cell injury	Describe the causes of cell injury	C 1	MK	Lecture Slide present ation	Viva Voce SAQ MCQ	Viva Voce SAQ MCQ	
HomU G-Path M 2.3	KS	KH	Cellular response to injurious stimuli	Describe the types of cellular response to injurious stimuli and stress.	C 2	MK	Lecture Slide present ation	Viva Voce MCQ	Viva Voce SAQ MCQ	

HomU G-Path M 2.4	KS	K	Cellular adaptation	Define the term "cellular adaptation"	C 1	MK	Lecture	Viva Voce SAQ	Viva Voce SAQ LAQ	
HomU G-Path M 2.5	KS	K		Discuss the various types of cellular adaptation with examples	C 1	MK	Lecture Slide present ation	Viva Voce MCQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M 2.6	KS	K	Atrophy	Define the term "atrophy"	C 1	MK	Lecture	Viva Voce SAQ MCQ	Viva Voce SAQ MCQ LAQ	
HomU G-Path M 2.7	KS	KH		Explain the etiopathogenesis atrophy with examples	C 2	MK	Lecture Slide present ation	Viva Voce SAQ MCQ	Viva Voce SAQ MCQ LAQ	
HomU G-Path M 2.8	KS	KH		Describe the morphologic features of atrophied cell	C 2	MK	Lecture Slide present ation	Viva Voce SAQ MCQ	Viva Voce SAQ MCQ LAQ	
HomU G-Path M 2.9	KS	K	Hyperplasia	Define the term "Hyperplasia"	C 1	MK	Lecture	Viva Voce SAQ MCQ	Viva Voce SAQ MCQ LAQ	

HomU G-Path M 2.10	KS	KH		Describe types of hyperplasia with examples	C 2	MK	Lecture Slide present ation	Viva Voce SAQ MCQ	Viva Voce SAQ MCQ LAQ	
HomU G-Path M 2.11	KS	KH		Discuss the morphologic features of hyperplasia	C 2	MK	Lecture Slide present ation	Viva Voce SAQ MCQ	Viva Voce SAQ MCQ LAQ	
HomU G-Path M 2.12	KS	K	Hypertrophy	Define the term hypertrophy	C 1	MK	Lecture	Viva Voce SAQ MCQ	Viva Voce SAQ MCQ LAQ	
HomU G-Path M 2.13	KS	KH		Describe the types of hypertrophy with examples.	C 2	MK	Lecture Slide present ation	Viva Voce SAQ MCQ	Viva Voce SAQ MCQ LAQ	
HomU G-Path M 2.14	KS	KH		Describe the morphologic features of hypertrophy	C 2	MK	Lecture Slide present ation	Viva Voce SAQ MCQ	Viva Voce SAQ MCQ LAQ	
HomU G-Path M 2.15	KS	KH	Differences between Hypertrophy and Hyperplasia	Enumerate differences between Hypertrophy and Hyperplasia	C 2	MK	Lecture Slide present ation	Viva Voce SAQ MCQ	Viva Voce SAQ MCQ LAQ	

HomU G-Path M 2.16	KS	K	Metaplasia	Define the term “Metaplasia”	C 1	MK	Lecture	Viva Voce SAQ MCQ	Viva Voce SAQ MCQ LAQ	
HomU G-Path M 2.17	KS	KH		Describe the types of metaplasia with examples.	C 2	MK	Lecture Slide present ation	Viva Voce SAQ MCQ	Viva Voce SAQ MCQ LAQ	
HomU G-Path M 2.18	KS	K	Dysplasia	Define the term “Dysplasia”	C 1	MK	Lecture	Viva Voce MCQ	Viva Voce MCQ SAQ	
HomU G-Path M 2.19	KS	KH		Explain the cytological changes in Dysplasia	C 2	MK	Lecture Slide present ation	Viva Voce MCQ	Viva Voce MCQ SAQ	
HomU G-Path M 2.20	KS	KH	Biochemical and ultra structural changes in reversible cell injury	Describe the sequential biochemical and ultrastructural changes in reversible cell injury due to Ischaemia and hypoxia	C 2	MK	Lecture Slide present ation	Viva Voce SAQ MCQ	Viva Voce SAQ MCQ LAQ	
HomU G-Path M 2.21	KS	KH	Biochemical and ultrastructural changes in Irreversible cell injury	Describe the sequential biochemical and ultrastructural changes in irreversible cell injury due to Ischaemia and hypoxia	C 2	MK	Lecture Slide present ation	Viva Voce MCQ SAQ	Viva Voce SAQ MCQ LAQ	

HomU G-Path M 2.22	KS	KH	Pathogenesis of cell injury	Describe the pathogenesis of Free Radical-mediated cell injury	C 2	MK	Lecture Slide present ation	Viva Voce SAQ MCQ	Viva Voce SAQ MCQ	
HomU G-Path M 2.23	KS	K	Morphology of Reversible cell injury	Enumerate the common morphologic forms of reversible cell injury	C1	MK	Lecture Slide present ation	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M 2.24	KS	K	Hydropic change	Define the term "Hydropic change"	C 1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M 2.25	KS	KH	Hydrophic change	Describe the etiopathogenesis of Hydropic change	C 2	MK	Lecture Slide present ation	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M 2.26	KS	KH		Describe morphology of hydropic change with an example	C 2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M 2.27	KS	K	Fatty change	Define the term "Fatty change"	C 1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	

HomU G-Path M 2.28	KS	KH		Describe the etiopathogenesis of Fatty change	C 2	MK	Lecture Slide present ation	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M 2.29	KS	KH		Describe morphology of Fatty change in various organs	C 2	MK	Lecture Slide present ation	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M 2.30	KS	KH	Types of mucoid change with examples	Describe the types of mucoid change with examples	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ	
HomU G-Path M 2.31	KS	KH	Types of Hyaline change with examples	Describe the types of hyaline change with examples	C 2	MK	Lecture Slide present ation	Viva Voce MCQ SAQ	Viva Voce MCQ	
HomU G-Path M 2.32	KS	K	Morphological forms of Irreversible cell injury	List the Morphological forms of Irreversible cell injury	C 1	MK	Lecture	Viva Voce MCQ	Viva Voce MCQ	
HomU G-Path M 2.33	KS	K	Necrosis	Define the term “Necrosis”	C 1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	

HomUG-PathM 2.34	KS	K		Describe the types of Necrosis with examples	C 1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomUG-PathM 2.35	KS	K	Coagulative Necrosis	Describe the etiopathogenesis of Coagulative necrosis	C 2	MK	Lecture Slide presentation	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomUG-PathM 2.36	KS	KH		Describe themorphological features of Coagulative necrosis in affected organs	C 2	MK	Lecture Slide presentation	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomUG-PathM 2.37	KS	KH	Liquefactive necrosis	Describe the etiopathogenesis of liquefactive necrosis	C 2	MK	Lecture Slide presentation	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomUG-PathM 2.38	KS	KH		Describe the morphological features of liquefactive necrosis in affected organs	C 2	MK	Lecture Slide presentation	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomUG-PathM 2.39	KS	KH	Differences between coagulative necrosis and liquefactive necrosis	Enumerate differences between coagulative necrosis and liquefactive necrosis	C 2	MK	Lecture Slide presentation	Viva Voce SAQ MCQ	Viva Voce SAQ MCQ	

HomU G-Path M 2.40	KS	KH	Caseous necrosis	Describe the etiopathogenesis caseous necrosis	C 2	MK	Lecture Slide present ation	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M 2.41	KS	KH		Describe themorphological features of caseous necrosis inaffected organs	C 2	MK	Lecture Slide present ation	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M 2.42	KS	KH	Fat necrosis	Describe the etiopathogenesis, morphological features of fat necrosis	C2	MK	Lecture Slide present ation	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M 2.43	KS	KH	Fibrinod necrosis	Describe the etiopathogenesis, microscopic features of fibrinod necrosis	C2	MK	Lecture Slide present ation	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M 2.44	KS	K	Gangrene	Define the term “Gangrene”	C 1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	Surgery
HomU G-Path M 2.45	KS	K		State the types of gangrene	C 1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	Surgery

HomU G-Path M 2.46	KS	KH	Dry gangrene	Explain the etiopathogenesis morphological features of dry gangrene with examples	C 2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	Surgery
HomU G-Path M 2.47	KS	KH	Wet gangrene	Describe the etiopathogenesis morphological features of wet gangrene with examples	C 2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	Surgery
HomU G-Path M 2.48	KS	KH	Differences between dry gangrene and wet gangrene	Enumerate the differences between dry gangrene and wet gangrene	C 2	MK	Lecture	Viva Voce SAQ MCQ	Viva Voce SAQ MCQ	
HomU G-Path M 2.49	KS	KH	Etiopathology of Gas gangrene	Explain the etiopathogenesis and morphological features of Gas gangrene	C 2	MK	Lecture Slide present ation	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M 2.50	KS	K	Pathological calcification	Define the term “Pathological calcification”	C 1	MK	Lecture Slide present ation	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M 2.51	KS	KH		Enumerate the types of pathological calcification	C 1	MK	Lecture Slide present ation	MCQ Viva Voce	MCQ Viva Voce	

HomU G-Path M 2.52	KS	KH		Describe the etiopathogenesis of Dystrophic calcification with examples	C 2	MK	Lecture Slide present ation	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M 2.53	KS	KH		Describe the etiopathogenesis of Metastatic calcification with examples	C 2	MK	Lecture Slide present ation	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M 2.54	KS	KH		Enumerate the differences between Dystrophic calcification and Metastatic calcification	C 2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M 2.55	KS	K	Apoptosis	Define the term “Apoptosis”	C 1	DK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M 2.56	KS	KH		Describe the role of apoptosis in pathologic processes with examples	C 2	DK	Lecture Slide present ation	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M 2.57	KS	K	Intracellular accumulation	Define the term “Intracellular accumulations”	C 1	MK	Lecture	Viva Voce MCQ	Viva Voce MCQ	

HomU G-Path M 2.58	KS	KH		Enumerate the types of abnormal intracellular accumulations with examples	C 2	MK	Lecture	Viva Voce MCQ	Viva Voce MCQ	
HomU G-Path M 2.59	KS	K	Definition of Xanthomas, "Russell bodies", "Mallory body", "Brown atrophy", "Heart failure cells"	Define the terms "Xanthomas "Russell bodies", "Mallory body", "Brown atrophy", "Heart failure cells"	C 1	DK	Lecture	Viva Voce MCQ	Viva Voce MCQ	

5.3. Inflammation and repair-

Sl.No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomU G-Path M.3.1	KS	K	Inflammation	Define the term "Inflammation"	C 1	MK	Lecture	Viva Voce MCQ	Viva Voce MCQ	Physiology
HomU G-Path M.3.2	KS	K	Causes of inflammation	State the Causes of inflammation	C 1	MK	Lecture	Viva Voce SAQ	Viva Voce SAQ	
HomU G-Path M.3.3	KS	K	Types of inflammation	State the types of Inflammation	C 1	MK	Lecture	Viva Voce MCQ	SAQ Viva Voce MCQ	

HomUG-Path M.3.4	KS	K	Cardinal signs of inflammation	State the cardinal signs of inflammation	C 1	MK	Lecture	Viva Voce MCQ	SAQ Viva Voce MCQ	
HomUG-Path M.3.5	KS	K	Definition of Acute inflammation"	Define the term "Acute inflammation"	C 1	MK	Lecture	Viva Voce MCQ	Viva Voce MCQ	
Hom UG-Path M.3.6	KS	KH	Vascular events of the acute inflammation	Describe the mechanism of vascular events in acute inflammatory response	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
Hom UG-Path M.3.7	KS	KH	Cellular phase of acute inflammation	Describe the steps of cellular phase of acute inflammation	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
Hom UG-Path M.3.8	KS	KH	Process of Phagocytosis	Describe the three processes of Phagocytosis in cellular phase of acute inflammation	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomUG-Path M.3.9	KS	K	Chemical mediators of inflammation	List the Chemical mediators of inflammation	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
Hom UG-Path M II.3.10	KS	KH	Role of cell derived Chemical mediators	State the various sources and functions of cell derived chemical mediators of inflammation	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	

HomU G-Path M.3.11	KS	KH	Role of plasma derived Chemical mediators	State the various sources and functions of Plasma derived chemical mediators of inflammation	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.3.12	KS	KH	Inflammatory cells	Describe the functions of cells participating in acute and chronic inflammation	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M.3.13	KS	KH	Giant cells	Describe the three types of macrophages derived giant cells	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M.3.14	KS	K	Morphologic Patterns of Acute Inflammation	State the Morphologic Patterns of Acute Inflammation	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M.3.15	KS	KH	Classification of inflammatory lesion	Describe the classification of inflammatory lesion based on duration, type of exudates, and anatomic location affected in acute inflammation	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ	
HomU G-Path M.3.16	KS	KH	Systemic effects of inflammation	Describe the systemic effects of acute inflammation	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ	

HomU G-Path M.3.17	KS	KH	Outcomes of Acute Inflammation	Describe the end result of Acute Inflammation	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ	
HomU G-Path M.3.18	KS	K	Chronic inflammation	Define the term “chronic inflammation"	CI	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M.3.19	KS	K	Types of chronic inflammation	Mention the types of chronic inflammation	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.3.20	KS	KH	Morphologic Features of chronic inflammation	Describe the general features of chronic inflammation	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M.3.21	KS	KH	Granulomatous inflammation	Describe chronic non-specific inflammation with examples	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-PathM. 3.22	KS	KH	Granuloma	Describe the mechanism of evolution of a granuloma	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	

Hom UG-Path M 3.23	KS	KH		Describe the morphology of granuloma	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
Hom UG-Path M 3.24	KS	K	Examples of granulomatous inflammation	State common examples of granulomatous inflammation	C1	MK	lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
Hom UG-Path M 3.25	KS	KH	Systemic effects of chronic inflammation	State the systemic effects of chronic inflammation	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ	
HomU G-Path M.3.26	KS	K	Definition of Healing	Define the term “Healing”	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M.3.27	KS	KH	Repair and regeneration	Describe the processes involved in repair and regeneration	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.3.28	KS	KH	Wound healing by primary intention	Describe Wound healing by primary intention	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	Surgery

HomU G-Path M.3.29	KS	KH	Wound healing by secondary intention	Describe Wound healing by secondary intention	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	Surgery
HomU G-Path M.3.30	KS	KH	Complications in healing of skin wounds	Describe the complications in healing of skin wounds	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	Surgery
HomU G-Path M.3.31	KS	K	Wound healing	Discuss difference in wound healing by primary and secondary intention	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.3.32	KS	K	Factors modifying the healing process	Explain the process of Fracture Healing	CI	NK	Lecture	Viva Voce	NA	
HomU G-Path M.3.33	KS	KH	Homoeopathic aspect in inflammation	Correlate the events of inflammation and outcome of various types of inflammation with miasm and representation in repertory and different MateriaMedica.	C 2	DK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	OM, MM, Repertory

5.4. Haemodynamic disorders

Sl. No.	Domains of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-PathM.4.1	KS	K	Definition of Oedema.	Define the term “Oedema”	C1	MK	Lecture	Viva Voce MCQ	Viva Voce MCQ	Physiology
HomUG-PathM.4.2	KS	KH	Types of Oedema.	Describe the pathogenesis of oedema	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomUG-PathM.4.3	KS	KH	Transudate and exudate	Enumerate the differences between transudate and exudate	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomUG-PathM.4.4	KS	KH	Etiopathogenesis of Oedema	Describe the etiopathogenesis of various types of oedema with its clinical correlation	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomUG-PathM.4.5	KS	K	Definition of Hyperaemia	Define the term “Active Hyperemia”	C1	MK	Lecture	Viva Voce MCQ	Viva Voce MCQ	

HomUG-Path M.4.6	KS	K	Definition of Venous congestion	Define the term "Venous congestion" or "Passive hyperaemia"	C1	MK	Lecture	Viva Voce MCQ	Viva Voce MCQ	
HomUG-Path M.4.7	KS	KH	Chronic venous congestion	Describe the mechanisms involved in chronic venous congestion of different organs	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomUG-Path M.4.8	KS	KH		Explain morphology of Chronic Venous Congestion in Lung	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomUG-Path M.4.9	KS	K	Definitions	Define the terms "Haemorrhage", "Haematoma", "Ecchymosis", "Purpuras", "Petechiae",	C1	MK	Lecture	Viva Voce MCQ	Viva Voce MCQ	Forensic medicine
HomUG-Path M.4.10	KS	K	Shock	Define the term "Shock"	C1	MK	Lecture	Viva Voce MCQSAQ	Viva Voce MCQ SAQ LAQ	
Hom UG-Path M 4.11	KS	K		Classify shock based on aetiology	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	Surgery
Hom UG-Path M 4.12	KS	KH		Describe the pathogenesis of various types of shock	C2	MK	Lecture	Viva Voce MCQSAQ	Viva Voce MCQ SAQ LAQ	

Hom UG-Path M 4.13	KS	KH		Describe the stages of shock	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	Surgery
Hom UG-Path M.4.14	KS	K	Thrombosis	Define the term “Thrombosis” ,“Thrombus” .	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
Hom UG-Path M.4.15	KS	K		Enumerate the primary events in Thrombogenesis-Virchow’s triad	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
Hom UG-Path M.4.16	KS	KH		Describe the etio-pathogenesis of thrombosis	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
Hom UG-Path M.4.17	KS	KH		Describe the morphologic features of thrombi	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
Hom UG-Path M.4.18	KS	KH		Describe the fate of thrombus	C2	DK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	

Hom UG-Path M.4.19	KS	KH	Clinical effects of thrombi	Describe the clinical effects of various types of thrombi	C2	DK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
Hom UG-Path M.4.20	KS	K	Embolism	Define the term "Embolism", "Embolus"	C1	MK	Lecture	Viva Voce MCQ	Viva Voce MCQ	
Hom UG-Path M 4.21	KS	K		Describe the various types of Emboli	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
Hom UG-Path M 4.22	KS	KH	Etiopathogenesis of Pulmonary thromboembolism	Describe the aetiopathogenesis of Pulmonary thromboembolism	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
Hom UG-Path M 4.23	KS	KH	Pathogenesis of Thromboembolism	Describe the consequences of pulmonary thromboembolism	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	Practice of medicine
Hom UG-Path M 4.24	KS	KH	Pathogenesis of fat embolism	Describe the pathogenesis of fat embolism	C2	DK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ	

Hom UG-Path M.4.25	KS	KH	Pathogenesis of air embolism	Describe the pathogenesis of air embolism	C2	DK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ	
Hom UG-Path M.4.26	KS	KH	Pathogenesis of aminiotic fluid embolism	Describe the pathogenesis aminiotic fluid embolism	C2	NK	Lecture	NA		
Hom UG-Path M.4.27	KS	K	Ischaemia	Define the term “Ischaemia”	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
Hom UG-Path M.4.28	KS	KH		Describe the etiopathogenesis of Ischaemia	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
Hom UG-Path M.4.29	KS	KH		Describe the factors determining severity of Ischaemic injury	C2	DK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
Hom UG-Path M.4.30	KS	K	Infarction	Define the term “Infarction”	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
Hom UG-Path M.4.31	KS	KH		Describe the etiopathogenesis of Infarction	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	Practice of medicine

Hom UG-Path M.4.32	KS	K		State the types of Infract	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	

5.5. Immunopathology-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-Path M.5.1	KS	K	Definition of Immunity	Define the term "Immunity"	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	Physiology
HomUG-Path M.5.2	KS	K	Types of immunity	State the types of immunity	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	Physiology
HomUG-Path M.5.3	KS	KH	Components of Innate immunity	Describe the four components of Innate immunity	C2	MK	Lecture Slide presentation	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	Physiology
HomUG-Path M.5.4	KS	KH	Functions of Innate immunity	Describe the functions of Innate immunity	C2	MK	Lecture Slide presentation	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	Physiology

HomU G-Path M.5.5	KS	K	Definition of Adaptive immunity"	Define the term "Adaptive immunity"	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.5.6	KS	K	Classification of Adaptive immunity	Classify Adaptive immunity with examples for each type	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.5.7	KS	KH	Features of Active immunity	Describe the features of Active immunity	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.5.8	KS	KH	Features of Passive immunity	Describe the features of Passive immunity	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.5.9	KS	K	Local immunity	Explain Local immunity	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M.5.10	KS	K	Herd immunity	Explain Herd immunity	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M.5.11	KS	K	Organs of immune system	State the organs of immune system	C1	MK	Lecture	Viva Voce SAQ MCQ	Viva Voce SAQ MCQ LAQ	Physiology

HomU G-Path M.5.12	KS	K	Cells and Organs of Immune system	State the cells of the immune system	C1	MK	Lecture	Viva Voce SAQ MCQ	Viva Voce SAQ MCQ LAQ	Physiology
HomU G-Path M.5.13	KS	KH	Humoral immunity	Explain the mechanism of humoral immunity	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	Physiology
HomU G-Path M.5.14	KS	KH	Differences between Primary and Secondary immune response	Enumerate the differences between Primary and Secondary immune response"	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.5.15	KS	KH	Mechanism of cell mediated immunity	Describe the mechanism of cell mediated immunity	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.5.16	KS	K	Definition of "Antigen"	Define the term "Antigen"	C1	MK	Lecture	Viva Voce MCQ	Viva Voce MCQ	Physiology
HomU G-Path M.5.17	KS	K	Definition of "Antibody", "Immunoglobulin"	Define the terms "Antibody", "Immunoglobulin"	C1	MK	Lecture	Viva Voce MCQ	Viva Voce MCQ	Physiology

HomU G-Path M.5.18	KS	K	Immunoglobulin and their function	State the types of Immunoglobulin classes and their function.	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.5.19	KS	KH	Biological functions of Complement	Describe the biological functions of Complement	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M.5.20	KS	K	Types of antigen-antibody reaction with examples	Discuss the types of antigen-antibody reactions with examples	C1	DK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.5.21	KS	K	Definition of Hypersensitivity	Define the term “Hypersensitivity”	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M.5.22	KS	K	Types of hypersensitivity reactions	List the types of hypersensitivity reactions	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.5.23	KS	KH	Type I Hypersensitivity	Describe the mechanism of type I hypersensitivity reaction	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	

HomU G-Path M.5.24	KS	KH	Type I Hypersensitivity reaction with examples	Describe the examples of type I hypersensitivity reaction	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.5.25	KS	KH	Type II Hypersensitivity reaction	Describe the mechanism of type II hypersensitivity reaction	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.5.26	KS	KH	Type II Hypersensitivity reaction – examples	Describe the examples of type II hypersensitivity reaction	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.5.27	KS	KH	Type III Hypersensitivity reaction	Describe the mechanism of type III hypersensitivity reaction	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.5.28	KS	KH	Type III Hypersensitivity reaction – examples	Describe the examples of type III hypersensitivity reaction	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	

HomU G-Path M.5.29	KS	KH	Type IV Hypersensitivity reaction	Describe the mechanism of type IV hypersensitivity reaction	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.5.30	KS	KH	Type IV Hypersensitivity reaction – examples	Describe the examples of type IV hypersensitivity reaction	C2	MK	Lecture	Viva Voce SAQ MCQ	Viva Voce SAQ MCQ LAQ	
HomU G-Path M.5.31	KS	K	Autoimmunity	Define the term "Autoimmunity"	C1	DK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M.5.32	KS	KH		Describe the pathogenesis of autoimmunity	C2	DK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M.5.33	KS	K	Autoimmune diseases	State the autoimmune diseases	C1	DK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M.5.34	KS	K	Amyloidosis	Define the term "Amyloidosis"	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M.5.35	KS	K		Classify amyloidosis	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	

HomU G-Path M.5.36	KS	KH		Describe the pathogenesis of amyloidosis	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.5.37	KS	KH		Describe the features of amyloidosis of various organs .	C2	DK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M.5.38	KS	K	Homoeopathic concept of immunity	Explain the concept of immunity and hypersensitivity and correlate it with the Homoeopathic concepts of susceptibility	C1	NK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	Organon of Medicine

5.6. Neoplasia-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomU G-Path M.6.1	KS	K	Definition of Neoplasia	Define the term “Neoplasia”	C 1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M.6.2	KS	K	Nomenclature of tumours	Explain the nomenclature of tumours	C 1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	

HomU G-Path M.6.3	KS	K	Classification of tumours	Classify tumours based on histogenesis and anticipated behaviour	C 1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.6.4	KS	K	Special categories of tumours	State the special categories of tumours with examples	C 1	DK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M.6.5	KS	K	Characteristics of benign and malignant neoplasms	State the characteristics of tumours	C 1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.6.6	KS	KH	Differentiating features of benign and malignant neoplasms	Differentiate benign and malignant neoplasms based on the clinical and gross features	C 2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.6.7	KS	KH		Differentiate benign and malignant neoplasms based on microscopic features	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.6.8	KS	K	Definition of “Differentiation”, “Anaplasia”	Define the terms “Differentiation”, “Anaplasia”	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	

HomU G-Path M.6.9	KS	KH	Differentiating features of benign and malignant neoplasms	Differentiate benign and malignant neoplasms based on their rate of growth	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.6.10	KS	KH		Differentiate benign and malignant neoplasms based on their spread - local invasion and metastasis	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.6.17	KS	K	Definition of Metastasis	Define the term “Metastasis”	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.6.18	KS	K	Routes of Metastasis	Discuss the routes of Metastasis with examples	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	Surgery
HomU G-Path M.6.19	KS	KH	Lymphatic spread of malignant tumours	Describe the mechanism of lymphatic spread of malignant tumours	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.6.20	KS	KH	Haematogenous metastasis	Describe the mechanism of Haematogenous spread of malignant tumours	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	

HomU G-Path M.6.21	KS	KH	Spread of cancer along body cavities and natural passages	Describe the mechanism of spread of cancer along body cavities and natural passages	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M.6.22	KS	KH	Molecular basis of cancer	Describe Molecular basis of cancer	C2	NK	Lecture	NA	NA	
HomU G-Path M.6.23	KS	K	Definition of Carcinogenesis , Carcinogen	Define the terms “Carcinogenesis”, “Carcinogen”	C1	MK	Lecture	Viva Voce MCQ	Viva Voce MCQ	
HomU G-Path M.6.24	KS	K	Carcinogens	Enumerate the various types of carcinogens	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.6.25	KS	KH	Chemical Carcinogenesis	Describe the three sequential stages in chemical carcinogenesis	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ LAQ	
HomU G-Path M.6.26	KS	KH	Physical carcinogenesis	Describe the mechanism of physical carcinogenesis	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	

HomU G-Path M.6.27	KS	KH	Biological carcinogenesis	Describethe mechanism of biological carcinogenesis	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M.6.28	KS	KH	Effects of tumour on the host	Describe the effects of tumour on the host	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M.6.29	KS	K	Definition of Paraneoplastic syndromes	Define the term “Paraneoplastic syndromes”	C1	MK	Lecture	Viva Voce MCQ	Viva Voce MCQ SAQ	
HomU G-Path M.6.30	KS	KH	Paraneoplastic syndromes	State the various clinical syndromes included in Paraneoplastic syndromes	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M.6.31	KS	KH	Definition of “Grading”, “Staging”	Define the terms “Grading”, “Staging”	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	Surgery
HomU G-Path M.6.32	KS	KH	Tumour grading	Explain about the grading of tumour.	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	Surgery
HomU G-Path M.6.33	KS	KH	Staging of tumours	Explain about the staging of tumour	C2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	Surgery

HomU G-Path M.6.34	KS	K	Laboratory Diagnosis of Cancer	State the various methods of Laboratory diagnosis of tumours	C1	DK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M.6.35	KS	K	Tumour markers	State the important liquid based biomarkers in tumour diagnosis	C1	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	
HomU G-Path M.6.36	KS	KH	Homoeopathic concept	Discuss about the miasmatic concept of neoplastic disorder	C 2	DK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	OM,MM,Repertory

5.7. Environmental and nutritional diseases-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomU G-Path M.7.1	KS	KH	Obesity	Define the term "Obesity"	C 2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	Physiology Community medicine
HomU G-Path M.7.2	KS	KH	Obesity	Describe the etiopathogenesis of Obesity	C 2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	Physiology Community medicine
HomU G-Path M.7.3	KS	KH	Pathogenesis of protein energy malnutrition	Describe the pathogenesis of protein energy malnutrition	C 2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	Physiology Community medicine

HomU G-Path M.7.4	KS	KH	Difference between Kwashiorkor and marasmus	Enumerate the differences between Kwashiorkor and Marasmus	C 2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	Physiology Community medicine
HomU G-Path M.7.5	KS	KH	Vitamin A	Describe the lesions in Vitamin A deficiency	C 2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	Physiology Community medicine
HomU G-Path M.7.6	KS	KH	Vitamin C	Describe the lesions in Vitamin C deficiency	C 2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	Physiology Community medicine
HomU G-Path M.7.7	KS	KH	Vitamin D	Describe the lesions in Vitamin D deficiency	C 2	MK	Lecture	Viva Voce MCQ SAQ	Viva Voce MCQ SAQ	Physiology Community medicine
HomU G-Path M.7.8	KS	KH	Vitamin E	Describe the lesions in Vitamin E deficiency	C 2	DK	Lecture	Viva Voce MCQ	Viva Voce MCQ	Physiology Community medicine
HomU G-Path M7.9	KS	KH	Vitamin K	Describe the lesions in Vitamin K deficiency	C 2	DK	Lecture	Viva Voce MCQ	Viva Voce MCQ	Physiology Community medicine
HomU G-Path M.7.10	KS	KH	Vitamin B1	Describe the lesions in Vitamin B1(Thiamine) deficiency	C 2	DK	Lecture	Viva Voce MCQ	Viva Voce MCQ	Physiology Community medicine
HomU G-Path M.7.11	KS	KH	Vitamin B2	Describe the lesions in Vitamin B2 (Riboflavin) deficiency	C 2	DK	Lecture	Viva Voce MCQ	Viva Voce MCQ	Physiology Community medicine

HomU G-Path M.7.12	KS	KH	Vitamin B3	Describe the lesions in Vitamin B3 (Niacin) deficiency	C 2	DK	Lecture	Viva Voce MCQ	Viva Voce MCQ	Physiology , Community medicine
HomU G-Path M.7.13	KS	KH	Vitamin B6	Describe the lesions in Vitamin B 6 (Pyridoxine) deficiency	C 2	DK	Lecture	Viva Voce MCQ	Viva Voce MCQ	Physiology , Community medicine

5.8. Diseases of the haematopoietic system, bone marrow and blood-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMU G-Path M. 8.1	KS	K	Red cell disorders	Define the term "Anaemia"" Megaloblastic Anaemia"	C 1	MK	Lecture	Viva MCQ	SAQ Vivavoce MCQ	Physiology
HOMU G-Path M. 8.2	KS	KH	Classification of Anaemia	State the patho-physiologic classification of anaemia	C 2	MK	Lecture	Viva voce, MCQ	LAQ SAQ Viva .MCQ	Physiology
HOMU G-Path M. 8.3	KS	K		State the morphologic classification of anaemia	C 1	MK	Lecture	Viva voce, MCQ	LAQSAQ. Viva MCQ	Physiology
HOMU G-Path M. 8.4	KS	KH		Explain the scheme of laboratory investigations for anaemia	C 2	MK	Lecture	Viva voce, MCQ	LAQ, SAQ. Viva . MCQ	Physiology Practice of medicine
HOMU G-Path M. 8.5	KS	K	Iron deficiency Anaemia	Define Iron deficiency Anaemia	C 1	MK	Lecture	Viva voce, MCQ	SAQ. Viva . MCQ	Physiology

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMU G-Path M. 8.6	KS	KH		Describe the etio-pathogenesis of Iron deficiency anaemia	C 2	MK	Lecture	Viva voce, MCQ	LAQ SAQ. Viva . MCQ	
HOMU G-Path M. 8.7	KS	KH		Describe the laboratory findings of iron deficiency anaemia	C 2	MK	Lecture	Viva voce, MCQ	LAQ SAQ Viva MCQ	Practice of medicine
HOMU G-Path M. 8.8	KS	KH	Megaloblastic Anaemia	Describe the etio-pathogenesis of Megaloblastic anaemia	C 2	MK	Lecture	Viva voce, MCQ	LAQ SAQ Viva MCQ	
HOMU G-Path M. 8.9	KS	KH		Describe the laboratory diagnosis of Megaloblastic Anaemia	C 2	MK	Lecture	Viva voce, MCQ	LAQ SAQ. Viva . MCQ	Practice of medicine
HOMU G-Path M. 8.10	KS	K	Pernicious Anaemia	Define Pernicious Anaemia	C 1	DK	Lecture	Viva voce, MCQ	SAQ. Viva . MCQ	
HOMU G-Path M. 8.11	KS	KH		Discuss the etio- pathogenesis of Pernicious Anaemia	C 2	DK	Lecture	Viva voce, MCQ	SAQ. Viva . MCQ	
HOMU G-Path M. 8.12	KS	KH		Discuss the laboratory diagnosis of Pernicious Anaemia	C 2	DK	Lecture	Viva voce, MCQ	SAQ. Viva . MCQ	Practice of medicine
HOMU G-Path M. 8.13	KS	K	Haemolytic Anaemia	Define the term “Haemolytic Anaemia”	C 1	MK	Lecture	Viva voce, MCQ	SAQ. Viva . MCQ	

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMU G-Path M. 8.14	KS	KH		Classify Haemolytic Anaemias	C2	MK	Lecture	Viva voce, MCQ	LAQ SAQ. Viva . MCQ	
HOMU G-Path M. 8.15	KS	KH		Describe laboratory evaluation of Haemolytic Anaemia	C 2	MK	Lecture	Viva voce, MCQ	LAQ SAQ. Viva . MCQ	
HOMU G-Path M. 8.16	KS	K	types of Haemoglobinopathies	Classify Haemoglobinopathies	C 1	DK	Lecture	Viva voce, MCQ	SAQ. Viva . MCQ	
HOMU G-Path M. 8.17	KS	K	Sickle cell Anaemia	Define Sickle cell Anaemia	C 1	DK	Lecture	Viva voce, MCQ	SAQ. Viva . MCQ	
HOMU G-Path M. 8.18	KS	KH		Discuss theetio- pathogenesis of sickle cell anaemia	C2	DK	Lecture	Viva voce, MCQ	LAQSAQ. Viva . MCQ	
HOMU G-Path M. 8.19	KS	KH		Discuss the laboratory findings of sickle cell anaemia	C 2	DK	Lecture	Viva voce, MCQ	LAQSAQ. Viva . MCQ	
HOMU G-Path M. 8.20	KS	K	Thalassemia	Define Thalassemia	C 1	MK	Lecture	Viva voce, MCQ	SAQ. Viva . MCQ	

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMU G-Path M. 8.21	KS	KH		Classify Thalassaemia	C 2	MK	Lecture	Viva voce, MCQ	SAQ. Viva . MCQ	
HOMU G-Path M. 8.22	KS	KH		Discuss the pathophysiology of anaemia in Thalassemia	C 2	MK	Lecture	Viva voce, MCQ	LAQSAQ. Viva . MCQ	
HOMU G-Path M. 8.23	KS	KH		Describe the laboratory findings of Thalassaemia.	C 2	MK	Lecture	Viva voce, MCQ	LAQSAQ. Viva . MCQ	Practice of medicine
HOMU G-Path M. 8.24	KS	K	Aplastic anaemia.	Define the term "Aplastic anaemia"	C 1	DK	Lecture	Viva voce, MCQ	SAQ. Viva . MCQ	
HOMU G-Path M. 8.25	KS	KH	.	State the etiology of Aplastic anaemia.	C 2	DK	Lecture	Viva voce, MCQ	SAQ. Viva . MCQ	
HOMU G-Path M. 8.26	KS	KH		Describe laboratory findings of Aplastic anaemia.	C 2	DK	Lecture	Viva voce, MCQ	SAQ. Viva .MCQ	Practice of medicine
HOMU G-Path M. 8.27	KS	K	Polycythaemia	Define Polycythaemia	C 1	DK	Lecture	Viva voce, MCQ	SAQ. Viva . MCQ	

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMU G-Path M. 8.28	KS	KH	Classification of Polycythaemia	Classify Polycythaemia on the basis of etiology	C2	DK	Lecture ,	Viva voce, MCQ	SAQ. Viva . MCQ	
HOMU G-Path M. 8.29	KS	KH	laboratory diagnosis of Polycythaemia	Describe laboratory features of Polycythaemia	C2	DK	Lecture	Viva voce, MCQ	SAQ. Viva . MCQ	Practice of medicine
HOMU G-Path M. 8.29	KS	K	WBC disorders	Define the terms "Leukocytosis" "Leukopenia", "Leukaemoid reaction", "Leukaemias"	C 1	MK	Lecture	Viva voce, MCQ	Viva MCQ	
HOMU G-Path M. 8.30	KS	KH	Leukaemia	Classify Leukaemias	C2	MK	Lecture	Viva voce, MCQ	SAQ. Viva . MCQ	
HOMU G-Path M. 8.31	KS	K		Describe the aetiology of Leukaemia	C1	MK	Lecture	Viva voce, MCQ	SAQ. Viva . MCQ	
HOMU G-Path M. 8.32	KS	KH	Leukaemia	Describe the laboratory diagnosis of Chronic Myeloid Leukaemia	C 2	MK	Lecture	Viva voce, MCQ	SAQ. Viva . MCQ	Practice of medicine
HOMU G-Path M. 8.33	KS	KH		Describe the laboratory diagnosis of Acute Myeloid Leukaemia	C 2	MK	Lecture	Viva voce, MCQ	SAQ. Viva . MCQ	Practice of medicine

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMU G-Path M. 8.34	KS	KH		Describe the laboratory diagnosis of Acute lymphoblastic Leukaemia	C 2	MK	Lecture	Viva voce, MCQ	SAQ. Viva . MCQ	Practice of medicine
HOMU G-Path M. 8.35	KS	K	Haemorrhagic disorders	State the aetiology of bleeding disorders	C 1	MK	Lecture	Viva SAQ MCQ	Viva SAQ MCQ	
HOMU G-Path M. 8.36	KS	K		Define Haemophilia A	C 1	MK	Lecture	Viva MCQ	Viva MCQ	
HOMU G-Path M. 8.37	KS	K		Describe the laboratory features of Haemophilia A	C 1	MK	Lecture	Viva MCQ	SAQ. Viva . MCQ	Practice of medicine
HOMU G-Path M. 8.38	KS	K		Define the terms “Thrombocytopenia”, “Thrombocytosis”	C 1	MK	Lecture	Viva MCQ	Viva . MCQ	
HOMU G-Path M. 8.39	KS	K		State the causes of Thrombocytopenia	C 1	MK	Lecture	Viva SAQ MCQ	SAQ. Viva . MCQ	
HOMU G-Path M. 8.40	KS	KH	Plasma cell myeloma	Define multiple myeloma.	C 2	DK	Lecture	Viva voce, MCQ	SAQ. Viva . MCQ	

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMU G-Path M. 8.41	KS	KH	Plasma cell myeloma	Describe the laboratory diagnosis of Multiple myeloma	C 2	DK	Lecture	Viva voce, MCQ	SAQ. Viva . MCQ	Practice of medicine
HOMU G-Path M. 8.42	KS	K	Hodgkin's lymphoma	Discuss features of Hodgkin's lymphoma	C1	DK	Lecture	Viva SAQ MCQ	SAQ. Viva . MCQ	Practice of medicine
HOMU G-Path M. 8.43	KS	K		Explain the appearance of Reed Sternberg cell in tissues	C 1	DK	Lecture	Viva SAQ MCQ	SAQ. Viva . MCQ	
HOMU G-Path M. 8.44	KS	K		Discuss features of Non Hodgkin's lymphoma	C 1	NK	Lecture	Viva SAQ MCQ	NA	Practice of medicine
HOMU G-Path M. 8.45	KS	K	Splenomegaly	State the causes of Splenomegaly	C1	DK	Lecture	Viva SAQ MCQ	Viva SAQ MCQ	

5.9. Diseases of the Respiratory System

l. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 9.1	KS	K	Pulmonary Tuberculosis	Describe the three components of Primary complex or Ghon complex	C 1	MK	Lecture	Viva LAQ SAQ MCQ	LAQ SAQ Viva MCQ	Practice of medicine
HOMUG-Path M. 9.2	KS	K		Describe the fate of primary tuberculosis	C1	MK	Lecture	Viva SAQ MCQ	LAQ SAQ Viva MCQ	
HOMUG-Path M. 9.3	KS	K		Describe the morphology of Secondary pulmonary tuberculosis	C1	MK	Lecture	Viva SAQ MCQ	LAQ SAQ Viva MCQ	
HOMUG-Path M. 9.4	KS	K		Enumerate the differences between Primary tuberculosis and Secondary tuberculosis	C1	MK	Lecture	Viva SAQ MCQ	LAQ Viva SAQ MCQ	
HOMUG-Path M. 9.5	KS	K		Describe the fate of secondary pulmonary tuberculosis	C1	MK	Lecture	Viva SAQ MCQ	LAQ SAQ Viva MCQ	
HOMUG-Path M. 9.6	KS	K		Discuss the diagnosis of pulmonary tuberculosis	C1	MK	Lecture	Viva SAQ MCQ	LAQ SAQ Viva MCQ	Practice of medicine
HOMUG-Path M. 9.7	KS	K	Pneumonia	Define the term “Pneumonia”	C1	MK	Lecture	Viva MCQ	Viva MCQ	

l. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 9.8	KS	K		State the Anatomic classification of Pneumonia	C1	MK	Lecture	Viva SAQ MCQ	SAQ Viva MCQ	Practice of medicine
HOMUG-Path M. 9.9	KS	K		State the Aetiologic classification of Pneumonia	C1	MK	Lecture	Viva SAQ MCQ	SAQ Viva MCQ	Practice of medicine
HOMUG-Path M. 9.11	KS	KH		Discuss the morphologic features of lobar Pneumonia	C 2	MK	Lecture	Viva LAQ SAQ MCQ	LAQ SAQ Viva MCQ	
HOMUG-Path M. 9.12	KS	K		Discuss the morphologic features of bronchopneumonia	C1	MK	Lecture	Viva SAQ MCQ	Viva SAQ MCQ	
HOMUG-Path M. 9.16	KS	KH		State the complications of Pneumonia	C2	MK	Lecture	Viva voce, MCQ	SAQ Viva MCQ	Practice of medicine
HOMUG-Path M. 9.17	KS	K	Lung abscess	Define the term "Lung abscess"	C1	MK	Lecture	Viva MCQ	Viva MCQ	
HOMUG-Path M. 9.18	KS	KH		Describe aetiopathogenesis of lung abscess	C 2	MK	Lecture	Viva SAQ MCQ	Viva MCQ	Practice of medicine
HOMUG-Path M. 9.19	KS	KH		Explain the morphology of lung abscess	C2	DK	Lecture	Viva SAQ MCQ	Viva MCQ	
HOMUG-Path M. 9.20	KS	K	Obstructive lung diseases	Classify chronic obstructive lung diseases	C1	MK	Lecture	Viva SAQ MCQ	LAQ Viva SAQ MCQ	

l. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 9.21	KS	K	Chronic bronchitis.	Define the term "Chronic Bronchitis"	C1	MK	Lecture	Viva MCQ	SAQ Viva MCQ	
HOMUG-Path M. 9.22	KS	KH		Describe the etio-pathogenesis of chronic bronchitis	C2	MK	Lecture	Viva LAQ SAQ MCQ	LAQ SAQ Viva MCQ	Practice of medicine
HOMUG-Path M. 9.23	KS	KH		Describe the morphologic features of chronic bronchitis.	C 2	DK	Lecture	Viva SAQ MCQ	LAQ SAQ Viva MCQ	Practice of medicine
HOMUG-Path M. 9.24	KS	K	Emphysema	Define the term "Emphysema"	C1	MK	Lecture	Viva MCQ	SAQ Viva MCQ	
HOMUG-Path M. 9.25	KS	K		Classify Emphysema	C1	MK	Lecture	Viva voce, MCQ	LAQ Viva SAQ MCQ	
HOMUG-Path M. 9.26	KS	KH		Explain the aetio-pathogenesis of Emphysema	C2	MK	Lecture	Viva SAQ MCQ	LAQ Viva SAQ MCQ	Practice of medicine
HOMUG-Path M. 9.27	KS	K	Emphysema	Describe the morphologic features of emphysema.	C1	DK	Lecture	Viva SAQ MCQ	LAQ Viva SAQ MCQ	Practice of medicine
HOMUG-Path M. 9.28	KS	K	Bronchial Asthma	Define the term "Bronchial Asthma"	C1	MK	Lecture	Viva MCQ	SAQ Viva MCQ	

l. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 9.29	KS	K		Classify Bronchial Asthma	C1	MK	Lecture	Viva SAQ MCQ	LAQ Viva SAQ MCQ	
HOMUG-Path M. 9.30	KS	K		Enumerate the differences between Extrinsic Asthma and Intrinsic Asthma	C1	MK	Lecture	Viva SAQ MCQ	LAQ SAQ Viva MCQ	Practice of medicine
HOMUG-Path M. 9.31	KS	KH		Describe the morphologic features of Bronchial asthma	C 2	MK	Lecture	Viva SAQ MCQ	LAQ Viva SAQ MCQ	
HOMUG-Path M. 9.32	KS	K	Bronchiectasis	Define the term "Bronchiectasis"	C1	MK	Lecture	Viva voce, MCQ	SAQ Viva MCQ	
HOMUG-Path M. 9.33	KS	KH		Describe the aetiopathogenesis of bronchiectasis	C 2	MK	Lecture	Viva voce, MCQ	SAQ Viva MCQ	Practice of medicine
HOMUG-Path M. 9.34	KS	K		Describe the morphology of bronchiectasis	C1	MK	Lecture	Viva voce, MCQ	SAQ Viva MCQ	
HOMUG-Path M. 9.35	KS	K	Pneumoconiosis	Define the term "Pneumoconioses"	C1	DK	Lecture	Viva MCQ	SAQ Viva MCQ	
HOMUG-Path M. 9.36	KS	K		Classify Pneumoconiosis	C1	DK	Lecture	Viva SAQ MCQ	SAQ Viva MCQ	
HOMUG-Path M. 9.37	KS	KH	coal worker's pneumoconiosis.	Describe the etio-pathogenesis of coal worker's pneumoconiosis.	C2	DK	Lecture	Viva SAQ MCQ	SAQ Viva MCQ	Practice of medicine

l. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 9.38	KS	K		Describe the morphologic features of coal worker's pneumoconiosis.	C1	DK	Lecture	Viva SAQ MCQ	SAQ Viva MCQ	
HOMUG-Path M. 9.39	KS	K	Lung cancer	Describe the aetiology of Lung cancer	C1	DK	Lecture	Viva SAQ MCQ	SAQ Viva MCQ	Practice of medicine
HOMUG-Path M. 9.40	KS	K		Describe the morphology of lung cancer	C1	DK	Lecture	Viva SAQ MCQ	SAQ Viva MCQ	
HOMUG-Path M. 9.41	KS	K		Explain the spread of lung cancer	C1	DK	Lecture	Viva SAQ MCQ	SAQ Viva MCQ	
HOMUG-Path M. 9.42	KS	KH		Describe the clinical features of lung cancer	C 2	NK	Lecture	Viva SAQ MCQ	NA	Practice of medicine, Surgery

5.10. Diseases of the oral cavity and salivary glands and gastrointestinal tract-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 10.1	KS	K		Definition of "Stomatitis", "Glossitis"	C 1	MK	Lecture	Viva MCQ	SAQ, MCQ, Viva	
HOMUG-Path M. 10.2	KS	K	Oral leukoplakia	Define the term "Oral leucoplakia"	C 1	MK	Lecture	Viva MCQ	SAQ, MCQ, Viva	
HOMUG-Path M. 10.3	KS	K		Describe the aetiology of Oral Leukoplakia	C 1	DK	Lecture	Viva SAQ MCQ	SAQ, MCQ, Viva	Practice of medicine, Surgery

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 10.4	KS	K		Describe the morphologic features of oral leukoplakia	C 1	NK	Lecture	Viva SAQ MCQ	SAQ, MCQ, Viva	Practice of medicine, Surgery
HOMUG-Path M. 10.5	KS	K	Diseases of GI system	Define reflux oesophagitis.	C1	MK	Lecture	Viva voce, MCQ	SAQ, MCQ, Viva	
HOMUG-Path M. 10.6	KS	KH	Reflux esophagitis	Describe the aetiopathogenesis of Reflux esophagitis	C 2	MK	Lecture	Viva SAQ MCQ	LAQ SAQ, MCQ, Viva voce	
HOMUG-Path M. 10.7	KS	KH		Describe the morphology of Reflux Oesophagitis	C 2	MK	Lecture	Viva SAQ MCQ	LAQ SAQ MCQ Viva	
HOMUG-Path M. 10.8	KS	KH	Barrett's oesophagus	Describe the aetiopathogenesis, of Barrett oesophagus	C 2	MK	Lecture	Viva SAQ MCQ	LAQ SAQ, MCQ, Viva voce	Practice of medicine, Surgery
HOMUG-Path M. 10.9	KS	K		Describe the morphology of Barret oesophagus	C 1	MK	Lecture	Viva SAQ MCQ	LAQ SAQ, MCQ, Viva	
HOMUG-Path M. 10.10	KS	K	Carcinoma oesophagus	Describe the aetiology of carcinoma oesophagus	C 1	NK	Lecture	NA	NA	Practice of medicine, Surgery

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 10.11	KS	K		Describe the morphology of Carcinoma of oesophagus	C 1	NK	Lecture	Viva SAQ MCQ	NA	
HOMUG-Path M. 10.12	KS	KH		Describe the spread of Carcinoma oesophagus.	C2	NK	Lecture	Viva SAQ MCQ	NA	Practice of medicine, Surgery
HOMUG-Path M. 10.13	KS	K	Gastritis	Classify Gastritis	C 1	MK	Lecture	Viva SAQ MCQ	Viva SAQ MCQ	
HOMUG-Path M. 10.14	KS	K	Gastritis	Describe the aetiopathogenesis of Acute gastritis	C 1	MK	Lecture	Viva SAQ MCQ	Viva MCQ	Practice of medicine, Surgery
HOMUG-Path M. 10.15	KS	K		Describe the aetiopathogenesis of Chronic gastritis	C 1	MK	Lecture	Viva SAQ MCQ	Viva MCQ	
HOMUG-Path M. 10.16	KS	K	Peptic ulcer	Define the term “Peptic ulcer”	C 1	MK	Lecture	Viva voce, MCQ	SAQ, MCQ, Viva	
HOMUG-Path M. 10.17	KS	KH		Describe the aetiopathogenesis of chronic peptic ulcer	C 2	MK	Lecture	Viva SAQ MCQ	SAQ MCQ Viva LAQ	Practice of medicine, Surgery

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 10.18	KS	KH		Describe the morphology of chronic peptic ulcer	C 2	MK	Lecture	Viva SAQ MCQ	LAQ SAQ, MCQ, Viva	Practice of medicine, Surgery
HOMUG-Path M. 10.19	KS	KH		Describe the complications of Peptic ulcer	C2	MK	Lecture	Viva SAQ MCQ	LAQ SAQ, MCQ, Viva	Practice of medicine, Surgery
HOMUG-Path M. 10.20	KS	KH		Discuss differences between gastric ulcer and duodenal ulcers.	C2	MK	Lecture	Viva SAQ MCQ	LAQ SAQ, MCQ, Viva	
HOMUG-Path M. 10.21	KS	K	gastric carcinoma,	Describe the aetiology of Gastric carcinoma	C 1	DK	Lecture	Viva SAQ MCQ	SAQ, MCQ, Viva	
HOMUG-Path M. 10.22	KS	K	gastric carcinoma,	Describe morphology of gastric carcinoma	C 1	DK	Lecture	Viva SAQ MCQ	LAQ SAQ, MCQ, Viva	Practice of medicine, Surgery
HOMUG-Path M. 10.23	KS	K		Describe the spread of gastric carcinoma.	C 1	DK	Lecture	Viva SAQ MCQ	LAQ SAQ, MCQ, Viva	
HOMUG-Path M. 10.24	KS	K	Acute appendicitis	Define the term “Acute appendicitis”	C 1	MK	Lecture	Viva MCQ	SAQ, MCQ, Viva	
HOMUG-Path M. 10.25	KS	KH		Describe the etio-pathogenesis of acute appendicitis	C 2	MK	Lecture	Viva SAQ MCQ	LAQ SAQ MCQ Viva	Practice of medicine, Surgery

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 10.26	KS	KH		Describe the morphology of Acute appendicitis	C2	MK	Lecture	Viva SAQ MCQ	LAQ SAQ MCQ Viva	
HOMUG-Path M. 10.27	KS	KH	Inflammatory bowel disease	Describe the aetio-pathogenesis of Inflammatory bowel disease	C 2	MK	Lecture	Viva SAQ MCQ	SAQ, MCQ, Viva	Practice of medicine, Surgery
HOMUG-Path M. 10.28	KS	K		Describe the morphologic features of Crohn's disease	C 1	MK	Lecture	Viva SAQ MCQ	LAQ SAQ, MCQ, Viva voce	
HOMUG-Path M. 10.29	KS	K		Describe the morphologic features of Ulcerative colitis	C 1	MK	Lecture	Viva SAQ MCQ	LAQ SAQ, MCQ, Viva	
HOMUG-Path M. 10.30	KS	K	Inflammatory bowel disease	Enumerate the differences between Crohn's disease and Ulcerative Colitis.	C 1	MK	Lecture	Viva SAQ MCQ	LAQ SAQ, MCQ, Viva	
HOMUG-Path M. 10.31	KS	K		Discuss the complications of Inflammatory bowel disease	C 1	MK	Lecture	Viva SAQ MCQ	LAQ SAQ, MCQ, Viva	
HOMUG-Path M. 10.32	KS	K	Carcinoma Colon	Describe the aetiology of Colorectal cancer	C 1	DK	Lecture	Viva MCQ	LAQ SAQ, MCQ, Viva	Practice of medicine, Surgery

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 10.33	KS	K		Describe the morphology of Colorectal cancer	C 1	DK	Lecture	Viva SAQ MCQ	LAQ SAQ, MCQ, Viva	
HOMUG-Path M. 10.34	KS	K		Describe the spread of Colorectal cancer	C 1	DK	Lecture	Viva SAQ MCQ	LAQ SAQ, MCQ, Viva	
HOMUG-Path M. 10.35	KS	K	Intestinal tuberculosis	Describe the pathology of Intestinal tuberculosis	C 1	DK	Lecture	Viva SAQ MCQ	LAQ SAQ, MCQ, Viva	

5.11. Diseases of liver, gall bladder and biliary ducts-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 11.1	KS	K	Liver Function Tests	Discuss the liver function tests alongwith clinical significance of each	C 1	MK	Lecture	OSPE Viva MCQ	OSPEL AQ SAQ MCQ Viva	
HOMUG-Path M. 11.2	KS	K	Jaundice	Define the term “Jaundice”	C 1	MK	Lecture	Viva MCQ	SAQ, MCQ, Viva	
HOMUG-Path M. 11.3	KS	K		State the pathophysiologic classification of jaundice.	C 1	MK	Lecture	Viva SAQ MCQ	LAQ SAQ, MCQ, Viva	

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 11.4	KS	K	Cholestatisis	Define Cholestasis	C 1	MK	Lecture	Viva voce, MCQ	SAQ, MCQ, Viva	
HOMUG-Path M. 11.5	KS	K	Alcoholic Liver Disease	Define the term "Alcoholic liver disease"	C 1	MK	Lecture	Viva voce, MCQ	SAQ, MCQ, Viva	
HOMUG-Path M. 11.6	KS	K		Explain the pathogenesis of alcoholic liver disease	C 1	MK	Lecture	Viva SAQ MCQ	LAQ SAQ, MCQ, Viva	
HOMUG-Path M. 11.7	KS	K		Describe the morphologic spectrum of alcoholic liver disease	C 1	MK	Lecture	Viva SAQ MCQ	LAQ SAQ, MCQ, Viva	Practice of medicine
HOMUG-Path M. 11.8	KS	K	Liver Cirrhosis	Define the term "Liver cirrhosis"	C 1	MK	Lecture	Viva voce, MCQ	LAQ SAQ, MCQViva	
HOMUG-Path M. 11.9	KS	K	Liver Cirrhosis	Classify Cirrhosis based on morphology and aetiology	C 1	DK	Lecture	Viva SAQ MCQ	LAQ SAQ, MCQViva	Practice of medicine
HOMUG-Path M. 11.10	KS	KH		Describe the morphology of Alcoholic cirrhosis	C 2	MK	Lecture	Viva SAQ MCQ	LAQ SAQ, MCQViva	

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 11.11	KS	K	Hepatocellular Carcinomas	State the aetiology of Hepatocellular Carcinomas	C 1	DK	Lecture	Viva SAQ MCQ	Viva SAQ MCQ	
HOMUG-Path M. 11.12	KS	K		Describe the morphology of hepatocellular carcinoma.	C 1	DK	Lecture	Viva SAQ MCQ	Viva SAQ MCQ	Practice of medicine, Surgery
HOMUG-Path M. 11.13	KS	K	Cholelithiasis.	State the risk factors of cholelithiasis.	C 1	MK	Lecture	Viva SAQ MCQ	SAQ, MCQ, Viva	
HOMUG-Path M. 11.14	KS	KH		Describe the pathogenesis of cholelithiasis/ gall stones	C 2	MK	Lecture	Viva SAQ MCQ	LAQ SAQ, MCQ, Viva	Practice of medicine, Surgery
HOMUG-Path M. 11.15	KS	K		Describe the various types of gall stones	C 1	MK	Lecture	Viva SAQ MCQ	LAQ SAQ, MCQ, Viva	

5.12. Diseases of the pancreas-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 12.1	KS	K	Acute Pancreatitis	Define the term "Acute pancreatitis"	C 1	MK	Lecture	Viva MCQ	MCQ, Viva	
HOMUG-Path M. 12.2	KS	KH		Describe the aetio-pathogenesis of acute pancreatitis	C 2	MK	Lecture	Viva MCQ	MCQ, Viva	Practice of medicine, Surgery

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 12.3	KS	K		State the morphologic features of acute pancreatitis.	C 1	MK	Lecture	Viva voce, SAQ MCQ	MCQ, Viva voce	
HOMUG-Path M. 12.4	KS	K	Chronic Pancreatitis	Define the term "Chronic pancreatitis"	C 1	DK	Lecture	Viva voce, MCQ	MCQ, Viva	
HOMUG-Path M. 12.5	KS	KH		Describe the aetio-pathogenesis of chronic Pancreatitis	C 2	DK	Lecture	Viva voce, SAQ MCQ	MCQ, Viva voce	Practice of medicine, Surgery
HOMUG-Path M. 12.6	KS	K		State the morphologic features of Chronic Pancreatitis.	C 1	DK	Lecture	Viva voce, SAQ MCQ	MCQ, Viva	
HOMUG-Path M. 12.7	KS	K	Diabetes mellitus	Define the term "Diabetes mellitus"	C 1	MK	Lecture	Viva MCQ	SAQ, MCQ, Viva	
HOMUG-Path M. 12.8	KS	K		Enumerate the aetiologic classification of diabetes mellitus	C 1	DK	Lecture	Viva SAQ MCQ	MCQ Viva SAQ	
HOMUG-Path M. 12.9	KS	K		Describe the pathogenesis of Type1 diabetes mellitus	C 1	DK	Lecture	Viva MCQ SAQ	MCQ Viva SAQ	Practice of medicine
HOMUG-Path M. 12.10	KS	K		Describe the pathogenesis of Type 2 diabetes mellitus	C 1	DK	Lecture	Viva MCQ SAQ	MCQ Viva SAQ	Practice of medicine
HOMUG-Path M. 12.11	KS	K		Discuss the laboratory diagnosis of Diabetes Mellitus	C 1	MK	Lecture	Viva MCQ SAQ	LAQ MCQ Viva	Practice of medicine

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
									SAQ	
HOMUG-Path M. 12.12	KS	K		Describe the Acute metabolic complications of diabetes mellitus	C 1	MK	Lecture	Viva MCQ SAQ	LAQ MCQ Viva SAQ	Practice of medicine
HOMUG-Path M. 12.13	KS	K		Describe the Late systemic complications of diabetes mellitus	C 1	MK	Lecture	Viva MCQ SAQ	LAQ MCQ Viva SAQ	

5.13. Diseases of blood vessels and lymphatics-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 13.1	KS	K	Arteriosclerosis	Define Arteriosclerosis	C 1	MK	Lecture	Viva voce, MCQ	SAQ, MCQ, Viva	
HOMUG-Path M. 13.2	KS	K		State the types of Arteriosclerosis	C 1	MK	Lecture	Viva MCQ	SAQ, MCQ, Viva	
HOMUG-Path M. 13.3	KS	K	Atherosclerosis	Define the term “Atherosclerosis”	C 1	MK	Lecture	Viva MCQ	SAQ, MCQ, Viva	
HOMUG-Path M. 13.4	KS	KH		Describe the aetiology of Atherosclerosis	C 2	MK	Lecture	Viva MCQ SAQ	LAQ SAQ MCQ Viva	Practice of medicine

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 13.5	KS	KH		Describe the pathogenesis of Atherosclerosis	C 2	MK	Lecture	Viva MCQ SAQ	LAQ SAQ MCQ Viva	
HOMUG-Path M.13.6	KS	K	Atherosclerosis	Describe the morphologic features of Atherosclerosis	C 1	MK	Lecture	Viva MCQ SAQ LAQ	LAQ SAQ, MCQ, Viva	
HOMUG-PathM.13.7	KS	K	Hypertension.	Define the term "Hypertension"	C 1	MK	Lecture	Viva MCQ	SAQ, MCQ, Viva	Practice of medicine
HOMUG-Path M. 13.8	KS	K		Enumerate the aetiologic classification of Hypertension	C 1	MK	Lecture	Viva SAQ MCQ	LAQ SAQ, MCQ, Viva	Practice of medicine
HOMUG-Path M. 13.9	KS	KH		Describe the aetio-pathogenesis of Primary/essential Hypertension	C 2	MK	Lecture	Viva SAQ MCQ	LAQ SAQ, MCQ, Viva	Practice of medicine
HOMUG-Path M. 13.10	KS	KH		Describe the aetio-pathogenesis of Secondary Hypertension	C 2	MK	Lecture	Viva SAQ MCQ	LAQ SAQ, MCQ, Viva voce	
HOMUG-Path M. 13.11	KS	KH		State the major effects of systemic hypertension on the organs	C 2	MK	Lecture	Viva voce, SAQ MCQ	LAQ SAQ, MCQ, Viva voce	

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 13.12	KS	K	Aneurysm	Define the term “Aneurysm”	C 1	DK	Lecture	Viva voce, MCQ	SAQ, MCQ, Viva	
HOMUG-Path M. 13.13	KS	K		Classify Aneurysm	C 1	DK	Lecture	Viva voce, MCQ SAQ	LAQ SAQ, MCQ, Viva voce	
HOMUG-Path M. 13.14	KS	KH	Aneurysm	Describe the clinical effects of aneurysms	C 2	DK	Lecture	Viva voce, MCQ SAQ	LAQ SAQ, MCQ, Viva voce	
HOMUG-Path M. 13.15	KS	K	Tumors of blood vessels	State the benign tumours of blood vessels	C 1	NK	Lecture	Viva voce, MCQ	NA	
HOMUG-Path M. 13.16	KS	K		State the malignant tumours of blood vessels	C 1	NK	Lecture	Viva voce, MCQ	NA	
HOMUG-Path M. 13.17	KS	K		Define the term “Lymphangitis”	C 1	NK	Lecture	Viva voce, MCQ	Viva MCQ	

5.14. Diseases of cardiovascular system-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-Path M. 14.1	KS	K	Ischaemic Heart Disease	Define the term "Ischaemic Heart Disease"	C 1	MK	Lecture	Viva voce, MCQ	SAQ, MCQ, Viva	
HomUG-Path M. 14.2	KS	KH		Describe the etio-pathogenesis of Ischaemic Heart Disease	C 2	MK	Lecture	Viva MCQ SAQ	LAQ SAQ, MCQ, Viva	Practice of medicine
HomUG-Path M. 14.3	KS	K		State the effects of Myocardial ischaemia	C 1	MK	Lecture	Viva MCQ SAQ	LAQ SAQ, MCQ, Viva	Practice of medicine
HomUG-Path M. 14.4	KS	K	Angina Pectoris	Define the term "Angina Pectoris"	C 1	MK	Lecture	Viva voce, MCQ	SAQ, MCQ, Viva	
HomUG-Path M. 14.5	KS	K		Describe Stable or Typical angina	C 1	MK	Lecture	Viva voce, MCQ SAQ	SAQ, MCQ, Viva voce	
HomUG-Path M. 14.6	KS	K		Explain Prinzmetal's variant Angina	C 1	MK	Lecture	Viva voce, MCQ SAQ	SAQ, MCQ, Viva voce	
HomUG-Path M. 14.7	KS	K		Describe Unstable or Crescendo angina.	C 1	MK	Lecture	Viva voce, MCQ SAQ	SAQ, MCQ, Viva voce	

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-Path M. 14.8	KS	KH	Myocardial Infarction.	Describe the aetio-pathogenesis of Myocardial Infarction.	C 2	MK	Lecture	Viva voce, MCQ SAQ	LAQ SAQ, MCQ, Viva voce	Practice of medicine
HomUG-Path M. 14.9	KS	KH		Describe the gross changes in Myocardial infarction	C 2	DK	Lecture	Viva SAQ MCQ	LAQ SAQ, MCQ, Viva	
HomUG-Path M. 14.10	KS	KH		Describe the microscopic changes in Myocardial infarction	C 2	DK	Lecture	Viva SAQ MCQ	LAQ SAQ, MCQ, Viva	
HomUG-Path M. 14.11	KS	KH		Describe the diagnosis of Myocardial Infarction.	C 2	MK	Lecture	Viva voce, MCQ SAQ	LAQ SAQ, MCQ, Viva voce	Practice of medicine
HomUG-Path M. 14.12	KS	K	Rheumatic heartdisease.	Define the terms “Rheumatic fever”, “Rheumatic heart disease”	C 1	MK	Lecture	Viva voce, MCQ	MCQ, Viva voce	
HomUG-Path M. 14.13	KS	KH		Describe etio-pathogenesisof Rheumatic heart disease.	C 2	MK	Lecture	Viva voce, MCQ SAQ	LAQ SAQ, MCQ, Viva voce	Practice of medicine
HomUG-Path M. 14.14	KS	K		Describe the Cardiac lesions of Rheumatic heart disease	C 1	MK	Lecture	Viva voce, MCQ SAQ	LAQS AQ, MCQ, Viva voce	

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-Path M. 14.15	KS	K	Rheumatic heart disease.	Describe the extra-cardiac lesions in Rheumatic heart disease.	C 1	MK	Lecture	Viva voce, MCQ SAQ	SAQ, MCQ, Viva voce	
HomUG-Path M. 14.16	KS	K		Enumerate the diagnostic criterion of Rheumatic heartdisease.	C 1	MK	Lecture	Viva voce, MCQ SAQ	LAQSAQ, MCQ, Viva voce	
HomUG-Path M. 14.17	KS	K	Infective Endocarditis	Define the term “Infective endocarditis”	C 1	DK	Lecture	Viva MCQ	SAQ, MCQ, Viva	
HomUG-Path M. 14.18	KS	KH	Infective Endocarditis	Describe the aetio-pathogenesis of Infective Endocarditis	C 2	DK	Lecture	Viva MCQ SAQ	SAQ, MCQ, Viva	Practice of medicine
HomUG-Path M. 14.19	KS	K		Describe the morphologic changes of Infective Endocarditis	C 1	NK	Lecture	Viva MCQ SAQ	NA	
HomUG-Path M. 14.20	KS	K		Enumerate the Duke criteria for diagnosis of Infective endocarditis	C 1	NK	Lecture	Viva MCQ SAQ	NA	
HomUG-Path M. 14.21	KS	KH		Define the term “Pericardial effusion”	C 2	MK	Lecture	Viva MCQ	MCQ, Viva	
HomUG-Path . 14.22	KS	KH		Define the term “Pericarditis”	C 2	MK	Lecture	Viva MCQ	MCQ, Viva	Practice of medicine

5.15. Diseases of kidney and lower urinary tract-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 15.1	KS	K	Renal function tests	Discuss renal function tests in detail	C 1	MK	Lecture	Viva MCQ	OSPE LAQ SAQ MCQ Viva voce	Practice of medicine
HOMUG-Path M. 15.2	KS	K	Glomerular disease	Define the term "Glomerulonephritis" "Nephrotic syndrome" "Acute nephritic syndrome"	C 1	MK	Lecture	Viva MCQ SAQ	MCQ Viva SAQ	
HOMUG-Path M. 15.3	KS	K	Acute nephritic syndrome.	Enumerate the aetiology of Acute nephritic syndrome	C 1	DK	Lecture	Viva voce, MCQ SAQ	LAQ SAQ, MCQ, Viva voce	
HOMUG-Path M. 15.4	KS	KH	Acute nephritic syndrome.	Describe the clinical features of Acute nephritic syndrome.	C 2	DK	Lecture	Viva voce, MCQ SAQ	LAQ SAQ, MCQ, Viva voce	Practice of medicine
HOMUG-Path M. 15.5	KS	K	Nephrotic syndrome	Enumerate the causes of Nephrotic syndrome	C 1	DK	Lecture	Viva MCQ SAQ	LAQ SAQ, MCQ, Viva	Practice of medicine

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 15.6	KS	K		Describe the characteristic features of Nephrotic syndrome	C 1	DK	Lecture	Viva MCQ SAQ	LAQ SAQ, MCQ, Viva	Practice of medicine
HOMUG-Path M. 15.7	KS	KH		Enumerate the differences between Nephrotic syndrome and Acute Nephritic syndrome	C 2	MK	Lecture	Viva voce, MCQ SAQ	LAQ SAQ, MCQ, Viva voce	
HOMUG-Path M. 15.8	KS	K	Glomerulonephritis	Define Glomerulonephritis	C 1	DK	Lecture	Viva MCQ	SAQ, MCQ, Viva	
HOMUG-Path M. 15.9	KS	KH	Acute Post-Streptococcal Glomerulonephritis	Describe the aetio-pathogenesis of Acute post-streptococcal glomerulonephritis.	C 2	MK	Lecture	Viva MCQ SAQ	LAQ SAQ, MCQ, Viva	Practice of medicine
HOMUG-Path M. 15.10	KS	K	Nephrolithiasis	State the types of Renal calculi	C 1	MK	Lecture	Viva voce, MCQ SAQ	LAQ SAQ, MCQ, Viva voce	
HOMUG-Path M.15.11	KS	K	Nephrolithiasis	Describe the etio-pathogenesis of each type of renal stones	C 1	MK	Lecture	Viva MCQ SAQ	LAQ SAQ, MCQ, Viva	

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M.15.12	KS	K		Describe the morphology of each type of renal stones	C 1	MK	Lecture	Viva SAQ MCQ	LAQ SAQ MCQ Viva	
HOMUG-Path M.15.13	KS	K	Urinary tract infections	Define the term "Acute pyelonephritis" "ureteritis", "Cystitis", "Urethritis"	C 1	MK	Lecture	Viva MCQ	SAQ, MCQ, Viva	
HOMUG-Path M.15.14	KS	K	Renal Cell Carcinoma	Discuss the etiology of Renal Cell Carcinoma	C 1	DK	Lecture	Viva voce, MCQ SAQ	SAQ, MCQ, Viva voce	Practice of medicine, Surgery
HOMUG-Path M.15.15	KS	K		Describe the morphology of Renal Cell Carcinoma	C 1	DK	Lecture	Viva voce, MCQ SAQ	SAQ, MCQ, Viva voce	
HOMUG-Path M.15.16	KS	K	Wilm's tumour	Describe the morphology of Wilm's tumour	C 1	NK	Lecture	Viva voce, MCQ SAQ	NA	Practice of medicine, Surgery

5.16. Diseases of male reproductive system-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 16.1	KS	K	Inflammatory diseases	Define the terms "Orchitis", "Epididymitis"	C 1	MK	Lecture	Viva MCQ	SAQ, MCQ, Viva	
HOMUG-Path M. 16.2	KS	K	Testicular Tumors	Classify testicular tumors	C 1	DK	Lecture	Viva MCQ SAQ	SAQ, MCQ Viva	Practice of medicine, Surgery
HOMUG-Path M. 16.3	KS	K		Discuss the morphology of Germ cell tumors	C 1	DK	Lecture	Viva MCQ SAQ	SAQ, MCQ Viva	
HOMUG-Path M. 16.4	KS	K	Inflammatory diseases	Define the term "Prostatitis"	C 1	NK	Lecture	Viva MCQ	NA	
HOMUG-Path M. 16.5	KS	K		State the types of Prostatitis	C 1	NK	Lecture	Viva MCQ	NA	Practice of medicine, Surgery
HOMUG-Path M. 16.6	KS	KH	Benign Nodular Hyperplasia Of Prostate	Describe the etio-pathogenesis of Benign nodular hyperplasia of prostate	C 2	MK	Lecture	Viva MCQ SAQ	LAQ SAQ MCQ, Viva	Practice of medicine, Surgery
HOMUG-Path M. 16.7	KS	KH		Describe the pathology of Benign nodular hyperplasia of prostate	C 2	MK	Lecture	Viva voce, MCQ SAQ	LAQ SAQ, MCQ, Viva voce	Practice of medicine, Surgery
HOMUG-Path M. 16.8	KS	K	Ca Prostate	Describe the aetiologyof Carcinoma of Prostate	C 1	NK	Lecture	Viva voce, MCQ SAQ	NA	

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 16.9	KS	KH		Describe the morphology of Carcinoma of Prostate	C 2	NK	Lecture	Viva voce, MCQ SAQ	NA	Practice of medicine, Surgery
HOMUG-Path M. 16.10	KS	KH	Ca Prostate	Explain the spread of Carcinoma of Prostate	C2	NK	Lecture	Viva MCQ SAQ	NA	

5.17. Diseases of the female genitalia and breast-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 17.1	KS	K	Cervicitis	Define the term "Cervicitis"	C 1	DK	Lecture	Viva MCQ	MCQ, Viva	OBG
HOMUG-Path M. 17.2	KS	K		State the types of Cervicitis	C 1	DK	Lecture	Viva MCQ	MCQ, Viva	
HOMUG-Path M. 17.3	KS	K		Define the term Endometritis.	C 1	DK	Lecture	Viva MCQ SAQ	MCQ Viva	
HOMUG-Path M. 17.4	KS	K		Define the term Endometriosis	C 1	DK	Lecture	Viva MCQ	MCQ, Viva	OBG

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 17.5	KS	KH		Define the term Leiomyomas	C 1	DK	Lecture	Viva MCQ SAQ	MCQ Viva SAQ	OBG
HOMUG-Path M. 17.6	KS	KH		Discuss the morphology of Leiomyoma uterus	C 1	DK	Lecture	Viva MCQ SAQ	MCQ Viva SAQ	OBG
HOMUG-Path M. 17.7	KS	K		Define the term ‘ Adenomyosis’	C 1	DK	Lecture	Viva MCQ SAQ	MCQ Viva	OBG
HOMUG-Path M. 17.8	KS	KH	Ovarian Tumors.	Classify ovarian tumours	C 1	MK	Lecture	Viva MCQ SAQ	LAQ MCQ Viva SAQ	OBG
HOMUG-Path M. 17.9	KS	K		Discuss the morphology of germ cell tumors of ovary	C 2	MK	Lecture	Viva MCQ SAQ	LAQ MCQ Viva SAQ	OBG
HOMUG-Path M. 17.10	KS	K		Discuss the morphology of serous tumors of ovary	C 2	MK	Lecture	Viva SAQ MCQ	LAQ SAQ MCQ, Viva	OBG
HOMUG-Path M. 17.11	KS	K		Discuss the morphology of mucinous tumors of ovary	C 2	MK	Lecture	Viva MCQ	LAQ SAQ, MCQ, Viva	OBG
HOMUG-Path M. 17.12	KS	KH		Describe the pathology of Fibroadenoma breast	C 2	MK	Lecture	Viva voce, MCQ	SAQ, MCQ,	

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
								SAQ,	Viva voce	
HOMUG-Path M. 17.13	KS	K	Tumors of breast	Classify breast tumors as per WHO	C 1	MK	Lecture	Viva MCQ SAQ	LAQ MCQ Viva SAQ	Surgery
HOMUG-Path M. 17.14	KS	K		Describe the etiology of Carcinoma Breast	C 1	MK	Lecture	Viva voce, MCQ SAQ	LAQ SAQ, MCQ, Viva voce	Surgery
HOMUG-Path M. 17.15	KS	KH		Describe the morphologic features of Carcinoma Breast	C 2	MK	Lecture	Viva voce, MCQ SAQ	LAQ SAQ, MCQ, Viva voce	

5.18. Diseases of the skin and soft tissue-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 18.1	KS	K	Tumors of skin	State the predisposing conditions of Squamous cell carcinoma	C 1	DK	Lecture	Viva voce, MCQ SAQ	SAQ, MCQ, Viva	
HOMUG-Path M. 18.2	KS	KH		Describe the pathology of squamous cell carcinoma of skin	C 2	DK	Lecture	Viva voce, MCQ SAQ	SAQ, MCQ, Viva voce	
HOMUG-Path M. 18.3	KS	K		State the pre-disposing factors for basal cell carcinoma (Rodent ulcer)	C 1	NK	Lecture	Viva voce, MCQ SAQ	SAQ, MCQ, Viva voce	
HOMUG-Path M. 18.4	KS	KH		Describe morphologic features of basal cell carcinoma of skin	C 2	NK	Lecture	Viva voce, MCQ SAQ	SAQ, MCQ, Viva voce	Practice of medicine, Surgery
HOMUG-Path M. 18.5	KS	KH	Soft tissue tumors	Describe morphologic features of lipoma.	C 2	MK	Lecture	Viva voce, MCQ	SAQ, MCQ, Viva voce	

5.19. Diseases of the musculo-skeletal system-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 19.1	KS	K	Bone tumors	Classify bone tumors	C 1	DK	Lecture	Viva voce, MCQ	SAQ, MCQ, Viva voce	
HOMUG-Path M. 19.2	KS	K	Bone tumors	Discuss morphology of osteosarcoma	C 1	MK	Lecture	Viva voce, MCQ	LAQ SAQ, MCQ, Viva voce	Practice of medicine
HOMUG-Path M. 19.3	KS	K	Osteo - arthritis	Define Osteo Arthritis	C 1	MK	Lecture	Viva voce, MCQ	MCQ, Viva voce	Practice of medicine
HOMUG-Path M. 19.4	KS	K	Rheumatoid arthritis	Define rheumatoid arthritis	C 1	MK	Lecture	Viva voce, MCQ	MCQ, Viva voce	Practice of medicine
HOMUG-Path M. 19.5	KS	K	Gout	Define Gout	C 1	MK	Lecture	Viva voce, MCQ	MCQ, Viva voce	

5.20. Diseases of endocrine glands-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 20.1	KS	KH	Thyroid function tests	Interpret the abnormalities in a panel containing thyroid function tests	C 2	MK	Lecture	Viva MCQ	OSPE MCQ, Viva SAQ	
HOMUG-Path M. 20.2	KS	K	Goitre	Define the term "Goitre"	C 1	MK	Lecture	Viva MCQ	SAQ, MCQ, Viva	
HOMUG-Path M. 20.3	KS	K		Describe the etio-pathogenesis of Goitre	C 2	MK	Lecture	Viva MCQ SAQ	LAQ SAQ, MCQ, Viva	Practice of medicine
HOMUG-Path M. 20.4	KS	K		Classify Goitre on the basis of morphology	C 1	MK	Lecture	Viva voce, MCQ SAQ	LAQ SAQ, MCQ, Viva voce	Practice of medicine
HOMUG-Path M. 20.5	KS	KH	Goitre	Describe the morphology of Colloid Goitre	C 2	MK	Lecture	Viva voce, MCQ SAQ	LAQ SAQ, MCQ, Viva voce	
HOMUG-Path M. 20.6	KS	K		Describe the morphology of Multi-nodular Goitre	C 1	MK	Lecture	Viva MCQ SAQ	LAQ SAQ, MCQ, Viva	Practice of medicine

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 20.7	KS	K	Cushing syndrome	State the aetiologic types of Cushing syndrome	C 1	DK	Lecture	Viva MCQ	MCQ, Viva	Practice of medicine
HOMUG-Path M. 20.8	KS	K		Describe the clinical features of Cushing syndrome	C 1	DK	Lecture	Viva MCQ SAQ	SAQ MCQ, Viva	
HOMUG-Path M. 20.9	KS	K	Gigantism	Describe the features of Gigantism	C 1	DK	Lecture	Viva MCQ SAQ	SAQ, MCQ, Viva	
HOMUG-Path M. 20.10	KS	K	Acromegaly	Describe the features of Acromegaly	C 1	DK	Lecture	Viva MCQ SAQ	SAQ, MCQ, Viva	
HOMUG-Path M. 20.11	KS	K	Diabetes Insipidus	Describe the features of Diabetes Insipidus	C 1	DK	Lecture	Viva MCQ SAQ	SAQ, MCQ, Viva	
HOMUG-Path M. 20.12	KS	K	differences between Diabetes Mellitus and Diabetes Insipidus	Discuss differences between Diabetes Mellitus and Diabetes Insipidus	C 1	DK	Lecture	Viva MCQ SAQ	SAQ, MCQ, Viva	

5.21. Diseases of the nervous system-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HOMUG-Path M. 21.1	KS	K,	Meningitis	Define the term' Meningitis"	C 1	DK	Lecture	Viva MCQ	MCQ, Viva	
HOMUG-Path M. 21.2	KS	KH		Enumerate the CSF findings in Bacterial meningitis	C 1	DK	Lecture	Viva MCQ SAQ	SAQ, MCQ, Viva	
HOMUG-Path M. 21.3	KS	KH		Enumerate the CSF findings in Tubercular meningitis	C 1	DK	Lecture	Viva MCQ SAQ	SAQ, MCQ, Viva	
HOMUG-Path M. 21.4	KS	KH		Enumerate the CSF findings in Viral meningitis	C 1	DK	Lecture	Viva MCQ SAQ	SAQ, MCQ, Viva	
HOMUG-Path M. 21.5	KS	K	CNS tumors	Classify CNS tumours	C 1	NK	Lecture	Viva MCQ	NA	

5.22. Introduction to Microbiology-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-Path M. 22.1	KS	K	Basic definitions	Define the terms "Microbiology", "Medical Microbiology "Clinical Microbiology".	C1	NK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M 22.2	KS	K	Contributions of important scientists to Microbiology	List the contribution of important scientists to Microbiology	C1	NK	Lecture	Viva Voce	NA	
HomUG-Path M 22.3	KS	K	Koch's postulate	State the Koch's postulate	C1	MK	Lecture	Viva voce MCQ	SAQ Viva voce MCQ	
HomUG-Path M 22.4	KS	K	Normal Human microbiota	List the anatomical location of normal bacterial flora in the human body	C1	MK	Lecture	MCQ Viva voce	SAQ MCQ Viva voce	
HomUG-Path M. 22.5	KS	KH	Role of normal human microbiota	Explain the role of human microbiota in health and disease.	C2	MK	Lecture	MCQ Viva voce	SAQ MCQ Viva voce	
HomUG-Path M 22.6	KS	KH	Role of probiotics	Explain the role of probiotics.	C2	MK	Lecture	MCQ Viva voce	MCQ Viva voce	

5.23. Bacterial structure, growth and nutrition-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-Path M 23.1	KS	K	Morphology of bacteria	Explain the morphological characteristics of bacteria	C1	MK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	
HomUG-Path M 23.2	KS	K	Classification of bacteria	Classify bacteria based on shape	C1	MK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	
HomUG-Path M 23.3	KS	KH	Bacterial Cell structure	Describe the detailed structure of the bacterial cell envelope	C1	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	
HomUG-Path M. 23.4	KS	K	Cell wall appendages	Define flagella	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M. 23.5	KS	KH		Describe the types of flagellar arrangement in a bacterial cell	C2	MK	Lecture	SAQ MCQ Viva voce	MCQ Viva voce	
HomUG-Path M. 23.6	KS	KH	Bacterial spore	Describe the structure of bacterial spore	C2	DK	Lecture	Viva voce MCQ SAQ	Viva voce MCQ SAQ	
HomUG-Path M. 23.7	KS	KH		Describe the types of bacterial spores based on shape, position of spores	C2	MK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	

HomUG -Path M. 23.8	KS	KH	Bacterial growth and nutrition	Describe bacterial growth curve	C2	DK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	
HomUG -Path M 23.9	KS	KH		Describe the classification of bacteria based on energy requirements	C2	DK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG -Path M. 23.10	KS	KH		Describe the classification of bacteria based on oxygen requirements	C2	DK	Lecture	Viva voce MCQ	SAQViva voce MCQ	
HomUG -Path M. 23.11	KS	KH		Describe the classification of bacteria based on temperature requirements	C2	DK	Lecture	Viva voce MCQ	Viva voce MCQ	

5.24. Sterilization and disinfection-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-Path M 24.1	KS	K	Definitions	Define 'Sterilization', "Disinfection", "Asepsis", "Decontamination", "Bactericidal agents" ,"Bacteriostatic agents"	C1	MK	Lecture	Viva voce MCQ	SAQ Viva voce MCQ	
HomUG-Path M 24.2	KS	K	Methods of sterilization	Describe the various methods of sterilization	C1	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	
HomUG-Path M 24.3	KS	KH	Physical methods of sterilization	Describe the various physical methods of sterilization	C2	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	

HomUG-Path M 24.4	KS	KH		Describe the procedure of sterilization using hot air oven	C2	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	
HomUG-Path M 24.5	KS	KH		Describe the procedure of sterilization using Autoclave	C2	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	
HomUG-Path M 24.6	KS	KH		Explain the uses of Pasteurization in the process of sterilization	C2	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	
HomUG-Path M 24.7	KS	KH	Chemical methods of sterilization	Discuss on various types of chemical agents of sterilization	C2	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	Community medicine
HomUG-Path M 24.8	KS	K		State the characteristics of disinfectant	C1	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	Community medicine

5.25. Staining, culture medias and methods-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-Path M 25.1	KS	K	Staining methods	Discuss the various staining methods of bacteria	C1	MK	Lecture	MCQ Viva voce	MCQ Viva Voce SAQ	
HomUG-Path M 25.2	KS	KH		Discuss the steps of gram staining	C2	MK	Lecture	MCQ Viva voce	MCQ Viva Voce SAQ	
HomUG-Path M 25.3	KS	KH	Classification of bacteria	Classify bacteria based on gram staining property	C1	MK	Lecture	MCQ Viva voce	SAQ MCQ Viva voce	
HomUG-Path M 25.4	KS	K	Staining methods	Discuss differences between gram positive and gram negative bacteria	C1	MK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	
HomUG-Path M 25.5	KS	K	Staining methods	Discuss the steps of Acid fast staining	C1	MK	Lecture	SAQ MCQ Viva voce	MCQ Viva Voce SAQ	
HomUG-Path M 25.6	KS	K	Culture media	Describe types of culture media based on consistency with examples	C1	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	
HomUG-Path M 25.7	KS	K		Describe culture media based on constituents with examples	C1	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	
HomUG-Path M 25.8	KS	K		Describe culture media based on functional requirement with examples	C1	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ	

								Viva voce	Viva voce	
HomUG-Path M 25.9	KS	K	Culture methods	Enumerate various methods used for culturing bacteria.	C1	MK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	
HomUG-Path M 25.10	KS	K		Describe various anaerobic culture methods	C2	DK	Lecture	Not to be assessed	SAQ MCQ Viva voce	

5.26. Infection and disease-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-Path M 26.1	KS	K	Infection and Disease	Define the terms" infection" pathogen, pathogenesis, pathogenicity, Virulence", infectious disease	C1	MK	Lecture	Viva voce MCQ	SAQ Viva voce MCQ	
HomUG-Path M 26.2	KS	KH		Describe the various types of infections	C2	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ Viva voce	
HomUG-Path M 26.3	KS	KH		Describe the sources of infection	C2	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ Viva voce	
HomUG-Path M 26.4	KS	KH		Describe the methods of transmission of infection	C2	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ Viva voce	

HomUG-Path M 26.5	KS	K	Virulence of micro-organisms	State the factors influencing virulence of micro-organisms.	C1	MK	Lecture	Viva voce MCQ	LAQ SAQ Viva voce MCQ	
HomUG-Path M 26.6	KS	KH	Exotoxins and Endotoxins	Describe the features of exotoxins	C2	MK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	
HomUG-Path M 26.7	KS	KH		Describe the features of Endotoxins	C2	MK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	
HomUG-Path M 26.8	KS	KH		Differentiate the features of Exotoxins and Endotoxins	C2	MK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	
HomUG-Path M 26.9	KS	K	Classification of infectious diseases	Describe the classification of infectious diseases	C1	MK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	
HomUG-Path M 26.10	KS	K	Nosocomial infection	Define nosocomial infection	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M 26.11	KS	K		Discuss some common nosocomial infections.	C1	MK	Lecture	SAQ MCQ	MCQ VIVA	

5.27. Gram positive bacterias-

Sl. No.	Domains of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-Path M 27.1	KS	K	Staphylococci	Explain the morphology of Staphylococci	C1	MK	Lecture	Viva voce MCQ	SAQ Viva voce MCQ	
HomUG-Path M 27.2	KS	K		List the virulence factors of Staphylococcus aureus	C1	MK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva	
HomUG-Path M 27.3	KS	KH		Explain the pathogenesis of staphylococcus aureus infections	C2	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	
HomUG-Path M 27.4	KS	KH		Describe the laboratory diagnosis of staphylococcal infections	C2	DK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	Practice of medicine
HomUG-Path M 27.5	KS	K	Pneumococci	Explain the morphology of Pneumococci	C1	MK	Lecture	Viva voce MCQ	SAQ MCQ Viva voce	
HomUG-Path M 27.6	KS	KH		Describe the virulence factors of Pneumococci	C2	MK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	
HomUG-Path M 27.7	KS	KH		Describe the pathogenesis of Pneumococcus	C2	MK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	
HomUG-Path M 27.8	KS	KH		Describe the laboratory diagnosis of Pneumococcal infections	C2	MK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	

HomUG-Path M 27.9	KS	K	Streptococci	Explain the morphology of Streptococcus pyogenes	C1	MK	Lecture	Viva voce MCQ SAQ	SAQ MCQ Viva voce	
HomUG-Path M 27.10	KS	KH		Describe the virulence factors of Streptococcus pyogenes	C2	MK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	
HomUG-Path M 27.11	KS	KH		Explain the pathogenicity of Streptococcus pyogenes	C2	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	
HomUG-Path M 27.12	KS	KH		Explain the pathogenesis of post streptococcal sequelae caused by streptococcus pyogenes	C2	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	
HomUG-Path M 27.13	KS	KH		Describe the laboratory diagnosis of streptococcal infections	C2	DK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ	
HomUG-Path M 27.14	KS	K	Corynebacterium diphtheriae	Explain the morphology of Corynebacterium diphtheriae	C1	MK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	
HomUG-Path M 27.15	KS	KH		Describe the pathogenicity of Corynebacterium diphtheriae	C2	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ Viva voce	
HomUG-Path M 27.16	KS	K		Describe the laboratory diagnosis of diphtheria	C1	NK	Lecture	NA	NA	Practice of medicine

HomUG-Path M 27.17	KS	K	Bacillus anthracis	Explain the morphology of Bacillus anthracis	C1	MK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	
HomUG-Path M 27.18	KS	KH		Describe the pathogenicity of Bacillus anthracis	C2	MK	Lecture	SAQ MCQ	SAQ MCQ	
HomUG-Path M 27.19	KS	KH		Describe the clinical features of Human anthrax	C2	DK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	
HomUG-Path M 27.20	KS	KH		Describe the laboratory diagnosis of Human anthrax	C2	NK	Lecture	Not to be assessed	NA	
HomUG-Path M 27.21	KS	K	Bacillus cereus	Discuss the clinical manifestations of Bacillus cereus	C1	DK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M 27.22	KS	K	Clostridium tetani	Explain the morphology of Clostridium tetani	C1	MK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	
HomUG-Path M 27.23	KS	KH		Describe pathogenesis of Clostridium tetani	C2	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ Viva	
HomUG-Path M 27.24	KS	KH		Explain the Clinical manifestation of tetanus	C2	DK	Lecture	SAQ MCQ	LAQ SAQ MCQ Viva	Community medicine, Practice of medicine

HomUG-Path M 27.25	KS	K		Describe the Laboratory diagnosis of tetanus	C1	NK	Lecture	NA	NA	
HomUG-Path M 27.26	KS	K	Clostridium perfringens	Explain the morphology of Clostrium perfringens	C1	MK	Lecture	SAQ MCQ Viva voce	MCQ Viva voce	
HomUG-Path M 27.27	KS	KH		Describe the clinical manifestation of Clostridium perfringens	C2	MK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	
HomUG-Path M 27.28	KS	K		Describe laboratory diagnosis of Clostridium perfringens	C1	NK	Lecture	NA	NA	
HomUG-Path M 27.29	KS	K	Clostridium botulinum	Explain the morphology of Clostrium botulinum	C1	MK	Lecture	SAQ MCQ Viva voce	MCQ Viva voce	
HomUG-Path M 27.30	KS	KH		Describe pathogenicity of Clostridium botulinum	C2	MK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	
HomUG-Path M 27.31	KS	K		Describe laboratory diagnosis of Clostridium botulinum	C1	NK	Lecture	NA	NA	
HomUG-Path M 27.32	KS	KH	Clostridium Difficile	Describe the pathogenicity of Clostridium difficile	C2	NK	Lecture	NA	NA	

5.28. Gram negative bacterias-

Sl.No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-Path M 28.1	KS	K	Neisseria gonorrhoeae	Explain the morphology of Neisseria gonorrhoeae	C1	MK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	
HomUG-Path M 28.2	KS	KH		Describe the pathogenesis of Neisseria gonorrhoeae	C2	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	
HomUG-Path M 28.3	KS	K		Describe the laboratory diagnosis of Neisseria gonorrhoeae	C1	NK	Lecture	NA		
HomUG-Path M 28.4	KS	K	Neisseria meningitidis	Explain the morphology of Neisseria meningitidis	C1	MK	Lecture	Viva voce MCQ	SAQ Viva voce MCQ	
HomUG-Path M 28.5	KS	KH		Describe the clinical spectrum of meningococcal infections	C2	MK	Lecture	SAQ Viva voce MCQ	SAQ Viva voce MCQ	
HomUG-Path M 28.6	KS	K		Describe the laboratory diagnosis of Neisseria meningitidis	C1	NK	Lecture	NA		
HomUG-Path M 28.7	KS	K	Escherichia coli	Explain the morphology of Escherichia coli	C1	MK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	
HomUG-Path M 28.8	KS	KH		Describe the virulence factors of Escherichia coli	C2	MK	Lecture	SAQ MCQ	MCQ Viva Voce	

HomUG-Path M 28.9	KS	KH		Describe the pathogenicity of Escherichia coli	C2	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ	
HomUG-Path M 28.10	KS	KH		Describe the clinical syndromes caused by Escherichia coli	C2	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	
HomUG-Path M 28.11	KS	KH		Describe the laboratory diagnosis of Escherichia coli	C2	MK	Lecture	Viva voce MCQ	LAQ SAQ MCQ Viva voce	
HomUG-Path M 28.12	KS	KH	Shigella	Describe the pathogenicity of Shigella	C2	MK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	
HomUG-Path M 28.13	KS	KH		Describe the clinical manifestations of Shigellosis.	C2	MK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	
HomUG-Path M 28.14	KS	K		Describe the laboratory diagnosis of Shigellosis.	C1	DK	Lecture	SAQ MCQ	SAQ MCQ	
HomUG-Path M 28.15	KS	K	Salmonellae	Explain the morphology of Salmonellae	C1	MK	Lecture	SAQ MCQ Viva voce	MCQ Viva voce	
HomUG-Path M 28.16	KS	KH		Describe the antigenic structure of Salmonellae	C2	MK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	

HomUG-Path M 28.17	KS	KH		State the clinical syndromes caused by Salmonellae in humans	C2	MK	Lecture	Viva voce MCQ	Viva voce MCQ SAQ LAQ	Community medicine Practice of medicine
HomUG-Path M 28.18	KS	KH		Describe the pathogenesis and clinical manifestations of Enteric fever	C2	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ	
HomUG-Path M 28.19	KS	KH		Explain the laboratory diagnosis of Salmonella infection	C2	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ Viva voce	Practice of medicine
HomUG-Path M 28.20	KS	K	Klebsiella	Describe the morphology of Klebsiella pneumonia	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M 28.21	KS	KH		Describe the pathogenicity of Klebsiella pneumoniae	C2	MK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	
HomUG-Path M 28.22	KS	K		Describe the laboratory diagnosis of Klebsiella pneumoniae	C2	MK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	
HomUG-Path M 28.23	KS	KH	Proteus	Describe the pathogenicity of Proteus bacilli	C2	NK	Lecture	Not to be assessed		
HomUG-Path M 28.24	KS	KH	Yersinia	Describe the pathogenicity of Yersinia pestis	C2	NK	Lecture			
HomUG-Path M 28.25	KS	K	Vibrio cholera	Explain the morphology of Vibrio cholera	C1	MK	Lecture	Viva voce MCQ	MCQ Viva voce	

HomUG-Path M 28.26	KS	KH		Describe pathogenesis and clinical features of cholera	C2	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	Community medicine, Practice of medicine
HomUG-Path M 28.27	KS	KH		Describe the laboratory diagnosis of Cholera	C1	DK	Lecture	SAQ MCQ	LAQ SAQ MCQ	
HomUG-Path M 28.28	KS	KH	Pseudomonas	Describe the pathogenicity of pseudomonas aeruginosa	C1	NK	Lecture	SAQ MCQ	MCQ Viva voce	
HomUG-Path M 28.29	KS	K	H.influenzae	State the diseases caused by H.influenzae	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M 28.30	KS	K		Describe the laboratory diagnosis of H.influenzae	C1	NK	Lecture	Not to be assessed		
HomUG-Path M 28.31	KS	K	Bordetella pertussis	Explain the morphology of Bordetella pertussis	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M 28.32	KS	KH		Describe the clinical manifestation of B.pertussis	C2	MK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	Community medicine Practice of medicine
HomUG-Path M 28.33	KS	K		Describe the laboratory diagnosis of Bordetella Pertussis	C1	DK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	

HomUG-Path M 28.34	KS	K	Brucella	Explain the morphology of Brucellae	C1	DK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M 28.35	KS	KH		Describe the pathogenesis of Brucellosis.	C2	DK	Lecture	SAQ MCQ	MCQ Viva voce	
HomUG-Path M 28.36	KS	K		Describe the laboratory diagnosis of Brucellae	C1	NK	Lecture	NA	NA	
HomUG-Path M 28.37	KS	K	Helicobacter pylori	Describe the morphology of Helicobacter pylori	C1	NK	Lecture	NA	NA	
HomUG-Path M 28.38	KS	KH		Describe the pathogenicity of Helicobacter pylori infection	C2	DK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	
HomUG-Path M 28.39	KS	K		Describe the laboratory diagnosis of Helicobacter pylori infection	C1	NK	Lecture	NA	NA	
HomUG-Path M 28.40	KS	K	Rickettsiae	Discuss the human diseases caused by Rickettsiae group of organism	C1	DK	Lecture	MCQ Viva voce	MCQ Viva voce	
HomUG-Path M 28.41	KS	K	Chlamydia	Describe the diseases caused by chlamydia	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	

5.29. Acid fast bacterias-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-Path M. 29.1	KS	K	Mycobacterium tuberculosis	Explain the morphology of Mycobacterium tuberculosis	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M. 29.2	KS	KH		Explain the pathogenesis of Mycobacterium tuberculosis	C2	DK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	Community medicine, Practice of medicine
HomUG-Path M. 29.3	KS	KH		Describe the pathology of Primary tuberculosis	C2	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	
HomUG-Path M. 29.4	KS	KH		Explain pathology of Secondary tuberculosis	C2	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	
HomUG-Path M. 29.5	KS	K		Explain laboratory diagnosis of Mycobacterial tuberculosis	C1	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	
HomUG-Path M. 29.6	KS	K	Mycobacterium leprae	Explain the morphology of Mycobacterium leprae	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M. 29.7	KS	KH		Discuss the pathology of Leprosy	C2	MK	Lecture	Viva voce MCQ	SAQ Viva voce	

									MCQ LAQ	
HomUG-Path M. 29.8	KS	KH		Differentiate between Lepromatous and Tuberculoid leprosy	C2	MK	Lecture	SAQ MCQ Viva voce	SAQ MCQ LAQ Viva voce	Community medicine, Practice of medicine
HomUG-Path M. 29.9	KS	K		Describe the laboratory diagnosis of Mycobacterium Leprae	C1	DK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	
HomUG-Path M. 29.10	KS	KH		Discuss Lepromin test	C2	DK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	

5.30. Spirochaetes

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-Path M. 30.1	KS	K	Treponema pallidum	Explain the morphology of Treponema pallidum	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M. 30.2	KS	KH		Describe the pathogenesis of Syphilis	C2	MK	Lecture	SAQ MCQViva voce	LAQ SAQ MCQ Viva voce	
HomUG-Path M. 30.3	KS	KH		Describe the clinical manifestations of Syphilis	C2	MK	Lecture	SAQ MCQViva voce	LAQ SAQ MCQ Viva voce	Practice of medicine

HomUG-Path M. 30.4	KS	KH		Describe the laboratory diagnosis for syphilis	C2	DK	Lecture	SAQ MCQ Viva voce	SAQ MCQ LAQ Viva voce	
HomUG-Path M. 30.5	KS	K	Non venereal treponematoses	State the three distinct forms of non venerealtrepanomatoses	C1	NK	Lecture	Not to be assessed		
HomUG-Path M. 30.6	KS	K		Describe the features of Endemic syphilis	C1	NK	Lecture	NA		
HomUG-Path M. 30.7	KS	K		Describe the features of Yaws	C1	NK	Lecture			
HomUG-Path M. 30.8	KS	K		Describe the features of Pinta	C1	NK	Lecture			
HomUG-Path M. 30.9	KS	K	Borrelia	Mention the types of Borrelia	C1	NK	Lecture	NA	NA	
HomUG-Path M. 30.10	KS	K		State the diseases caused by Borrelia	C1	NK	Lecture	NA		
HomUG-Path M. 30.11	KS	K	Leptospira	Explain the morphology of Leptospira	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M. 30.12	KS	KH		Describe pathogenicity of Leptospira	C2	MK	Lecture	SAQ MCQViva voce	SAQ MCQ Viva voce	

HomUG-Path M. 30.13	KS	KH		Describe the clinical manifestations of Leptospirosis	C2	MK	Lecture	MCQViva voce	MCQViva voce	

5.31. Fungi

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-Path M. 31.1	KS	K	Fungi	State the characteristics of fungi	C1	MK	Lecture	SAQ MCQ	SAQ MCQ	
HomUG-Path M. 31.2	KS	K		Classify fungi based on morphological forms	C1	DK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	
HomUG-Path M. 31.3	KS	K		Classify fungi based on type of infection	C1	MK	Lecture	SAQ MCQ	SAQ MCQ	
HomUG-Path M. 31.4	KS	K		Discuss the laboratory diagnosis of fungal infections	C1	DK	Lecture	SAQ MCQ	SAQ MCQ	
HomUG-Path M. 31.5	KS	K		State examples for superficial mycoses	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M. 31.6	KS	K		State the types of Subcutaneous mycoses	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M. 31.7	KS	K		State four fungi causing Systemic mycoses	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M. 31.8	KS	K		State examples of fungi causing Opportunistic Mycoses	C1	DK	Lecture	Viva voce MCQ	Viva voce MCQ	

HomUG-Path M. 31.9	KS	KH		Describe the pathogenesis of Candidiasis	C2	MK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	
HomUG-Path M. 31.10	KS	KH	Homoeopathic concept	Explain the significance of susceptibility in fungal infections	C2	NK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	Organon of medicine

5.32. Parasitology: Introduction to Parasitology, Protozoans

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-Path M 32.1	KS	K	Introduction to parasitology	Define the terms "parasite","Host"	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M 32.2	KS	K		State the types of parasites with examples	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M 32.3	KS	K		State the types of Host with examples	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M 32.4	KS	K		List the three categories of host parasite relationship	C1	MK	Lecture	Viva voce MCQ	SAQ Viva voce MCQ	
HomUG-Path M 32.5	KS	K		Define the terms Symbiosis,Commensalism,Parasitism	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M 32.6	KS	K	Protozoa – Intestinal – Entamoeba histolytica	Describe the morphology of Entamoeba histolytica	C1	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	

HomUG-Path M 32.7	KS	KH		Describe the life cycle of Entamoeba histolytica	C2	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ	
HomUG-Path M 32.8	KS	KH		Describe the clinical manifestations of Entamoeba histolytica	C2	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ	
HomUG-Path M 32.9	KS	KH		Enumerate the differences between Amoebic dysentery and Bacillary dysentery	C2	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	
HomUG-Path M 32.10	KS	K		Describe the laboratory diagnosis of amoebiasis	C1	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ	
HomUG-Path M 32.11	KS	K	Protozoa – Intestinal - Giardia lamblia	Describe the morphology of Giardia lamblia	C1	DK	Lecture	Viva voce MCQ	SAQViva voce MCQ	
HomUG-Path M 32.12	KS	KH		Describe the life cycle of Giardia lamblia	C1	DK	Lecture	SAQ MCQ	SAQ MCQ	
HomUG-Path M 32.13	KS	KH		Describe the pathogenicity and clinical features of Giardia lamblia	C2	MK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	
HomUG-Path M 32.14	KS	K	Protozoa – Urogenital – Trichomonas vaginalis	Describe the morphology of Trichomonas vaginalis	C1	DK	Lecture	Viva voce MCQ	SAQViva voce MCQ	
HomUG-Path M 32.15	KS	KH		Describe the life cycle of Trichomonas vaginalis	C1	DK	Lecture	SAQ MCQ	SAQ MCQ	
HomUG-Path M 32.16	KS	KH		Describe the pathogenesis of Trichomonas vaginalis	C2	DK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	OBG

HomUG-Path M 32.17	KS	K	Blood and Tissues – plasmodium - species	Explain the life cycle of Plasmodium species	C1	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ	
HomUG-Path M 32.18	KS	KH		Describe the pathogenesis Plasmodium species	C2	MK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	
HomUG-Path M 32.19	KS	KH		Describe the clinical features of malaria.	C2	MK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	Community medicine
HomUG-Path M 32.20	KS	K		Explain the laboratory diagnosis of malaria	C1	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ Viva voce	
HomUG-Path M 32.21	KS	K	Blood and Tissues – Toxoplasma gondii	Describe the Mode of transmission of Toxoplasma gondii	C1	MK	Lecture	SAQ MCQ Viva voce	MCQ Viva voce	
HomUG-Path M 32.22	KS	KH		Describe the Pathogenesis of Toxoplasma gondii	C2	NK	Lecture			
HomUG-Path M 32.23	KS	KH		Describe the Clinical features of human toxoplasmosis	C2	DK	Lecture	SAQ MCQ Viva voce	MCQ Viva voce	
HomUG-Path M 32.24	KS	K		Describe the Lab diagnosis of human toxoplasmosis	C1	NK	Lecture	Not to be assessed		
HomUG-Path M 32.25	KS	K	Blood and Tissues –	Describe the Trypanosoma brucei	C1	NK	Lecture	SAQ MCQ	MCQ	

HomUG-Path M 32.26	KS	KH	Trypanosoma brucei	Describe the Life cycle of Trypanosoma brucei	C2	DK	Lecture	SAQ MCQ	MCQ	
HomUG-Path M 32.27	KS	KH		Describe the Pathogenecity of Trypanosoma brucei	C2	DK	Lecture	SAQ MCQ Viva voce	MCQ Viva voce	
HomUG-Path M 32.28	KS	KH		Describe the Clinical features of trypanosomiasis	C2	DK	Lecture	SAQ MCQ Viva voce	SAQMCQ Viva voce	
HomUG-Path M 32.29	KS	K		Describe the Lab diagnosis of trypanosomiasis	C1	NK	Lecture	Not to be assessed		
HomUG-Path M 32.30	KS	K	Blood and Tissues – Trypanosoma Cruzi	Describe the morphology of Trypanosoma Cruzi	C1	MK	Lecture	SAQ MCQ	SAQ MCQ	
HomUG-Path M 32.31	KS	K		Describe the Life cycle of Trypanosoma Cruzi	C1	MK	Lecture	SAQ MCQ	SAQ MCQ LAQ	
HomUG-Path M 32.32	KS	KH		Describe the Pathogenicity of Trypanosoma Cruzi	C2	MK	Lecture	SAQ MCQ	SAQ MCQ LAQ	
HomUG-Path M 32.33	KS	KH		Describe the Clinical features of Chagas disease	C2	MK	Lecture	SAQ MCQ	SAQ MCQ LAQ Viva voce	Community medicine
HomUG-Path M 32.34	KS	K		Describe the Lab diagnosis of Chagas disease	C1	CK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	

HomUG-Path M 32.35	KS	K	Blood and Tissues – Leishmania species	Describe the morphology of Leishmania donovani	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M 32.36	KS	KH		Describe the Life cycle of Leishmania donovani	C2	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ Viva voce	
HomUG-Path M 32.37	KS	KH		Describe the pathogenicity of Leishmania donovani	C2	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ Viva voce	
HomUG-Path M 32.38	KS	KH		Describe the clinical features of Leishmaniasis	C2	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ Viva voce	
HomUG-Path M 32.39	KS	K		Describe the Laboratory diagnosis of Leishmaniasis.	C1	DK	Lecture	SAQ MCQ	LAQ SAQ MCQ Viva voce	

5.33. Helminths-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-Path M 33.1	KS	K	Helminths – Cestodes – Echinococcus granulosus	Describe the morphology of Echinococcus granulosis	C1	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ Viva	
HomUG-Path M 33.2	KS	KH		Describe the life cycle of Echinococcus granulosis	C2	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ Viva	
HomUG-Path M 33.3	KS	KH		Describe the pathogenesis of Echinococcus granulosis	C2	MK	Lecture	MCQ	LAQ SAQ MCQ Viva	
HomUG-Path M 33.4	KS	KH		Describe the clinical features of hydatid disease	C2	MK	Lecture	MCQ	LAQ SAQ MCQ Viva	
HomUG-Path M 33.5	KS	K		Describe Laboratory diagnosis of hydatid disease	C1	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ Viva	
HomUG-Path M 33.6	KS	K	Helminths – Cestodes – Taenia saginata and Taenia solium	Describe the morphological difference between T.saginata and T.solium	C1	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva	
HomUG-Path M 33.7	KS	KH		Describe the life cycle of Taenia saginata	C1	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ Viva	
HomUG-Path M 33.8	KS	KH		Describe the life cycle of Taenia solium	C2	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ Viva	

HomUG-Path M 33.9	KS	KH		Describe the pathogenicity and clinical features of taeniasis	C2	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	Community medicine
HomUG-Path M 33.10	KS	K		Describe the lab diagnosis of taeniasis.	C1	DK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva	
HomUG-Path M 33.11	KS	K	Helminths – Trematodes – Paragonimuswestermani	Describe the morphology of Paragonimuswestermani	C1	DK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M 33.12	KS	K		Describe the life cycle of Paragonimuswestermani	C1	DK	Lecture	SAQ MCQ	MCQ	
HomUG-Path M 33.13	KS	KH		Describe the pathogenicity and clinical features of Paragonimuswestermani	C2	DK	Lecture	SAQ MCQ Viva voce	MCQ Viva voce	
HomUG-Path M 33.14	KS	K		Describe the lab diagnosis of paragonimiasis	C1	NK	Lecture	Not to be assessed		
HomUG-Path M 33.15	KS	K	Helminths – Trematodes – Schistosoma haematobium	Describe the morphology of Schistosoma haematobium	C1	MK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	
HomUG-Path M 33.16	KS	KH		Describe the life cycle of Schistosoma haematobium	C2	MK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	
HomUG-Path M 33.17	KS	KH		Describe the pathogenicity and clinical features of Bilharziasis	C2	MK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	
HomUG-Path M 33.18	KS	K		Describe the lab diagnosis of Bilharziasis	C1	DK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	

HomUG-Path M 33.19	KS	K	Helminths – Trematodes – F.hepatica	Describe the morphology of Fasciola hepatica	C1	MK	Lecture	SAQ MCQ Viva voce	MCQ Viva voce	
HomUG-Path M 33.20	KS	K		Describe the life cycle of Fasciola hepatica	C1	NK	Lecture	NA	NA	
HomUG-Path M 33.21	KS	KH		Describe the pathogenicity of Fascioliasis	C2	DK	Lecture	MCQ Viva voce	MCQ Viva voce	
HomUG-Path M 33.22	KS	K	Helminths – Nematodes – Ankylostoma duodenale	Describe the morphology of Ancylostoma duodenale	C1	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	
HomUG-Path M 33.23	KS	KH		Describe the life cycle of Ancylostoma duodenale	C2	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ Viva voce	
HomUG-Path M 33.24	KS	KH		Describe the pathogenicity and clinical features of hook worm infection.	C2	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	Community medicine
HomUG-Path M 33.25	KS	K		Describe the laboratory diagnosis of hook worm infection.	C1	DK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	
HomUG-Path M 33.26	KS	K	Helminth – Nematodes – Ascaris lumbricoides	Describe the morphology of Ascaris lumbricoides	C1	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	
HomUG-Path M 33.27	KS	KH		Describe the life cycle of Ascaris lumbricoides	C2	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	

HomUG-Path M 33.28	KS	KH		Describe the pathogenicity and clinical features of Ascariasis	C2	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ Viva voce	
HomUG-Path M 33.29	KS	K		Describe laboratory diagnosis of Ascariasis	C1	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ Viva voce	
HomUG-Path M 33.30	KS	K	Helminths – Nematodes – Enterobius vermicularis	Describe the morphology of Enterobius vermicularis	C1	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	
HomUG-Path M 33.31	KS	KH		Describe the life cycle of Enterobius vermicularis	C2	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ Viva voce	
HomUG-Path M 33.32	KS	K		Describe the pathogenicity and clinical features of Enterobiasis	C2	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ Viva voce	
HomUG-Path M 33.33	KS	K		Describe the laboratory diagnosis of Enterobiasis	C1	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ Viva voce	
HomUG-Path M 33.34	KS	K	Helminths – Nematodes – Strongyloidesstercoralis	Describe the morphology of Strongyloidesstercoralis	C1	NK	Lecture	NA	NA	
HomUG-Path M 33.35	KS	KH		Describe the life cycle of Strongyloidesstercoralis	C1	NK	Lecture	NA	NA	
HomUG-Path M 33.36	KS	KH		List the diseases caused by S.stercoralis	C2	NK	Lecture	NA	NA	

HomUG-Path M 33.37	KS	K	Helminths – Nematodes –Trichuristrichiura	Describe the morphology of Trichuris trichiura	C1	DK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M 33.38	KS	KH		Describe life cycle of Trichuris trichiura	C2	DK	Lecture	SAQ MCQ	MCQ	
HomUG-Path M 33.39	KS	KH		Describe the pathogenicity and clinical manifestation of Trichuritrichiura	C2	DK	Lecture	SAQ MCQ	MCQ	
HomUG-Path M 33.40	KS	K		Describe the lab diagnosis of trichuriasis	C1	NK	Lecture	Not to be assessed		
HomUG-Path M 33.41	KS	K	Helminths – Filarial Nematodes – Wuchereriabancrofti	Describe the morphology of Wuchereriabancrofti	C1	MK	Lecture	SAQ MCQViva voce	LAQ SAQ MCQ Viva voce	
HomUG-Path M 33.42	KS	KH		Describe the life cycle of Wuchereriabancrofti	C2	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ Viva voce	
HomUG-Path M 33.43	KS	KH		Describe pathogenesis of Wucheririabancrofti	C2	MK	Lecture	SAQ MCQViva voce	LAQ SAQ MCQViva voce	
HomUG-Path M 33.44	KS	K		Describe the lab diagnosis of Wuchereriasis	C1	MK	Lecture	SAQ MCQViva voce	LAQ SAQ MCQViva voce	
HomUG-Path M 33.45	KS	KH	Helminths – Filarial Nematodes – Brugiamalayi	Describe pathogenesis of Brugiamalayi	C2	NK	Lecture	Viva voce MCQ	Viva voce MCQ	

HomUG-Path M 33.46	KS	KH	Loa Loa	Describe pathogenesis of Loa Loa	C2	NK	Lecture	NA	NA	
HomUG-Path M 33.47	KS	KH	Onchocerca volvulus	Describe pathogenesis of Onchocerca volvulus	C2	NK	Lecture	NA	NA	
HomUG-Path M 33.48	KS	KH	Dracunculus medinensis	Describe pathogenesis of Dracunculus medinensis	C2	NK	Lecture	NA	NA	
HomUG-Path M 33.49	KS	KH	Homoeopathic concepts	Explain the Homoeopathic concepts in parasitic infections	C2	DK	Lecture	SAQ MCQ	SAQ MCQ	Organon of medicine
HomUG-Path M 33.50	KS	KH		Explain the application of Homoeopathic concepts in management of parasitic infections	C2	DK	Lecture	SAQ MCQ	SAQ MCQ	Organon of medicine

5.34. Virology : Introduction-

Sl.No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-Path M 34.1	KS	K	Virology – Introduction - Structure	Describe the morphology of virus	C1	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ	
HomUG-Path M 34.2	KS	K	Virology – Introduction – Viral replication	Discuss the steps of viral replication	C1	DK	Lecture	Viva voce MCQ	SAQ Viva voce MCQ	
HomUG-Path M 34.3	KS	K	Virology – Introduction – Viral inclusion bodies	Describe the viral inclusion bodies with examples	C1	MK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	
HomUG-Path M 34.4	KS	K	Pathogenesis of viral infections	Describe the pathogenesis of viral infections	C1	MK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	
HomUG-Path M 34.5	KS	K	Virology – Introduction – Lab diagnosis of Viral infections	Discuss about cultivation of viruses	C1	NK	Lecture	Not to be assessed	Not to be assessed	

HomUG-Path M 34.6	KS	K	Virology – Introduction - Classification	Describe the classification of viruses based on type of nucleic acid	C1	MK	Lecture	SAQ MCQ Viva voce	LAQ SAQ MCQ Viva voce	
HomUG-Path M 34.7	KS	K	Virus host interactions and its Significance in Homoeopathy	State the various virus host interactions	C1	MK	Lecture	SAQ MCQ	MCQ Viva	
HomUG-Path M 34.8	KS	K	Bacteriophages	Explain the morphology of bacteriophage	C1	MK	Lecture	SAQ MCQ Viva voce	SAQ MCQ Viva voce	
HomUG-Path M 34.9	KS	K		Explain the significance of bacteriophages in medical microbiology	C1	MK	Lecture	SAQ MCQ	SAQ MCQ	

5.35. DNA viruses-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-Path M 35.1	KS	K	DNA virus – Pox virus-	State the pox virus which infect humans	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M 35.2	KS	K		Describe the clinical features of Molluscum contagiosum	C1	MK	Lecture	SAQ MCQ	SAQ MCQ	
HomUG-Path M 35.3	KS	K	DNA virus – Papova virus-Human papillomavirus	Discuss the diseases caused by Human Papilloma virus	C1	MK	Lecture	SAQ MCQ	SAQ MCQ	

HomUG-Path M 35.4	KS	KH	DNA virus –Herpes virus- Herpes simplex virus	Explain the pathogenesis of Herpes simplex virus	C2	MK	Lecture	SAQ MCQ	MCQ	
HomUG-Path M 35.5	KS	K		Describe the clinical features of Herpes simplex virus infection	C1	MK	Lecture	SAQ MCQ	SAQ MCQ	
HomUG-Path M 35.6	KS	K		Describe the laboratory diagnosis of Herpes virus infection	C1	MK	Lecture	SAQ MCQ	MCQ	
HomUG-Path M 35.7	KS	K	DNA virus –Herpes virus- Varicella-zoster	Describe the pathogenesis of Varicella zoster	C1	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ	
HomUG-Path M 35.8	KS	KH		Describe the clinical manifestation and complications of Chicken pox	C2	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ	
HomUG-Path M 35.9	KS	KH		Describe the pathogenesis of Herpes zosteror shingles	C2	MK	Lecture	SAQ MCQ	SAQ MCQ	
HomUG-Path M 35.10	KS	K		Explain the laboratory diagnosis of Varicella-zoster infection	C1	MK	Lecture	SAQ MCQ	SAQ MCQ	
HomUG-Path M 35.11	KS	K	DNA virus –Herpes virus- Cytomegaloviruses	Explain the morphology of Cytomegalovirus	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M 35.12	KS	K		Describe the clinical features of Cytomegalovirus disease	C1	DK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	
HomUG-Path M 35.13	KS	K		Explain the laboratory diagnosis of Cytomegalovirus disease	C1	DK	Lecture	SAQ MCQ	MCQ Viva voce	
HomUG-Path M 35.14	KS	K	DNA virus –Herpes virus-Human herpes virus	List the two variants of Human Herpes Virus	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	

HomUG-Path M 35.15	KS	K		Explain the clinical features of Human Herpes virus	C1	MK	Lecture	SAQ MCQ	MCQ Viva voce	
HomUG-Path M 35.16	KS	K	DNA virus –Herpes virus-Epstein –Barr virus	List the clinical conditions caused by Epstein-Barr virus	C1	MK	Lecture	Viva voce MCQ	SAQ MCQ Viva voce	
HomUG-Path M 35.17	KS	K		Describe the pathogenesis of Epstein –Barr virus infection	C1	MK	Lecture	SAQ MCQ	MCQ Viva voce	
HomUG-Path M 35.18	KS	K		Describe the laboratory diagnosis of Epstein-Barr virus infection	C1	MK	Lecture	SAQ MCQ	MCQ Viva voce	
HomUG-Path M 35.19	KS	KH	DNA virus – Adenoviruses	Describe the pathogenicity and clinical manifestations of Adenoviruses	C2	MK	Lecture	SAQ MCQ	MCQ Viva voce	
HomUG-Path M 35.20	KS	K		Explain the laboratory diagnosis of Adenovirus disease	C1	DK	Lecture	SAQ MCQ	MCQ Viva voce	
HomUG-Path M 35.21	KS	K	DNA virus –Hepadna virus – Hepatitis B virus	Explain the morphology of Hepatitis B virus	C1	MK	Lecture	SAQ MCQ	SAQ MCQ LAQ	
HomUG-Path M 35.22	KS	K		Describe the mode of transmission of Hepatitis B virus infection	C1	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ	
HomUG-Path M 35.23	KS	K		Describe the pathogenesis of hepatitis B virus infection	C1	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ	

HomUG-Path M 35.24	KS	K		Describe the clinical features of hepatitis B virus infection	C1	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ	Community medicine, Practice of medicine
HomUG-Path M 35.25	KS	K		Explain the laboratory diagnosis of Hepatitis B virus infection	C1	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ	

5.36. RNA viruses-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-Path M 36.1	KS	K	RNA virus – Orthomyxovirus-Influenza virus	Describe the morphology of Influenza virus	C1	MK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	
HomUG-Path M 36.2	KS	KH		Describe the pathogenesis of Influenza virus	C2	MK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	
HomUG-Path M 36.3	KS	K		Describe the clinical features of Influenza virus infection	C1	MK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	Community medicine, Practice of medicine
HomUG-Path M 36.4	KS	K		Explain the laboratory diagnosis of Influenza virus infection	C1	MK	Lecture	SAQ MCQ	MCQ Viva voce	
HomUG-Path M 36.5	KS	K	RNA virus – Paramyxovirus-Mumps	Explain the morphology of Mumps virus	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M 36.6	KS	K		Describe the clinical features of mumps	C1	MK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	Community medicine, Practice of medicine

HomUG-Path M 36.7	KS	K		Explain the complications of Mumps	C1	MK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	
HomUG-Path M 36.8	KS	K		Describe the laboratory diagnosis of Mumps virus infection	C1	NK	Lecture	Not to be assessed		
HomUG-Path M 36.9	KS	K	RNA virus – Paramyxovirus-Measles	Explain the morphology of Measles virus	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M 36.10	KS	KH		Explain the pathogenesis of Measles	C2	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ	
HomUG-Path M 36.11	KS	K		Describe the clinical features and complications of Measles	C1	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ	Community medicine, Practice of medicine
HomUG-Path M 36.12	KS	K		Describe the laboratory diagnosis of Measles virus	C1	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ	
HomUG-Path M 36.13	KS	K	RNA virus – Paramyxovirus-Rubella virus	Explain the morphology of Rubella virus	`C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M 36.14	KS	K		Describe the clinical features of Rubella virus infection	C1	MK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	
HomUG-Path M 36.15				Describe the features of congenital Rubella syndrome	C1	MK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	
HomUG-Path M 36.16	KS	K		Explain the laboratory diagnosis of Rubella	C1	MK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	
HomUG-Path M 36.17	KS	K	RNA virus – Paramyxovirus-RSV	Describe the morphology of Respiratory syncytial virus	C1	NK	Lecture	Not to be assessed		

HomUG-Path M 36.18	KS	KH		Describe the clinical features of Respiratory syncytial virus infection	C2	DK	Lecture	SAQ MCQ	MCQ Viva voce	
HomUG-Path M 36.19	KS	K	RNA virua – Corona virus	Explain the morphology of Coronavirus	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M 36.20	KS	K		State the types of corona virus infecting humans	C1	MK	Lecture	Viva voce MCQ	LAQ SAQ Viva voce MCQ	
HomUG-Path M 36.21	KS	K		Describe the clinical features of Corona virus disease	C1	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ Viva voce	
HomUG-Path M 36.22	KS	K		Explain the laboratory diagnosis of Corona virus disease	C1	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ	
HomUG-Path M 36.23	KS	K	RNA virus – Rhabdovirus – Rabies virus	Explain the morphology of Rabies virus	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M 36.24	KS	K		Describe the mode of transmission of Rabies	C1	MK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	
HomUG-Path M. 36.25	KS	K		Describe the pathogenicity of Rabies	C1	MK	Lecture	SAQ MCQ	SAQ MCQ MCQ Viva voce	
HomUG-Path M. 36.26	KS	K		Describe the clinical stages of Rabies	C1	MK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	Community medicine
HomUG-Path M. 36.27	KS	K		Explain the laboratory diagnosis of human rabies	C1	MK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	

HomUG-Path M 36.28	KS	K	RNA virus –Picorna virus-Polio virus	Explain the morphology of Polio virus	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M. 36.29	KS	K		Describe the pathogenesis of Polio virus infection	C1	MK	Lecture	SAQ MCQ	SAQ MCQ	
HomUG-Path M. 36.30	KS	K		Describe the clinical features of polio	C1	MK	Lecture	SAQ MCQ	SAQ MCQ	Community medicine
HomUG-Path M 36.31	KS	K		Describe the laboratory diagnosis polio	C1	MK	Lecture	SAQ MCQ	SAQ MCQ	
HomUG-Path M. 36.32	KS	K	RNA virus –Arboviruses –	Describe the general features of Arboviruses	C1	NK	Lecture	NA	NA	
HomUG-Path M. 36.33	KS	K		Describe the types of Dengue	C1	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ	
HomUG-Path M. 36.34	KS	K		Describe the pathogenesis and clinical classification of Dengue	C1	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ	Community medicine, Practice of medicine
HomUG-Path M 36.35	KS	K		Explain the laboratory diagnosis of Dengue	C1	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ	
HomUG-Path M. 36.36	KS	K	RNA virus –Arbo virus – Chikungunya virus	Describe the clinical features of Chikungunya	C1	MK	Lecture	SAQ MCQ	MCQ Viva voce	
HomUG-Path M. 36.37	KS	K		Explain the laboratory diagnosis of Chikungunya	C1	MK	Lecture	SAQ MCQ	MCQ Viva voce	
HomUG-Path M. 36.38	KS	K	RNA virus –Arbo virus – Yellow fever	Describe the clinical features of Yellow fever	C1	NK	Lecture	Not to be assessed		

HomUG-Path M .36.39	KS	K	RNA viruses – Arbo virus – Japanese encephalitis -	Describe the clinical features of Japanese encephalitis	C1	DK	Lecture	SAQ MCQ	MCQ Viva voce	
HomUG-Path M. 36.40	KS	K	RNA viruses – Retro virus – HIV	Explain the morphology of Human immunodeficiency virus	C1	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ	
HomUG-Path M. 36.41	KS	K		State the major antigens of HIV	C1	MK	Lecture	Viva voce MCQ	LAQ SAQ Viva voce MCQ	
HomUG-Path M. 36.42	KS	K		Describe the pathogenesis of HIV infection	C1	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ	
HomUG-Path M. 36.43	KS	K		Describe the clinical features of HIV infection	C1	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ	Practice of medicine
HomUG-Path M. 36.44	KS	KH		Describe confirmatory tests for diagnosis of HIV and AIDS	C1	MK	Lecture	SAQ MCQ	LAQ SAQ MCQ	Practice of medicine
HomUG-Path M. 36.45	KS	K	RNA viruses – Hepatitis virus – HAV	Describe the morphology of Hepatitis A virus	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M. 36.46	KS	K		Describe the pathogenesis of type A Hepatitis	C1	MK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	
HomUG-Path M. 36.47	KS	K		Describe the clinical features of type A hepatitis	C1	MK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	

HomUG-Path M. 36.48	KS	K		Describe the laboratory diagnosis of type A hepatitis	C1	MK	Lecture	SAQ MCQ	SAQ MCQ Viva voce	
HomUG-Path M. 36.49	KS	K	RNA viruses – Hepatitis virus –C,D,E	Discuss the comparative features of the viral hepatitis type C,D and E viruses	C1	DK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M. 36.50	KS	K	Emerging/re-emerging infections	Describe the factors contributing to emerging and re-emerging infectious diseases	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	
HomUG-Path M. 36.51	KS	K		State the emerging infections in India	C1	MK	Lecture	Viva voce MCQ	Viva voce MCQ	

5.37. Homoeopathic correlation with microbiology-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-Path M 37.1	KS	K	Homoeopathic correlation	Discuss the correlation of study of microbiology and parasitologywith homoeopathic philosophy	C1	DK	Lecture	SAQ MCQ	SAQ MCQ	Organon of medicine
HomUG-Path M 37.2	KS	K		Discuss Homoeopathic prophylaxis	C1	DK	Lecture	SAQ MCQ	SAQ MCQ	Organon of medicine
HomUG-Path M 37.3	KS	K		Discuss genus epidemics	C1	DK	Lecture	SAQ MCQ	SAQ MCQ	Organon of medicine
HomUG-Path M 37.4	KS	K		Discuss the correlation of study of microbiology and parasitology with	C1	DK	Lecture	SAQ MCQ	SAQ MCQ	Materia medica

				homoeopathic materiamedica						
HomUG-Path M 37.5	KS	K		Discuss the correlation of study of microbiology and parasitologywith Repertory	C1	DK	Lecture	SAQ MCQ	SAQ MCQ	
HomUG-Path M 37.6	KS	K		Discuss the significance of study of microbiology and parasitologyfor homoeopathic physician	C1	DK	Lecture	SAQ MCQ	SAQ MCQ	Organon of medicine

5.38. Practicals and demonstration-

Sl. No.	Content	Competency/ Outcome	Entry behaviour	Specific Learning Objectives	Learner activity	Assessment
HomUG-Path M38.1	Blood grouping-A B O Grouping – Slide technique	Learner should be able to perform the blood grouping test of the blood sample	ABO blood group system RH blood group system	1.Perform estimation of blood group and Rh system using slide method 2.Interpret the results of experiment to determine the blood group and Rh grouping of blood sample.	1.Perform the procedure as per the methodology 2.Make entries into the pathology practical record	Viva voce OSPE Checklist
HomUG-Path M38.2	Estimation of Haemoglobin	Learner should be able to perform the estimation of Haemoglobin with accuracy and interpret the results	Normal Haemoglobin content in children, adult males, Adult females	1. Perform estimation of Haemoglobin using Sahli's haemoglobinometer 2. Interpret of Haemoglobin concentration of the blood sample	1.Perform the procedure as per the methodology 2.Make entries into the pathology practical record	Viva voce OSPE Checklist
HomUG-Path M38.3	Red Blood Cell Count	Learner should be able to perform the RBC count with accuracy and interpret the results	Normal values of RBC count in children, Adult males, Adult females	1. Perform the counting of RBC using haemocytometer 2. Calculate total RBC count of blood sample.	1.Perform the procedure as per the methodology 2.Make entries into the pathology practical record practical record	Viva voce OSPE Checklist

HomU G-Path M38.4	Total White blood cell count	Learner should be able to do the WBC count with accuracy and interpret the results	Normal values of WBC count in children,Adultmales,Adult females	1. Perform the counting of WBC using haemocytometer 2. Calculate total WBC count of blood sample.	1. Perform the procedure as per the methodology 2. Make entries into the pathology practical record	Viva voce OSPE Checklist
HomU G-Path M38.5	Differential count and morphology	Learner should be able to perform the Differential count with accuracy and interpret the results	Normal values in percentage of each type of white blood cell. Morphology of various WBC	1. Examine the blood smear for counting of differential leucocyte count. 2. Calculate the differential leukocyte count of blood sample.	1. Perform the procedure as per the methodology 2. Make entries into the pathology practical record	Viva voce OSPE Checklist
HomU G-Path M38.6	Erythrocyte sedimentation rate [Demonstration]	Learner should be able to explain the significance of ESR and interpret the results	Stages of sedimentation of RBCs Normal values of ESR	1. Observe the experiment using Westergren method. 2. Interpret the value of ESR of blood sample	1. Observe the procedure 2. Make entries into the pathology practical record	NA
HomU G-Path M38.7	Erythrocyte sedimentation rate [Demonstration]	Learner should be able to describe the significance of ESR and interpret the results	Stages of sedimentation of RBCs Normal values of ESR	1. Observe the experiment using Wintrobe method. 2. Interpret the value of ESR of blood sample	1. Observe the procedure 2. Make entries into the pathology practical record	NA
HomU G-Path M38.8	Bleeding time – Duke's method	Learner should be able to perform with accuracy and reliability the bleeding time of the given sample of blood	Normal value of Bleeding time	1. Perform the experiment using Duke's method 2. Calculate the bleeding time of blood sample.	1. Perform the procedure as per the methodology 2. Make entries into the pathology practical record practical record	Viva voce OSPE Checklist

HomU G-Path M38.9	Clotting time-fingertip method	Learner should be able to perform with accuracy and reliability the clotting time of the given sample of blood	Factors involved in blood clotting Sequence in clotting mechanism Normal value of clotting time	1. Perform the experiment using fingertip method 2. Calculate the clotting time of blood sample.	1. Perform the procedure as per the methodology 2. Make entries into the pathology practical record	Viva voce OSPE Checklist
HomU G-Path M38.10	Staining of thick and thin films [Demonstration]	Learner should be able to explain the procedure of staining of thin film,	Principle and technique of preparation of Staining of thick films	Observe the procedure of staining of thin blood film	1. Observe the procedure as per the methodology 2. Make entries into the pathology practical record	NA
HomU G-Path M38.11	Staining of thick and thick films [Demonstration]	Learner should be able to explain the procedure of staining of thick film,	Principle and technique of preparation of Staining of thin films	Observe the procedure of staining of thick blood film	1. Observe the procedure as per the methodology 2. Make entries into the pathology practical record	Viva voce OSPE Checklist
HomU G-Path M38.12	Platelet count [Demonstration]	Learner should be able to describe the significance of platelet count and interpret the results	Normal value of Platelet count Principle and technique of counting of Platelet	1. Observe the experiment of counting of Platelet of blood sample 2. Calculate platelet count of blood sample	1. Observe the procedure as per the methodology 2. Make entries into the pathology practical record	NA
HomU G-Path M38.13	Urine examination: Physical examination	Learner should be able to perform physical examination of urine with logical interpretation of results	Principle and technique of Physical examination of urine Clinical significance of physical examination of urine	1. Perform the physical examination of urine sample 2. Interpret the results	1. Perform the procedure as per the methodology 2. Make entries into the pathology practical record	Viva voce OSPE Checklist

HomU G-Path M38.14	Urine examination: Chemical examination	Learner should be able to perform chemical examination of given sample of urine with logical interpretation of results	Principle and technique of Chemical examination of urine Clinical significance of chemical examination of urine	1. Perform the chemical examination of urine for presence of glucose, proteins, ketones, bile derivatives and blood 2. Interpret the results	1. Perform the procedure as per the methodology 2. Make entries into the pathology practical record	Viva voce OSPE Checklist
HomU G-Path M38.15	Urine examination: Microscopic examination	Learner should be able to do microscopic examination of urine and interpret the results	Principle and technique of microscopical examination of urine Clinical significance of microscopical examination of urine	1. Perform the microscopical examination of urine sample 2. Interpret the results	1. Perform the procedure as per the methodology 2. Make entries into the pathology practical record	Viva voce OSPE Checklist
HomU G-Path M38.16	Examination of Faeces:Physical [Demonstartion]	Learner should be able to describe the procedure of physical examination of feaces	Principle and technique of physical examination of faeces Clinical significance of physical examination of faeces	1. Observe the procedure of physical examination of faeces 2. Interpret the results of Physical Examination of Faeces	1. Observe the procedure 2. Make entries into pathology practical record	NA
HomU G-Path M38.17	Examination of Faeces:Microscopic for ova and protozoa [Demonstration]	Learner should be able to describe the procedure of microscopical examination of faeces and interpret the results	Principle and technique of microscopic examination of faeces Clinical significance of microscopic examination of faeces	1. Observe the procedure of microscopical examination of faeces for ova and protozoa 2. Interpret the results of microscopical Examination of Faeces	1. Observe the procedure 2. Make entries into pathology practical record	NA

HomU G-Path M38.18	Examination of Faeces:Chemical (occult blood) [Demonstration]	Learner should be able to describe the procedure of chemical examination of faeces and interpret the results	Principle and technique of chemical examination of faeces Clinical significance of chemical examination of faeces	1. Observe the procedure of chemical examination of faeces 2. Interpret the results of chemical Examination of Faeces	1. Observe the procedure 2. Make entries into pathology practical record	NA
HomU G-Path M38.19	Semen analysis [Demonstration]	Learner should be able to list the physical characteristics and microscopic features of semen	Principle and technique of Semen analysis Clinical significance of semen analysis	1. Observe the procedure of examination of semen 2. Interpret the results of the test	1. Observe the procedure 2. Make entries into pathology practical record	Not to be assessed
HomU G-Path M38.20	**Microbiology:** Use of microscope	Learner should be familiar with the different parts of microscope and their uses	Parts of compound microscope	1. Identify the different parts of microscope 2. Learn the function of each part	1. Will use and familiarise with the parts of microscope 2. Make entries into the pathology practical record	Viva voce OSPE Checklist
HomU G-Path M38. 21	**Microbiology:** Demonstration of Methods of sterilisation: Using Hot air oven, Autoclave,	Learner should be able to explain the methods of sterilization using Hot air oven, Autoclave,	Agents of sterilization Principles of dry heat and moist heat in process of sterilization	1. Observe the method of sterilization using hot air oven 2. Observe the method of sterilization using autoclave 3. Observe the method of sterilization using flaming	1. Observe the procedure 2. Make entries into the pathology practical record	Viva voce OSPE Checklist
HomU G-Path M38. 22	**Microbiology:** Motility preparation [Demonstration]	Learner should be able to explain the procedure of motility preparation	Principle and technique of Motility preparation	1. Observe the procedure of Motility preparation 2. Interpret the results	1. Observe the procedure 2. Make entries into and pathology practical record	Not to be assessed

HomU G-Path M38. 23	**Microbiology**: Gram staining	Learner should be able to stain the given smear by gram stain and examine under microscope and interpret the results	Principle and technique of Gram staining	1. Perform gram staining on the given sample 2. Observe under the microscope 3. Interpret the results.	1. Perform the procedure 2. Make entries into pathology practical record	Viva voce OSPE Checklist
HomU G-Path M38. 24	**Microbiology**: Acid fast staining [Demonstration]	Learner should be able to list the steps in Acid fast staining	Principle and technique of Acid fast staining	1. To observe the procedure of Acid fast staining 2. To observe the slide for presence of acid fast bacteria .	1. Observe the procedure 2. Make entries into the pathology practical record	Not to be assessed
HomU G-Path M38. 25	Common culture medias: Preparation of common culture media [Demonstration]	Learner should be able to list the ingredients of culture medias	Principle and technique of culture media preparation	Observe the steps of preparation of common culture media	1. Observe the procedure 2. Make entries into the pathology practical record	Not to be assessed
Spotters						
HomU G-Path M38. 26	**Commonly used instruments / Equipments in pathology laboratory:** 1.Haemoglobinometer 2. RBC pipette 3. WBC pipette 4.Neubauer's chamber 5.ESR tubes:Wintrobe Westergren 6.Urinometer	Awareness of application and method of use of instruments,equipments in laboratory	Enumerate the commonly used instruments equipments in laboratory and its use	• Identify the instrument / Equipment • Enumerate the purpose/ use/utility of the instrument / Equipment	1. Identify,describe the parts and list the uses of the instrument / Equipment 2. Make entries into the pathology practical record	OSPE Checklist

	7.Hot air oven 8.Autoclave 9.Incubator 10.Petri dish 11.Centrifuge 12.Waterbath 13.Inoculating loop etc.					
HomUG-PathM38.27	**Interpretation of laboratory reports and its clinico pathological correlation** Complete Haemogram Urine reports Liver function tests Renal function tests Thyroid function tests Lipid profile Diabetic profile Serum cardiac biomarkers Enzyme markers for necrosis Serological tests, etc.	Learner should be able to interpret the values in the given laboratory reports	Significance of interpretation of laboratory tests for diagnosis	• Identify whether laboratory report is normal or abnormal in relation to physiological values • Identify the probable reason for abnormal values in laboratory report and its clinical significance	1. Study the laboratory reports 2. Interpret the values in the laboratory reports 3. Make entries into the pathology practical record	Viva voce OSPE Checklist
HomUG-PathM38.28	Exposure to latest equipment:Auto-analyzer, Cell counter, ELISA reader etc. [Demonstration]	Learner should be able to explain the utility of latest equipment	De novo topic	• Identify the equipment • Observe the functioning of the Equipment	1. Observe the procedure 2. Make entries into the pathology practical record	Not to be assessed

HomU G-Path M38. 29	**Histopathology**: (a)Demonstration of common slides Any 15	Learner should be able to do identify the slide and mention its distinguishing features	Histopathological changes of particular condition.	• Observe the histopathology slide • Identify the distinguishing features of the given histopathology slide	1. Identify the histopathology slide based on identification points. 2. Make entries into the pathology practical record	OSPE Checklist
HomU G-Path M38. 30	(b)Demonstration of gross pathological specimens / models Any 15	Learner should be able to identify the gross specimen	Gross pathological changes in specimen as per General pathology and Systemic pathology topics	• Identify the specimen • List three characteristic identification features of the specimen	1. Identify the gross pathological specimen based on identification points. 2. Make entries into the pathology practical record	OSPE Checklist

6. Teaching learning methods

Lectures (Theory)	Non-lectures (Practical/Demonstrative)
Lectures	Clinical demonstration
Group discussion	Practicals /Experiential learning
Integrated lectures	Problem based discussion
	Case based learning
	Tutorials/Seminars/Symposium
	Assignments
	Library reference
	Self-learning

Details of assessment

6.1 Overall Scheme of Assessment (Summative)

Sr. No	Professional Course	Term I (1-6 Months)		Term II (7-12 Months)		
1	Second Professional BHMS	PA I (end of 3 months)	TT I (end of 6 months)	PA II (end of 9 months)	FUE (end of 12 months)	
		20 Marks Viva	100 Marks Practical/ Viva i) Viva voce -50 marks ii) Practical – 50 marks	20 Marks Viva	200 marks theory	200 marks Practical+ Viva+ IA

PA: Periodical Assessment; TT: Term Test; FUE: Final University Examinations; IA: Internal Assessment

7.1 Number of papers and Mark Distribution for Final University Examination (FUE)

Sr. No.	Course Code	Papers	Theory	Practical/ Clinical	Viva Voce	Internal Assessment*	Grand Total
1	HomUG-Path M	02	200 marks*	100 marks	80 marks	20 marks (Marks of PA I + TT I + PA II)	400 marks

***Method of Calculation of Internal Assessment Marks for Final University Examination:**

Marks of IA- **(**Marks of PA-1 + Marks of TT + Marks of PA-2) / 140 X 20

7.2 Paper Layout

Summative assessment (FUE):

Theory- 200 marks

Paper I (100 Mark) General Pathology and Systemic Pathology		
1.	LAQ	50
2.	SAQ	40
3.	MCQ	10
Paper II (100) Microbiology and Parasitology		
1.	LAQ	50
2.	SAQ	40
3.	MCQ	10

7.3 Theme-wise distribution of questions for theory exam paper I

PAPER – 1						
Theme	**Topics**	**Term**	**Marks**	**LAQ's**	**SAQ's**	**MCQ's**
A	Cell Injury and cellular adaptation, Inflammation and repair and Homoeopathic concept	I	21	Yes	Yes	Yes
B	Neoplasia ,Immunopathology and Homoeopathic concept	I	21	Yes	Yes	Yes
C	Haemodynamic disorders ,Environmental and Nutritional diseases and Homoeopathic concept	I	17	Yes	Yes	Yes
D	Diseases of the haemopoetic system, bone marrow and blood,CVS system blood vessels and lymphatics	II	17	Yes	Yes	Yes
E	Diseases of Respiratory , GIT, Liver and gall bladder, Pancreas , kidney and lower urinary tract,Endocrine glands	II	17	Yes	Yes	Yes
F	Diseases of male and female reproductive system, skin and soft tissue, nervous, Musculo-skeletal system	II	7	No	Yes	Yes

7.4 Distribution of questions for theory exam paper II

PAPER – 2						
Theme	**Topics**	**Term**	**Marks**	**LAQ's**	**SAQ's**	**MCQ's**
A	Bacteriology introduction, Human microbiome, Infection and diseases ,culture medias and methods ,Sterilisation and disinfection.	I	12	No	Yes	Yes
B	Gram positive bacterias	I	17	Yes	Yes	Yes
C	Parasites-protozoans , Virology introduction	I	17	Yes	Yes	Yes
D	Gram negative bacterias, Acid fast bacterias ,Spirochaetes	II	21	Yes	Yes	Yes
E	DNA & RNA Viruses	II	17	Yes	Yes	Yes
F	Fungi and parasites –helminthes, Diagnostic procedures in Microbiology, Homoeopathic concept	II	16	Yes	Yes	Yes

7.5 Question paper blue print Paper I

A **Question Serial Number**	**B** **Type of Question**	**Question Paper Format** **(Refer table 7.4 for themes)**
Q1	Multiple Choice Questions(MCQ) 10 Questions 1 mark each All compulsory	1. Theme A 2. Theme B 3. Theme C 4. Theme C 5. Theme D 6. Theme D 7. Theme E

		8. Theme E 9. Theme F 10. Theme F
Q2	Short answer Questions (SAQ) Eight Questions 5 Marks Each All compulsory	1. Theme A 2. Theme A 3. Theme B 4. Theme B 5. Theme C 6. Theme D 7. Theme E 8. Theme F
Q3	Long answer Questions (LAQ) Five Questions 10 marks each All compulsory	1. Theme A 2. Theme B 3. Theme C 4. Theme D 5. Theme E

7.7 Question paper blue print Paper II

A Question Serial Number	B Type of Question	Question Paper Format (Refer table 7.4 for themes)
Q1	Multiple Choice Questions (MCQ) 10 Questions 1 mark each All compulsory	1. Theme A 2. Theme A 3. Theme B 4. Theme B 5. Theme C 6. Theme C 7. Theme D 8. Theme E 9. Theme E 10. Theme F
Q2	Short answer Questions (SAQ) Eight Questions 5 Marks Each All compulsory	1. Theme A 2. Theme A 3. Theme B 4. Theme C 5. Theme D 6. Theme D 7. Theme E 8. Theme F
Q3	Long answer Questions (LAQ) Five Questions 10 marks each All compulsory	1. Theme B 2. Theme C 3. Theme D 4. Theme E 5. Theme F

7.8 Details of practical assessment

	PRACTICAL EXAM				
1.	**Laboratory reports**		**Marks**	**Total marks**	**Time**
	Interpretation of laboratory reports and its clinico- pathological correlation: Complete Haemogram Urine reports Liver function tests Renal function tests Thyroid function tests Lipid profile Diabetic profile Serum cardiac biomarkers Enzyme markers for necrosis Serological tests **Any one of the above**	• Identify whether laboratory report is normal or abnormal in relation to physiological values • Discuss the probable reason for abnormal values in laboratory report and its clinical significance	3 7	10 marks	10 mins
2.	**EXPERIMENT:**			**Total marks**	**Time**
a. b. c. d. e f f. g. h. i.	Estimation of Haemoglobin % WBC -Total count RBC - Total count Differential count Bleeding time and Clotting time Determination of Blood group Physical examination of urine Chemical examination of urine Urine microscopy Gram staining **Any one of the above**	Procedural and Practical skills Result and Discussion	15 10	25 marks	30 minutes

3.	**Spotters (5):25 marks**				
	ANY FIVE SPOTTERS (Instruments/ Equipments/ Specimens / Models)	•Identify the spot •List the characteristic features/ utility of the spot.	2 3	5 marks X 5 = 25 marks	3 minutes for each spotting=15 minutes
4.	**Spotting –Slides (5): 25 marks**				
	Any five Slides (Histopathology/parasitology/microbiology)	•Identify the slide •List three features of the given slide	2 3	5 marks X 5 = 25 marks	3 minutes for each slide=15 minutes
5.	Journal or Practical record	------	----	15 marks	
	Total Practical marks			**100 marks**	

8. OSPE STATIONS

STATION - 01 (Unobserved station)

For Organizer:

Topic specification: Lab report interpretation
Subject material: Laboratory report

For Candidate:

Marks: 10 Time Allowed:10 minutes.

TASK: Carefully read the Laboratory report given and answer the questions:

Answer the following questions:
1) Identify whether laboratory report is normal or abnormal in relation to physiological values (03)
2) Discuss the probable reason for abnormal values in laboratory report and its clinical significance (07)

For Examiner:

Sr. No	Key	Max. Marks
1.	Identify whether laboratory reports are normal or abnormal in relation to physiological values	3
2.	Discuss the probable reason for abnormal values in laboratory report and its clinical significance	7

STATION -02 (Unobserved station)

For Organizer:

Topic specification: Spotters (five)
Sample material: Instruments/Equipments/Gross specimen /model

For Candidate:

Max. Marks: 05 for each spot Time Allowed: 03minutes -for each Spotter.

Task: Carefully examine the spot and answer the following questions:
•Identify the spot (2 mark)
•List the characteristic features / utility of the spot. (3 marks)

For Examiner:

Sr. No	Key	Max. Marks
1.	Spot identification	2
2.	List the characteristic features / utility of the spot	3

STATION - 03 (Unobserved station)

For Organizer:

TOPIC SPECIFICATION: Slide (five)
SAMPLE MATERIAL: Slide (Pathology/Parasitology/Microbiology)

For Candidate:

Max. Marks: 05 Time Allowed: 03minutes -for each slide

Task:
• Identify the slide (2)
• List the characteristic features of the slide (3)

For Examiner:

Sr. No	Key	Max. Marks
1.	Specimen identification	2
2.	Characteristic features of the slide	3

STATION - 04 (Observed station)

For Organizer:

TOPIC SPECIFICATION: Practical (haematology/urine/gram staining)
SAMPLE MATERIAL: Blood /Urine/Smeared slide

For Candidate:

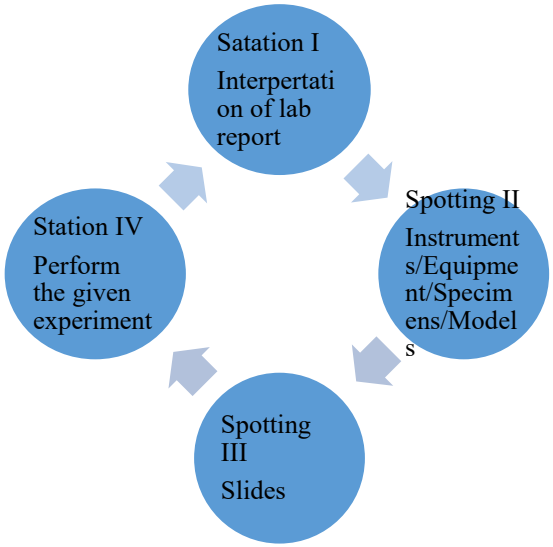
Max. Marks: 25 Time Allowed: 30minutes.

Task: Carefully perform the experiment given
• Write the procedure and perform the experiment (15)
•Write the result obtained and its Discussion (10)

For Examiner:

Sr. No	Key	Max. Marks
1.	Procedural and Practical skills	15
2.	Results and Discussion	10

OSPE STATIONS



8. List of recommended text/reference books

Theory

1. Harsh Mohan (2023), *Textbook of Pathology* (9 th Edition). Jaypee Publisher (CBME)
2. Vinay Kumar and Abul K Abbas(2023) ,*Robbins & Kumar Basic Pathology* (11th SAE), Elsevier
3. Apurba S Sastry , Sandhya Bhat (2023), *Essentials of Medical Microbiology* (4 th Edition), ARYA Publications. (CBME) CBS publihers.
4. Ananthanarayan.R and Jayaram Paniker CK (2022), *Ananthanarayan and Paniker's Textbook of Microbiology* (12th Edition),Universities Press (CBME)
5. Chatterjee K D, (2023), *Parasitology (Protozoology and Helminthology*), (13th Edition),CBS publihers.
6. Ghosh Sougata (2021), *Paniker's Textbook of Medical Parasitology*,(9 th Edition), Jaypee Publisher (CBME)
7. Fiona Roberts , (2018),*Pathology Illustrated International* ,(8th Edition) , Elsevier
8. Nayak Ramadas(2017),*Essentials in Hematology and Clinical Pathology*,(2 nd Edition), Jaypee Publishers.
9. Sunil Kumar Mohanty (2014),*Text Book of Immunology*,(2 nd Edition),Jaypee Brothers Medical Publishers

Practical

1. Harsh Mohan , (RP 2023) *Practical Pathology*, (5th Edition). Jaypee Publisher (CBME)
2. Santosh Kumar Mondal , (2024) *Pathology Practicals With OSPE*, (2 nd Edition), CBS Publishers. (CBME)
3. Anamika Vyas, Sheethal. S (2023), *Concise Workbook in Practical Microbiology*, Jaypee Publishers. (CBME)
4. Dr Baveja C P(2021), *Practical Microbiology* for MBBS, (5 th Edition),ARYA Publications

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Subject: Practice of Medicine

Subject code: HomUG PM-I

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1. Preamble

Practice of Medicine with Homoeopathic therapeutics is concerned with study of clinical methods, clinical presentations of systemic diseases, differential diagnosis and prognosis, general management and integration with Homoeopathic principles to evolve homoeopathic therapeutics.

Homoeopathy has a distinct approach to the concept of disease. It recognizes the ailing individual by studying him as a whole rather than in terms of sick parts and emphasizes the study of the man, his state of health, state of Illness.The emphasis is on study of man in respect of health, disposition, diathesis, disease, taking all predisposing and precipitating factors, i.e. fundamental cause, maintaining cause and exciting cause. The study of the concept of individualization is essential so that the striking features which are characteristic to the individual become clear, in contrast to the common picture of the respective disease condition. Hahnemann's theory of chronic miasms provides us an evolutionary understanding of the chronic diseases: psora, sycosis, tubercular and syphilis, and acute manifestations of chronic diseases and evolution of the natural disease shall be comprehended in the light of theory of chronic miasms.

This will demand correlation of the disease conditions with basics of anatomy, physiology, biochemistry and pathology. Application of Knowledge of Organon of Medicine and Homoeopathic Philosophy, Materia Medica and Repertory in dealing with the disease conditions should be actively taught.

Life style disorders have burgeoned in modern times. Homoeopathy has a great deal to offer through its classical holistic approach. There are plenty of therapeutic possibilities which Homoeopathy needs to exploit in the years to come.

2. Course outcomes

i. Develop as a sound homoeopathic clinician who can function indifferent clinical settings by applying knowledge, clinical skills and attitudes in studying the individual as a whole.
ii. Able to correlate the disease conditions with the basics of anatomy, physiology, biochemistry and pathology.
iii. Able to apply the knowledge of causation, pathophysiology, pathogenesis, manifestations, and diagnosis (including differential diagnosis) to understand the disease.
iv. Develop adequate knowledge for rational use of investigations and its interpretation to arrive at a final diagnosis of disease.
v. Ability to make a rational assessment of prognosis and general management of different disease conditions.

vi. Ability to understand and provide preventive, curative, palliative, rehabilitative and holistic care with compassion, following the principles of Homoeopathy.

vii. Able to integrate the clinical state of the disease with the concepts of Organon of Medicine and Homoeopathic Philosophy, Repertory and Homoeopathic Materia Medica for the management of the patient.

3. Learning objectives

At the end of BHMS II course, the students should be able to-

i. Clinico-pathological evaluation of common signs and symptoms with miasmatic integration.

- **a. Understanding Common Signs and Symptoms**: By the end of the course, students will be proficient in recognizing and evaluating common signs and symptoms presented by patients, utilizing a holistic approach that integrates clinical and pathophysiological processes involved.
- **b. Diagnostic Competence**: Through case-based learning and clinical exposure, students will develop the skills necessary to conduct comprehensive clinico-pathological evaluations, to identify underlying disease tendencies and susceptibilities.
- **c. Therapeutic Proficiency**: Students will be able to able to select Homoeopathic remedies based on the disease expression.

ii. Infectious Diseases general outline and introduction and common expression and investigation; Water & Electrolyte Disturbances, Acid Base Metabolism

- **a. Comprehensive Understanding**: Students will acquire a comprehensive understanding of the principles of infectious diseases, including their aetiology, pathogenesis, epidemiology, and clinical manifestations, within the context of homeopathic philosophy.
- **b. Recognition of Common Infections**: Through case studies and practical sessions, students will learn to identify common infectious diseases encountered in clinical practice, integrating homeopathic principles with conventional approaches to diagnosis.
- **c. Diagnostic Approach**: Students will develop proficiency in employing diagnostic methods relevant to infectious diseases, including physical examination findings, laboratory tests, and imaging studies, while considering holistic aspects of the patient's health.

d. **Introduction to Prevention and Control Measures**: Students will be able to define preventive strategies and public health measures aimed at controlling the spread of infectious diseases, incorporating principles of homeopathy into discussions of hygiene, immunity, and environmental factors.

iii. General Considerations of Immunity & Susceptibility

a. **Understanding Immune Function**: Students will acquire a comprehensive understanding of the immune system, including its cellular and humoral components, mechanisms of recognition, and response to pathogens and foreign antigens.

b. **Exploration of Susceptibility**: Through theoretical study and clinical case discussions, students will explore the concept of susceptibility in homoeopathy, examining factors that influence an individual's predisposition to disease and their response to homoeopathic treatment.

c. **Integration of Immune Concepts**: Students will learn to integrate concepts of immunity and susceptibility into the homoeopathic framework, considering the role of constitutional factors, miasmatic influences, and environmental exposures in shaping an individual's health status.

iv. Introduction to Medical Genetics

a. **Foundational Principles**: Students will gain aintroductory understanding of medical genetics, including principles of inheritance, genetic variation, and gene-environment interactions relevant to human health and disease.

b. **Genetic Disorders**: Through theoretical study, students will familiarize themselves with common genetic disorders, including single gene disorders, chromosomal abnormalities, and their clinical manifestations.

These course outcomes aim to equip second-year homoeopathy degree students with the knowledge, skills, and perspectives necessary to approach the evaluation and management of common clinical presentations, infectious diseases and establishing the relationship between knowledge of genetics and immunology with Homoeopathic concept of qualitative aspects of Susceptibility.

4. Course content and its term-wise distribution

Theory	Non-lectures (Clinical/Demonstrative)
Term I	
1. Clinico - pathological evaluation of common signs and symptoms with miasmatic integration* 2. Introduction to Medical genetics*	Clinical: 10 Demonstrative: 2
Term II	
1. Immunity & Susceptibility - General considerations* 2. Infectious Diseases and Tropical Diseases*	Clinical: 10 Demonstrative: 2

Refer clause 5.4 and tables 5.4.1 – 5.4.5 for detailed content (topics breakup)

5. Teaching hours

5.1. Gross division of teaching hours

Practice of Medicine			
Year	**Teaching hours- Lectures**	**Teaching hours- Non-lectures**	**Total**
II BHMS	80	24	104

5.2. Teaching hours theory

Sr. No.	Topic	Hours
1	Clinico - pathological evaluation of common signs and symptoms with miasmatic integration	35
2	Immunity & Susceptibility - General considerations	5
3	Introduction to Medical genetics	5
4	Infectious Diseases and Tropical Diseases	35
Total		**80**

5.3. Teaching hours Non-lecture

Sr. No.	Non-lectures	Hours
	Clinical	
1	Approach to Patient: a) Doctor & Patient: General Principles of History Taking b) Physical Examination General Principles c) Differential Diagnosis: The beginning of management plan	3
2	General Assessment: a) Psychological Assessment b) Nutritional Assessment	3
3	General Physical Examination Skill	14
	Demonstrative	
4	Case Based / Problem Based Discussion on any of the topic of II BHMS Syllabus topic to be conducted *[as per availability of the case material or patient]*	4
Total		**24**

5.4. Distribution of teaching hours with breakup of each topic

5.4.1. Clinico - pathological evaluation of Common signs and symptoms with miasmatic integration

Cardinal Manifestations and Presentation of Diseases with relevant investigations

(Ref: Harison's Principles of Internal Medicine 21stEd)

Sr. No.	Topic	Topic breakup	Hours
1	Pain	1) **Pain**: Pathophysiology, types of pain	4
		2) Chest Discomfort	
		3) Abdominal Pain	
		4) Headache	
		5) Back and Neck Pain	
2	Alterations in Body Temperature	6) ***Fever:*** Definition, types of fever, aetiology, pathophysiology, physical examination, investigations and management	3
		7) ***Fever and Rash:*** Definition of rash, Approach - causes and its presentation, examinations, investigations and management	
		8) ***Fever of Unknown Origin:*** Definition, types, aetiology and epidemiology, diagnostic tests, differential diagnosis and management	
3	Neurological Symptoms	9) ***Syncope:*** Definition, classification and its aetiology and its pathophysiology, clinical features as per the types, investigations, management	6
		10) ***Dizziness and Vertigo:*** Definition, clinical approach with its pathophysiology and management	
		11) ***Fatigue:*** Definition, differential diagnosis, clinical approach and management	

Sr. No.	Topic	Topic breakup	Hours
		12) ***Neurologic Causes of Weakness and Paralysis:*** Definition *[Weakness, Paralysis, Tone, Spasticity, Rigidity, Paratonia, flaccidity, Fasciculations],* Pathogenesis *[Upper Motor Neuron Weakness, Lower Motor Neuron Weakness, Neuromuscular Junction Weakness, Myopathic Weakness, & Psychogenic Weakness],* Distribution and its approach.	
		13) ***Numbness, Tingling, and Sensory Loss:*** Definition, pathophysiology and differential diagnosis	
		14) ***Gait Disorders, Imbalance, and Falls:*** a) Anatomy and physiology related to Gait balance. b) Definition, pathophysiology and clinical significance related to different types of gait disorders. c) Definition, pathophysiology and clinical manifestation of disorders of balance. d) Assessment for the patient with falls.	
		15) ***Confusion and Delirium:*** Definition, epidemiology, risk factors, pathogenesis, clinical features, physical examinations, investigations, diagnostic criteria, differential diagnosis and general management.	
		16) ***Coma and disorders of consciousness:*** Definition, stages, Diagnostic approach: History, aetiology and its differential diagnosis, neurological examinations, investigations, management and prognosis	
		17) ***Dementia:*** Definition, functional anatomy of dementia, aetiology and its differential diagnosis, Diagnostic approach: History physical & neurological examinations,	

Sr. No.	Topic	Topic breakup	Hours
		cognitive and neuropsychiatric examination, investigations and management	
		18) ***Aphasia, Memory Loss, and Other Cognitive Disorders:*** Definition, applied anatomy, clinical examination	
		19) ***Sleep Disorders:*** Physiology of sleep and wakefulness, approach to sleep disorders and treatment; evaluation of insomnia and its treatment	
4	Circulatory and Respiratory Dysfunctions	20) ***Dyspnoea:*** Definition, epidemiology, mechanisms underlying dyspnoea, assessment, differential diagnosis; Clinical approach: history, physical examination, investigations and management.	6
		21) ***Cough:*** Definition, mechanism of cough, impaired cough, aetiology, classification, assessment of chronic cough, differential diagnosis, approach: history, physical examination, investigations and management.	
		22) ***Haemoptysis:*** Definition, understanding anatomy & physiology of it, aetiopathogenesis, evaluation of haemoptysis: history, physical examination, diagnostic evaluation, and management.	
		23) ***Hypoxia and Cyanosis:*** a) ***Hypoxia:*** Definition, response to hypoxia, aetiology, pathophysiology, adaptation to hypoxia. b) ***Cyanosis:*** Definition, types, differential diagnosis with its aetiology, approach to cyanosis.	
		24) ***Oedema:*** Definition, aetiopathogenesis, differential diagnosis – Generalized and Localized oedema;	

Sr. No.	Topic	Topic breakup	Hours
		distribution of oedema; Approach: History taking, Clinical examination and investigations.	
		25) ***Palpitations:*** Definition, aetiopathogenesis, differential diagnosis, Approach: History taking, Clinical examination, investigations and management.	
5	Abdominal/GIT Dysfunctions	26) ***Dysphagia:*** Definition, physiology of swallowing, pathophysiology; Approach: history taking, Clinical examination, diagnostic procedures and management.	6
		27) ***Nausea, Vomiting and Indigestion:*** Definition, mechanism, causes & differential diagnosis, Approach: history taking, Clinical examination, diagnostic testing and management.	
		28) ***Diarrhoea and Constipation:*** Definition, Normal physiology, types and causes, differential diagnosis, Approach: history taking, Clinical examination, diagnostic testing and management.	
		29) ***Dysentery:*** Definition, causes, differential diagnosis, Approach: history taking, Clinical examination, diagnostic testing and management.	
		30) ***Unintentional Weight Loss:*** Definition, physiology of weight regulation with aging, causes and differential diagnosis, assessment and testing, management.	
		31) ***Gastrointestinal Bleeding:*** Definition, source of the bleeding and its causes and its mechanism, Approach: history taking, differentiation of UGIB & LGIB - its assessment, evaluation and management.	

Sr. No.	Topic	Topic breakup	Hours
		32) ***Jaundice:*** Definition, clinical evaluation, metabolism of bilirubin, aetiopathogenesis, classification and its causes, differential diagnosis, Approach: history taking, Clinical examination, diagnostic testing and management.	
		33) ***Abdominal Swelling & Ascites:*** Definition, causes, differential diagnosis, Approach: history taking, Clinical examination, investigations and its evaluation. Ascites: Definition, aetiopathogenesis, evaluation, management and complications.	
6	Renal and Urinary Tract Dysfunctions	34) ***Interstitial Cystitis / Bladder Pain Syndrome:*** Definition, aetiopathogenesis, clinical presentation, investigations, diagnostic evaluation, management, complication and prognosis.	4
		35) ***Dysuria:*** Definitions, aetiology, pathophysiology, assessment and diagnostic evaluation.	
		36) ***Azotaemia and Urinary Abnormalities:*** Definitions, aetiology, pathophysiology, assessment and diagnostic evaluation.	
		37) ***Fluid and Electrolyte Imbalance:*** Causes, pathophysiological evaluation, Investigations	
7	Haematological alterations	38) ***Anaemia:*** Definition, applied anatomy & physiology of RBC, regulation of its production; classification, clinical presentation; Approach: History taking, clinical examination, investigations and diagnostic evaluation	4
		39) ***Leucocytosis & Leukopenia:*** Definition, Aetiology, differential diagnosis.	

Sr. No.	Topic	Topic breakup	Hours
		40) ***Bleeding diatheses: Bleeding & Thrombosis:*** Definitions, applied anatomy & physiology of Haemostasis, aetiology of disorder of haemostasis, clinical presentation and history taking, clinical examination, laboratory evaluation.	
		41) ***Interpretation of Peripheral Blood Smears***	
8	Psychological symptoms	42) Causes of asthenia, anxiety, sadness, thought disorders and delusions, perceptual disorders and hallucinations and relevant investigations	2
Total			**35**

5.4.2 Medical genetics:

Sr. No.	Topic lecture	Hours
1	Cytogenetics - definition, classification of chromosomal abnormality	1
2	Down's Syndrome	1
3	Turner's & Klinefelter's Syndrome	
4	Cystic fibrosis, Huntington's disease & Marfan's syndrome	1
5	Poly cystic kidney disease	
6	Neoplasia	1
7	Rare diseases – basic concept	
8	Integrating concept of Genetics with Homoeopathy	1
Total		**5**

5.4.3 Immunological factors in disease with concept of susceptibility:

Sr. No.	Topic lecture	Hours
1	Introduction and Primary & Secondary Immunodeficiency States	1
2	Hypersensitivity reactions: I, II, III, IV	1
3	Autoimmune diseases	1
4	Transplants, Graft rejection	
5	HIV	1
6	Integrating concept of Immunity with Homoeopathy: Susceptibility	1
TOTAL		**5**

5.4.4 For study of infectious and tropical diseases: Emphasis shall be on the following headings:

i. Definition
ii. Causative agents
iii. Epidemiology
iv. Pathogenesis
v. Clinical features
vi. Investigations
vii. Diagnostic features
viii. Differential Diagnosis
ix. Complications
x. Management
xi. Prevention
xii. Prognosis
xiii. Homoeopathic classification of disease with its reasons
xiv. Repertorial coverage / reference related to the disease
xv. Homoeopathic therapeutics to the disease

Sr. No.	Topic Lecture	Hours
1	Herpes simplex viruses [HSV] infections	1
2	Varicella-zoster virus (VZV) infection	1
3	Epstein-Barr virus [EBV] Infections	1
4	Poliovirus Infections	1
5	Measles	1
6	Mumps	1
7	Rabies	1
8	Dengue	1
9	Japanese B Encephalitis	1
10	BIRD FLU	2
11	Influenza A H1N1 virus	
12	Chikungunya	
13	COVID 19 Virus Infection	1
14	Yellow fever	1
15	Smallpox (variola) - poxvirus infection	1
16	HIV Infection	1
17	Zika virus infection	1
18	Rickettsial infection	
19	Staphylococcal, streptococcal infections	1
20	Typhoid Fever	1
21	Gastroenteritis	1
22	Cholera	1
23	Tetanus	1
24	Anthrax, brucellosis, plague	1
25	Leprosy	1
26	Sexually Transmitted Disease, Syphilis	1

Sr. No.	Topic Lecture	Hours
27	Amoebiasis, Amoebic Liver Abscess	1
28	Filariasis / Worm infestations	1
29	Malaria &Kalazar	1
30	Leptospirosis	1
31	Tuberculosis	1
32	Extra pulmonary tuberculosis	1
33	Diphtheria	1
34	Pertussis (whooping cough)	1
35	Therapeutics of Infectious Disorders	3
TOTAL		**35**

5.4.5 Teaching hours distribution to clinical / practical / demonstrative activities (Non-lectures):

Sr. No.	Non-lectures	Hours
1	**Approach to Patient:** d) Doctor & Patient: General Principal of History Taking e) Physical Examination General Principal f) Differential Diagnosis: The beginning of management plan	3
2	**General Assessment:** c) Psychiatric Assessment d) Nutritional Assessment	3
3	**General Examination Skill:**	14
	i.) Temp recording and its documentation and interpretation	1
	ii.) Pulse examination at different site and its documentation and interpretation	
	iii.) RR examination and its documentation and interpretation	1
	iv.) BP Recoding and its documentation and its interpretation	
	v.) Height measurement and its documentation and interpretation	1

Sr. No.	Non-lectures	Hours
	vi.) Weight measurement and its documentation and interpretation	
	vii.) BMI and Nutrition Assessment and its documentation and interpretation	
	viii.) Observation of Appearance, Built, and assessing Body proportion: Documentation and interpretation	1
	ix.) Observation of Gait and its Assessment& documentation	
	x.) Observation of Decubitus and its assessment& documentation	
	xi.) Ear examination and its documentation and interpretation	3
	xii.) Nose examination and its documentation and interpretation	
	xiii.) Throat examination and its documentation and interpretation	
	xiv.) Eye examination and its documentation and interpretation	2
	xv.) Face examination and its documentation and interpretation	2
	xvi.) Mouth examination and its documentation and interpretation	
	xvii.) Lymph Nodes examination at different sites and documentation and interpretation	3
	xviii.) Nails examination and its documentation and interpretation	
	xix.) Skin examination and its documentation and interpretation	
4	**Case Based / Problem Based Discussion on any of the following topic to be conducted *[as per availability of the case material or patient]***	4
	a) Approach to Case of Fever with any system presenting symptoms [GIT / RS / Skin / Renal / MSS etc.]	
	b) Approach to Case presenting with Neurological Symptoms	
	c) Approach to Case presenting with Circulatory and / or Respiratory Symptoms	
	d) Approach to Case presenting with Abdominal/GIT Symptoms	
	e) Approach to Case presenting with Renal and Urinary Tract symptoms	
	f) Approach to Case presenting with Haematological symptoms	
	g) Approach to Case presenting with psychological symptoms	

6. Content mapping (competencies tables)

6.1. Competency tables for clinico-pathological evaluation of common signs and symptoms with miasmatic integration:

6.1.1. Pain-

Sl. No	Domain of Competency	Millers Level:	Content	SLO	Blooms Domain/ Guilbert's Level	Priority -	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PMI.1.1	K&S	K	Define pain and its types	1. Define pain and 2. Differentiate between acute and chronic pain	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Anatomy, Physiology
HomUG-PMI.1.2		KH	Differentiate between types of pain	Differentiate between nociceptive, neuropathic, and inflammatory pain	C2	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Anatomy, Physiology
HomUG-PMI.1.3			Role of inflammation in pain	Describe how inflammation contributes to pain sensation and hypersensitivity	C2	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Anatomy, Physiology
HomUG-PMI.1.4		K	Define chest discomfort and its significance	1. define chest discomfort and 2. explain its importance in diagnosing	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Anatomy, Physiology

				various conditions						
HomUG-PMI.1.5		KH	Describe the common causes of chest discomfort	Describe the common etiologies of chest discomfort, such as angina, heartburn, and musculoskeletal pain	C2	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Anatomy, Physiology
HomUG-PMI.1.6		K	Define abdominal discomfort and its significance	1. Define abdominal discomfort and 2. Explain its importance in diagnosing various conditions	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Anatomy, Physiology
HomUG-PMI.1.7		KH	Describe the common causes of abdominal discomfort	Describe the common etiologies of abdominal discomfort, such as gastritis, appendicitis, and constipation	C2	Must Know	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Anatomy, Physiology

HomUG-PMI.1.8		K	Define headache and its types	1. define headache and 2. differentiate between primary and secondary headaches	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Anatomy, Physiology
HomUG-PMI.1.9		KH	Describe the common causes of headache	Describe the common etiologies of headache, such as tension-type headache, migraine, and cluster headache	C2	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Anatomy, Physiology
HomUG-PMI.1.10		K	Define back and neck pain and their types	1. define back and neck pain and 2. differentiate between mechanical and non-mechanical causes	C1	MK	Lecture, Group discussion	Quiz, Written test	SAQ, MCQ	Anatomy, Physiology
HomUG-PMI.1.11		KH	Describe the common causes of back and neck pain	Describe the common etiologies of back and neck pain, such as muscle strain, disc herniation, and osteoarthritis	C2	MK	Lecture, Group discussion	Quiz, Written test	SAQ, MCQ	Anatomy, Physiology

HomUG-PMI.1.12	HO	K	Define the principles of homoeopathic management of pain	define homoeopathic principles for pain management, emphasizing 1. individualizatio n and 2. similars	C1	MK	Lecture, Group discussi on	Quiz, Written test, MCQ	SAQ, MCQ	Organon and Homoeopathic Philosophy
HomUG-PMI.1.13		KH	Describe the concept of the simillimum in homoeopathy	Describe how remedies are selected based on symptom similarity in pain management	C2	MK	Lecture, Group discussi on	Quiz, Written test, MCQ	SAQ, MCQ	Organon and Homoeopathic Philosophy
HomUG-PMI.1.14			Explain the role of repertories in homoeopathic prescribing	Discuss repertory usage to find the most suitable remedy for pain	C2	MK	Lecture, Group discussi on	Quiz, Written test, MCQ	SAQ, MCQ	Repertory
HomUG-PMI.1.15		SH	Demonstrate the process of selecting a homoeopathic remedy	Demonstrate remedy selection based on totality symptoms in case of pain	P2	MK	Case studies	OSCE, Practical exam	Bedside examinatio n, Viva voce	Materia Medica
HomUG-PMI.1.16		KH	Explain the principles of case management in homoeopathy	Discuss posology in pain treatment	C2	Must Know	Lecture, Group discussi on	Quiz, Written test, MCQ	SAQ, MCQ	Organon, Homoeopthic Pharmacy

6.1.2. Fever-

Sl. No.	Domain of Competency	Millers Level	Content	SLO	Blooms Domain/ Guilbert's Level	Priority -	T-L Methods	Assessment		Integration
								F	S	
HomUG-PMI.2.1	K&S	K	Define fever and its significance	Define fever and explain its role in the body's immune response	C1	MK	Lecture, Group discussion	Quiz, Written test		Physiology, Pathology
HomUG-PMI.2.2		KH	Describe the types of fever and their characteristics	Describe different types of fever, such as intermittent and continuous	C2	MK	Lecture, Group discussion	Quiz, Written test		Physiology, Pathology
HomUG-PMI.2.3			Explain the causes of fever	Explain the causes of fever, including infection and inflammation	C2	MK	Lecture, Group discussion	Quiz, Written test		Microbiology, Immunology
HomUG-PMI.2.4		K	Define the different types of fever (e.g., intermittent, remittent, continuous, relapsing).	Explain the characteristics and patterns of different types of fever.	C1	MK	Lecture, Small group discussion	Structured Oral Examination, Tutorials, Assignments, MCQs	Theory and Viva voce	Internal Medicine, Infectious Diseases

HomUG-PMI.2.5		KH	Describe the etiology of each type of fever.	Explain the underlying causes of intermittent, remittent, continuous, and relapsing fevers.	C2	MK	Lecture, Small group discussion	Structured Oral Examination, Tutorials, Assignments, MCQs	Theory and Viva voce	Internal Medicine, Infectious Diseases
HomUG-PMI.2.6			Discuss the clinical manifestations and symptoms associated with each type of fever.	Identify the clinical features and presentations of intermittent, remittent, continuous, and relapsing fevers.	C2	MK	Lecture, Small group discussion	Structured Oral Examination, Tutorials, Assignments, MCQs	Theory and Viva voce	Internal Medicine, Infectious Diseases
HomUG-PMI.2.7		K	Define fever with rash.	Explain the clinical presentation of fever accompanied by a rash.	C2	MK	Lecture, Small group discussion	Structured Oral Examination, Tutorials, Assignments, MCQs	Theory and Viva voce	Internal Medicine, Infectious Diseases, Dermatology
HomUG-PMI.2.8		K	Identify the common causes of fever with rash (e.g., viral infections, bacterial infections, allergic reactions).	Describe the etiological factors contributing to the development of fever with rash.	C2	MK	Lecture, Small group discussion	Structured Oral Examination, Tutorials, Assignments, MCQs	Theory and Viva voce	Internal Medicine, Infectious Diseases, Dermatology

HomUG-PMI.2.9		KH	Discuss the differential diagnosis of fever with rash.	Explain the process of differentiating between various infectious and non-infectious causes of fever with rash.	C2	Must Know	Lecture, Small group discussion	Structured Oral Examination, Tutorials, Assignments, MCQs	Theory and Viva voce	Internal Medicine, Infectious Diseases, Dermatology
HomUG-PMI.2.10		K	Define Fever of Unknown Origin (FUO).	Explain the criteria/definition of FUO.	C1	MK	Lecture, Small group discussion	Structured Oral Examination, Tutorials, Assignments, MCQs	Theory and Viva voce	Internal Medicine, Infectious Diseases
HomUG-PMI.2.11		KH	Discuss the etiology and pathophysiology of FUO.	Describe the possible causes and underlying mechanisms of FUO.	C2	MK	Lecture, Small group discussion	Structured Oral Examination, Tutorials, Assignments, MCQs	Theory and Viva voce	Internal Medicine, Infectious Diseases
HomUG-PMI.2.12			Identify the diagnostic approach to FUO.	Explain the stepwise approach to diagnosing and investigating FUO.	C2	MK	Lecture, Small group discussion	Structured Oral Examination, Tutorials, Assignments, MCQs	Theory and Viva voce	Internal Medicine, Infectious Diseases
HomUG-PMI.2.13			Discuss the differential diagnosis of FUO.	Explain how to differentiate between various causes of FUO.	C2	MK	Lecture, Small group discussion	Structured Oral Examination, Tutorials, Assignments, MCQs	Theory and Viva voce	Internal Medicine, Infectious Diseases

HomUG-PMI.2.14			Describe the management strategies for FUO.	Explain the treatment options and approaches for patients with FUO.	C2	MK	Lecture, Small group discussion	Structured Oral Examination, Tutorials, Assignments, MCQs	Theory and Viva voce	Internal Medicine, Infectious Diseases
HomUG-PMI.2.15		K	Describe the fever totality.	Define how to erect a fever totality	C1	MK	Lecture, Small group discussion	Totorials, Asignments		Organon, Repertory
HomUG-PMI.2.16		KH	Discuss the characteristic indications of various indicated drugs	List the PQRS symptoms of a drug in Fever	C2	MK	Lecture, Small group discussion	Structured Oral Examination, Tutorials, Assignments, MCQs	Theory & Viva voce	Materia Medica

6.1.3. Neurological Symptoms-

Sl. No.	Domain of Competency	Millers Level	Content	SLO	Blooms Domain/ Guilbert's Level	Priority -	T-L Methods	Assessment		Integration
								F	S	
HomUG-PMI.3.1	K&S	K	Define the pathophysiology of neurological symptoms (e.g., weakness, numbness, tingling).	Explain the underlying mechanisms that lead to neurological symptoms.	C2	MK	Lecture, Small group discussion	Structured Oral Examination, Tutorials, Assignments, MCQs	MCQs	Anatomy, Physiology, Neurology
HomUG-PMI.3.2		KH	Describe the neuroanatomical basis of common neurological symptoms.	Explain how specific neurological structures are involved in producing symptoms such as weakness or sensory changes.	C2	MK	Lecture, Small group discussion	Structured Oral Examination, Tutorials, Assignments, MCQs	SAQ, MCQs	Anatomy, Physiology, Neurology
HomUG-PMI.3.3			Discuss the pathophysiological processes underlying various neurological conditions.	Explain how different diseases and disorders affect the nervous system to produce specific symptoms.	C2	MK	Lecture, Small group discussion	Structured Oral Examination, Tutorials, Assignments, MCQs	SAQ, MCQs	Physiology, Pathology

HomUG-PMI.3.4			Identify the role of neurotransmitters and receptors in neurological symptoms.	Explain how alterations in neurotransmission can lead to neurological symptoms.	C2	MK	Lecture, Small group discussion	Structured Oral Examination, Tutorials, Assignments, MCQs	SAQ, MCQs	Physiology, Pathology
HomUG-PMI.3.5	K&S	KH	Define the principles of management for neurological symptoms.	Explain the basic approaches to managing common neurological symptoms.	C2	MK	Lecture, Small group discussion	Structured Oral Examination, Tutorials, Assignments, MCQs	SAQ, MCQs	Physiology
HomUG-PMI.3.6		K	Describe the complete symptom	Define the symptom under LSMC	C1	MK	Lecture, Small group discussion	Structured Oral Examination, Tutorials, Assignments, MCQs	LAQ, SAQ, Viva voce	Organon
HomUG-PMI.3.7		S	Demonstrate the process of selecting a homoeopathic remedy for neurological symptoms based on totality of symptoms	Student should be able to demonstrate how to select a homoeopathic remedy based on the totality of symptoms in a case of neurological symptoms	P2	MK	Lecture, Small group discussion	Assignments, Tutorials	SAQ, MCQs	Materia medica

HomUG-PMI.3.8		KH	Discuss the characteristic indications of various indicated drugs	List the PQRS symptoms of a drug in different Neurological symptoms	C1	MK	Lecture, Small group discussion	Structured Oral Examination, Tutorials, Assignments, MCQs	SAQ, Viva voce	Materia medica

6.1.4. Circulatory and Respiratory Dysfunctions

Sl. No.	Domain of Competency	Millers Level	Content	SLO	Blooms Domain/ Guilbert's Level	Priority -	T-L Methods	Assessment		Integration
								F	S	
HomUG-PMI.4.1	K&S	K	Define dyspnea.	Define dyspnea as the sensation of difficult or uncomfortable breathing, often described as shortness of breath.	C1	MK	Lecture, Small group discussion	Quizzes, Peer assessment	SAQ	Physiology
HomUG-PMI.4.2		KK	Describe the physiology of dyspnea.	Explain the physiological mechanisms that contribute to the sensation of dyspnea, including neural and mechanical factors.	C2	MK	Lecture, Small group discussion	Structured Oral Examination, Tutorials, Assignments, MCQs	SAQ, MCQs	Physiology

HomUG-PMI.4.3			Discuss the etiology of dyspnea.	Explain the various conditions and diseases that can cause dyspnea, such as respiratory disorders, cardiovascular diseases, or metabolic conditions.	C2	MK	Lecture, Small group discussion	Structured Oral Examination, Tutorials, Assignments, MCQs	SAQ, MCQs	Physiology, Pathology
HomUG-PMI.4.4			Identify the clinical evaluation and diagnostic approach for patients presenting with dyspnea.	Explain the steps involved in assessing and diagnosing patients with dyspnea, including history taking, physical examination, and diagnostic tests.	C2	MK	Lecture, Small group discussion	Observations, Simulations	OSCE, Bedside examination	Clinical Medicine
HomUG-PMI.4.5		K	Define cough.	Define cough as a protective reflex that helps clear the airways of mucus, irritants, or foreign particles.	C1	MK	Lecture, Small group discussion	Quizzes, Peer assessment	Written examination, Objective Structured Clinical Examination (OSCE)	Clinical Medicne
HomUG-PMI.4.6		KH	Describe the physiology of cough.	Explain the neural and mechanical processes involved in the	C2	MK	Lecture, Small group	Case studies, Role-playing	OSCE, Practical examination	Clinical Medicine

				generation of a cough reflex.			discussion			
HomUG-PMI.4.7			Discuss the different types of cough.	Explain the characteristics and classification of cough, such as acute, subacute, or chronic.	C2	MK	Lecture, Small group discussion	Problem-based learning	MCQs, Short-answer questions	Pathology
HomUG-PMI.4.8			Identify the common causes of cough.	Describe the etiology and pathophysiology of cough, including respiratory infections, asthma, and GERD.	C2	MK	Lecture, Small group discussion	Presentations, Group projects	Written examination, Case-based discussion	Physiology, Pathology
HomUG-PMI.4.9	K&S		Describe the characteristics of different types of cough.	Explain the differences between dry, wet, productive, and non-productive coughs, and their potential underlying causes.	C2	MK	Lecture, Small group discussion	Quizzes, Peer assessment	Written examination, OSCE	
HomUG-PMI.4.10		K	Define hemoptysis.	Define hemoptysis as the expectoration of blood that originates from the respiratory tract.	C2	MK	Lecture, Small group discussion	Quizzes, Peer assessment	Written examination, OSCE	Pathology

HomUG-PMI.4.11		KH	Describe the etiology of hemoptysis.	Explain the various causes of hemoptysis, including respiratory infections, pulmonary embolism, and lung cancer.	C2	MK	Lecture, Small group discussion	Case studies, Role-playing	OSCE, Practical examination	Pathology
HomUG-PMI.4.12			Discuss the clinical evaluation and diagnostic approach for patients presenting with hemoptysis.	Explain the steps involved in evaluating patients with hemoptysis, including history taking, physical examination, and diagnostic tests.	C2	MK	Lecture, Small group discussion	Observations, Simulations	OSCE, Practical examination	Pathology
HomUG-PMI.4.13	K&S		Discuss the complications associated with hemoptysis.	Explain the potential complications of hemoptysis, such as respiratory compromise or hemorrhagic shock, and their management.	C2	MK	Lecture, Small group discussion	Problem-based learning, Assignments	MCQs, Short-answer questions	Pathology

HomUG-PMI.4.14		K	Define hypoxia and cyanosis.	Define hypoxia as a condition characterized by insufficient oxygen supply to tissues and cyanosis as a bluish discoloration of the skin and mucous membranes due to deoxygenated hemoglobin.	C1	MK	Lecture, Small group discussion	Quizzes	Written examination, Objective Structured Clinical Examination (OSCE)	Pulmonology, Cardiology, Critical Care Medicine
HomUG-PMI.4.15		KH	Describe the pathophysiology of hypoxia and cyanosis.	Explain the mechanisms that lead to hypoxia and cyanosis, including impaired oxygen delivery or utilization.	C2	MK	Lecture, Small group discussion	Case studies	OSCE, Practical examination	Pulmonology, Cardiology, Critical Care Medicine
HomUG-PMI.4.16			Discuss the common causes of hypoxia and cyanosis.	Explain the various conditions and diseases that can manifest with hypoxia and cyanosis, such as respiratory disorders, cardiac conditions, or anemia.	C2	MK	Lecture, Small group discussion	Case studies	MCQs, Short-answer questions	Pulmonology, Cardiology, Critical Care Medicine

HomUG-PMI.4.17	PC		Discuss the clinical evaluation and diagnostic approach for patients presenting with hypoxia and cyanosis.	Explain the steps involved in evaluating patients with hypoxia and cyanosis, including history taking, physical examination, and diagnostic tests.	C2	MK	Lecture, Small group discussion	Tutorials, Group projects	OSCE, Practical examination	Pulmonology, Cardiology, Critical Care Medicine
HomUG-PMI.4.18		K	Define edema.	Define edema as the accumulation of excessive fluid in the interstitial spaces, leading to swelling and tissue enlargement.	C1	MK	Lecture, Small group discussion	Quizzes, Peer assessment	SAQ	Cardiology, Nephrology, Internal Medicine
HomUG-PMI.4.19		KH	Describe the pathophysiology of edema.	Explain the mechanisms involved in the development of edema, including changes in hydrostatic pressure, oncotic pressure, and capillary permeability.	C2	MK	Lecture, Small group discussion	Case studies, MCQs	LAQ, SAQ	Cardiology, Nephrology, Internal Medicine

HomUG-PMI.4.20			Discuss the causes and classification of edema.	Explain the various factors that can lead to edema, such as heart failure, kidney disease, liver cirrhosis, and venous insufficiency. Classify edema based on its location and underlying cause.	C2	MK	Lecture, Small group discussion	Problem-based learning	MCQs, SAQ, LAQ	Cardiology, Nephrology, Internal Medicine
HomUG-PMI.4.21			Describe the pathophysiology of edema.	Explain the mechanisms that lead to the accumulation of fluid in tissues, including increased capillary permeability and impaired lymphatic drainage.	C2	MK	Lecture, Small group discussion	Tutorials, Assignments	SAQ, LAQ	Cardiology, Nephrology, Internal Medicine
HomUG-PMI.4.22			Identify the clinical features of edema.	Describe the signs and symptoms associated with edema, including swelling, pitting, and changes in skin texture.	C2	MK	Lecture, Small group discussion	Presentations, Group projects, Assignments	SAQ, LAQ	Cardiology, Nephrology, Internal Medicine

HomUG-PMI.4.23		K	Define palpitations.	Define palpitations as the sensation of a rapid, irregular, or forceful heartbeat that may be felt in the chest, throat, or neck.	C1	MK	Lecture, Small group discussion	Quizzes	SAQ	Cardiology, Internal Medicine
HomUG-PMI.4.24		KH	Describe the pathophysiology of palpitations.	Explain the mechanisms that can lead to palpitations, including cardiac arrhythmias, structural heart disease, and stimulant use.	C2	MK	Lecture, Small group discussion	Assignments	SAQ, MCQs	Cardiology, Internal Medicine
HomUG-PMI.4.25			Discuss the common causes of palpitations.	Explain the various conditions and factors that can cause palpitations, such as atrial fibrillation, ventricular tachycardia, anxiety, and caffeine intake.	C2	MK	Lecture, Small group discussion	Tutorials, Assignments, MCQs	MCQs, Short-answer questions	Cardiology, Internal Medicine

HomUG-PMI.4.26			Identify the clinical features of palpitations.	Describe the signs and symptoms associated with palpitations, including palpitations at rest, palpitations with exertion, and associated dizziness or syncope.	C2	MK	Lecture, Small group discussion	Tutorials, Assignments, MCQs	MCQs, Short-answer questions	Cardiology, Internal Medicine
HomUG-PMI.4.27		K	Define the principles of homoeopathic management	Students should be able to define the basic principles of homoeopathic treatment	C1	MK	Lecture, Group discussion	Quiz, Assignments	SAQ	Homoeopathic Materia Medica
HomUG-PMI.4.28		KH	Describe the concept of the simillimum in homoeopathy	Students should be able to describe how the selection of the simillimum is based on the totality of symptoms in homoeopathic treatment	C2	MK	Lecture, Group discussion	Quiz, Assignments	SAQ	Homoeopathic Materia Medica
HomUG-PMI.4.29		SH	Demonstrate the process of selecting a homoeopathic remedy based	Students should be able to demonstrate how to select a homoeopathic remedy based on	C4	MK	Case studies	Quiz, Assignments	SAQ	Homoeopathic Materia Medica, Repertory

			on totality of symptoms	the totality of symptoms						
HomUG-PMI.4.30		KH	Explain the principles of case management in homoeopathy	Students should be able to discuss the principles of case management, including the importance of follow-up and potency selection	C5	MK	Lecture, Group discussion	Quiz, Assignments	LAQ	Homoeopathic Materia Medica

6.1.5. Abdominal/GIT Dysfunctions

Sl.No.	Domain of Competency	Millers Level	Content	SLO	Blooms Domain/ Guilbert's Level	Priority -	T-L Methods	Assessment		Integration
								F	S	
HomUG-PMI.5.1	K&S	KH	Describe the common causes of GIT dysfunctions.	Explain how factors such as diet, lifestyle, stress, and genetics can contribute to the development of GIT dysfunctions.	C2	MK	Lecture, Small group discussion	Quizzes, Peer assessment	SAQ	Pathology, Microbiology, PSM
HomUG-PMI.5.2			Discuss the pathophysiological mechanisms underlying GIT dysfunctions.	Explain how disturbances in gastrointestinal motility, secretion, and	C2	MK	Lecture, Small group discussion	Case studies, MCQ	LAQ, SAQ	Physiology, Pathology

				absorption can lead to symptoms of GIT dysfunctions.						
HomUG-PMI.5.3			Identify the risk factors associated with GIT dysfunctions.	Describe how factors such as age, gender, diet, and medication use can increase the risk of developing GIT dysfunctions.	C2	DK	Lecture, Small group discussion	Problem-based learning	MCQs, Short-answer questions	Physiology, Pathology
HomUG-PMI.5.4			Explain the role of inflammation in GIT dysfunctions.	Describe how inflammatory processes can contribute to conditions such as gastritis, enteritis, and colitis.	C2	MK	Lecture, Small group discussion	MCQ, Assignments	SAQ	Pathology, Microbiology
HomUG-PMI.5.5			Discuss the role of the microbiome in GIT health.	Explain how alterations in the gut microbiome can impact GIT function and contribute to the development of GIT dysfunctions.	C2	DK	Lecture, Small group discussion	Tutorials, Group projects	LAQ, SAQ	Physiology, Pathology

HomUG-PMI.5.6			Describe the pathophysiology of dysphagia.	Explain how dysphagia can result from structural abnormalities, neurological disorders, or muscular dysfunction.	C2	MK	Lecture, Small group discussion	Quizzes, Peer assessment	LAQ, SAQ	Physiology, Pathology
HomUG-PMI.5.7			Discuss the common causes of dysphagia.	Explain how conditions such as esophageal strictures, achalasia, and neurological diseases can lead to dysphagia.	C2	MK	Lecture, Small group discussion	Case studies	SSQ	Pathology
HomUG-PMI.5.8			Identify the key symptoms and clinical features of dysphagia.	Describe how symptoms such as difficulty swallowing, pain with swallowing, and regurgitation can help diagnose dysphagia.	C2	MK	Lecture, Small group discussion	Problem-based learning	MCQs, Short-answer questions	Clinical medicine

HomUG-PMI.5.9	HO		Discuss the role of homoeopathic remedies in the management of dysphagia.	Explain how remedies such as Lachesis, Phosphorus, and Belladonna can be used to treat symptoms of dysphagia.	C2	MK	Lecture, Small group discussion	Assignments	MCQs, Short-answer questions	Homoeopathic Materia Medica
HomUG-PMI.5.11			Describe the pathophysiology of nausea and vomiting.	Explain how various triggers, such as chemical stimulation, sensory input, and central nervous system disorders, can lead to nausea and vomiting.	C2	MK	Lecture, Small group discussion	Quizzes, Peer assessment	MCQs, Short-answer questions	Physiology, Pathology
HomUG-PMI.5.12			Discuss the common causes of nausea and vomiting.	Explain how conditions such as gastroenteritis, motion sickness, and pregnancy can cause nausea and vomiting.	C2	MK	Lecture, Small group discussion	Case studies	MCQs, Short-answer questions	Physiology, Pathology

HomUG-PMI.5.13			Identify the key symptoms and clinical features of nausea and vomiting.	Describe how symptoms such as retching, hypersalivation, and pallor can help diagnose nausea and vomiting.	C2	MK	Lecture, Small group discussion	Case studies	MCQs, Short-answer questions	Clinical medicine
HomUG-PMI.5.14	HO		Discuss the role of homoeopathic remedies in the management of nausea and vomiting.	Explain how remedies such as Ipecacuanha, Nux vomica, and Cocculus indicus can be used to treat symptoms of nausea and vomiting.	C2	MK	Lecture, Small group discussion	Observations, Assignments	MCQs, Short-answer questions	Homoeopathic Materia Medica
HomUG-PMI.5.15	K&S		Describe the importance of hydration and dietary modifications in the management of nausea and vomiting.	Explain how maintaining hydration and following a bland diet can help alleviate symptoms of nausea and vomiting.	C2	DK	Lecture, Small group discussion	Tutorials, Group projects	MCQs, Short-answer questions	Physiology

HomUG-PMI.5.16			Define diarrhea and its characteristics.	Define diarrhea as the passage of loose or watery stools three or more times a day, often accompanied by abdominal cramping, bloating, and urgency.	C1	MK	Lecture, Small group discussion	MCQ	SAQ	Physiology
HomUG-PMI.5.17			Describe the pathophysiology of diarrhea.	Explain how disturbances in gastrointestinal motility, secretion, and absorption can lead to diarrhea.	C2	MK	Lecture, Small group discussion	MCQ, Assignments	LAQ, SAQ	Physiology. Pathology
HomUG-PMI.5.18			Discuss the common causes of diarrhea.	Explain how infections, dietary factors, medications, and stress can contribute to the development of diarrhea.	C2	MK	Lecture, Small group discussion	Case studies	SAQ	Pathology, Microbiology
HomUG-PMI.5.19			Identify the key symptoms and clinical features of diarrhea.	Describe how symptoms such as loose stools, abdominal cramping, and	C2	MK	Lecture, Small group	SAQ, LAQ	LAQ, SAQ	Clinical medicine

				dehydration can help diagnose diarrhea.			discussion			
HomUG-PMI.5.20	HO		Discuss the role of homoeopathic remedies in the management of diarrhea.	Explain how remedies such as Podophyllum, Arsenicum album, and Chamomilla can be used to treat symptoms of diarrhea.	C2	MK	Lecture, Small group discussion	Assignments, MCQ	MCQs, Short-answer questions	Homoeopathic Materia Medica
HomUG-PMI.5.21	K&S		Describe the importance of fluid and electrolyte management in the management of diarrhea.	Explain how maintaining hydration and electrolyte balance is crucial in the treatment of diarrhea.	C2	MK	Lecture, Small group discussion	Tutorials, Goup projects	LAQ, SAQ	Physiology
HomUG-PMI.5.22			Define constipation and its characteristics.	Define constipation as infrequent bowel movements or difficulty passing stools, often associated with hard, dry stools and straining.	C1	MK	Lecture, Small group discussion	Quizzes, Peer assessment	SAQ	Physiology

HomUG-PMI.5.23			Describe the pathophysiology of constipation.	Explain how factors such as slow colonic transit, pelvic floor dysfunction, and lifestyle factors can contribute to constipation.	C2	MK	Lecture, Small group discussion	Tutorials, Group projects	LAQ, SAQ	Physiology
HomUG-PMI.5.24			Discuss the common causes of constipation.	Explain how factors such as inadequate dietary fiber, dehydration, sedentary lifestyle, and certain medications can cause constipation.	C2	MK	Lecture, Small group discussion	Tutorials, Assignments	MCQs, Short-answer questions	Physiology
HomUG-PMI.5.25			Identify the key symptoms and clinical features of constipation.	Describe how symptoms such as straining, lumpy or hard stools, and a feeling of incomplete evacuation can help diagnose constipation.	C2	MK	Lecture, Small group discussion	MCQ, Assignments	MCQs, Short-answer questions	Clinical medicine

HomUG-PMI.5.26	HO		Discuss the role of homoeopathic remedies in the management of constipation.	Explain how remedies such as Bryonia, Nux vomica, and Lycopodium can be used to treat symptoms of constipation.	C2	MK	Lecture, Small group discussion	Observations	MCQs, Short-answer questions	Homoeopathic Materia Medica
HomUG-PMI.5.27	K&S		Describe the importance of lifestyle modifications in the management of constipation.	Explain how dietary changes, increased physical activity, and regular bowel habits can help alleviate constipation.	C2	DK	Lecture, Small group discussion	Tutorials, Assignments	LAQ, SAQ	Physiology
HomUG-PMI.5.28			Define dysentery and its characteristics.	Define dysentery as a type of diarrhea that contains blood or mucus, often accompanied by abdominal pain and fever.	C2	MK	Lecture, Small group discussion	Quizzes, Peer assessment	SAQ	Physiology
HomUG-PMI.5.29			Describe the pathophysiology of dysentery.	Explain how infections, particularly bacterial and parasitic, can lead to	C2	MK	Lecture, Small group discussion	Tutorials, Assignments	LAQ, SAQ	Pathology

				inflammation of the intestines and the characteristic symptoms of dysentery.						
HomUG-PMI.5.30			Discuss the common causes of dysentery.	Explain how pathogens such as Shigella, Salmonella, and Entamoeba histolytica can cause dysentery.	C2	MK	Lecture, Small group discussion	Case studies	SAQ	Pathology
HomUG-PMI.5.31			Identify the key symptoms and clinical features of dysentery.	Describe how symptoms such as bloody diarrhea, abdominal cramps, and tenesmus can help diagnose dysentery.	C2	MK	Lecture, Small group discussion	Problem-based learning	MCQs, Short-answer questions	Clinical medicine
HomUG-PMI.5.32	HO		Discuss the role of homoeopathic remedies in the management of dysentery.	Explain how remedies such as Merc sol, Aloe socotrina, and Podophyllum can be used to treat symptoms of dysentery.	C2	MK	Lecture, Small group discussion	Observations	MCQs, Short-answer questions	Homoeopathic Materia Medica

HomUG-PMI.5.33	K&S		Describe the importance of hydration and electrolyte management in the management of dysentery.	Explain how maintaining hydration and electrolyte balance is crucial in the treatment of dysentery.	C2	MK	Lecture, Small group discussion	Tutorials, Assignments	LAQ, SAQ	Physiology
HomUG-PMI.5.34			Define unintentional weight loss and its significance.	Define unintentional weight loss as a decrease in body weight that occurs without purposeful dieting or exercise, often indicating an underlying health issue.	C1	MK	Lecture, Small group discussion	Quizzes, Peer assessment	SAQ	Physiology
HomUG-PMI.5.35			Describe the pathophysiology of unintentional weight loss.	Explain how various factors, such as increased metabolism, reduced nutrient absorption, and chronic inflammation, can lead to unintentional weight loss.	C2	MK	Lecture, Small group discussion	Tutorials, Assignments	LAQ, SAQ, MCQ	Physiology

HomUG-PMI.5.36			Discuss the common causes of unintentional weight loss.	Explain how conditions such as cancer, gastrointestinal disorders, hyperthyroidism, and depression can cause unintentional weight loss.	C2	MK	Lecture, Small group discussion	Case studies	SAQ	Physiology, Pathology
HomUG-PMI.5.37			Identify the key symptoms and clinical features associated with unintentional weight loss.	Describe how symptoms such as fatigue, weakness, and changes in appetite can help diagnose unintentional weight loss.	C2	MK	Lecture, Small group discussion	Problem-based learning	MCQs, Short-answer questions	Clinical medicine
HomUG-PMI.5.38	HO		Discuss the role of homoeopathic remedies in the management of unintentional weight loss.	Explain how remedies such as Calcareacarbonica, Natrum muriaticum, and Phosphorus can be used to address underlying causes of unintentional weight loss.	C2	MK	Lecture, Small group discussion	Assignments	MCQs, Short-answer questions	Homoeopathic Materia Medica

HomUG-PMI.5.39	K&S		Describe the importance of a comprehensive evaluation in the management of unintentional weight loss.	Explain how assessing medical history, conducting physical examinations, and performing diagnostic tests are essential in identifying the cause of unintentional weight loss.	C2	DK	Lecture, Small group discussion	Tutorials, Assignments	LAQ, SAQ	Clinical medicine
HomUG-PMI.5.40			Describe the pathophysiology of gastrointestinal bleeding	Explain the mechanisms by which various conditions, such as peptic ulcers, esophageal varices, and inflammatory bowel disease, can lead to GI bleeding.	C2	MK	Lecture, Small group discussion	Tutorials, Assignments	LAQ, SAQ	Pathology
HomUG-PMI.5.41			Discuss the risk factors associated with GI bleeding	Identify and explain the risk factors, such as NSAID use, alcohol consumption, and coagulopathy,	C2	MK	Lecture, Small group discussion	Case studies	MCQs, Short-answer questions	Physiology, Pathology

				that can predispose individuals to GI bleeding.						
HomUG-PMI.5.42			Explain the clinical presentation of GI bleeding	Describe the signs and symptoms, such as hematemesis, melena, and hematochezia, that are indicative of GI bleeding.	C2	MK	Lecture, Small group discussion	Problem-based learning	MCQs, Short-answer questions	Clinical medicine
HomUG-PMI.5.43	HO		Describe the common homoeopathic remedies used in the management of GI bleeding	Explain the indications for remedies such as Phosphorus, Hamamelis, and Ferrummetallicum in treating various causes of GI bleeding.	C2	MK	Lecture, Small group discussion	Case studies	MCQs, Short-answer questions	Homoeopathic Tteria Medica
HomUG-PMI.5.44			Explain the concept of miasmatic prescribing in homeopathy	Describe how miasmatic factors are considered in chronic cases of GI bleeding for long-term management.	C2	DK	Lecture, Small group discussion	Observations, Simulations	SAQ	Organon

HomUG-PMI.5.45			Define jaundice and its clinical significance	Define jaundice as the yellow discoloration of the skin and mucous membranes due to elevated bilirubin levels and explain its importance in clinical diagnosis.	C1	MK	Lecture, Small group discussion	Quizzes, Peer assessment	SAQ	Physiology, Pathology
HomUG-PMI.5.46			Describe the pathophysiology of jaundice	Explain the mechanisms of hyperbilirubinemia, including hemolysis, hepatocellular dysfunction, and biliary obstruction, leading to jaundice.	C2	MK	Lecture, Small group discussion	Case studies, Role-playing	LAQ, SAQ	Physiology, Surgery
HomUG-PMI.5.47			Discuss the causes of jaundice	Identify and explain the various etiologies of jaundice, including viral hepatitis, alcoholic liver disease, and biliary tract obstruction.	C2	MK	Lecture, Small group discussion	Problem-based learning	MCQs, Short-answer questions	Physiology, Surgery

HomUG-PMI.5.48			Explain the clinical features of jaundice	Describe the signs and symptoms of jaundice, such as yellowing of the skin, dark urine, and pale stools, and their significance in diagnosis.	C2	MK	Lecture, Small group discussion	Observations, Simulations	MCQs, Short-answer questions	Clinical medicine
HomUG-PMI.5.49	HO		Describe the common homoeopathic remedies used in the management of jaundice	Explain the indications for remedies such as Chelidonium, Lycopodium, and Natrum sulphuricum in treating jaundice.	C2	MK	Lecture, Small group discussion	Case studies, Role-playing	MCQs, Short-answer questions	Homoeopathic Tteria Medica
HomUG-PMI.5.50	K&S		Define ascites and its clinical significance	Define ascites as the abnormal accumulation of fluid in the peritoneal cavity and its importance in clinical diagnosis.	C1	MK	Lecture, Small group discussion	Quizzes, Peer assessment	SAQ	Anatomy, Physiology

HomUG-PMI.5.51			Describe the pathophysiology of ascites	Explain the mechanisms of fluid accumulation in ascites, including portal hypertension, hypoalbuminemia, and lymphatic obstruction.	C2	MK	Lecture, Small group discussion	Case studies, Role-playing	LAQ, SAQ	Physiology, Pathology
HomUG-PMI.5.52			Discuss the causes of ascites	Identify the various etiologies of ascites, including liver cirrhosis, heart failure, and malignancy.	C2	MK	Lecture, Small group discussion	Problem-based learning	MCQs, Short-answer questions	Pathology
HomUG-PMI.5.53			Explain the clinical features of ascites	Describe the signs and symptoms of ascites, such as abdominal distension and shifting dullness, and their significance in diagnosis.	C2	MK	Lecture, Small group discussion	Observations, Simulations	LAQ, SAQ	Surgery, Clinical Medicne

HomUG-PMI.5.54			Differentiate between transudative and exudative ascites	Define transudative and exudative ascites and the pathophysiological differences between them.	C1	MK	Lecture, Small group discussion	Quizzes, Peer assessment	SAQ	Pathology
HomUG-PMI.5.55			Discuss the classification of ascites based on the underlying cause	Explain the categorization of ascites as cirrhotic, cardiac, malignant, and tuberculous based on the underlying disease process.	C2	MK	Lecture, Small group discussion	#NAME?	MCQs, Short-answer questions	Pathology
HomUG-PMI.5.56			Describe the grading of ascites based on severity	Explain the use of imaging modalities, such as ultrasound, in grading ascites from mild to severe based on fluid accumulation.	C2	MK	Lecture, Small group discussion	Problem-based learning	MCQs, Short-answer questions	Pathology, Surgery
HomUG-PMI.5.57			Explain the role of ascitic fluid analysis in diagnosis	Describe the use of ascitic fluid analysis, including cell count, albumin gradient, and	C2	MK	Lecture, Small group discussion	Presentations, Group projects	SAQ	Physiology, Laboratory Medicine

				culture, in diagnosing the cause of ascites.						
HomUG-PMI.5.58	HO		Describe the common homoeopathic remedies used in the management of ascites	Explain the indications for remedies such as Apis mellifica, Lycopodium, and Carduus marianus in treating ascites.	C2	MK	Lecture, Small group discussion	Case studies,	MCQs, Short-answer questions	Homoeopathic Materia Medica

6.1.6. Renal and Urinary Tract Dysfunctions

Sl. No.	Domain of Competency	Millers Level	Content	SLO	Blooms Domain/ Guilbert's Level	Priority	T-L Methods	Assessment		Integration
								F	S	
HomUG-PMI.6.1	K&S	K	Define the terms "renal dysfunction" and "urinary tract dysfunction"	Students should be able to define these terms and differentiate between dysfunction of the kidneys and the urinary tract	C1	MK	Lecture, Group discussion	MCQ, Written test	SAQ	Anatomy, Pathology

HomUG-PMI.6.2			Identify the various causes of renal dysfunction	Students should be able to list the factors that can lead to dysfunction of the kidneys	C1	MK	Lecture, Group discussion	MCQ, Written test	SAQ	Medicine, Pathology
HomUG-PMI.6.3			Identify the various causes of urinary tract dysfunction	Students should be able to list the factors that can lead to dysfunction of the urinary tract	C1	MK	Lecture, Group discussion	MCQ, Written test	SAQ	Medicine, Pathology
HomUG-PMI.6.4		KH	Describe the underlying pathophysiology of renal dysfunction	Students should be able to describe the pathophysiological processes involved in renal dysfunction	C2	NK	Lecture, Group discussion	MCQ, Written test	SAQ	Physiology, Pathology
HomUG-PMI.6.5		K	Define the terms "cystitis" and "bladder pain syndrome"	Students should be able to define these terms and differentiate between them	C1	MK	Lecture, Group discussion	MCQ, Written test	SAQ, MCQ	Pathology, Surgery
HomUG-PMI.6.6			Describe the symptoms and clinical presentation of cystitis/bladder pain syndrome	Students should be able to list the common symptoms associated with cystitis and bladder pain syndrome	C1	MK	Lecture, Group discussion	MCQ, Written test	SAQ, MCQ	Surgery, Urology

HomUG-PMI.6.7		KH	Discuss the causes and risk factors associated with cystitis/bladder pain syndrome	Students should be able to discuss the various factors that can lead to the development of cystitis and bladder pain syndrome	C2	NK	Lecture, Group discussion	MCQ, Written test	SAQ, MCQ	Pathology, Urology
HomUG-PMI.6.8	HO		Describe the principles of homoeopathic management for cystitis/bladder pain syndrome	Students should be able to describe the basic principles of homoeopathic treatment for cystitis and bladder pain syndrome	C2	MK	Lecture, Group discussion	MCQ, Written test	SAQ, MCQ	Homoeopathic Materia Medica
HomUG-PMI.6.9		SH	Demonstrate the process of selecting a homoeopathic remedy for cystitis/bladder pain syndrome based on the totality of symptoms	Students should be able to demonstrate how to select a homoeopathic remedy for a case of cystitis/bladder pain syndrome	P2	MK	Role-playing, Simulation	MCQ, Written test	SAQ, MCQ	Homoeopathic Materia Medica

HomUG-PMI.6.10	K&S	K	Define the term "dysuria" and differentiate it from other urinary symptoms	Students should be able to define dysuria with its characteristic features	C1	MK	Lecture, Group discussion	MCQ, Written test	SAQ, MCQ	Physiology, Urology
HomUG-PMI.6.11			Describe the various causes of dysuria	Students should be able to list the factors that can lead to the development of dysuria	C1	MK	Lecture, Group discussion	MCQ, Written test	SAQ, MCQ	Pathology, Urology
HomUG-PMI.6.12		KH	Explain the underlying pathophysiology of dysuria	Students should be able to explain the pathological processes that cause dysuria	C2	NK	Lecture, Group discussion	MCQ, Written test	SAQ, MCQ	Physiology, Pathology
HomUG-PMI.6.13			Discuss the clinical features and presentation of dysuria	Students should be able to describe the common symptoms and signs associated with dysuria	C2	MK	Lecture, Group discussion	MCQ, Written test	SAQ, MCQ	Surgery, Pathology
HomUG-PMI.6.14	HO		Explain the principles of homoeopathic management for dysuria	Students should be able to describe the basic principles of homoeopathic treatment for dysuria	C2	MK	Lecture, Group discussion	MCQ, Written test	SAQ, MCQ	Homoeopathic Materia Medica

HomUG-PMI.6.15			Demonstrate the process of selecting a homoeopathic remedy for dysuria based on the totality of symptoms	Students should be able to demonstrate how to select a homoeopathic remedy for a case of dysuria	P2	MK	Role-playing, Simulation	MCQ, Written test	SAQ, MCQ	Homoeopathic Materia Medica
HomUG-PMI.6.16	K&S	K	Define the term "azotemia" and explain its significance	Students should be able to 1.defineazotemia and 2. understand its clinical implications	C1	MK	Lecture, Group discussion	MCQ, Written test	SAQ, MCQ	Physiology, Pathology, Nephrology
HomUG-PMI.6.17			Describe the various causes and mechanisms leading to the development of azotemia	Students should be able to list the factors that can lead to the development of azotemia	C1	MK	Lecture, Group discussion	MCQ, Written test	SAQ, MCQ	Pathology, Nephrology
HomUG-PMI.6.18		KH	Explain the underlying pathophysiological processes involved in the development of azotemia	Students should be able to explain the pathological processes that lead to elevated blood urea nitrogen (BUN) and creatinine levels in azotemia	C2	NK	Lecture, Group discussion	MCQ, Written test	SAQ, MCQ	Physiology, Pathology, Nephrology

HomUG-PMI.6.19			Discuss the clinical presentation and signs associated with azotemia	Students should be able to describe the common clinical manifestations of azotemia	C2	MK	Lecture, Group discussion	MCQ, Written test	SAQ, MCQ	Nephrology
HomUG-PMI.6.20			Discuss the diagnostic tests and procedures used to evaluate and diagnose azotemia	Students should be able to discuss the clinical investigations used to evaluate azotemia	C2	NK	Lecture, Group discussion	MCQ, Written test	SAQ, MCQ	Laboratory Medicine, Nephrology
HomUG-PMI.6.21	HO		Explain the principles of homoeopathic management for azotemia	Students should be able to describe the basic principles of homoeopathic treatment for azotemia	C2	MK	Lecture, Group discussion	MCQ, Written test	SAQ, MCQ	Homoeopathic Materia Medica
HomUG-PMI.6.22			Demonstrate the process of selecting a homoeopathic remedy for azotemia based on the totality of symptoms	Students should be able to demonstrate how to select a homoeopathic remedy for a case of azotemia	P2	MK	Role-playing, Simulation	MCQ, Written test	SAQ, MCQ	Homoeopathic Materia Medica
KHomUG-PMI.6.23		K	Define the terms "fluid imbalance" and "electrolyte imbalance"	Students should be able to define these terms	C1	MK	Lecture, Group discussion	MCQ, Written test	SAQ, MCQ	Physiology

HomUG-PMI.6.24			Describe the various causes and factors contributing to fluid and electrolyte imbalances	Students should be able to list the factors that lead to the development of fluid and electrolyte imbalances	C1	MK	Lecture, Group discussion	MCQ, Written test	SAQ, MCQ	Medicine, Physiology
HomUG-PMI.6.25		KH	Explain the underlying pathophysiological processes involved in the development of fluid and electrolyte imbalances	Students should be able to explain the pathological mechanisms that lead to fluid and electrolyte imbalance	C2	NK	Lecture, Group discussion	MCQ, Written test	SAQ, MCQ	Physiology, Pathology
HomUG-PMI.6.26			Discuss the clinical signs and symptoms associated with fluid and electrolyte imbalances	Students should be able to describe the common clinical manifestations seen in patients with fluid and electrolyte imbalances	C2	MK	Lecture, Group discussion	MCQ, Written test	SAQ, MCQ	Physiology
HomUG-PMI.6.27			Identify the various risk factors that predispose individuals to the development of	Students should be able to discuss the factors that influence the fluid and	C2	NK	Lecture, Group discussion	MCQ, Written test	SAQ, MCQ	Physiology, Pathology

			fluid and electrolyte imbalances	electrolyte imbalances						
HomUG-PMI.6.28	HO		Explain the principles of homoeopathic management for fluid and electrolyte imbalances	Students should be able to describe the basic principles of homoeopathic treatment for fluid and electrolyte imbalances	C2	MK	Lecture, Group discussion	MCQ, Written test	SAQ, MCQ	Homoeopathic Materia Medica
HomUG-PMI.6.29			Demonstrate the process of selecting a homoeopathic remedy for fluid and electrolyte imbalance based on symptoms	Students should be able to demonstrate how to select a homoeopathic remedy in case of fluid and electrolyte imbalance	P2	MK	Role-playing, Simulation	MCQ, Written test	SAQ, MCQ	Homoeopathic Materia Medica
HomUG-PMI.6.30	K&S		Discuss the impact of lifestyle factors such as diet and fluid intake on fluid and electrolyte balance	Students should be able to discuss how lifestyle changes can help manage fluid and electrolyte imbalances	C2	NK	Lecture, Group discussion	MCQ, Written test	LAQ, SAQ, MCQ	Nutrition, Lifestyle Medicine

6.1.7. Hematological alterations-

Sl. No.	Domain of Competency	Millers Level	Content	SLO	Blooms Domain/ Guilbert's Level	Priority	T-L Methods	Assessment		Integration
								F	S	
HomUG-PMI.7.1	K&S	K	Define the terminologies used.	Students should be able to define following hematological alterations with their characterestics	C1	MK	Lecture, Group discussion	Quiz, Written test	MCQ, SAQ	Physiology, Pathology
7.1a				1. Anemia,						
7.1a				2. Leukocytosis,						
7.1a				3. Leucopenia,						
7.1a				4. Bleeding diatheses						
HomUG-PMI.7.2		KH	Identify the various risk factors that predispose individuals to the development of hematological alterations	Students should be able to discuss the factors that increase the likelihood of developing the above hematological alterations	C2	MK	Lecture, Group discussion	Quiz, Written test	MCQ, SAQ	Physiology, Pathology

HomUG-PMI.7.3			Explain the underlying pathophysiological processes involved in the development of hematological alterations	Students should be able to explain the pathological mechanisms that lead to the following hematological disorders	C2	MK	Lecture, Group discussion	Quiz, Assignments, Written test	MCQ, SAQ	Physiology, Pathology
7.3a				1. Anemia,						
7.3a				2. Leukocytosis,						
7.3a				3. Leucopenia,						
7.3a				4. Bleeding diatheses						
HomUG-PMI.7.4			Discuss the common signs and symptoms associated with hematological alterations	Students should be able to describe the typical clinical manifestations observed in patients with following hematological disorders	C2	MK	Lecture, Group discussion	Quiz, Assignments, Written test	MCQ, LAQ, SAQ	Pathology, Hematology
7.4a				1. Anemia,						
7.4a				2. Leukocytosis,						
7.4a				3. Leucopenia,						
7.4a				4. Bleeding diatheses						

HomUG-PMI.7.5			Discuss the diagnostic tests and procedures used to evaluate and diagnose hematological alterations	Students should be able to discuss the various tests and procedures used to evaluate hematological disorders	C2	MK	Lecture, Group discussion	Quiz, Assignments, Written test	MCQ, SAQ	Pathology, Laboratory Medicine, Hematology
HomUG-PMI.7.6			Explain the principles of homoeopathic management for hematological alterations	Students should be able to describe the basic principles of homoeopathic treatment for hematological disorders	C2	MK	Lecture, Group discussion	Quiz, Assignments, Written test	SAQ	Organon of Medicine
HomUG-PMI.7.7			Explain how homoeopathic remedies are selected for hematological alterations	Students should be able to explain the process of selection homoeopathic remedies for hematological alterations	C2	MK	Lecture, Group discussion	Quiz, Assignments, Written test	SAQ	Organon, Materia medica
HomUG-PMI.7.8		SH	Demonstrate the process of selecting a homoeopathic remedy for hematologicalalterations based on symptoms	Students should be able to demonstrate how to select a homoeopathic remedy for a case of hematological dysfunction	P2	MK	Group Discussion, Case study	Assignments	SAQ	Organon, Materia medica

6.1.8. Psychological symptoms-

Sl. No.	Domain of Competency	Millers Level	Content	SLO	Blooms Domain / Guilbert's Level	Priority	T-L Methods	Assessment		Integration
								F	S	
HomUG-PMI.8.1	K&S	K	Define the terms "psychological symptoms" and explain their relevance	1. Psychological disorders are patterns of behavioral or psychological symptoms that impact multiple areas of life. 2. These disorders create distress for the person experiencing the symptoms. 3. They can be temporary or lifelong, and affect how you think, feel, and behave	C1	MK	Lecture, Group discussion	Quiz, Written test	SAQ	Psychiatry, Psychology
HomUG-PMI.8.2			Define the term "fatigue" and explain its relevance	Define fatigue and its significance	C1	MK	Lecture, Group discussion	Quiz, Written test	SAQ	Physiology, Medicine
HomUG-PMI.8.3			Describe the various factors and conditions that can lead to fatigue	List the factors that can contribute to the onset of fatigue	C1	MK	Lecture, Group discussion	Quiz, Written test	SAQ	Physiology, Medicine

HomUG-PMI.8.4		KH	Explain the underlying physiological processes involved in the development of fatigue	Explain the physiological mechanisms that underlie the manifestation of fatigue	C2	NK	Lecture, Group discussion	Quiz, Written test	SAQ	Physiology, Medicine
HomUG-PMI.8.5		K	Define the term "asthenia"	Define asthenia and its significance	C1	MK	Lecture, Group discussion	Quiz, Written test	SAQ	Physiology, Medicine
HomUG-PMI.8.6			Describe the various factors and conditions that can lead to asthenia	List the factors that can contribute to the onset of asthenia	C2	MK	Lecture, Group discussion	Quiz, Written test	SAQ	Physiology, Medicine
HomUG-PMI.8.7		KH	Explain the underlying physiological processes involved in the development of asthenia	Explain the physiological mechanisms that underlie the manifestation of asthenia	C2	NK	Lecture, Group discussion	Quiz, Written test	SAQ	Physiology, Medicine
HomUG-PMI.8.8		K	Define the term "anxiety"	Define anxiety and its significance	C1	MK	Lecture, Group discussion	Quiz, Written test	SAQ	Psychiatry, Psychology
HomUG-PMI.8.9			Describe the various factors and conditions that can lead to anxiety	List the factors that can contribute to the onset of anxiety	C2	MK	Lecture, Group discussion	Quiz, Written test	SAQ	Psychiatry, Psychology

HomUG-PMI.8.10		KH	Explain the underlying physiological processes involved in the development of anxiety	Explain the physiological mechanisms that underlie the manifestation of anxiety	C2	NK	Lecture, Group discussion	Quiz, Written test	SAQ	Physiology, Psyc
HomUG-PMI.8.11		K	Define the term "sadness"	Define sadness and its significance	C1	MK	Lecture, Group discussion	Quiz, Written test	SAQ	Psychiatry, Psychology
HomUG-PMI.8.12		KH	Describe the various factors and conditions that can lead to sadness	List the factors that can contribute to the onset of sadness	C2	MK	Lecture, Group discussion	Quiz, Written test	SAQ	Psychiatry, Psychology
HomUG-PMI.8.13		K	Define the term "disorders of thought" and explain its relevance	Define disorders of thought and understand their significance	C1	MK	Lecture, Group discussion	Quiz, Written test	SAQ	Psychiatry, Psychology
HomUG-PMI.8.14		KH	Describe the various factors and conditions that can lead to disorders of thought	List the factors that can contribute to the onset of disorders of thought	C2	MK	Lecture, Group discussion	Quiz, Written test	SAQ	Psychiatry, Psychology
HomUG-PMI.8.15		K	Define the term "disorders of perception" and explain its relevance	Define disorders of perception and their significance	C1	MK	Lecture, Group discussion	Quiz, Written test	SAQ	Psychiatry, Psychology

HomUG-PMI.8.16		KH	Describe the various factors and conditions that can lead to disorders of perception	List he factors that can contribute to the onset of disorders of perception	C2	MK	Lecture, Group discussion	Quiz, Written test	SAQ	Psychiatry, Psychology
HomUG-PMI.8.17		K	Define the term "sleep disorders" and explain its relevance	Define sleep disorders.	C1	MK	Lecture, Group discussion	Quiz, Written test	SAQ	Psychiatry, Psychology
HomUG-PMI.8.18		KH	Describe the various factors and conditions that can lead to sleep disorders	List the factors that can contribute to the onset of sleep disorders	C2	MK	Lecture, Group discussion	Quiz, Written test	SAQ	Psychiatry, Psychology
HomUG-PMI.8.19			Explain the underlying physiological processes involved in the development of sleep disorders	Explain the physiological mechanisms that underlie the manifestation of sleep disorders	C2	NK	Lecture, Group discussion	Quiz, Written test	SAQ	Physiology, Psychiatry

6.2. Competency tables for immunity and susceptibility – general considerations

6.2.1. Introduction and primary & secondary immunodeficiency states-

Sl. No.	Domain of Competency	Millers Level	Content	SLO	Blooms Domain/ Guilbert's Level	Priority	T-L Methods	Assessment		Integration
								F	S	
HomUG-PMI.9.1	K&S	K	Explanation of primary and secondary immunodeficiency states	Understanding the difference between primary and secondary immunodeficiency	C1	MK	Lecture, Discussion	Quizzes, Written test	SAQ	Physiology, Pathology, Microbiology
HomUG-PMI.9.2			Overview of common genetic and acquired causes	Recognition of common primary immunodeficiency disorders	C2	MK	Case studies, Group work	Quizzes, Written test	MCQ, SAQ	Pathology, Microbiology
HomUG-PMI.9.3		KH	Description of clinical signs and symptoms	Identification of clinical features suggestive of immunodeficiency	C2	MK	Group Discussiion, Assignments	Quizzes, Written test, Tutorials	MCQ, SAQ	Pathology, Microbiology
HomUG-PMI.9.4			Description of therapeutic interventions and preventive measures	Demonstration of appropriate management plans for immunodeficiency disorders	C3	DK	Debates	Tutorials	SAQ	Pathology, Microbiology

6.2.2. Hypersensitivity reactions: I,II,III,IV-

Sl. No.	Domain of Competency	Millers Level	Content	SLO	Blooms Domain/ Guilbert's Level	Priority	T-L Methods	Assessment		Integration
								F	S	
HomUG-PMI.10.1	K&S	K	Explanation of hypersensitivity reaction types	Understanding the classification and mechanisms of hypersensitivity reactions	C1	MK	Lecture, Discussion	MCQ	SAQ	Pathology, Microbiology
01a				Type I hypersensitivity reactions						
01b				Type II hypersensitivity reactions						
01c				Type III hypersensitivity reactions						
01d				Type IV hypersensitivity reactions						
HomUG-PMI.10.2			Overview of common allergens and mediators such as IgE, histamine, and cytokines	Recognition of allergens and mediators associated with type I hypersensitivity	C2	MK	Group discussion	Assignments, MCQ	SAQ	Pathology, Microbiology

HomUG-PMI.10.3		KH	Explanation of IgE-mediated mast cell degranulation	Understanding the sequence of events leading to type I hypersensitivity reactions	C2	NK	Lecture, Group Discussion	Assignments, MCQ	SAQ	Physiology, Pathology
HomUG-PMI.10.4			Description of allergic rhinitis, asthma, anaphylaxis, and atopic dermatitis	Identification of clinical features suggestive of type I hypersensitivity	C2	MK	Lectures, Group discussion	MCQ	SAQ, Bedside examination	Physiology, Pathology, Clinical medicine
HomUG-PMI.10.5			Explanation of skin prick tests and serum IgE assays	Application of diagnostic strategies for type I hypersensitivity assessment	C2	DK	Debates	Tutorials	SAQ	Physiology, Pathology, Clinical medicine
HomUG-PMI.10.6		K	Overview of common antigens and antibodies such as blood group antigens and autoantibodies	Identify common antigens and antibodies involved in type II hypersensitivity reactions	C1	MK	Lecture	Assignments, MCQ	SAQ, Viva voce	Pathology, Microbiology
HomUG-PMI.10.7		KH	Explanation of antibody-mediated cell destruction and complement activation	Understanding the sequence of events leading to type II hypersensitivity reactions	C2	MK	Lecture	Assignments, MCQ	SAQ	Physiology, Pathology

HomUG-PMI.10.8			Description of autoimmune hemolytic anemia, Goodpasture syndrome, and hemolytic disease of the newborn	Identification of clinical features suggestive of type II hypersensitivity	C2	MK	Lecture, case based learning	Assignments, MCQ	SAQ, Viva voce	Pathology, clinical medicine
HomUG-PMI.10.9			Explanation of direct and indirect Coombs tests	Application of diagnostic strategies for type II hypersensitivity assessment	C2	DK	Debates	Tutorials	SAQ, Viva voce	Physiology, pathology
HomUG-PMI.10.10		K	Overview of common antigens and antibodies such as immune complexes and autoantibodies	Identify common antigens and antibodies involved in type III hypersensitivity reactions	C1	MK	Lecture	Assignments, MCQ	SAQ, Viva voce	Pathology, Microbiology
HomUG-PMI.10.11		KH	Explanation of immune complex deposition and complement activation	Understanding the sequence of events leading to type III hypersensitivity reactions	C2	MK	Lecture	Assignments, MCQ	SAQ	Physiology, Pathology

HomUG-PMI.10.12			Description of serum sickness, Arthus reaction, and systemic lupus erythematosus	Identification of clinical features suggestive of type III hypersensitivity	C2	MK	Lecture, case based learning	Assignments, MCQ	SAQ, Viva voce	Pathology, clinical medicine
HomUG-PMI.10.13			Explanation of laboratory tests such as complement levels and immunofluorescence	Application of diagnostic strategies for type III hypersensitivity assessment	C2	DK	Debates	Tutorials	SAQ, Viva voce	Physiology, pathology
HomUG-PMI.10.14		K	Overview of common antigens and cells such as haptens and T cells	Identify common antigens and cells involved in type IV hypersensitivity reactions	C1	MK	Lecture	Assignments, MCQ	SAQ, Viva voce	Pathology, Microbiology
HomUG-PMI.10.15		KH	Explanation of T cell-mediated inflammation and cytokine release	Understanding the sequence of events leading to type IV hypersensitivity reactions	C2	MK	Lecture	Assignments, MCQ	SAQ	Physiology, Pathology
HomUG-PMI.10.16			Description of contact dermatitis, tuberculin reaction, and	Identification of clinical features suggestive of type IV	C2	MK	Lecture, case based	Assignments, MCQ	SAQ, Viva voce	Pathology, clinical medicine

			autoimmune diseases	hypersensitivity			learning			
HomUG-PMI.10.17			Explanation of patch testing and lymphocyte proliferation assays	Application of diagnostic strategies for type IV hypersensitivity assessment	C2	DK	Debates	Tutorials	SAQ, Viva voce	Physiology, pathology

6.2.3. Autoimmune Diseases-

Sl. No.	Domain of Competency	Millers Level	Content	SLO	Blooms Domain/ Guilbert's Level	Priority	T-L Methods	Assessment		Integration
								F	S	
HomUG-PMI.11.1	K&S	K	Explanation of autoimmune disease etiology and pathogenesis	Understanding the basics of autoimmune diseases and their mechanisms	C1	MK	Lecture, Discussion	MCQ	SAQ	Pathology, Microbiology
HomUG-PMI.11.2			Overview of common autoimmune disorders such as rheumatoid arthritis, systemic lupus erythematosus, and multiple sclerosis	Recognition of autoimmune diseases and their clinical presentations	C1	MK	Lecture, Discussion	Assignments, MCQ	SAQ, Viva voce	Pathology, Microbiology, Clinical medicine

HomUG-PMI.11.3		KH	Explanation of immune dysregulation in autoimmune disorders	Understanding the involvement of autoantibodies and T cells in autoimmune pathophysiology	C2	MK	Problem-based learning	Tutorials, MCQ	SAQ, Viva voce	Physiology, pathology
HomUG-PMI.11.4			Description of systemic symptoms and organ involvement in autoimmune disorders	Identification of systemic and organ-specific manifestations of autoimmune diseases	C2	MK	Lecture, Discussion	Tutorials, MCQ	SAQ, Viva voce	Pathology, Clinical medicine

6.2.4. HIV Disease-

Sl. No.	Domain of Competency	Millers Level	Content	SLO	Blooms Domain/ Guilbert's Level	Priority	T-L Methods	Assessment		Integration
								F	S	
HomUG-PMI.12.1	K&S	K	Explanation of HIV virus and its transmission	Understanding the basics of HIV/AIDS and its causative agent	C1	MK	Lecture, Group Discussion	MCQ	SAQ	Pathology, Microbiology

HomUG-PMI.12.2			Overview of HIV transmission routes such as sexual contact, blood exposure, and vertical transmission	Identify common risk factors and modes of transmission for HIV infection	C1	MK	Lecture, Group Discussion	Assignments, MCQ	SAQ, Viva voce	Pathology, Microbiology, PSM
HomUG-PMI.12.3		KH	Explanation of HIV progression from acute infection to AIDS	Understanding the stages and clinical course of HIV disease	C2	MK	Lectures, case based learning	Tutorials, Assignments, MCQ	SAQ, Viva voce	Clinical medicine
HomUG-PMI.12.4			Description of HIV-related symptoms and AIDS-defining illnesses	Identification of clinical features suggestive of HIV infection and AIDS	C2	MK	Workshops, Case-based learning	Assignments, MCQ	SAQ, Viva voce	Clinical medicine
HomUG-PMI.12.5			Explanation of HIV replication and immune depletion	Understand the pathophysiology of HIV infection and its effects on the immune system	C2	DK	Lectures, Group Discussion	Assignments, MCQ	SAQ, Viva voce	Pathology, Microbiology
HomUG-PMI.12.6		SH	Description of HIV prevention methods and harm reduction approaches	Demonstration of appropriate prevention strategies for HIV infection	P2	DK	Seminars	Tutorials, Assignments, MCQ	SAQ, Viva voce	Community outreach programs on HIV prevention

6.2.5. Transplants and graft rejection-

Sl. No	Domain of Competency	Millers Level	Content	SLO	Blooms Domain / Guilbert's Level	Priority	T-L Methods	Assessment		Integration
								F	S	
HomUG-PMI.13.1	K&S	K	Explanation of transplantation and immune response against grafts	Understanding the basics of transplantation and graft rejection	C1	MK	Lecture, Group Discussion	MCQ	SAQ	Pathology, Microbiology
HomUG-PMI.13.2			Overview of different types of transplants and their sources	Recognition of various transplantation methods and their differences	C1	MK	Lecture, Group Discussion	Assignments, MCQ	SAQ, Viva voce	Pathology, Microbiology
HomUG-PMI.13.3		KH	Explanation of the alloimmune response and mechanisms of graft rejection	Understanding the immune-mediated rejection process	C2	MK	Lectures, case based learning	Tutorials, Assignments, MCQ	SAQ, Viva voce	Pathology, Microbiology
HomUG-PMI.13.4			Description of acute and chronic rejection symptoms	Identification of clinical features suggestive of graft rejection	C2	MK	Workshops, Case-based learning	Assignments, MCQ	SAQ, Viva voce	Pathology, Microbiology

6.2.6. Homoeopathic relation of immunity and susceptibility-

Sl. No.	Domain of Competency	Millers Level	Content	SLO	Blooms Domain/ Guilbert's Level	Priority	T-L Methods	Assessment		Integration
								F	S	
HomUG-PMI.14.1	K&S	K	Overview of factors such as genetic predisposition, miasmatic influence, and constitutional characteristics	Recognition of factors influencing individual's susceptibility according to homeopathic principles	C2	MK	Lecture, Group Discussion	Case presentations, MCQ	SAQ, Viva voce	Organon and Hom. Philosophy
HomUG-PMI.14.3		KH	Description of the individualized approach in homeopathy	Identification of the importance of individualization in homeopathic treatment based on susceptibility	C2	MK	Lectures, Case-based learning	Quiz competitions, Tutorials	SAQ, Bedside examination	Organon and Hom. Philosophy
HomUG-PMI.14.4			Explanation of homeopathic remedies and constitutional treatment for improving vitality	Explain the role of homeopathic treatment strategies in enhancing immunity	C2	DK	Problem-solving scenarios, Group discussions	Case presentation, Guided discussions	Viva voce	Organon and Hom. Philosophy

HomUG-PMI.14.5			Description of the principle of similars and its role in strengthening immunity	Discuss the concept of the similimum in homeopathy and its relation to immunity and susceptibility	C2	DK	Group Discussions	Tutorials, Assignments		Organon and Hom. Philosophy
HomUG-PMI.14.6		SH	Analysis of patient outcomes and changes in susceptibility following homeopathic treatment	Evaluation of the effectiveness of homeopathic interventions on immunity	P1	DK	Patient encounters - OPD		Objective Structured Clinical Examination (OSCE)	Organon and Hom. Philosophy

6.3. Competency tables for medical genetics – an introduction

6.3.1. Introduction-

Sl. No.	Domain of Competency	Miller s Level	Content	SLO	Blooms Domain/ Guilbert's Level	Priority	T-L Methods	Assessment		Integration
								F	S	
HomUG-PM I.15.1	K&S	K	Explanation of medical genetics and its scope	Understanding the definition and scope of medical genetics	C1	MK	Lecture, Discussion	MCQ	SAQ	Physiology, Biochemistry,
HomUG-PM I.15.2			Overview of Mendelian principles, non-Mendelian inheritance, and genetic variation	Identify the basic principles of inheritance	C2	MK	Lecture, Discussion	MCQ, Assignemnts	Viva voce	Physiology, Pathology
HomUG-PM I.15.3		KH	Explanation of DNA structure, gene expression, and regulation	Describe the structure and function of DNA and genes	C2	MK	Problem-based learning	Assignments, MCQ	SAQ,	Physiology, Biochemistry

HomUG-PM I.15.4			Description of inheritance patterns (autosomal dominant, autosomal recessive, X-linked, etc.) and common genetic disorders	Describe the patterns of inheritance and genetic disorders	C2	MK	Interactive workshops, Case-based learning	MCQ, Assignments	SAQ	Pathology, Clinical medicine
HomUG-PM I.15.5			Explanation of genetic testing methods, indications, and implications	Application of genetic counseling principles	C3	DK	Problem-solving scenarios, Group Discussion	Tutorials, MCQ	SAQ, Viva voce	Biochemistry, Clinical Medicine
HomUG-PM I.15.6		Shows how	Description of ELSI (ethical, legal, and social implications) issues in clinical practice	Demonstration of understanding ELSI principles	P1	DK	Seminars	Tutorials, Assignments		Clinical Medicine, PSM

6.3.2. Cytogenetics-

Sl. No.	Domain of Competency	Millers Level	Content	SLO	Blooms Domain/ Guilbert's Level	Priority	T-L Methods	Assessment		Integration
								F	S	
HomUG-PMI.16.1	K&S	K	Explanation of cytogenetics and its role in studying chromosomes and their abnormalities	Understanding the definition and scope of cytogenetics	C1	MK	Lecture, Discussion	MCQ	SAQ	Pathology
HomUG-PMI.16.2			Overview of chromosome structure, function, and organization	Identify the basic structure and function of chromosomes	C1	MK	Lecture, Discussion	MCQ, Assignemnts	Viva voce	Biochemistry, pathology
HomUG-PMI.16.3		KH	Explanation of cytogenetic techniques such as karyotyping, FISH, and chromosomal microarray	Understanding the principles and applications of cytogenetic methods	C2	MK	Lecture, Assgnments	Assignments, MCQ	SAQ,	Pathology

HomUG-PMI.16.4			Description of different types of chromosomal abnormalities (numerical and structural) and their subtypes (e.g., trisomy, translocation, deletion)	Identification and categorization of chromosomal abnormalities	C2	MK	Workshops, Case-based learning	MCQ, Assignments	SAQ	Pathology
HomUG-PMI.16.5			Explanation of inheritance patterns for chromosomal abnormalities (e.g., autosomal dominant, autosomal recessive, X-linked)	Recognize patterns of inheritance for chromosomal abnormalities	C2	MK	Interactive workshops, Case-based learning	Tutorials, MCQ	SAQ, Viva voce	Physiology, Biochemistry, pathology

6.3.3. Down's Syndrome-

Sl. No.	Domain of Competency	Millers Level	Content	SLO	Blooms Domain/ Guilbert's Level	Priority	T-L Methods	Assessment		Integration
								F	S	
HomUG-PMI.17.1	K&S	K	Explanation of Down's Syndrome, its causes, and characteristics	Understanding the definition and basic features of Down's Syndrome	C1	MK	Lecture, Discussion	Quizzes, Class participation	SAQ	Pathology
HomUG-PMI.17.2		KH	Overview of trisomy 21 and the genetic mechanisms leading to Down's Syndrome	Describe the genetic basis of Down's Syndrome	C2	MK	Lecture, Discussion	MCQ, Assignemnts	SAQ, Viva voce	Pathology
HomUG-PMI.17.3		Knows how	Description of physical characteristics, developmental delays, and medical issues associated with Down's Syndrome	Identification of clinical features suggestive of Down's Syndrome	C3	MK	Lecture, Assgnments	Assignments, MCQ	SAQ, MCQ	Pathology, Paediatrics

HomUG-PMI.17.4		Knows how	Explanation of prevalence, risk factors, and screening methods for Down's Syndrome	Application of knowledge regarding Down's Syndrome epidemiology and risk assessment	C4	DK	Workshops	MCQ, Assignments	SAQ	Pathology, ObG, PSM, Paediatrics
HomUG-PMI.17.5		Shows how	Description of medical interventions, therapies, and support services for individuals with Down's Syndrome	Discuss the medical and developmental management of individuals with Down's Syndrome	C5	DK	Interactive workshops, Case-based learning	Tutorials, MCQ	SAQ, Viva voce	Paediatrics

6.3.4. Turner's Syndrome-

Sl. No.	Domain of Competency	Millers Level	Content	SLO	Blooms Domain/ Guilbert's Level	Priority	T-L Methods	Assessment		Integration
								F	S	
HomUG-PMI.18.1	K&S	K	Explanation of Turner's Syndrome, its causes, and characteristics	Understanding the definition and basic features of Turner's Syndrome	C1	MK	Lecture, Discussion	Quizzes, Class participation	SAQ	Pathology

HomUG-PMI.18.2		KH	Overview of monosomy X and the genetic mechanisms leading to Turner's Syndrome	Describe the genetic basis of Turner's Syndrome	C2	MK	Lecture, Discussion	MCQ, Assignemnts	SAQ, Viva voce	Pathology
HomUG-PMI.18.3			Description of physical characteristics, developmental issues, and medical conditions associated with Turner's Syndrome	Identification of clinical features suggestive of Turner's Syndrome	C3	MK	Lecture, Assgnments	Assignments, MCQ	SAQ, MCQ	Pathology, Paediatrics
HomUG-PMI.18.4			Explanation of prevalence, risk factors, and screening methods for Turner's Syndrome	Understand the epidemiology and risk factors for Turner's Syndrome	C4	DK	Workshops	MCQ, Assignments	SAQ	Pathology, ObG, PSM, Paediatrics
HomUG-PMI.18.5			Description of medical interventions, hormone therapy, and support	Discuss the medical and developmental management of	C5	DK	Interactive workshops, Case-based learning	Tutorials, MCQ	SAQ, Viva voce	Paediatrics

			services for individuals with Turner's Syndrome	individuals with Turner's Syndrome						

6.3.5. Klinefelter’s Syndrome-

Sl. No.	Domain of Competency	Millers Level	Content	SLO	Blooms Domain/ Guilbert's Level	Priority	T-L Methods	Assessment		Integration
								F	S	
HomUG-PMI.19.1	K&S	K	Explanation of Klinefelter's Syndrome, its causes, and characteristics	Understanding the definition and basic features of Klinefelter's Syndrome	C1	MK	Lecture, Discussion	Quizzes, Class participation	SAQ	Pathology
HomUG-PMI.19.2		KH	Overview of aneuploidy (47, XXY) and the genetic mechanisms leading to Klinefelter's Syndrome	Describe the genetic basis of Klinefelter's Syndrome	C2	MK	Lecture, Discussion	MCQ, Assignemnts	SAQ, Viva voce	Pathology

HomUG-PMI.19.3			Description of physical characteristics, developmental issues, and medical conditions associated with Klinefelter's Syndrome	Identification of clinical features suggestive of Klinefelter's Syndrome	C3	MK	Lecture, Assgnments	Assignments, MCQ	SAQ, MCQ	Pathology, Paediatrics
HomUG-PMI.19.4			Explanation of prevalence, risk factors, and screening methods for Klinefelter's Syndrome	Understand the epidemiology and risk factors for Klinefelter's Syndrome	C4	DK	Workshops	MCQ, Assignments	SAQ	Pathology, ObG, PSM, Paediatrics
HomUG-PMI.19.5			Description of medical interventions, hormone therapy, and support services for individuals with Klinefelter's Syndrome	Discuss the medical and developmental management of individuals with Klinefelter's Syndrome	C5	DK	Interactive workshops, Case-based learning	Tutorials, MCQ	SAQ, Viva voce	Paediatrics

6.3.6. Cystic Fibrosis-

Sl. No.	Domain of Competency	Millers Level	Content	SLO	Blooms Domain/ Guilbert's Level	Priority	T-L Methods	Assessment		Integration
								F	S	
HomUG-PMI.20.1	K&S	K	Explanation of CF, its causes, and characteristics	Understanding the definition and basic features of CF	C1	MK	Lecture, Discussion	Quizzes, Class participation	SAQ	Pathology
HomUG-PMI.20.2			Overview of mutations in the CFTR gene and their effects on chloride transport	Describe the genetic basis of CF	C1	MK	Lecture, Discussion	MCQ, Assignemnts	SAQ, Viva voce	Pathology
HomUG-PMI.20.3		KH	Description of respiratory, digestive, and other symptoms associated with CF	Identification of clinical features suggestive of CF	C2	MK	Lecture, Assgnments	Assignments, MCQ	SAQ, MCQ	Pathology, Paediatrics
HomUG-PMI.20.4			Explanation of the mechanisms leading to mucus buildup and organ damage in CF	Understanding the pathophysiological processes underlying CF	C2	MK	Workshops	MCQ, Assignments	SAQ	Pathology, ObG, PSM, Paediatrics

HomUG-PMI.20.5			Description of treatment modalities including airway clearance techniques, medications, and nutritional support	Discuss the medical management of CF	C2	DK	Interactive workshops, Case-based learning	Tutorials, MCQ	SAQ, Viva voce	Paediatrics

6.3.7. Huntington's disease-

Sl. No.	Domain of Competency	Millers Level	Content	SLO	Blooms Domain/ Guilbert's Level	Priority	T-L Methods	Assessment		Integration
								F	S	
HomUG-PMI.21.1	K&S	K	Explanation of HD, its causes, and characteristics	Understanding the definition and basic features of HD	C1	MK	Lecture, Discussion	Quizzes, Class participation	SAQ	Pathology
HomUG-PMI.21.2			Overview of the mutation in the HTT gene and its inheritance pattern	Describe the genetic basis of HD	C1	MK	Lecture, Discussion	MCQ, Assignemnts	SAQ, Viva voce	Pathology

HomUG-PMI.21.3		KH	Description of motor, cognitive, and psychiatric symptoms associated with HD	Identification of clinical features suggestive of HD	C2	MK	Lecture, Assgnments	Assignments, MCQ	SAQ, MCQ	Pathology, Paediatrics
HomUG-PMI.21.4			Explanation of the mechanisms leading to neuronal dysfunction and degeneration in HD	Understanding the physiological processes underlying HD	C2	MK	Workshops	MCQ, Assignments	SAQ	Pathology, ObG, PSM, Paediatrics
HomUG-PMI.21.5			Explanation of genetic counseling services, predictive testing, and family planning options for HD	Explain the importance of genetic counseling and testing in HD	C2	DK	Workshop, Seminar	Tutorials, assignment		Psychology, PSM

6.3.8. Marfan's syndrome-

Sl. No.	Domain of Competency	Millers Level	Content	SLO	Blooms Domain/ Guilbert's Level	Priority	T-L Methods	Assessment		Integration
								F	S	
HomUG-PMI.22.1	K&S	K	Explanation of Marfan Syndrome, its causes, and characteristics	Understanding the definition and basic features of Marfan Syndrome	C1	MK	Lecture, Discussion	Quizzes, Class participation	SAQ	Pathology
HomUG-PMI.22.2			Overview of mutations in the FBN1 gene and their effects on connective tissue	Describe the genetic basis of Marfan Syndrome	C1	MK	Lecture, Discussion	MCQ, Assignments	SAQ, Viva voce	Pathology
HomUG-PMI.22.3		KH	Description of skeletal, cardiovascular, and ocular manifestations associated with Marfan Syndrome	Identification of clinical features suggestive of Marfan Syndrome	C2	MK	Lecture, Assgnments	Assignments, MCQ	SAQ, MCQ	Pathology, Paediatrics
HomUG-PMI.22.4			Explanation of the mechanisms leading to connective tissue abnormalities and organ dysfunction in Marfan Syndrome	Understanding the pathophysiological processes underlying Marfan Syndrome	C2	MK	Workshops	MCQ, Assignments	SAQ	Pathology, ObG, PSM, Paediatrics

HomUG-PMI.22.5			Description of treatments including medications, surgery, and lifestyle modifications for managing Marfan Syndrome symptoms	Discuss the medical management of Marfan Syndrome	C2	DK	Interactive workshops, Case-based learning	Tutorials, MCQ	SAQ, Viva voce	Paediatrics
HomUG-PMI.22.6			Explanation of genetic counseling services, family screening, and prenatal testing for Marfan Syndrome	Explain the importance of genetic counseling and screening in Marfan Syndrome	C2	DK	Workshop, Seminar	Tutorials, assignments		Psychology, PSM

6.3.9. Polycystic kidney disease-

Sl. No.	Competency	Millers Level:	Content	SLO	Blooms Domain / Guilbert's Level	Priority	T-L Methods	Assessment		Integration
								F	S	
HomUG-PMI.23.1	K&S	K	Explanation of PKD, its causes, and characteristics	Understanding the definition and basic features of PKD	C1	MK	Lecture, Discussion	Quizzes, Class participation	SAQ	Pathology

HomUG-PMI.23.2			Overview of mutations in the PKD1 and PKD2 genes and their effects on kidney development	Describe the genetic basis of PKD	C1	MK	Lecture, Discussion	MCQ, Assignemnts	SAQ, Viva voce	Pathology
HomUG-PMI.23.3		KH	Description of renal and extrarenal manifestations associated with PKD	Identification of clinical features suggestive of PKD	C2	MK	Lecture, Assgnments	Assignments, MCQ	SAQ, MCQ	Pathology, Paediatrics
HomUG-PMI.23.4			Explanation of the mechanisms leading to cyst formation, kidney enlargement, and renal dysfunction in PKD	Understanding the physiological processes underlying PKD	C2	MK	Workshops	MCQ, Assignments	SAQ	Pathology, ObG, PSM, Paediatrics
HomUG-PMI.23.5			Description of treatments including blood pressure control, pain management, and dialysis/transplantation for managing PKD complications	Discuss the medical management of PKD	C2	DK	Interactive workshops, Case-based learning	Tutorials, MCQ	SAQ, Viva voce	Paediatrics

HomUG-PMI.23.6			Explanation of genetic counseling services, family screening, and prenatal testing for PKD	Explain the importance of genetic counseling and screening in PKD	C2	DK	Workshop, Seminar	Tutorials, assignments		Psychology, PSM

6.3.10. Neoplasia-

Sl. No.	Domain of Competency	Millers Level	Content	SLO	Blooms Domain/ Guilbert's Level	Priority	T-L Methods	Assessment		Integration
								F	S	
HomUG-PMI.24.1	K&S	K	Explanation of neoplasia, its definition, and characteristics	Understanding the definition and basic features of neoplasia	C1	MK	Lecture, Discussion	Quizzes, Class participation	SAQ	Pathology
HomUG-PMI.24.2			Overview of benign and malignant neoplasms, including carcinomas, sarcomas, and hematologic malignancies	Recognition of different types of neoplasms based on histological and molecular characteristics	C1	MK	Lecture, Discussion	MCQ, Assignments	SAQ, Viva voce	Pathology

HomUG-PMI.24.3		KH	Description of the multistep process of carcinogenesis, including initiation, promotion, and progression	Understanding the molecular and cellular events leading to the development of cancer	C2	MK	Lecture, Assgnments	Assignments, MCQ	SAQ, MCQ	Pathology
HomUG-PMI.24.4			Identification of environmental, genetic, and lifestyle factors contributing to cancer risk	Recognition of modifiable and non-modifiable risk factors for cancer	C2	MK	Workshops	MCQ, Assignments	SAQ	PSM, Clinical medicine
HomUG-PMI.24.5			Description of screening tests and preventive measures for various types of cancer	Discuss the principles of cancer screening and prevention	C2	DK	Interactive workshops, Case-based learning	Tutorials, MCQ	SAQ, Viva voce	PSM, Clinical medicine
HomUG-PMI.24.6			Description of common signs and symptoms associated with cancer, including pain, weight loss, and fatigue	Identification of clinical features suggestive of cancer	C2	MK	Interactive workshops, Case-based learning	Tutorials, MCQ	SAQ, Viva voce	Clinical medicine

HomUG-PMI.24.7			Explanation of diagnostic tests such as imaging, biopsy, and tumor markers used in cancer diagnosis	Discuss the diagnostic workup for cancer	C2	DK	Assignments	Tutorials, MCQ	SAQ, Viva voce	Clinical Medicine, Radiology, Laboratory medicine, Pathology

6.4. Competency Tables for Infectious Diseases and Tropical Diseases

Sl. No.	Domain of Competency	Millers Level	Content	SLO	Blooms Domain/ Guilbert's Level	Priority	T-L Methods	Assessment		Integration
								F	S	
HomUG-PMI.25.1	K&S	K	**Herpes simplex viruses [HSV] infections**	Define Herpes simplex viruses [HSV] infections	C1	MK	Lecture, Multimedia presentation, Case Based	MCQ, Quiz, Case Based, Morphology Chart, Viva	LQ, SQ, MCQ, Case Based, Viva	Pathology, Community Medicine, Paediatrics, Dermatology
				Discuss etiopathogeneis for HSV Infections	C2	MK	Lecture, Case Based			
				Identify the epidemiology dimension of HSV Infections	C2	MK	Lecture, field visit			Community Medicine
				Explain how HSV Infections	C2	MK	Lecture, field visit			Community Medicine

				spreads from person to person						
				Describe the different clinical spectrum of HSV Infections	C2	MK	Lecture, Case Based			
				State the investigations to be done for the patient suffering from different clinical spectrum of HSV Infections	C1	MK	Lecture, Case Based			Pathology
		KH		Enumerate the diagnostic features for HSV Infections	C1	MK	Lecture, Case Based			
				Describe the differential diagnosis of HSV Infections	C2	MK	Lecture, Case Based			
		K		Describe the potential complications of HSV Infections	C2	MK	Lecture, Case Based			
		KH		Discuss the prognosis of HSV Infections	C2	MK	Lecture, Case Based			

				Summarize the treatment and management options for HSV Infections	C2	MK	Lecture, Case Based			Organon
		K		Enumerate the indications of homoeopathic medicines for the HSV Infections	C1	MK	Lecture, Case Based			Materia Medica
		KH		Describe the strategies to prevent HSV Infections transmission	C2	MK	Lecture, Case Based			Community Medicine
HomUG-PM I.25.2	K&S	K	**Varicella-zoster virus (VZV) infection**	Define Varicella-zoster virus infection (VZV)	C1	MK	Lecture, Multimedia presentation, Case Based	MCQ, Quiz, Case Based, Morphology Chart, Viva	LQ, SQ, MCQ, Case Based, Viva	Pathology, Community Medicine, Pediatrics, Dermatology
				Discuss etiopathogeneis for Varicella-zoster virus (VZV) infection	C2	MK	Lecture, Case Based			
				Identify the epidemiology dimension of Varicella-zoster virus (VZV) infection	C2	MK	Lecture, field visit			Community Medicine

				Explain how Varicella-zoster virus (VZV) infection spreads from person to person	C2	MK	Lecture, field visit			Community Medicine
				Describe the different clinical spectrum of Varicella-zoster virus (VZV) infection	C2	MK	Lecture, Case Based			
				State the investigations to be done for the patient suffering from Varicella-zoster virus (VZV) infection	C1	MK	Lecture, Case Based			Pathology
		KH		Enumerate the diagnostic features for Varicella-zoster virus (VZV) infection	C1	MK	Lecture, Case Based			
				Describe the differential diagnosis of Varicella-zoster virus (VZV) infection	C2	MK	Lecture, Case Based			

				Describe the potential complications arising from Varicella-zoster virus (VZV) infection as per the different clinical spectrum	C2	MK	Lecture, Case Based			
				Discuss the prognosis of different clinical spectrum of Varicella-zoster virus (VZV) infection	C2	MK	Lecture, Case Based			
				Summarize the treatment and management options for different clinical spectrum of Varicella-zoster virus (VZV) infection	C2	MK	Lecture, Case Based			Organon
		K		Enumerate the indications of homoeopathic medicines for different clinical spectrum of Varicella-zoster	C1	MK	Lecture, Case Based			Materia Medica

				virus (VZV) infection						
		KH		Describe the strategies to prevent Varicella-zoster virus (VZV) infection	C2	MK	Lecture, Case Based			Community Medicine
HomUG-PM I.25.3	K&S	K	**Epstein-Barr virus [EBV] Infections**	Define EBV Infections	C1	MK	Lecture, Multimedia presentation, Assignment - Literature Review	MCQ, Quiz, Viva	LQ, SQ, MCQ, Viva	Pathology, Community Medicine, Pediatrics, Dermatology
				Discuss etiopathogeneis for EBV Infections	C2	MK	Lecture			
				Identify the epidemiology dimension of EBV Infections	C2	MK	Lecture, field visit			Community Medicine
				Explain how EBV Infections spreads from person to person	C2	MK	Lecture, field visit			Community Medicine

				Describe the clinical presentations of EBV Infections - infectious mononucleosis	C2	MK	Lecture			
				State the investigations to be done for the patient suffering from EBV Infections	C1	MK	Lecture			Pathology
		KH		Enumerate the diagnostic features for EBV Infections	C1	MK	Lecture			
				Describe the differential diagnosis of EBV Infections	C2	MK	Lecture			
		K		Describe the potential complications of EBV Infections	C2	MK	Lecture			
		KH		Discuss the prognosis of EBV Infections	C2	MK	Lecture			
				Summarize the treatment and management options for EBV Infections	C2	MK	Lecture			Organon

		K		Enumerate the indications of homoeopathic medicines for the EBV Infections	C1	MK	Lecture			Materia Medica
		KH		Describe the strategies to prevent EBV Infections transmission	C2	MK	Lecture			Community Medicine
HomUG-PM I.25.4	K&S	K	**Poliovirus Infections**	Define Poliovirus Infections	C1	DK	Lecture, Multimedia presentation, Assignment - Literature Review	MCQ, Quiz, Viva	LQ, SQ, MCQ, Viva	Pathology, Community Medicine, Pediatrics, Dermatology
				Discuss etiopathogeneis for Poliovirus Infections	C2	DK	Lecture, Case Based			
				Identify the epidemiology dimension of Poliovirus Infections	C2	DK	Lecture, field visit			Community Medicine
				Describe the clinical presentations of Poliovirus Infections	C2	DK	Lecture, Case Based			

				State the investigations to be done for the patient suffering from Poliovirus Infections	C1	DK	Lecture, Case Based			Pathology
		KH		Enumerate the diagnostic features for Poliovirus Infections	C1	DK	Lecture, Case Based			
				Describe the differential diagnosis of Poliovirus Infections	C2	DK	Lecture, Case Based			
		K		Describe the potential complications of Poliovirus Infections	C2	DK	Lecture, Case Based			
		KH		Discuss the prognosis of Poliovirus Infections	C2	DK	Lecture, Case Based			
				Summarize the treatment and management options for Poliovirus Infections	C2	DK	Lecture, Case Based			Organon, Immunology

		K		Enumerate the indications of homoeopathic medicines for the Poliovirus Infections	C1	DK	Lecture, Case Based			Materia Medica
		KH		Describe the strategies to prevent Poliovirus Infections transmission	C2	MK	Lecture, Case Based			Community Medicine, Immunology
HomUG-PM I.25.5	K&S	K	**Measles**	Define Measles	C1	MK	Lecture, Multimedia presentation, Case Based	MCQ, Quiz, Case Based, Morphology Chart, Viva	LQ, SQ, MCQ, Case Based, Viva	Pathology, Virology Community Medicine
				Discuss etiopathogeneis for measles	C2	MK	Lecture, Case Based			
				Identify the epidemiology dimension of measles	C2	MK	Lecture, field visit			Community Medicine
				Explain how measles Infections spreads from person to person	C2	MK	Lecture, field visit			Community Medicine
				Describe the clinical features of measles	C2	MK	Lecture, Case Based			

				State the investigations to be done for the patient suffering from Measles	C1	MK	Lecture, Case Based			Pathology
		KH		Enumerate the diagnostic features for Measles	C1	MK	Lecture, Case Based			
		K		Describe the potential complications of measles	C2	MK	Lecture, Case Based			
		KH		Describe the differential diagnosis of measles	C2	MK	Lecture, Case Based			
				Discuss the prognosis of Measles	C2	MK	Lecture, Case Based			
				Summarize the treatment and management options for Measles	C2	MK	Lecture, Case Based			Organon, Immunology
		K		Enumerate the indications of homoeopathic medicines for the Measles	C1	MK	Lecture, Case Based			Materia Medica

		KH		Describe the strategies to prevent Measles	C1	MK	Lecture, Case Based			Community Medicine, Immunology
HomUG-PM I.25.6	K&S	K	**Mumps**	Define Mumps	C1	MK	Lecture, Multimedia presentation, Case Based	MCQ, Quiz, Case Based, Morphology Chart, Viva	LQ, SQ, MCQ, Case Based, Viva	Pathology, Virology Community Medicine
				Discuss etiopathogeneis for Mumps	C2	MK	Lecture, Case Based			
				Identify the epidemiology dimension of mumps	C2	MK	Lecture, field visit			Community Medicine
				Explain how mumps infections spreads from person to person	C2	MK	Lecture, field visit			Community Medicine
				Describe the clinical manifestations of Mumps	C2	MK	Lecture, Case Based			
				State the investigations to be done for the patient suffering from Mumps	C1	MK	Lecture, Case Based			Pathology

		KH		Enumerate the diagnostic features for Mumps	C1	MK	Lecture, Case Based			
		K		Describe the potential complications of Mumps	C2	MK	Lecture, Case Based			
		KH		Describe the differential diagnosis of Mumps	C2	MK	Lecture, Case Based			
				Discuss the prognosis of Mumps	C2	MK	Lecture, Case Based			
				Summarize the treatment and management options for Measles	C2	MK	Lecture, Case Based			Organon, Immunology
		K		Enumerate the indications of homoeopathic medicines for the Mumps	C1	MK	Lecture, Case Based			Materia Medica
		K		Describe the strategies to prevent Mumps	C1	MK	Lecture, Case Based			Community Medicine, Immunology

HomUG-PM I.25.7	K&S	K	**Rabies**	Define Rabies	C1	DK	Lecture, Multimedia presentation, Assignment - Literature Review	MCQ, Quiz, Viva	SQ, MCQ, Viva	Pathology, Virology Community Medicine
				Discuss etiopathogeneis for Rabies	C2	DK	Lecture			
				Identify the epidemiology dimension of mumps	C2	DK	Lecture			Community Medicine
				Explain how rabies infections spreads from person to person	C2	DK	Lecture			Community Medicine
				Describe the different clinical sprectrum of Rabies	C2	DK	Lecture			
				State the investigations to be done for the patient suffering from Rabies	C1	DK	Lecture			Pathology
		KH		Enumerate the diagnostic features for different	C1	DK	Lecture			

				spectrum of Rabies						
		K		Describe the potential complications of Rabies	C2	DK	Lecture			
		KH		Describe the differential diagnosis of Rabies	C2	DK	Lecture			
				Discuss the prognosis of Rabies	C2	DK	Lecture			
				Summarize the treatment and management options for Rabies	C2	DK	Lecture			Organon, Immunology
		K		Enumerate the indications of homoeopathic medicines for the Rabies	C1	DK	Lecture			Materia Medica
		K		Describe the strategies to prevent Rabies	C1	DK	Lecture			Community Medicine, Immunology
HomUG-PM I.25.8	K&S	K	**Dengue Virus Infection**	Define Dengue	C1	MK	Lecture, Multimedia presentatio	MCQ, Quiz, Case	LQ, SQ, MCQ	Pathology, Virology,

							n, Case Based	based, Viva	Case Based Viva	Community Medicine
				Discuss etiopathogeneis for dengue infection	C2	MK	Lecture, Case Based			
				Identify the epidemiology dimension of dengue infection	C2	MK	Lecture, field visit			Community Medicine
				State the risk factors and high risk patients for dengue infection	C1	MK	Lecture, Case Based			
				Describe the different clinical spectrum of dengue infection	C2	MK	Lecture, Case Based			
				State the investigations to be done for the patient suffering from Dengue infection	C1	MK	Lecture, Case Based			Pathology
		KH		Enumerate the diagnostic features for dengue infection	C1	MK	Lecture, Case Based			

		K		Describe the complications of dengue infections as per the different clinical spectrum	C2	MK	Lecture, Case Based			
		KH		Describe the differential diagnosis of dengue infection	C2	MK	Lecture, Case Based			
				Discuss the prognosis of dengue infection as per the different clinical spectrum	C2	MK	Lecture, Case Based			
				Summarize the treatment and management options for dengue infection	C2	MK	Lecture, Case Based			Organon
		K		Enumerate the indications of homoeopathic medicines for the dengue infections as per the different clinical spectrum	C1	MK	Lecture, Case Based			Materia Medica
		K		Describe the preventive stretegies for the dengue infection	C1	MK	Lecture, Case Based			Community Medicine

HomUG-PM I.25.9	K&S	K	**Japanese encephalitis virus [JEV] Infection**	Define JEV Infection	C1	NK	Lecture, Multimedia presentation, Assignment - Literature Review	MCQ, Quiz, Viva	SQ, MCQ, Viva	Pathology, Virology, Community Medicine
				Discuss etiopathogeneis for JEV infection	C2	NK	Lecture			
				Identify the epidemiology dimension of JEV infection	C2	NK	Lecture			Community Medicine
				Explain how JEV infections spreads from person to person	C2	NK	Lecture			Community Medicine
				Describe the different clinical sprectrum of JEV infection	C2	NK	Lecture			
				State the investigations to be done for the patient suffering from JEV infection	C1	NK	Lecture			Pathology

		KH		Enumerate the diagnostic features for different spectrum of JEV infection	C1	NK	Lecture			
		K		Describe the potential complications of JEV infection	C2	NK	Lecture			
		KH		Describe the differential diagnosis of JEV infection	C2	NK	Lecture			
				Discuss the prognosis of JEV infection	C2	NK	Lecture			
				Summarize the treatment and management options for JEV infection	C2	NK	Lecture			Organon
		K		Enumerate the indications of homoeopathic medicines for the JEV infection	C1	NK	Lecture			Materia Medica
				Describe the strategies to prevent JEV infection	C1	NK	Lecture			Community Medicine

HomUG-PM I.25.10	K&S	K	**BIRD FLU**	Define BIRD FLU Infection	C1	NK	Lecture, Multimedia presentation, Assignment - Literature Review	MCQ, Quiz, Viva	SQ, MCQ, Viva	Pathology, Virology, Community Medicine
				Discuss etiopathogeneis for BIRD FLU infection	C2	NK	Lecture			
				Identify the epidemiology dimension of BIRD FLU infection	C2	NK	Lecture, field visit			Community Medicine
				Explain how BIRD FLU Infections spreads from person to person	C2	NK	Lecture, field visit			Community Medicine
				Describe the clinical sprectrum of BIRD FLU infection	C2	NK	Lecture			
				State the investigations to be done for the patient suffering	C1	NK	Lecture			Pathology

				from BIRD FLU infection						
		KH		Enumerate the diagnostic features for different spectrum of BIRD FLU infection	C1	NK	Lecture			
		K		Describe the potential complications of BIRD FLU infection	C2	NK	Lecture			
		KH		Describe the differential diagnosis of BIRD FLU infection	C2	NK	Lecture			
				Discuss the prognosis of BIRD FLU infection	C2	NK	Lecture			
				Summarize the treatment and management options for BIRD FLU infection	C2	NK	Lecture			Organon

		K		Enumerate the indications of homoeopathic medicines for the BIRD FLU infection	C1	NK	Lecture			Materia Medica
				Describe the strategies to prevent JEV infection	C1	NK	Lecture			Community Medicine
HomUG-PM I.25.11	K&S	K	**Influenza A H1N1 virus**	Define Influenza A H1N1 virus Infection - Swine Flu	C1	MK	Lecture, Multimedia presentation, Case based, Assignment - Literature Review	MCQ, Quiz, Case based, Viva	SQ, MCQ, Case Based, Viva	Pathology, Virology, Community Medicine
				Discuss etiopathogeneis for Influenza A H1N1 virus Infection	C2	MK	Lecture, Case Based			
				Identify the epidemiology dimension of Influenza A H1N1 virus Infection	C2	MK	Lecture, field visit			Community Medicine

				Explain how iH1N1 Infections spreads from person to person	C2	MK	Lecture, field visit			Community Medicine
				Describe the clinical sprectrum of Influenza A H1N1 virus Infection	C2	MK	Lecture, Case Based			
				State the investigations to be done for the patient suffering from Influenza A H1N1 virus Infection	C1	MK	Lecture, Case Based			Pathology
		K		Enumerate the diagnostic features for different spectrum of Influenza A H1N1 virus Infection	C1	MK	Lecture, Case Based			
		K		Describe the potential complications of Influenza A H1N1 virus Infection	C2	MK	Lecture, Case Based			

		KH		Describe the differential diagnosis of Influenza A H1N1 virus Infection	C2	MK	Lecture, Case Based			
				Discuss the prognosis of Influenza A H1N1 virus Infection	C2	MK	Lecture, Case Based			
				Summarize the treatment and management options for Influenza A H1N1 virus Infection	C2	MK	Lecture, Case Based			Organon
		K		Enumerate the indications of homoeopathic medicines for the Influenza A H1N1 virus Infection	C1	MK	Lecture, Case Based			Materia Medica
				Describe the strategies to prevent Influenza A H1N1 virus Infection	C1	MK	Lecture, Case Based			Community Medicine

HomUG-PM I.25.12	K&S	K	**Chikungunya virus Infection**	Define Chikungunya virus Infection - Chikungunya virus Disease	C1	MK	Lecture, Multimedia presentation, Case based, Assignment - Literature Review	MCQ, Quiz, Case based, Viva	SQ, MCQ, Case Based, Viva	Pathology, Virology, Community Medicine
				Discuss etiopathogeneis for Chikungunya virus Infection	C2	MK	Lecture, Case Based			
				Identify the epidemiological dimensions of Chikungunya virus Infection, and Explain how it spreads from person to person	C2	MK	Lecture, field visit			Community Medicine
				Describe the clinical features of Chikungunya virus Infection	C2	MK	Lecture, Case Based			
				State the investigations to be done for the patient suffering from Chikungunya virus Infection	C1	MK	Lecture, Case Based			Pathology

		KH		Enumerate the diagnostic features for Chikungunya virus Infection	C1	MK	Lecture, Case Based			
		K		Describe the potential complications of Influenza A H1N1 virus Infection	C2	MK	Lecture, Case Based			
		KH		Describe the differential diagnosis of Chikunguny virus Infection	C2	MK	Lecture, Case Based			
				Discuss the prognosis of Chikungunya virus Infection	C2	MK	Lecture, Case Based			
				Summarize the treatment and management options for Chikungunya virus Infection	C2	MK	Lecture, Case Based			Organon
		K		Enumerate the indications of homoeopathic medicines for the Chikungunya virus Infection	C1	MK	Lecture, Case Based			Materia Medica

				Describe the strategies to prevent Chikungunya virus Infection	C1	MK	Lecture, Case Based			Community Medicine
HomUG-PM I.25.13	K&S	K	**COVID 19 Virus Infection**	Define COVID 19 Virus Infection	C1	MK	Lecture, Multimedia presentation, Case based, Assignment - Literature Review	MCQ, Quiz, Case based, Viva	SQ, MCQ, Case Based, Viva	Pathology, Virology, Community Medicine
				Discuss etiopathogeneis for COVID 19 Virus Infection	C2	MK	Lecture, Case Based			
				Identify the epidemiology dimension of COVID 19 Virus Infection	C2	MK	Lecture, field visit			Community Medicine
				Explain how COVID 19 Virus Infections spreads from person to person	C2	MK	Lecture, field visit			Community Medicine
				Describe the different clinical sprectrum of	C2	MK	Lecture, Case Based			

				COVID 19 Virus Infection						
				State the investigations to be done for the patient suffering from different clincial spectrum of COVID 19 Virus Infection	C1	MK	Lecture, Case Based			Pathology
		KH		Enumerate the diagnostic features for different spectrum of COVID 19 Virus Infection	C1	MK	Lecture, Case Based			
		K		Describe the potential complications of COVID 19 Virus Infection	C2	MK	Lecture, Case Based			
		KH		Describe the differential diagnosis of COVID 19 Virus Infection	C2	MK	Lecture, Case Based			
				Discuss the prognosis of	C2	MK	Lecture, Case Based			

				COVID 19 Virus Infection						
				Summarize the treatment and management options for COVID 19 Virus Infection	C2	MK	Lecture, Case Based			Organon
		K		Enumerate the indications of homoeopathic medicines for the COVID 19 Virus Infection	C1	MK	Lecture, Case Based			Materia Medica
				Describe the strategies to prevent COVID 19 Virus Infection	C1	MK	Lecture, Case Based			Community Medicine
HomUG-PM I.25.14	K&S	K	**Yellow Fever virus [YFV] Infection**	Define Yellow Fever virus [YFV] Infection	C1	NK	Lecture, Multimedia presentation	MCQ, Quiz, Viva	SQ, MCQ, Viva	Pathology, Virology, Community Medicine
				Discuss etiopathogeneis for Yellow Fever virus [YFV] Infection	C2	NK	Lecture, Case Based			

				Identify the epidemiology dimension of Yellow Fever virus [YFV] Infection	C2	NK	Lecture, field visit			Community Medicine
				Explain how Yellow Fever virus [YFV] Infection spreads from person to person	C2	NK	Lecture, field visit			Community Medicine
				Describe the clinicalsprectrum of Yellow Fever virus [YFV] Infection	C2	NK	Lecture, Case Based			
				State the investigations to be done for the patient suffering from Yellow Fever virus [YFV] Infection	C1	NK	Lecture, Case Based			Pathology
		KH		Enumerate the diagnostic features for Yellow Fever virus [YFV] Infection	C1	NK	Lecture, Case Based			

		K		Describe the potential complications of Yellow Fever virus [YFV] Infection	C2	NK	Lecture, Case Based			
		K		Describe the differential diagnosis of Yellow Fever virus [YFV] Infection	C2	NK	Lecture, Case Based			
				Discuss the prognosis of Yellow Fever virus [YFV] Infection	C2	NK	Lecture, Case Based			
				Summarize the treatment and management options for Yellow Fever virus [YFV] Infection	C2	NK	Lecture, Case Based			Organon
		K		Enumerate the indications of homoeopathic medicines for the Yellow Fever virus [YFV] Infection	C1	NK	Lecture, Case Based			Materia Medica

				Describe the strategies to prevent Yellow Fever virus [YFV] Infection	C1	NK	Lecture, Case Based			Community Medicine
HomUG-PM I.25.15	K&S	K	**Smallpox (variola) - poxvirus infection**	Define Smallpox (variola) - poxvirus infection	C1	NK	Lecture, Multimedia presentation, Assignment - Literature Review	MCQ, Quiz, Viva	SQ, MCQ, Viva	Pathology, Virology, Community Medicine
				Discuss etiopathogeneis for Smallpox (variola) - poxvirus infection	C2	NK	Lecture			
				Identify the epidemiology dimension of Smallpox (variola) - poxvirus infection	C2	NK	Lecture			Community Medicine
				Explain how Smallpox (variola) - poxvirus infection spreads	C2	NK	Lecture			Community Medicine

				from person to person						
				Describe the clinical sprectrum of Smallpox (variola) - poxvirus infection	C2	NK	Lecture			
				State the investigations to be done for the patient suffering from clincial spectrum of Smallpox (variola) - poxvirus infection	C1	NK	Lecture			Pathology
		KH		Enumerate the diagnostic features of Smallpox (variola) - poxvirus infection	C1	NK	Lecture			
		K		Describe the potential complications of Smallpox (variola) - poxvirus infection	C2	NK	Lecture			

		KH		Describe the differential diagnosis of Smallpox (variola) - poxvirus infection	C2	NK	Lecture			
				Discuss the prognosis of Smallpox (variola) - poxvirus infection	C2	NK	Lecture			
				Summarize the treatment and management options for Smallpox (variola) - poxvirus infection	C2	NK	Lecture			Organon
		K		Enumerate the indications of homoeopathic medicines for the different stages related to Smallpox (variola) - poxvirus infection	C1	NK	Lecture			Materia Medica

				Describe the strategies to prevent Smallpox (variola) - poxvirus infection	C1	NK	Lecture			Community Medicine
HomUG-PM I.25.16	K&S	K	**HIV Infection**	Define the terms "HIV Infection" and "AIDS Syndrome"	C1	MK	Lecture, Multimedia presentation, Case based, Assignment - Literature Review	MCQ, Quiz, Case based, Chart, Model, Viva	LQ, SQ, MCQ, Case Based, Viva	Pathology, Virology, Community Medicine
				Discuss etiopathogeneis for HIV Infection	C2	MK	Lecture, Case Based			
				Identify the epidemiology dimension of HIV Infection	C2	MK	Lecture, field visit			Community Medicine
				Explain how HIV Infections spreads from person to person	C2	MK	Lecture, field visit			Community Medicine
				Describe the different clinical sprectrum of HIV Infection	C2	MK	Lecture, Case Based			

				State the investigations to be done for the patient suffering from different clincial spectrum of HIV Infection	C1	MK	Lecture, Case Based			Pathology
		KH		Enumerate the diagnostic features for different spectrum of HIV Infection	C1	MK	Lecture, Case Based			
		K		Describe the potential complications of HIV Infection	C2	MK	Lecture, Case Based			
		KH		Describe the differential diagnosis of HIV Infection	C2	MK	Lecture, Case Based			
				Discuss the prognosis of HIV Infection	C2	MK	Lecture, Case Based			
				Summarize the treatment and management options for HIV Infection	C2	MK	Lecture, Case Based			Organon, Immunology

		K		Enumerate the indications of homoeopathic medicines for the HIV Infection	C1	MK	Lecture, Case Based			Materia Medica
				Describe the strategies to prevent HIV Infection	C1	MK	Lecture, Case Based			Community Medicine
HomUG-PM I.25.17	K&S	K	**Zika virus infection**	Define Zika virus infection	C1	NK	Lecture, Multimedia presentation	MCQ, Quiz, Viva	SQ, MCQ, Viva	Pathology, Virology, Community Medicine
				Discuss etiopathogeneis for Zika virus infection	C2	NK	Lecture			
				Identify the epidemiology dimension of Zika virus infection	C2	NK	Lecture			Community Medicine
				Explain how Zika virus infection spreads from person to person	C2	NK	Lecture			Community Medicine
				Describe the different clinical sprectrum of Zika virus infection	C2	NK	Lecture			

				State the investigations to be done for the patient suffering from clincial spectrum of Zika virus infection	C1	NK	Lecture			Pathology
		KH		Enumerate the diagnostic features for Zika virus infection	C1	NK	Lecture			
		K		Describe the potential complications of Zika virus infection	C2	NK	Lecture			
		KH		Describe the differential diagnosis of Zika virus infection	C2	NK	Lecture			
				Discuss the prognosis of Zika virus infection	C2	NK	Lecture			
				Summarize the treatment and management options for Zika virus infection	C2	NK	Lecture			Organon

		K		Enumerate the indications of homoeopathic medicines for the Zika virus infection	C1	NK	Lecture			Materia Medica
				Describe the strategies to prevent HIV Infection	C1	NK	Lecture			Community Medicine
HomUG-PM I.25.18	K&S	K	**Rickettsial infection**	Define Rickettsial infection	C1	NK	Lecture, Multimedia presentation	MCQ, Quiz, Viva	SQ, MCQ, Viva	Pathology, Virology, Community Medicine
				Discuss etiopathogeneis for Rickettsial infection	C2	NK	Lecture			
				Identify the epidemiology dimension of Rickettsial infection	C2	NK	Lecture			Community Medicine
				Explain how Rickettsial infection spreads from person to person	C2	NK	Lecture			Community Medicine
				Describe the common clinical sprectrum of Rickettsial infection	C2	NK	Lecture			

				State the investigations to be done for the patient suffering from different clincial spectrum of Rickettsial infection	C1	NK	Lecture			Pathology
		KH		Enumerate the diagnostic features for different spectrum of Rickettsial infection	C1	NK	Lecture			
		K		Describe the potential complications of Rickettsial infection	C2	NK	Lecture			
		KH		Describe the differential diagnosis of Rickettsial infection	C2	NK	Lecture			
				Discuss the prognosis of Rickettsial infection	C2	NK	Lecture			

				Summarize the treatment and management options for Rickettsial infection	C2	NK	Lecture			Organon
		K		Enumerate the indications of homoeopathic medicines for the Rickettsial infection	C1	NK	Lecture			Materia Medica
				Describe the strategies to prevent Rickettsial infection	C1	NK	Lecture			Community Medicine
HomUG-PM I.25.19	K&S	K	**Staphylococcus aureus infection**	Define Staphylococcus aureus infection	C1	DK	Lecture, Multimedia presentation, Case Based	MCQ, Quiz, Case Based, Morphology Chart, Viva	SQ, MCQ, Case Based, Viva	Pathology, Bacteriology Community Medicine
				State the factors predisposing to S. aureus colonisation and its infections / disease	C1	DK	Lecture, Case Based			
				Discuss etiopathogeneis for S. aureus infection	C2	DK	Lecture, Case Based			

				Identify the epidemiology dimension of S. aureus infection	C2	DK	Lecture, field visit			Community Medicine
				Explain how S. aureus infection spreads from person to person	C2	DK	Lecture, field visit			Community Medicine
				Enumate the common clinical illness caused by S. aureus infection	C1	DK	Lecture, Case Based			
				Describe the clinical manifestation of coomon clinical illness which are caused by S. aureus infection	C2	DK	Lecture, Case Based			
				State the investigations to be done for the patient suffering from common clinical illness caused by S. aureus infection	C1	DK	Lecture, Case Based			Pathology

		KH		Enumerate the diagnostic features for common clinical illness caused by S. aureus infection	C1	DK	Lecture, Case Based			
		K		Describe the potential complications of common clinical illness caused by S. aureus infection	C2	DK	Lecture, Case Based			
		KH		Describe the differential diagnosis of common clinical illness caused by S. aureus infection	C2	DK	Lecture, Case Based			
				Discuss the prognosis of common clinical illness caused by S. aureus infection	C2	DK	Lecture, Case Based			
				Summarize the treatment and management options for common clinical	C2	DK	Lecture, Case Based			Organon

				illness caused by S. aureus infection						
		K		Enumerate the indications of homoeopathic medicines for the common clinical illness caused by S. aureus infection	C1	DK	Lecture, Case Based			Materia Medica
				Describe the strategies to prevent common clinical illness caused by S. aureus infection	C1	DK	Lecture, Case Based			Community Medicine
HomUG-PM I.25.20	K&S	K	**Streptococcal infections**	Define Streptococcal infections	C1	DK	Lecture, Multimedia presentation, Case Based	MCQ, Quiz, Case Based, Morphology Chart, Viva	SQ, MCQ, Case Based, Viva	Pathology, Bacteriology Community Medicine
				Discuss etiopathogeneis for Streptococcal infections	C2	DK	Lecture, Case Based			
				Identify the epidemiology dimension of Streptococcal infections	C2	DK	Lecture, field visit			Community Medicine

				Explain how Streptococcal infections spreads from person to person	C2	DK	Lecture, field visit			Community Medicine
				Enumate the common clinical illness caused by Streptococcal infections	C1	DK	Lecture, Case Based			
				Describe the clinical manifestation of comon clinical illness which are caused by Streptococcal infections	C2	DK	Lecture, Case Based			
				State the investigations to be done for the patient suffering from common clinical illness caused by Streptococcal infections	C1	DK	Lecture, Case Based			Pathology
		KH		Enumerate the diagnostic features for common clinical illness caused by S. aureus infection	C1	DK	Lecture, Case Based			

		K		Describe the potential complications of common clinical illness caused by S. aureus infection	C2	DK	Lecture, Case Based			
		KH		Describe the differential diagnosis of common clinical illness caused by Streptococcal infections	C2	DK	Lecture, Case Based			
				Discuss the prognosis of common clinical illness caused by S. aureus infection	C2	DK	Lecture, Case Based			
				Summarize the treatment and management options for common clinical illness caused by Streptococcal infection	C2	DK	Lecture, Case Based			Organon

		K		Enumerate the indications of homoeopathic medicines for the common clinical illness caused by Streptococcal infection	C1	DK	Lecture, Case Based			Materia Medica
				Describe the strategies to prevent common clinical illness caused by Streptococcal infection	C1	DK	Lecture, Case Based			Community Medicine
HomUG-PM I.25.21	K&S	K	**Typhoid Fever**	Define Typhoid Fever	C1	MK	Lecture, Multimedia presentation, Case based, Assignment - Literature Review	MCQ, Quiz, Case based, Viva	LQ, SQ, MCQ, Case Based, Viva	Pathology, Bacteriology Community Medicine
				Discuss etiopathogeneis for Typhoid Fever	C2	MK	Lecture, Case Based			
				Identify the epidemiology dimension of Typhoid Fever	C2	MK	Lecture, field visit			Community Medicine

				Explain how Typhoid Fever spreads from person to person	C2	MK	Lecture, field visit			Community Medicine
				Describe the clinical course of clinical manisfestation of Typhoid Fever	C2	MK	Lecture, Case Based			
				State the investigations to be done for the patient suffering from Typhoid Fever	C1	MK	Lecture, Case Based			Pathology
		KH		Enumerate the diagnostic features for Typhoid Fever	C1	MK	Lecture, Case Based			
		K		Describe the potential complications of Typhoid Fever	C2	MK	Lecture, Case Based			
		KH		Describe the differential diagnosis of Typhoid Fever	C2	MK	Lecture, Case Based			
				Discuss the prognosis of Typhoid Fever	C2	MK	Lecture, Case Based			

				Summarize the treatment and management options for Typhoid Fever	C2	MK	Lecture, Case Based			Organon
		K		Enumerate the indications of homoeopathic medicines for Typhoid Fever	C1	MK	Lecture, Case Based			Materia Medica
				Describe the strategies to prevent Typhoid Fever	C1	MK	Lecture, Case Based			Community Medicine
HomUG-PM I.25.22	K&S	K	**Acute Viral Gastroenteritis**	Define Acute Viral Gastroenteritis	C1	MK	Lecture, Multimedia presentation, Case based, Assignment - Literature Review	MCQ, Quiz, Case based, Viva	SQ, MCQ, Case Based, Viva	Pathology, Bacteriology Community Medicine
				Discuss etiopathogeneis for Acute Viral Gastroenteritis	C2	MK	Lecture, Case Based			
				Identify the epidemiology dimension of Acute Viral Gastroenteritis	C2	MK	Lecture, field visit			Community Medicine

				Explain how infection of Acute Viral Gastroenteritis spreads from person to person	C2	MK	Lecture, field visit			Community Medicine
				Describe the clinical manisfestation of Acute Viral Gastroenteritis	C2	MK	Lecture, Case Based			
				State the investigations to be done for the patient suffering from Acute Viral Gastroenteritis	C1	MK	Lecture, Case Based			Pathology
		KH		Enumerate the diagnostic features for Acute Viral Gastroenteritis	C1	MK	Lecture, Case Based			
		K		Describe the potential complications of Acute Viral Gastroenteritis	C2	MK	Lecture, Case Based			
		KH		Describe the differential diagnosis of TAcute Viral Gastroenteritis	C2	MK	Lecture, Case Based			

				Discuss the prognosis of Acute Viral Gastroenteritis	C2	MK	Lecture, Case Based			
				Summarize the treatment and management options for Acute Viral Gastroenteritis	C2	MK	Lecture, Case Based			Organon
		K		Enumerate the indications of homoeopathic medicines for Acute Viral Gastroenteritis	C1	MK	Lecture, Case Based			Materia Medica
				Describe the strategies to prevent Acute Viral Gastroenteritis	C1	MK	Lecture, Case Based			Community Medicine
HomUG-PM I.25.23	K&S	K	**Cholera**	Define Cholera	C1	MK	Lecture, Multimedia presentation, Case based, Assignment - Literature Review	MCQ, Quiz, Case based, Viva	LQ, SQ, MCQ, Case Based, Viva	Pathology, Bacteriology Community Medicine

				Discuss etiopathogeneis for Cholera	C2	MK	Lecture, Case Based			
				Identify the epidemiology dimension of Cholera	C2	MK	Lecture, field visit			Community Medicine
				Explain how infection of Cholera spreads from person to person	C2	MK	Lecture, field visit			Community Medicine
				Describe the clinical manisfestation of Cholera	C2	MK	Lecture, Case Based			
				State the investigations to be done for the patient suffering from Cholera	C1	MK	Lecture, Case Based			Pathology
		KH		Enumerate the diagnostic features for Cholera	C1	MK	Lecture, Case Based			
		K		Describe the potential complications of Cholera	C2	MK	Lecture, Case Based			
		KH		Describe the differential	C2	MK	Lecture, Case Based			

				diagnosis of Cholera						
				Discuss the prognosis of Cholera	C2	MK	Lecture, Case Based			
				Summarize the treatment and management options for Cholera	C2	MK	Lecture, Case Based			Organon
		K		Enumerate the indications of homoeopathic medicines for Cholera	C1	MK	Lecture, Case Based			Materia Medica
				Describe the strategies to prevent Cholera	C1	MK	Lecture, Case Based			Community Medicine
HomUG-PM I.25.24	K&S	K	**Tetanus**	Define Tetanus	C1	NK	Lecture, Multimedia presentation	MCQ, Quiz, Viva	SQ, MCQ, Viva	Pathology, Bacteriology Community Medicine
				Discuss etiopathogeneis for Tetanus	C2	NK	Lecture			
				Describe the clinical manisfestation of Tetanus	C2	NK	Lecture			

		KH		Enumerate the diagnostic features for Tetanus	C1	NK	Lecture			
		K		Describe the potential complications of Tetanus	C2	NK	Lecture			
		KH		Describe the differential diagnosis of Tetanus	C2	NK	Lecture			
				Discuss the prognosis of Tetanus	C2	NK	Lecture			
				Summarize the treatment and management options for Tetanus	C2	NK	Lecture			Organon
		K		Enumerate the indications of homoeopathic medicines for Tetanus	C1	NK	Lecture			Materia Medica
				Describe the strategies to prevent and / or prophylaxis in the wound management of Tetanus	C1	NK	Lecture			Community Medicine

HomUG-PM I.25.25	K&S	K	**Anthrax**	Define Anthrax	C1	NK	Lecture, Multimedia presentation	MCQ, Quiz, Viva	SQ, MCQ, Viva	Pathology, Bacteriology Community Medicine
				Discuss etiopathogeneis for Anthrax	C2	NK	Lecture			
				Identify the epidemiology dimension of Anthrax	C2	NK	Lecture			Community Medicine
				Explain how infection of Anthrax spreads from person to person	C2	NK	Lecture			Community Medicine
				Describe the clinical manisfestation of Anthrax / brucellosis / plague	C2	NK	Lecture			
				State the investigations to be done for the patient suffering from Anthrax	C1	NK	Lecture			Pathology
		KH		Enumerate the diagnostic features for Anthrax	C1	NK	Lecture			

		K		Describe the potential complications of Anthrax	C2	NK	Lecture			
		KH		Describe the differential diagnosis of Anthrax	C2	NK	Lecture			
				Discuss the prognosis of Anthrax	C2	NK	Lecture			
				Summarize the treatment and management options for Anthrax	C2	NK	Lecture			Organon
		K		Enumerate the indications of homoeopathic medicines for Anthrax	C1	NK	Lecture			Materia Medica
				Describe the strategies to prevent Anthrax	C1	NK	Lecture			Community Medicine
HomUG-PM I.25.26	K&S	K	**Brucellosis**	Define Brucellosis	C1	NK	Lecture, Multimedia presentation	MCQ, Quiz, Viva	SQ, MCQ, Viva	Pathology, Bacteriology Community Medicine
				Discuss etiopathogeneis for Brucellosis	C2	NK	Lecture			

				Identify the epidemiology dimension of Brucellosis	C2	NK	Lecture			Community Medicine
				Explain how infection of Brucellosisspreads from person to person	C2	NK	Lecture			Community Medicine
				Describe the clinical manisfestation of Brucellosis	C2	NK	Lecture			
				State the investigations to be done for the patient suffering from Brucellosis	C1	NK	Lecture			Pathology
		KH		Enumerate the diagnostic features for Brucellosis	C1	NK	Lecture			
		K		Describe the potential complications of Brucellosis	C2	NK	Lecture			
		KH		Describe the differential diagnosis of Brucellosis	C2	NK	Lecture			

				Discuss the prognosis of Brucellosis	C2	NK	Lecture			
				Summarize the treatment and management options for Brucellosis	C2	NK	Lecture			Organon
		K		Enumerate the indications of homoeopathic medicines for Brucellosis	C1	NK	Lecture			Materia Medica
				Describe the strategies to prevent Brucellosis	C1	NK	Lecture			Community Medicine
HomUG-PM I.25.27	K&S	K	**Plague**	Define Plague	C1	DK	Lecture, Multimedia presentation, Assignment - Literature Review	MCQ, Quiz, Viva	LQ, SQ, MCQ, Viva	Pathology, Bacteriology Community Medicine
				Discuss etiopathogeneis for Plague	C2	DK	Lecture			
				Identify the epidemiology dimension of Plague	C2	DK	Lecture			Community Medicine

				Explain how infection of Plague spreads from person to person	C2	DK	Lecture			Community Medicine
				Describe the clinical manisfestation of Plague	C2	DK	Lecture			
				State the investigations to be done for the patient suffering from Plague	C1	DK	Lecture			Pathology
		KH		Enumerate the diagnostic features for Plague	C1	DK	Lecture			
		K		Describe the potential complications of Plague	C2	DK	Lecture			
		KH		Describe the differential diagnosis of Plague	C2	DK	Lecture			
				Discuss the prognosis of Plague	C2	DK	Lecture			

				Summarize the treatment and management options for Plague	C2	DK	Lecture			Organon
		K		Enumerate the indications of homoeopathic medicines for Plague	C1	DK	Lecture			Materia Medica
				Describe the strategies to prevent Plague	C1	DK	Lecture			Community Medicine
HomUG-PM I.25.28	K&S	K	**Leprosy**	Define Leprosy	C1	MK	Lecture, Multimedia presentation, Case based, Assignment - Literature Review	MCQ, Quiz, Case Based, Model, Chart, Viva	LQ, SQ, MCQ, Case Based, Viva	Pathology, Bacteriology Community Medicine
				Discuss etiopathogeneis for Leprosy	C2	MK	Lecture, Case Based			
				Identify the epidemiology dimension of Leprosy	C2	MK	Lecture, field visit			Community Medicine
				Explain how infection of Leprosy spreads from person to person	C2	MK	Lecture, field visit			Community Medicine

				Describe the different clinical manisfestation of different types of Leprosy	C2	MK	Lecture, Case Based			
				State the investigations to be done for the patient suffering from Leprosy	C1	MK	Lecture, Case Based			Pathology
		KH		Enumerate the diagnostic features for different types of Leprosy	C1	MK	Lecture, Case Based			
		K		Describe the potential complications of different types of Leprosy	C2	MK	Lecture, Case Based			
		KH		Describe the differential diagnosis of different types of Leprosy	C2	MK	Lecture, Case Based			
				Discuss the prognosis of different types of Leprosy	C2	MK	Lecture, Case Based			

				Summarize the treatment and management options for different types of Leprosy	C2	MK	Lecture, Case Based			Organon
		K		Enumerate the indications of homoeopathic medicines for different types of Leprosy	C1	MK	Lecture, Case Based			Materia Medica
				Describe the strategies to prevent different types of Leprosy	C1	MK	Lecture, Case Based			Community Medicine
HomUG-PM I.25.29	K&S	K	**Tuberculosis**	Define Tuberculosis	C1	MK	Lecture, Multimedia presentation, Case based, Assignment - Literature Review	MCQ, Quiz, Case Based, Model, Chart, Viva	LQ, SQ, MCQ, Case Based, Viva	Pathology, Bacteriology Community Medicine
				Discuss etiopathogeneis for Tuberculosis	C2	MK	Lecture, Case Based			
				Identify the epidemiology dimension of Tuberculosis	C2	MK	Lecture, field visit			Community Medicine

				Explain how infection of Tuberculosis spreads from person to person	C2	MK	Lecture, field visit			Community Medicine
				Describe the different clinical manisfestation of different types of Tuberculosis	C2	MK	Lecture, Case Based			
				State the investigations to be done for the patient suffering from different types of Tuberculosis	C1	MK	Lecture, Case Based			Pathology
		KH		Enumerate the diagnostic features of different types of Tuberculosis	C1	MK	Lecture, Case Based			
		K		Describe the potential complications of of different types of Tuberculosis	C2	MK	Lecture, Case Based			
		KH		Describe the differential diagnosis of of different types of Tuberculosis	C2	MK	Lecture, Case Based			

				Discuss the prognosis of of different types of Tuberculosis	C2	MK	Lecture, Case Based			
				Summarize the treatment and management options for different types of Tuberculosis	C2	MK	Lecture, Case Based			Organon
		K		Enumerate the indications of homoeopathic medicines for different types of Tuberculosis	C1	MK	Lecture, Case Based			Materia Medica
				Describe the strategies to prevent different types of Tuberculosis	C1	MK	Lecture, Case Based			Community Medicine
HomUG-PM I.25.30	K&S	K	**Malaria Fever**	Define Malaria Fever	C1	MK	Lecture, Multimedia presentation, Case Based	MCQ, Quiz, Case Based, Model, Chart, Viva	LQ, SQ, MCQ, Case Based, Viva	Pathology, Parasitology Community Medicine
				Discuss etiopathogeneis for different types of Malaria Fever	C2	MK	Lecture, Case Based			

				Identify the epidemiology dimension of Malaria Fever	C2	MK	Lecture, field visit			Community Medicine
				Explain how infection of Malaria spreads from person to person	C2	MK	Lecture, field visit			Community Medicine
				Describe the different clinical manisfestation of different types of Malaria Fever	C2	MK	Lecture, Case Based			
				State the investigations to be done for the patient suffering from different types of Malaria Fever	C1	MK	Lecture, Case Based			Pathology
		KH		Enumerate the diagnostic features of different types of Malaria Fever	C1	MK	Lecture, Case Based			
		K		Describe the potential complications of of different types of Malaria Fever	C2	MK	Lecture, Case Based			

		KH		Describe the differential diagnosis of of different types of Malaria Fever	C2	MK	Lecture, Case Based			
				Discuss the prognosis of of different types of Malaria Fever	C2	MK	Lecture, Case Based			
				Summarize the treatment and management options for different types of Malaria Fever	C2	MK	Lecture, Case Based			Organon
		K		Enumerate the indications of homoeopathic medicines for different types of Malaria Fever	C1	MK	Lecture, Case Based			Materia Medica
				Describe the strategies to prevent different types of Malaria Fever	C1	MK	Lecture, Case Based			Community Medicine

6.5. Competency Tables for Bedside Clinics

Sl. No.	Domain of Competency	Millers Level	Content	SLO	Blooms Domain/ Guilbert's Level	Priority	T-L Methods	Assessment		Integration
								F	S	
HomUG-PM I.26.1	K&S	SH	Taking patient history including chief complaints, present illness, past medical history, family history, and personal history	Demonstration of effective communication and questioning skills	A1/2	MK	Simulated patient encounters	Observation of history-taking sessions, Peer feedback	OSCE	Case discussions with clinical preceptors
HomUG-PM I.26.2	PC		Conducting a systematic physical examination including general examination, systemic examination, and regional examination	Demonstration of proficiency in physical examination techniques	P2	MK	Simulation, Bedside demonstrations	Observation of physical examination sessions, Peer feedback	OSCE	Clinical rotations with supervision

HomUG-PMI.26.3			Analyzing patient history, physical examination findings, and relevant investigations to develop a list of possible diagnoses	Demonstration of critical thinking and clinical reasoning skills	P2/A2	MK	Case-based discussions, Problem-solving scenarios	Case analyses, Guided discussions	Viva voce, Bedside examination	Interactive case-based learning with faculty
HomUG-PMI.26.4			Developing appropriate management strategies including pharmacological, non-pharmacological, and lifestyle interventions	Demonstration of knowledge of evidence-based medicine and treatment guidelines	P2/A2	MK	Small group discussions, Clinical case presentations	Group Discussions	OSCE	Clinical rotations with treatment planning exercises
HomUG-PMI.26.5			Demonstrating empathetic communication, active listening, and professionalism in patient interactions and team communication	Demonstration of interpersonal and communication skills	A2	MK	Simulated patient encounters	Observation of communication skills, Peer feedback	OSCE	Communication exercises

HomUG-PMI.26.6			Recording patient history, examination findings, assessments, and management plans in a clear and organized manner	Demonstration of effective documentation skills	P3	MK	Charting exercises, Case note writing	Review of documentation, Peer feedback	OSCE	Clinical rotations with documentation review
HomUG-PMI.26.7			Adhering to professional standards, maintaining patient confidentiality, and respecting patient autonomy and diversity	Demonstration of ethical decision-making and professionalism	A3	MK	Group Discussions	Observations of professional conduct, Peer evaluations	OSCE	Reflection exercises and discussions

7. Teaching learning methods

Lectures	Non-lectures (clinical / practical / demonstrative)
Classroom lectures with oral presentation/ AV aid	Clinical Demonstration
Integrated teaching	Case Based Discussion
	PBL - Problem Based Learning
	Simulation – with mannequins
	OSCE – Objective Structure Clinical Examination
	Mini-CEX - mini clinical evaluation exercise
	Seminar: Integrated Medical Education Seminar
	Tutorials: Small Group Projects
	Chart and Model
	Assignment

8. Details of assessment

Note- ***The assessment in II BHMS shall be done only as Internal Assessment (IA) in terms of*** **Periodical Assessments** ***(PA) and*** **Term Tests (*TT) as detailed below. There shall not be any Final University Examination (FUE) at this level. The marks obtained in IA during II BHMS will be added to the marks of IA in the IV BHMS University Examination.**

Overall Scheme of Internal Assessment (IA)**

Professional Course/ Subject	**Term I (1-6 Months)**		**Term II (7-12 Months)**	
II BHMS/ Practice of Medicine	PA I (end of 3 months)	TT I (end of 6 months)	PA II (end of 9 months)	TT II (end of 12 months)
	20 Marks Viva- **A**	100 Marks Clinical/Practical and Viva - **E** i) Viva voce -50 marks ii) Clinical/practical*- 50	20 Marks Viva- **B**	100 Marks Clinical/Practical and Viva - **F** i) Viva voce -50 marks ii) Clinical/practical*- 50

****Practical Examinations:***

i. Case taking: 20 Marks for case taking, including history, symptoms of patient in detail.

ii. Examination skills: 10 marks for the proper demonstration of skills.

iii. Bedside Q n A session: 15 marks for demonstrating understanding of concepts and for applying knowledge to identify the problem.

iv. Spotters: 5 marks (Instruments: Identification and Indications; Reports: Observations, Causes, Diagnosis/Differential Diagnosis)

****Method of Calculation of Internal Assessment Marks in II BHMS for Final University Examination to be held in IV BHMS:**

Marks of PA I	Marks of PA II	Periodical Assessment Average PA I+ PA II /2	Marks of TT I	Marks of TT II	Terminal Test Average TT I + TT II / 200 x 20	Final Internal Assessment Marks
A	**B**	**D**	**E**	**F**	**G**	**D+G/2**

9. **List of recommended text/reference books**

- Alagappan, R. (2017). *Manual of Practical Medicine* (6th ed.). Jaypee Brothers Medical Publishers (P) Ltd.
- Penman I.D., Ralston S.H., Strachan M.W.J., & Hobson R. (2022). *Davidson's Principles and Practice of Medicine* (24th ed.) Elsevier Health Sciences.
- Anudeep, B. A. P. (2022). *Insider's guide to clinical medicine* (2nd ed).Jaypee Brothers Medical (P) Ltd.
- Golwala, A. F., & Vakil, R. J. (2008). *Physical diagnosis A textbook of symptoms and signs* (16th ed.). Media Promoters & Publishers.
- Glynn, M., & Drake, W. M. (2017). *Hutchison's clinical methods: An Integrated Approach to Clinical Practice*. Saunders.
- *Harrison's principles of internal medicine (2vols)* (21st ed.). (2022). McGraw-Hill.
- Bickley. (2016). *Bates' pocket guide to physical exam & history taking* (8th ed.). Wolters Kluwer India Pvt. Ltd.
- Dover, A. R., Innes, J. A., & Fairhurst, K. (2023). *Macleod's clinical examination international edition.* (15th ed.). Elsevier.
- Allen, H. C. (1998). *Therapeutics of intermittent fever*. B. Jain Publishers
- Bell, J. B. (2016). *The homeopathic therapeutics of diarrhea, dysentery, cholera, cholera morbus, cholera infantum, and all other loose evacuations of the bowels (Classic reprint)*. Forgotten Books.

- Boericke, W. (2022). *New Manual of Homoeopathic Materia Medica and Repertory with Relationship of Remedies: Including Indian Drugs, Nosodes Uncommon, Rare Remedies, Mother Tinctures, Relationship, Sides of the Body, Drug Affinities and List of Abbreviation* (3rd ed.). B Jain Publishers Pvt Limited.
- Hahnemann, S. (2004). *Organon of Medicine*. B Jain Publishers Pvt Limited.
- Lilienthal, S. (2005). *Homoeopathic therapeutics*. B Jain Pub Pvt Limited.
- Nash, E. B. (2002). *Leaders in homoeopathic therapeutics*. B Jain Pub Pvt Limited.
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Subject name – Surgery

Subject code- HomUG -Sur -I

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1. Preamble

Surgery involves addressing acute or chronic injuries, deformities, or diseases through physical intervention such as removal, repair, or reconstruction of a specific part or organ. Specialized fields like ENT, Ophthalmology, Dentistry, and Orthopedics, as well as super specialties like cardiac, neuro, and oncosurgery, have gained prominence.

Homoeopathy has proven to play a significant role in preventing several surgical interventions, provided that the physician can diagnose the condition early and administer the appropriate treatment while also considering supplementary measures. Therefore, a homoeopathic physician should possess a solid understanding of surgery. A student of homoeopathy should be able to diagnose clinical conditions to effectively address the scope and limitations of homoeopathy in surgical cases. It is essential for students to learn the Hahnemannian concept of surgical diseases, chronic diseases, and susceptibility for the effective management of surgical conditions.

The management of surgical cases according to both modern medicine and Organon is a crucial part of the education and training of homoeopathic students. A comprehensive understanding and application of Homoeopathic principles, along with the correct knowledge of Homoeopathic medicines, can extend the use of Homoeopathy to a range of acute and chronic surgical conditions that were previously considered beyond its scope. Understanding surgical conditions enables students to provide continuity of care, particularly when patients transition between surgical interventions and homeopathic management. Equipping homeopathic students with knowledge of surgical conditions allows them to make informed decisions and recommend suitable treatment options, whether surgical or non-surgical. By studying surgical conditions, homeopathic students can offer comprehensive and integrated healthcare to their patients, leading to improved health outcomes and patient satisfaction.

2. Course outcomes

At the end of BHMS course, the student shall be able to-

i) Diagnose common surgical conditions.

ii) Understand the role of Homoeopathic treatment in pseudo-surgical and true surgical diseases.

iii) Record the surgical case history that is complete and relevant to disease identification, help to find the correct Homoeopathic medicine that can be used for treating the condition.

iv) Understand the fundamentals of examination of a patient with surgical problems.
v) Demonstrate the ability to perform the bedside clinical procedures and the physical examination that is relevant for diagnosis and management of the disease.
vi) Demonstrate ability to advise appropriate diagnostic tests (including radio-diagnosis) and interpretation of the test in the individual surgical case.
vii) Perform basic management procedures of general surgery like wound dressing, ABC management, suturing, transport of the injured and fluid therapy etc.
viii) Discuss causation, manifestations, management and prognosis of surgical conditions.
ix) Understand the miasmatic background of surgical disorders, wherever applicable.
x) Apply Materia medica (therapeutics) and posology in common surgical conditions.
xi) Understand the use of repertory in Homoeopathic prescriptions for surgical conditions.

3. Learning objectives (to be edited according to the II BHMS content)

At the end of II BHMS course, the learner shall be able to-

i. Understand surgical case taking.
ii. Understand common surgical symptomatology and its differential approach.
iii. Demonstrate the basic management procedures of general surgery. Eg. dressing, ABC management and fluid therapy
iv. Describe the concepts required to diagnose surgical clinical conditions taught in II BHMS.
v. Understand the role of examination and investigation in diagnosing surgical disorders.
vi. Identify referral criteria for medical emergencies and surgical conditions.
vii. Classify symptoms and integration with repertory.
viii. Understand applied Materia Medica and posology in common surgical conditions (taught in II BHMS) which can be managed with Homoeopathy.

4. Course content and its term-wise distribution

Sl. No.	Topic
	Term I
1.	Introduction to surgery, Scope and limitations of Homoeopathy in surgical conditions, Surgical diseases explained in relation to organon of medicine
2.	Trauma/Injury; different types of injuries- head injury; road traffic accident; injury to chest and abdomen
3.	Wound and wound healing; scars and keloids
4.	Haemorrhage and blood transfusion
5.	Shock**;** various types of shock
6.	Fluid, electrolyte and acid- base balance
7.	Burns and Skin grafting
8.	Nutrition
9.	Common surgical infections
	Term II
10.	Special infections
11.	Tumours and Cysts (Swellings)
12.	Hernia
13.	Ulcers
14.	Sinus and fistula

5. Teaching hours

5.1. Gross division of teaching hours

Surgery		
Year	**Teaching hours- Lectures**	**Teaching hours- Non-lectures**
II BHMS	92	24

5.2. Teaching hours theory

Sl. No.	Topic	Teaching hours
1.	Introduction to surgery, Scope and limitations of Homoeopathy in surgical conditions	3
2.	Injury – types Head injury; Road traffic accident; injury to chest, abdomen	10
3.	Wound & wound healing; Scar, keloid	5
4.	Haemorrhage Blood transfusion	4
5.	Shock	6
6.	Fluid, electrolytes and acid-base balance	6
7.	Burn, skin grafting	7
8.	Nutrition – consequents of malnutrition in surgical patients, nutritional requirement in surgical patients and methods of providing nutritional support	3
9.	Common surgical infections- Boil, Carbuncle, Abscess, Cellulitis, and erysipelas, Hidradenitis suppurativa, septicaemia, pyaemia	8
10.	Special infections-	8

	Tuberculosis, syphilis, acquired immunodeficiency syndrome, actinomycosis, leprosy, tetanus, infective gangrene	
11.	Concept of swellings- Tumours: Benign-Lipoma, fibroma, adenoma, neuroma, Neurilemmoma, Neurofibroma, Haemangioma Malignant-Carcinoma, sarcoma, fibrosarcoma; naevus, melanoma Cysts – Classification	12
12.	Hernia - Aetiology, General Classification, Abdominal hernias- Basic anatomy, Types, clinical features, management	10
13.	Ulcers	8
14.	Sinus and fistula	2
Total		**92**

5.3. Teaching hours Non-lecture

Sl No	Clinical	Hours
1	Case taking of surgical case	2
2	Examination of Trauma case, Transport of the injured	2
3	Examination of head injury case	2
4	Examination of wound, suture technique	1
5	Examination of haemorrhagic case	1
6	Examination of shock	1
7	Fluid, electrolytes and acid base balance - Clinical Examination and evaluation	1
8	Burns - Clinical Examination	1
9	Common surgical infections - Clinical Examination	2
10	Special infections - Clinical examination	2
11	Examination of swelling- cysts and tumours	2
12	Examination of hernia	2

13	Examination of ulcer	2
14	Examination of sinus, fistula	1
15	ABC management, wound dressing, fluid therapy	2
	Total	**24**

6. Content mapping (competencies tables)

6.1. Introduction to Surgery, scope and limitations of Homoeopathy in surgical conditions and surgical case taking -

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-I 1.1	HO	KH	Introduction to surgery	Describe surgical disease according to Hahnemann. Explain the importance of knowledge of surgical diseases for Homoeopathic practice	C/2	Must know	Lecture Small group discussion	Viva	MCQ SAQ	Organon
Hom UG-Sur-I 1.2	HO	KH	Scope and limitations of Homoeopathy in surgical conditions	Explain scope and limitations of Homoeopathy in surgical conditions	C/2	Must know	Lecture Small group discussion	Viva	SAQ	Organon

Hom UG-Sur-I 1.3	HO	KH	Homoeopathic perspective of surgical diseases	Classification of Disease Hahnemmania n: Surgical disease	C/2	Must know	Lecture	Viva	LAQ	Organon
Hom UG-Sur-I 1.4	HO	KH	Homoeopathic perspective of surgical diseases	Explain the nature and significance of surgical disease on the basis of organon of medicine	C/2	Must know	Lecture	Viva	LAQ	Organon
Hom UG-Sur-I 1.5	KS	KH	Case taking of surgical cases	Discuss the steps of case taking in surgical conditions	C/2	Must know	Lecture, small group discussion	Viva	--	Organon Repertory and case taking
Hom UG-Sur-I 1.6	PC	SH	Case taking of surgical case	Observe surgical case taking in clinical set up	P/1	Must know	Observatio n Small group discussion	DOPS		--

6.2. Trauma/ Injury and examination of trauma case-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-I 2.1	KS	KH	Types of injury	Classify different types of injury/ trauma according to causation and be effects	C/2	Must know	Lecture Audiovisual mode	Viva	MCQ SAQ	FMT
Hom UG-Sur-I 2.2	HO	KH	Homoeopathic therapeutics of injury	List homeopathic remedies that are commonly used for specific types of injuries	C/1	Must know	Lecture Small group discussion	Viva	SAQ	Materia Medica
Hom UG-Sur-I 2.3	KS	KH	Principles in the management of road traffic accident	Describe the components of primary survey in victims of road traffic accidents	C/2	Must know	Lecture/ small group discussion	Viva OSCE	SAQ LAQ	--

				Describe the components of Secondary survey in victims of road traffic accidents	C/2	Must know	Lecture/ small group discussion			
Hom UG-Sur-I 2.4	PBL	SH	Resuscitation in trauma cases	Demonstrate the steps of Basic life support - Initiation of resuscitation Opening of airway Defibrillation High quality CPR Ventilation-compression ratio Vascular access Termination of CPR	P/2	Must know	Skill lab training Audio visual aids DOPS	DOPS Viva	DOPS	---
Hom UG-Sur-I 2.5	KS	KH	Resuscitation of trauma case	Discuss the principles of ATLS – advance trauma care management	C/2	Must know	Skill lab training Audio visual aids Small group discussion DOPS	Viva DOPS	MCQ SAQ LAQ DOPS	--

Hom UG-Sur-I 2.6	KS	KH	Management of trauma case	Discuss the principles of pre-hospital care and causality management of a trauma victim including principles of triage	C/2	Must know	Skill lab training Audio visual aids Small group discussion Small project	Viva OSCE	MCQ SAQ LAQ	--
Hom UG-Sur-I 2.7	PBL	SH	Resuscitation in trauma cases	Demonstrate the steps of Basic life support	P/2	Must know	Skill lab training Audiovisual aid DOPS	Viva OSCE Small project	OSCE	---
Hom UG-Sur-I 2.8	PBL	SH	Management of trauma – Transport of injured	Demonstrate the transport of the injured in simulated setting	P/2	Desirable to know	Skill lab training Audiovisual aid	OSCE	OSCE	

6.3. Head injury; Examination of head injury case-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-I 3.1	KS	K	Head injury and intracranial pressure	State the Monro Kellie doctrine about intracranial pressure Enumerate the causes of raised intracranial pressure	C/1 C/2	Nice to know Must know	Lecture Lecture	Viva	SAQ SAQ	--
Hom UG-Sur-I 3.2	KS	KH	Head injury pathophysiology, types	Describe Pathophysiology of head injuries Explain different types of head injuries like concussion, skull fracture, intracranial haemorrhage and diffuse axonal injuries	C/2 C/2	Must know Must know	Lecture Audiovisual aid Small group discussion Case based discussion	Viva Clinical simulation	MCQ SAQ	
Hom UG-Sur-I 3.3	KS	KH	Assessment of head injury	Describe Glasgow coma scale	C/1	Must know	Lecture/ small group discussion	Viva OSCE Mini-CEX	MCQ SAQ LAQ	

				Discuss the neurological assessment of a patient with head injuries	C/2	Must know	Audiovisual mode Clinical simulation			
Hom UG-Sur-I 3.4	KS	KH	Investigations and management of head injury	Enumerate the appropriate investigationsto done in case of head injury	C/2	Must know	Lecture/ small group discussion Audio visual aid	Viva Audiovisual aids	LAQ	Radiology
	HO	KH	Homoeopathic therapeutics for head injury	Discuss the Homoeopathic therapeutics for head injuries	C/1	Must know			SAQ	Materia Medica

6.4. Injury to chest and abdomen; Examination of chest and abdominal injury -

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-I 4.1	KS	KH	Clinical features, investigations and management of chest injuries	Describe the clinical features of chest injuries List the appropriate investigations required in a case of chest injury Discuss the management of chest injury	C/2 C/2 C/2	Must know Must know Desirable to know	Lecture Audiovisual aid Case based studies	Viva OSCE	SAQ LAQ	
Hom UG-Sur-I 4.2	KS	KH	Chest injuries - flail chest and stove-in chest	Define flail chest Explain the clinical features of flail chest Discuss the management of flail chest Explain stove-in chest	C/1 C/2 C/2 C/2	Must know Must know Desirable to know Nice to know	Lecture Audiovisual aid	Viva	MCQ SAQ	

Hom UG-Sur-I 4.3	KS	KH	Chest injuries -tension pneumothorax	Define tension pneumothorax Enumerate the cause of tension pneumothorax Discuss the clinical features of tension pneumothorax Discuss the management of tension pneumothorax	C/1 C/2 C/2 C/2	Must know Must know Must know Must know	Lecture Small group discussion Audiovisual aid Skill lab simulation	Viva OSCE	SAQ LAQ MCQ	
Hom UG-Sur-I 4.4	KS	KH	Chest injury - Thoracotomy	Enumerate the indications for Emergency thoracotomy	C/2	Desirable to know	Lecture	Viva	SAQ	
Hom UG-Sur-I 4.5	KS	KH	Abdominal injury - Clinical features, investigations and management of abdominal injuries	Explain the clinical presentations of blunt abdominal trauma Enumerate the relevant investigations to be advised in a case of blunt abdominal trauma	C/2 C/2	Must know Must know	Lecture Audiovisual aid Small group discussion	Viva OSCE	MCQ SAQ LAQ	

				Discuss the surgical management of blunt abdominal trauma	C/2	Desirable to know				
Hom UG-Sur-I 4.6	KS	KH	Abdominal injuries-splenic trauma	Describe the clinical presentation of splenic trauma Discuss the diagnosis of splenic trauma Discuss the management of splenic trauma	C/2 C/2 C/2	Must know Must know Desirable to know	Lecture Audio visual aid Small group discussion	Viva OSCE	MCQ SAQ LAQ	
Hom UG-Sur-I 4.7	KS	KH	Abdominal injuries-Hepatic trauma	Describe the clinical presentation of Hepatic trauma Discuss the diagnosis of Hepatic trauma Discuss the management of Hepatic trauma	C/2 C/2 C/2	Must know Must know Desirable to know	Lecture Audiovisual aid Small group discussion	Viva	MCQ SAQ LAQ	
Hom UG-Sur-I 4.8	KS	KH	Abdominal injuries-pancreaticoduodenal trauma	Describe the clinical presentation of pancreaticoduodenal trauma	C/2	Must know	Lecture Audiovisual aid	Viva	MCQ SAQ LAQ	

				Discuss the diagnosis of pancreaticoduodenal trauma Discuss the management of pancreaticoduodenal trauma	C/2 C/2	Desirable to know Nice to know	Small group discussion			
Hom UG-Sur-I 4.9	KS	KH	Abdominal injuries-Renal trauma	Explain the clinical presentations of renal trauma Discuss the diagnosis of renal trauma Discuss the management of renal trauma	C/2 C/2 C/2	Must know Desirable to know Nice to know	Lecture Audiovisual aid Small group discussion	Viva	MCQ SAQ LAQ	

6.5. Wounds and wound healing; Scar and keloid; Examination of wounds-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-I 5.1	KS	K	Types of wounds	Discuss various types of closed wounds Discuss various types of open wounds	C/1	Must know Must know	Lecture Small group discussion	Viva	MCQ SAQ	FMT
Hom UG-Sur-I 5.2	KS	KH	Wound healing process and its types	Discuss the various stages of wound healing Discuss the factors affecting the wound healing Discuss the types of wound healing	C/1 C/2 C/2	Must know Desirable to know Must know	Lecture Audiovisual aid Small project	Viva	SAQ MCQ	Pathology
Hom UG-Sur-I 5.3	PBL	SH	Examination of wound	Demonstrate the evaluation and assessment of wound	P/2	Must know	Audiovisual aid Case based discussion DOPS	Viva Clinical performance OSCE		

Hom UG-Sur-I 5.4	KS PBL	KH SH	Wound management	Describe the principles acute wound management Demonstrate cleaning and dressing of wound	C/2 P/2	Must know	Lecture Audio-video mode Skill lab simulation Clinical Demonstration Wound dressing Audiovisual aid Small group discussion DOPS Small project	Viva Clinical performance OSCE	SAQ	--
Hom UG-Sur-I 5.5	KS	K KH KH	Surgical site infections	Classify surgical site infections. Enumerate the risk factors of surgical site infections Discuss the clinical presentation of surgical site infections	C/1 C/2 C/ 2	Must know Must know Must know	Lecture Audiovisual aid Small group	Viva	MCQ SAQ LAQ	Pathology

	HO	KH	Homeopathic management of surgical site infections	Discuss the scope of Homoeopathy in surgical site infections. Discuss the Homeopathic therapeutics for surgical site infections	C/1 C/1	Must know Must know				
Hom UG-Sur-I 5.6	HO	KH	Wound management	Discuss the homoeopathic therapeutics for various types of injuries	C/2	Must know	Lecture	Viva	SAQ	Materia Medica Repertory
Hom UG-Sur-I 5.7	PBL	K SH KH	Wound management	Enumerate different types of Suture materials Demonstrate different types of Suture / knotting techniques Discuss the Principles of anastomosis	C/2 P/2 C/2	Desirable to know Nice to know Nice to know	Tutorial Small project Skill lab simulation Audiovisual aid DOAP Tutorial Audiovisual aid	Viva	SAQ	

Hom UG-Sur-I 5.8	KS	KH	Scars and keloid	Describe hypertrophic scar and keloid	C/2	Must know	Lecture	Viva	SAQ	
	HO			Discuss the management of Scars and Keloid along with Homoeopathic Therapeutics	C/2	Must know	Lecture	Viva	SAQ	Materia Medica

6.6. Haemorrhage, blood transfusion; Examination of a haemorrhagic case -

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-I 6.1	KS	K	Types of haemorrhage	Enumerate types of haemorrhage	C/2	Must know	Lecture	Viva	MCQ SAQ	
Hom UG-Sur-I 6.2	KS	KH	Management of haemorrhage	Explain the basic concepts of hemostasis and mechanism of Haemostasis	C/1	Nice to know	Lecture Audiovisual aid	Viva	SAQ LAQ	Physiology
Hom UG-Sur-I 6.3	HO	KH	Management of haemorrhage with homoeopathy	Discuss homoeopathic therapeutics for haemorrhage	C/2	Must know	Lecture	Viva	SAQ	Materia Medica Repertory

Hom UG-Sur-I 6.4	KS	KH	Blood transfusion and blood products	Enumerate the Indications for blood transfusion Explain the complications of blood transfusion Describe various blood products and appropriate indications for their use	C/1 C/2 C/2	Must know Must know Desirable to know	Lecture Small group discussion OSCE Small project	Viva Viva	SAQ MCQ SAQ	Pathology
Hom UG-Sur-I 6.5	KS PBL	KH SH	Examination of haemorrhagic case	Discuss the assessment of patient with haemorrhage Demonstrate examination of a haemorrhagic case	C/1 P/2	Must know	Audiovisual aid Clinical demonstration Small group discussion DOPS	Viva OSCE	SAQ	
Hom UG-Sur-I 6.6	PBL	S	Blood transfusion procedure	Observe blood transfusion procedure	P/1	Nice to know	Observing blood transfusion procedure	Logbook	--	--

6.7. Shock; Examination of shock -

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom / Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-I 7.1	KS	KH	Shock types, pathophysiology	Define shock	C/1	Must know	Lecture	Viva	MCQ SAQ LAQ	Pathology Physiology
				Enumerate the various types of shock	C/2	Must know	Lecture			
				Explain the pathophysiology of shock	C/2	Desirable to know	Lecture Audiovisual aid			
Hom UG-Sur-I 7.2	KS	KH	Clinical features, investigations and management of shock	Explain the clinical features of shock	C/2	Must know	Lecture Audiovisual aid Small group discussion	Viva OSCE	MCQ SAQ LAQ	Pathology Practice of Medicine
				Discuss the diagnosis of various types of shock	C/2	Must know				
				Explain the complications of shock.	C/2	Must know				

				Discuss the management of shock	C/2	Must know				
Hom UG-Sur-I 7.3	HO	KH	Homeopathic therapeutics for shock	Discuss the homoeopathic therapeutics for shock	C/1	Must know	Lecture Small group discussion	Viva	SAQ	Materia Medica

6.8. Fluid, electrolyte and acid base balance; Clinical examination and evaluation-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-I 8.1	KH	K	Fluid, electrolyte and acid base balance	Describe the fluid compartments of the body	C/1	Desirable to know	Tutorial	Viva	MCQ SAQ	Pathology Physiology
Hom UG-Sur-I 8.2	KH	KH	Fluid, electrolyte and acid base balance	Identify the indications of fluid replacement Discuss the methods of estimation and replacement the Fluid and electrolyte in the surgical patient	C/2 C/2	Must know Desirable to know	Lecture Small group discussion Small project	Viva OSCE	SAQ	Biochemistry

Hom UG-Sur-I 8.3	KH	KH	Acid base balance	Enumerate the causes of metabolic acidosis Describe the clinical features and laboratory findings of metabolic acidosis Discuss the management of metabolic acidosis	C/2 C/2 C/2	Must know Must know Must know	Lecture Small group discussion	Viva	MCQ SAQ	Biochemistry Pathology
Hom UG-Sur-I 8.4	KH	KH	Acid base balance	Enumerate the causes of metabolic alkalosis Describe the clinical features and laboratory findings of metabolic alkalosis Discuss the management of metabolic alkalosis	C/2 C/2 C/2	Must know Must know Must know	Lecture Small group discussion	Viva	MCQ SAQ	Biochemistry Pathology

Hom UG-Sur-I 8.5	KS	KH	Acid base balance	Enumerate the causes of respiratory acidosis Describe the clinical features and laboratory findings of respiratory acidosis Discuss the management of respiratory acidosis	C/2 C/2 C/2	Must know Must know Must know	Lecture Small group discussion	Viva	MCQ SAQ	Biochemistry Pathology
Hom UG-Sur-I 8.6	KS	KH	Acid base balance	Enumerate the causes of respiratory alkalosis Describe the clinical features and laboratory findings of respiratory alkalosis Discuss the management of respiratory alkalosis	C/2 C/2 C/2	Must know Must know Must know	Lecture Audiovisual aid	Viva	MCQ SAQ	Biochemistry Pathology

Hom UG-Sur-I 8.7	KS	KH	Electrolyte balance – Potassium	Enumerate causes of Hyperkalemia Describe the clinical features and diagnosis of hyperkalemia Discuss the management of Hyperkalemia	C/2 C/2 C/2	Must know Must know Must know	Lecture Small group discussion	Viva	SAQ	Biochemistry Practice of Medicine
Hom UG-Sur-I 8.8	KS	KH	Electrolyte balance – Potassium	Enumerate causes of Hypokalemia Describe the clinical features and diagnosis of hypokalemia Discuss the management of Hypokalemia	C/2 C/2 C/2	Must know Must know Must know	Lecture Small group discussion	Viva	SAQ	Biochemistry Practice of Medicine
Hom UG-Sur-I	KS	KH	Electrolyte balance – Sodium	Enumerate causes of Hypernatremia	C/2	Must know	Lecture	Viva	SAQ	Biochemistry Practice of Medicine

8.9				Describe the clinical features and diagnosis of hypernatremia Discuss the management of Hypernatremia	C/2 C/2	Must know Must know	Small group discussion			
Hom UG-Sur-I 8.10	KS	KH	Electrolyte balance – Sodium	Enumerate causes of Hyponatremia Describe the clinical features and diagnosis of hyponatremia Discuss the management of Hyponatremia	C/2 C/2 C/2	Must know Must know Must know	Lecture Small group discussion	Viva	SAQ	Biochemistry Practice of Medicine
Hom UG-Sur-I 8.11	KS	K	Electrolyte balance – Calcium	Enumerate causes of Hypercalcemia Describe the clinical features and	C/2 C/2	Must know Desirable to know	Lecture Small group discussion	Viva	SAQ	Biochemistry Practice of Medicine

				diagnosis of hypercalcemia Discuss the management of Hypercalcemia	C/2	Nice to know				
Hom UG-Sur-I 8.12	KS	K	Electrolyte balance – Calcium	Enumerate causes of Hypocalcemia Describe the clinical features and diagnosis of hypocalcemia Discuss the management of Hypocalcemia	C/2 C/2 C/2	Must know Desirable to know Nice to know	Lecture	Viva	SAQ	Biochemistry Practice of Medicine

Hom UG-Sur-I 8.13	PBL	KH SH	Fluid, electrolyte and acid base balance	Describe the assessment of fluid, electrolyte and acid base balance in a surgical case Fluid replacement therapy	P/2 P/2	Must know	Case demonstration Skill lab, Simulation Clinical bedside training DOPS	Clinical performance Case based discussion Assignments	---- ----	

6.9. Burns, skin grafting; Clinical examination-

SL No	Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-I 9.1	KS	K KH	Burns and skin grafting	Describe the pathophysiology of burns Discuss the assessment of burn wound. Assessing size and depth of burns	C/2 C/2	Must know Must know	Lecture Audiovisual aid Skill lab simulation	Viva OSCE	MCQ SAQ LAQ	Physiology

				Explain the principles of fluid resuscitation in burns cases Discuss the management of burn wound	C/2 C/2	Desirable to know Must know				
Hom UG-Sur-I 9.2	HO	KH	Burns and skin grafting	Discuss the scope of Homoeopathy in the management of burns Discuss the homoeopathic therapeutics for burns	C/2	Must know	Lecture small group discussion	Viva	SAQ	Materia Medica Repertory
Hom UG-Sur-I 9.3	PBL	SH	Burns and skin grafting	Examination of case of burns Assessment of burn wound	P/2	Desirable to know	Simulation and skill lab training DOPS	Logbook OSCE	--	--

Hom UG-Sur-I 9.4	KS	K	Burns and skin grafting	Enumerate the indications for skin grafting Describe the various types of skin grafting	C/2	Desirable to know	Lecture Audiovisual aid	Viva	SAQ	

6.10. Nutrition-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-I 10.1	KS	KH	Nutrition	Enumerate the causes of malnutrition in surgical patients Discuss the consequences of malnutrition in surgical patient.	C/1 C/2	Must know Desirable to know	Lecture Small group discussion	Viva Viva	SAQ SAQ	Physiology
Hom UG-Sur-I 10.2	KS	KH	Nutrition	Discuss the nutritional requirements of surgical patients	C/2	Must know	Lecture Audiovisual aid	Viva	SAQ	Physiology

				Explain the methods of providing nutritional support.			Skill lab simulation			
Hom UG-Sur-I 10.3	PBL	SH	Nutrition	Demonstrate various types artificial nutritional support in surgical patients	P/2	Desirable to know	Simulation skill lab Small project DOPS	Viva OSCE DOPS		

6.11. Common surgical infections; Examination of common surgical infections-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-I 11.1	KS	K KH	Boil	Define boil Discuss clinical features complications of boil	C/1 C/2	Must know	Lecture	Viva	MCQ SAQ	Pathology
Hom UG-Sur-I 11.2	KS	KH	Carbuncle	Define carbuncle Describe the pathology of carbuncle Discuss the clinical features complications of carbuncle	C/1 C/2 C/2	Must know Must know Must know	Lecture Audiovisual mode	Viva	MCQ SAQ	Pathology

Hom UG-Sur-I 11.3	KS	KH	Abscess	Define abscess Enumerate the various types of abscesses Explain clinical features of abscess Discuss the management of abscess	C/1 C/2 C/2 C/2	Must know	Lecture Audiovisual aid	Viva	MCQ SAQ	Pathology
Hom UG-Sur-I 11.4	KS	KH	Cellulitis and erysipelas	Define cellulitis Explain clinical features of cellulitis Define erysipelas Explain the clinical features of erysipelas	C/1 C/2 C/1 C/2	Must know Must know Must know Must know	Lecture Audiovisual aid	Viva	SAQ MCQ	Pathology

				Discuss the difference between cellulitis and erysipelas	C/2	Must know				
Hom UG-Sur-I 11.5	KS	KH	Hidradenitis suppurativa	Discuss the pathology of Hidradenitis suppurativa Explain the clinical features of Hidradenitis suppurativa	C/2 C/2	Must know Must know	Lecture	Viva	SAQ MCQ	Pathology
Hom UG-Sur-I 11.6	KS	K	Septicaemia and pyaemia	Define septicaemia. Enumerate the causes of septicemia discuss the clinical features of septicaemia	C/1 C/2	Must know Must know	Lecture Small group discussion	Viva	LAQ SAQ MCQ	Pathology
Hom UG-Sur-I 11.7	KS	K	Systemic inflammatory response syndrome	Define systemic inflammatory response syndrome (SIRS)	C/1	Must know	Lecture Audiovisual aid	Viva	LAQ SAQ MCQ	Pathology

		KH		Discuss the pathophysiology of SIRS	C/2	Desirable to know				
Hom UG-Sur-I 11.8	PBL	SH	Common surgical infections	Demonstrate the examination of a case of common surgical infections like boil, carbuncle, cellulitis, erysipelas, hydradenitis suppurativa etc	P/2	Must know	Small group discussion Clinical demonstration DOPS	Viva OSCE DOPS	Case based discussion Log book	
Hom UG-Sur-I 11.9	HO	K	Common surgical infections	Discuss the therapeutics with specific indications for common surgical infections like boil, carbuncle, cellulitis, erysipelas and hidradenitis suppurativa	C/2	Must know	Lecture	Viva	SAQ MCQ	Materia Medica Repertory

Hom UG-Sur-I 11.10	HO	KH	Common surgical infections Septicaemia and pyaemia	Discuss the role of Homoeopathy in septicaemia and pyaemia Discuss the homoeopathic therapeutics forsepticaemia and pyaemia	C/2	Must know	Lecture Small group discussion	Viva	SAQ	Materia Medica Repertory

6.12. Special infections; Clinical examination-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Gilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-I 12.1	KS	KH	Tuberculosis	Describe the pathology of tuberculosis Explain the clinicalfeatures of tuberculosis	C/1 C/2 C/2	Desirable to know Must know Must know	Lecture Audiovisual aid Small group discussion	Viva	LAQ SAQ MCQ	Pathology Practice of Medicine

				Discuss the diagnosis of tuberculosis						
Hom UG-Sur-I 12.2	KS	KH	Syphilis	Describe the pathology of syphilis Explain the types and clinical features of Syphilis	C/1 C/2	Desirable to know Must know	Lecture Audiovisual aid	Viva	LAQ SAQ MCQ	Pathology Practice of Medicine
Hom UG-Sur-I 12.3	KS	KH	AIDS	Discuss the pathogenesis of AIDS Explain the clinical features of AIDS	C/1 C/2	Desirable to know Must know	Lecture	Viva	LAQ SAQ MCQ	Pathology Practice of Medicine
Hom UG-Sur-I 12.4	KS	KH	Actinomycosis	Discuss the pathogenesis of Actinomycosis Describe the clinical features of Actinomycosis	C/2 C/2	Desirable to know Must know	Lecture	Viva	LAQ SAQ MCQ	Pathology Practice of Medicine
Hom UG-Sur-I 12.5	KS	KH	Leprosy	Discuss the pathogenesis of leprosy	C/1	Desirable to know	Lecture	Viva	LAQ SAQ MCQ	Pathology Practice of Medicine

				Explain the types and clinical features of leprosy	C/2	Must know				
Hom UG-Sur-I 12.6	KS	KH	Tetanus	Discuss the pathogenesis of Tetanus Explain the clinical features of Tetanus	C/1 C/2	Desirable to know Must know	Lecture	Viva	LAQ SAQ MCQ	Pathology Practice of Medicine
Hom UG-Sur-I 12.7	KS	KH	Infective gangrene	Define gangrene. Enumerate the causes of gangrene Discuss the clinical types of gangrene. Describe the clinical features Discuss the management of gangrene	C/1 C/2 C/2 C/2 C/2	Must know Must know Must know Must know Must know	Lecture Audiovisual aid Small group discussion Case based discussion	Viva	LAQ SAQ MCQ	Pathology Practice of Medicine

Hom UG-Sur-I 12.8	HO	K	Special infections	Discuss the homoeopathic therapeutics for special infections like Tuberculosis, Syphilis, AIDS, Actinomycosis, Leprosy and tetanus	C/2	Must know	Lecture/ small group discussion	Viva	SAQ MCQ	Materia Medica Repertory
Hom UG-Sur-I 12.9	HO	KH	Special infections – gangrene	Discuss the Homoeopathic therapeutics for Gangrene	C/1	Must know	Lecture/ small group discussion	Viva	SAQ MCQ	Materia Medica Repertory
Hom UG-Sur-I 12.10	PBL	SH	Special infections – gangrene	Demonstrate the Examination of case of gangrene	P/2	Must know	Clinical demonstration Audiovisual aid Skill lab training	Case based discussion OCSE	OSCE	

6.13. Concept of swelling- Tumours and Cysts; Clinical examination of swelling-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-I 13.1	KS	K	Swelling concept	Define Tumour	C/1	Must Know	Lecture	Viva	MCQ	Pathology

Hom UG-Sur-I 13.2	KS	KH	Tumours	Discuss the differences between benign and malignant tumours Differentiate different tumours like sarcoma, Fibrosarcoma, Naevus, Melanoma etc	C/2	Must Know	Lecture Audiovisual aid	Viva	SAQ LAQ	Pathology
Hom UG-Sur-I 13.3	HO	K	Tumours	Discuss Homoeopathic Therapeutics of Tumour	C/2	Must Know	Lecture	Viva	MCQ SAQ	Pathology Organon: Miasm Materia Medica
Hom UG-Sur-I 13.4	KS	K	Cyst	Define Cyst	C/1	Must Know	Lecture	Viva	MCQ	Pathology
Hom UG-Sur-I 13.5	KS	KH	Cyst	Explain Types of Cyst	C/2	Must Know	Lecture Audiovisual aid	Viva	SAQ LAQ	Pathology

Hom UG-Sur-I 13.6	HO	K	Cyst	Discuss the homoeopathic therapeutics for Cyst	C/2	Must Know	Lecture	Viva	MCQ SAQ	Pathology Organon: Miasm Materia Medica
Hom UG-Sur-I 13.7	KS	KH	Lipoma, Fibroma, Adenoma, Neuroma, Neurofibroma, Haemangioma	Explain Lipoma, Fibroma, Adenoma, Neuroma, Neurofibroma, Haemangioma	C/2	Must Know	Lecture Audiovisual aid	Viva	SAQ LAQ MCQ	Pathology
Hom UG-Sur-I 13.8	HO	KH	of Lipoma, Fibroma, Adenoma, Neuroma, Neurofibroma, Haemangioma	Discuss the Homoeopathic therapeutics of Lipoma, Fibroma, Adenoma, Neuroma, Neurofibroma, Haemangioma	C/2	Must Know	Lecture Small group discussion	Viva	MCQ SAQ LAQ	Pathology Organon: Miasm Materia Medica
Hom UG-Sur-I 13.9	PBL	SH	Tumour & Swelling	Demonstrate examination of Tumour and swelling of different types	P/2	Must Know	Clinical demonstration DOPS Small group discussion	OSCE	Mini-cex OSCE	

6.14. Hernia - Abdominal hernias, Basic Anatomy, Types causes, Clinical features Complications, Management; Examination of hernia case-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-I 14.1	KS	K KH	Hernia	Define Hernia Enumerate the causes of hernia Discuss the clinical classification of hernias Discuss the principles of management of hernias Discuss the operative approaches to hernias	C/1 C/2 C/2 C/2 C/2	Must Know Must know Must know Desirable to know Nice to know	Lecture Audiovisual aids Small group discussion	Viva	MCQ SAQ LAQ	Anatomy, Pathology
Hom UG-Sur-I 14.2	KS	KH	Inguinal hernia	Describe the basic anatomy of inguinal canal	C/1	Must know	Lecture Audiovisual aid Small group discussion	Viva	MCQ SAQ LAQ	Anatomy

				Discuss the types, clinical presentation and diagnosis of inguinal hernia Discuss the surgical management of inguinal hernia	C/2 C/2	Must know Nice to know				
Hom UG-Sur-I 14.3	KS	KH	Femoral hernia	Describe the basic anatomy of femoral canal Discuss the clinical features and diagnosis of femoral hernia Discuss the surgical management of Femoral hernia	C/1 C/2 C/2	Must know Must know Nice to know	Lecture Audiovisual aids Small group discussion	Viva	MCQ SAQ LAQ	Anatomy
Hom UG-Sur-I 14.4	KS	KH	Umbilical hernia	Describe the various types of umbilical hernia Discuss the clinicalfeatures and diagnosis Umbilical hernia	C/2 C/2	Must know Must know	Lecture Audiovisual aids	Viva	MCQ SAQ LAQ	

Hom UG-Sur-I 14.5	KS	KH	Epigastric hernia	Explain the pathology of epigastric hernia Describe the clinical features of epigastric hernia	C/2 C/2	Must know Must know	Lecture Audiovisual aids	Viva	MCQ SAQ LAQ	
Hom UG-Sur-I 14.6	KS	KH	Incisional hernia	Describe etiology of incisional hernia Discuss the clinical features of incisional hernia Discuss the management of incisional hernia	C/2 C/2 C/2	Must know Must know Nice to know	Lecture Audiovisual aids	Viva	MCQ SAQ LAQ	
Hom UG-Sur-I 14.7	KS	KH	Spigelian hernia	Explain spigelian hernia	C/2	Desirable to know	Lecture Audiovisual aids	Viva	MCQ SAQ	
Hom UG-Sur-I 14.8	KS	KH	Lumbar hernia	Explain lumbar hernia	C/2	Desirable to know	Lecture Audiovisual aids	Viva	MCQ SAQ	

Hom UG-Sur-I 14.9	KS	KH	Traumatic hernia	Explain traumatic hernia	C/2	Desirable to know	Lecture Audiovisual aids	Viva	MCQ SAQ	
Hom UG-Sur-I 14.10	KS	KH	Obturator hernia	Explain obturator hernia	C/2	Desirable to know	Lecture Audiovisual aids	Viva	MCQ SAQ	
Hom UG-Sur-I 14.11	HO	KH	Hernia	Discuss the Homoeopathic Therapeutics for Hernia	C/2	Must Know	Lecture Small group discussion	Viva	MCQ/ SAQ/ LAQ	Pathology Organon: Miasm Materia Medica
Hom UG-Sur-I 14.12	PBL	SH	Hernia	Demonstrate examination of hernia	P/2	Must Know	Clinical demonstration DOPS Small group discussion	OSCE Mini-cex	Mini-cex	

6.15. Ulcers; Clinical examination of ulcer-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/Gilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-I 15.1	KS	K	Ulcer	Define Ulcer	C/1	Must Know	Lecture	Viva	MCQ	Pathology Organon: Miasm Materia Medica
Hom UG-Sur-I 15.2	KS	KH	Ulcer	Describe different classification of Ulcer	C/2	Must Know	lecture	Viva	MCQ SAQ LAQ	Pathology
Hom UG-Sur-I 15.3	HO	KH	Ulcer	Explain therapeutics of ulcer	C/1	Must Know	Lecture/ Small group discussion	Viva	MCQ/SAQ/LAQ	Pathology Organon: Miasm Materia Medica
Hom UG-Sur-I 15.4	PBL	SH	Ulcer	Demonstrate examination of ulcer	P/2	Must Know	Clinical demonstration DOPS OSCE Small group discussion	OSCE Mini-cex	OSCE Mini-cex	

6.16. Sinus and Fistula; Clinical examination of Sinus and Fistula-

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-I 16.1	KS	K	Sinus and Fistula	Define sinus and fistula	C/1	Must Know	Lecture	Viva	MCQ	Pathology
Hom UG-Sur-I 16.2	KS	KH	Sinus and Fistula	Explain sinus and fistula	C/2	Must Know	Lecture	Viva	MCQ SAQ LAQ	Pathology Organon: Miasm Materia Medica
Hom UG-Sur-I 16.3	PBL	SH	Sinus and Fistula	Demonstrate examination of sinus and fistula	P/2	Must Know	Clinical demonstration DOPS Small group discussion	OSCE	OSCE	
Hom UG-Sur-I 16.4	HO	K	Sinus and Fistula	Explain therapeutics of sinus and fistula	C/1	Must Know	Lecture Small group discussion	Viva	MCQ SAQ LAQ	Organon: Miasm Materia Medica

7. Teaching learning methods

Lectures (Theory)	**Non-lectures (Practical/Demonstrative)**
Lectures	Clinical demonstration
Small group discussion	Problem based discussion
Integrated lectures	Case based learning
	Assignments
	Library reference
	Self-learning

8. Details of assessment

Note- ***The assessment in II BHMS shall be done only as Internal Assessment (IA) in terms of*** **Periodical Assessments** ***(PA) and*** **Term Tests (*TT)* *as detailed below. There shall not be any Final University Examination (FUE) at this level. The marks obtained in IA during II BHMS will be added to the marks of IA in the III BHMS University Examination.***

Overall Scheme of Internal Assessment (IA)*

Professional Course/ Subject	**Term I (1-6 Months)**		**Term II (7-12 Months)**	
II BHMS/	PA I (end of 3 months)	TT I (end of 6 months)	PA II (end of 9 months)	TT II (end of 12 months)

Surgery	20 Marks Viva- **A**	100 Marks Clinical/Practical and Viva - **E** i) Viva voce -50 marks ii) Clinical/practical- 50 Surgical Case taking - 25marks (Mandatory); Examination of wound/Cleaning and dressing of wound/Demonstration of Steps of Basic life support/Transport of the injured /Demonstration of suturing technique. (*Demonstration of any one of the procedures mentioned*) – 25 marks	20 Marks Viva- **B**	100 Marks Clinical/Practical and Viva - **F** i) Viva voce -50 marks ii) Clinical/practical- 50 Surgical case taking and Examination of surgical case – 15+15=30 marks; Surgical case file (5 cases)-20 marks

***Method of Calculation of Internal Assessment Marks in II BHMS for Final University Examination to be held in III BHMS:**

Marks of PA I	Marks of PA II	Periodical Assessment Average PA I+ PA II /2	Marks of TT I	Marks of TT II	Terminal Test Average TT I + TT II / 200 x 20	Final Internal Assessment Marks
A	**B**	**D**	**E**	**F**	**G**	**D+G/2**

9. List of recommended text/reference books

- Williams, N., O'Connell, P. R., & McCaskie, A. (2018).
- *Bailey and Love's Short Practice of Surgery, 27th Edition: the Collector's Edition*. Chapman and Hall/CRC.
- Sriram Bhat. (2019). *SRB's manual of surgery*. Jaypee Brothers.
- A concise text book of surgery, 11th edition – S Das
- Das, S. (2024). *A Manual on Clinical Surgery*. Jaypee Brothers Medical Publishers Pvt Limited.
- Sriram, B. M. (2019). *SRB's clinical methods in surgery*. Jaypee Brothers Medical Publishers.
- Kulkarni, S. (2002). *Surgery Therapeutics*. B. Jain Publishers.
- Lilienthal, S. *Homoeopathic Therapeutics*.
- Willis Alonzo Dewey. (2018). *Practical Homeopathic Therapeutics*. *B. Jain Publishers.*

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Subject name: Gynaecology and Obstetrics

Subject code: HomUG-ObGy-I

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1. Preamble

Obstetrics stands at the forefront of maternal health, emphasizing the care and well-being of expectant mothers throughout pregnancy, childbirth, and the postpartum period. From prenatal care to labour and delivery, obstetricians play a pivotal role in ensuring safe pregnancies and healthy births. Gynaecology encompasses the diagnosis and treatment of conditions affecting the female reproductive system, from adolescence through menopause, including menstrual disorders, fertility concerns, sexually transmitted infections, and gynecological cancers. Infant care extends beyond the moment of birth, encompassing the critical early stage of a newborn's life. From breastfeeding guidance to newborn screening and immunization.

The fields of Obstetrics, Infant care and Gynaecology intersect to provide holistic care to women across the reproductive lifespan. By addressing the physical, emotional and social aspects of women's health, healthcare providers empower individuals to make informed decisions about their bodies and well-being.In the realm of obstetrics and gynaecology, homoeopathy offers a holistic approach that seeks to address the physical, emotional and spiritual aspects of women's health.

Homoeopathy, a system of medicine based on the principle of "like cures like" and individualized treatment, can play a significant role in promoting well-being and managing various conditions in obstetrics and gynaecology. Homoeopathy offers safe and gentle remedies to support women throughout pregnancy. From alleviating common discomforts such as nausea, fatigue, and back pain to addressing emotional concerns like anxiety and mood swings, homoeopathic treatments can provide relief without adverse effects on the developing fetus. Additionally, homoeopathy can aid in preparing the mother's body for labor and delivery, promoting a smooth and natural

In the postpartum period, homeopathy offers support for new mothers as they navigate the physical and emotional changes following childbirth, and breastfeeding difficulties, promote lactation, and support the overall recovery of the mother. .Homeopathy provides a holistic approach to managing various gynaecological conditions, including menstrual disorders, hormonal imbalances, polycystic ovarian syndrome (PCOS), endometriosis, and menopausal symptoms. Homeopathy considers the individual's unique constitution and emotional state.

In conclusion, homoeopathy offers a holistic and patient-centred approach to obstetrics and gynaecology, addressing the physical, emotional, and spiritual aspects of women's health.

2. Course outcomes

At the end of BHMS II course, the students should be able to-

i. Understand applied anatomy, endocrinology and physiology including abnormality of female reproductive system during puberty, menstruation, menopause and in different stages of womanhood.

ii. Learn skills in case taking, physical examination, diagnostic procedures and managements of benign and malignant conditions, trauma, infections and inflammations related with female genitalia, and pre-malignancy screening procedures.

iii. Integrate the various knowledges to get a holistic understanding of disease evolution and approach to disease diagnosis and management.

iv. Understand developmental anomalies, uterine displacements and Sex and intersexuality

v. Uunderstand the causes related with male and female Infertility, their diagnosis, Artificial Reproductive Techniques and skill in Homoeopathic management along with population dynamics and control of Conception.

vi. Know skills required in case taking, clinical examination and common diagnostic modalities in Gynecology and Obstetrics.

vii. Understand the process of normal pregnancy and minor ailments during pregnancy

viii. Comprehend the process of diagnosis of normal pregnancy, prenatal, antenatal, postnatal maternal and fetal surveillance, care of newborn, care of puerperium

ix. Uunderstanding common problems during abnormal pregnancy and labour to manage it through Homoeopathic perspective including scope, limitations and timely referral.

x. Comprehending postnatal, puerperal care, diseases of fetus, new-born and medico legal aspects with Homoeopathic perspective.

xi. Learning general and homoeopathic management of common Gynecological and Obstetric conditions

3. Learning objectives

At the end of the II BHMS course the student shall able to:

1. Understand the applied anatomy, endocrinology and physiology including abnormality of female reproductive system during puberty, menstruation, menopause and in different stages womanhood.
2. Integrate the knowledge with Anatomy, Physiology, Organon of medicine, Practice of medicine and Homoeopathic materia medica to get a holisti
3. c understanding of disease evolution and approach to disease diagnosis and management.
4. Discuss the developmental anomalies, Uterine displacements and Sex and intersexuality to understand the Predisposition including fundamental miasm, personality type known to develop particular disease, causation and modifying factors like exciting and maintaining factors.
5. Acquire skill in case taking, clinical examination and common diagnostic modalities in Gynaecology and Obstetrics.
6. Describe anatomical, physiological, endocrinological changes and minor ailments during pregnancy
7. Understand prenatal, antenatal, postnatal maternal and foetal surveillance, care of new-born, care of puerperium
8. Integrate the knowledge with Organon of medicine and Homoeopathic Materia medica for eradicating genetic dyscrasias in the mother and foetus.
9. Describe the mechanism and stages of normal labour, and intra-partum management.
10. Discuss general and Homoeopathic management for the related conditions through integration with repertorisation and therapeutics.

4. Course content and its term-wise distribution

4.1 Unit 1: Gynaecology and Homoeopathic Therapeutics

Sl. No.	List of Topics	Term
1.a	Introduction to Gynaecology with Definition of Hahnemannian classification of disease. Importance in the review of the Homoeopathic literature, Therapeutics and Repertory source books	I
1.b	A review of the applied anatomy of female reproductive system, development and Developmental anomalies	I
1.c	A review of the applied physiology of female reproductive system - Puberty, Menstruation and its disorders including, amenorrhea, dysmenorrhea, menorrhagia, metrorrhagia, epimenorrhoea, AUB, Postmenopausal bleeding and menopause with related ailments and its scope and management in Homoeopathy and integrate wherever necessary with other disciplines	I
1.d	Gynaecological Case taking, physical examination, investigation and approach to clinical diagnosis and Differential diagnosis.	I
1.e	Epidemiology -Predisposition including fundamental miasm: personality type known to develop particular disease	I
1.f	Uterine displacements – Prolapse, Retroversion and inversion with its exciting and maintaining causes, disease manifestations, prognosis, management and scope in homoeopathic perspective.	II
1.g	Sex & Intersexuality- Knowledge and scope to eradicate genetic Dyscrasias, predisposition, miasm and personality types known to develop particular diseases through Homoeopathic outlook.	II
1.h	General and Homoeopathic Management, repertorisation, therapeutics, posology, Formulation of prognostic criteria and Prognosis of related topics in Gynecology.	II

4.2 . Unit 2: Obstetrics, new born care & Homoeopathic therapeutics

Sl. No.	List of topics	Term
2.a	Introduction to Obstetrics and Newborn care related with Homoeopathic Philosophy, Therapeutics and Repertorisation.	I
2.b	Fundamentals of reproduction	I
2.c	Development of intra uterine pregnancy	I
2.d	Diagnosis of pregnancy, investigations & examinations, applied anatomy & physiology, Normal pregnancy – physiological changes	I
2.e	Antenatal care – aims, objectives, visits, advise, procedures, investigations, identifying high risk cases, scope and limitation of management in Homoeopathy	I
2.f	Common conditions such as Vomiting, backache, constipation in pregnancy and Homoeopathic management	I
2.g	Normal labour with its causes of onset, anatomy, physiology, mechanism, stages, events and clinical course in each stage, importance of Homoeopathic scope and management	II
2.h	Postnatal & puerperal cure - scope and limitation of management in Homoeopathy	II
2.i	Care of new born in homoeopathic point of view	II
2.j	General and Homoeopathic Management, repertorisation, therapeutics, posology, Formulation of prognostic criteria and Prognosis of related topics in Obstetrics and new-born care.	II
2.k	Important Investigations for diagnosis in Obstetrics	II

5. Teaching hours

5.1. Gross division of teaching hours

Gynaecology and Obstetrics		
Year	**Teaching hours- Lectures**	**Teaching hours- Non-lectures**
II BHMS	100	24

5.2. Teaching hours theory

5.2.1 Unit 1: Gynaecology and Homoeopathic Therapeutics

Sl. No.	List of topics	Lecture hours
1.a	Introduction to Gynecology with definition of Hahnemannian classification of disease. Importance in the review of the Homoeopathic literature, Therapeutics and Repertory source books	02 hrs.
1.b	A review of the applied anatomy of the female reproductive system.	03 hrs.
	Developmental anomalies	03 hrs.
1.c	A review of the applied physiology of the female reproductive system HPO axis & Menstruation	02 hrs.
	Puberty	03 hrs.
	Disorders of Menstruation including – Amenorrhoea, Dysmenorrhoea, Menorrhagia, Metrorrhagia, Epimenorrhoea, AUB.	09 hrs.
	Post-Menopausal Bleeding & Menopause with related ailments	05 hrs.

1.d	Gynaecological case taking, Physical examination, investigation and approach to clinical diagnosis and differential diagnosis.	04 hrs.
1.e	Epidemiology – Predisposition including fundamental miasm; personality type known to develop particular disease.	04 hrs.
1.f	Uterine displacements- Prolapse, retroversion and inversion with its exciting and maintaining causes, disease manifestations, prognosis, management and scope in homoeopathic perspective	08 hrs.
1.g	Sex & Intersexuality – Knowledge and scope to eradicate genetic dyscrasians, predisposition, miasm and personality types known to develop particular diseases through Homoeopathic outlook	05 hrs.
1.h	Correlate homoeopathic remedies, Therapeutics, posology. Formulation of prognostic criteria and prognosis related to Gynaecological conditions.	02 hrs
Total		**50 hrs.**

5.2.2. Unit 2: Obstetrics, new born care & Homoeopathic therapeutics

Sl. No.	List of topics	Teaching hours
2.a	Introduction to Obstetrics and Newborn Care Related with Homoeopathic Philosophy. Therapeutics and Repertorisation.	02 hr.
2.b	Fundamentals of reproduction	04 hrs.
2.c	Development of intrauterine pregnancy- Placenta and foetus.	04 hrs.
2.d.	Diagnosis of pregnancy: Investigations & examinations, applied anatomy & physiology, Normal pregnancy – Physiological changes.	07 hrs.
2.e	Antenatal care – aims, objectives, visits, advice, procedures, investigations, identifying high-risk cases, scope and limitation of management in Homeopathy	06 hrs.

2.f	Vomiting in pregnancy	04 hrs.
2.g	Normal labour with its causes of onset, anatomy, physiology, mechanism, stages, events and clinical course in each stage and management	08 hrs.
2.h	Postnatal & puerperal cure – scope and limitation of management in Homoeopathy	06 hrs.
2.i	Care of New-born in a homoeopathic point of view	04 hrs.
2.j	Correlate homoeopathic remedies, Therapeutics, posology. formulation of prognostic criteria and prognosis related to Obstetrical conditions	02 hrs.
2.k	Important investigations for diagnosis in Obstetrics	03 hrs.
Total		**50 hrs.**

5.2.3. Teaching hours Non-lecture

S. No.	Non lecture activity	Hours
1.	**Clinical**	
a.	Gynaecological Case taking	04
b.	Obstetrical Case taking	04
c.	Gynaecological Examination	04
d.	Obstetrical Examination	04
e.	Investigations, Diagnosis , D/D	04
2.	**Demonstrative**	
a.	Problem based / Case based learning- Foetal skull & maternal pelvis Demonstration of labour in Mannequin - skill lab	04
	Total	**24**

6. Content mapping (competencies tables)

Unit 1: Gynaecology & Homoeopathic therapeutics

6.1. Introduction to Gynecology with definition of Hahnemannian classification of disease. Importance in the review of the Homoeopathic literature, Therapeutics and Repertory source books

Sl. No.	Domain of Competency	Miller's level	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-ObGy-1 1.1	K & S	K	Introduction to Gynecology	Define Gynaecology	C1	MK	Lecture Small group discussion	MCQ		
HomUG-ObGy-1 1.2	K & S	K	History of Gynaecology	Discuss the history of Gynaecology	C1	NK	Lecture Small group discussion	MCQ		
HomUG-ObGy-1 1.3	H O	KH	Hahnemannian classification of disease.	Classify diseases according to Hahnemann	C1	MK	Lecture Small group discussion	MCQ		Organon of Medicine
HomUG-ObGy-1 1.4	H O	KH	Homoeopathic literature	Discuss the Homoeopathic case taking in female complaints as per Organon of Medicine	C I	MK	Lecture/ Integrated Small Group discussion CBL	MCQ/		Organon of Medicine

HomUG-ObGy-1 1.5	H O	KH		Discuss Hahnemann's concept of case taking in females according to different Homoeopathic authors	C1	MK	Lecture/ Small group discussion CBL PBL	MCQ/		Organon of Medicine
HomUG-ObGy-1 1.6	H O	KH	Materia Medica& Therapeutics Materia	Discuss the list of indicated medicines for the gynaecological conditions	C2	MK	Lecture / small group discussion PBL CBL	MCQ	SAQ	Materia Medica,
HomUG-ObGy-1 1.7	H O	KH		Discuss the characteristic indication of medicines mention in the list	C2	MK	Lecture / small group discussion PBL CBL	MCQ	SAQ	Materia Medica,
HomUG-ObGy-1 1.8	H O	KH		Discuss the differentiation of the remedies	C2	MK	Lecture / small group discussion PBL CBL	MCQ	SAQ	Materia Medica, Pathology
HomUG-ObGy-1 1.9	H O	KH		Discuss the remedy relationship wherever applicable	C2	MK	Lecture / small group discussion PBL CBL	MCQ		Materia Medica, Pathology
HomUG-ObGy-1 1.10	H O	KH	Repertory	Describe the selection of repertories in different gynaecological conditions	C2	MK	Lecture / small group discussion PBL CBL	MCQ		Repertory

HomUG-ObGy-1 1.11	H O	KH		Explain how to convert symptoms into rubrics from different repertories in gynaecological conditions	C2	MK	Lecture / small group discussion PBL CBL	MCQ		Repertory
HomUG-ObGy-1 1.12	H O	KH		Explain the selection of rubrics from different gynaecological conditions.	C2	MK	Lecture / small group discussion PBL CBL	MCQ		Repertory

6.2.1. Review of the applied anatomy of the female reproductive system.: Development of genital tract, malformations and their clinical significance

Sl. No.	Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG -ObGy-I-2.1	K & S	K	External genitalia organs	Name the external genitalia organs	C I	MK	Small group discussion Models	MCQ		
HomUG -ObGy-I 2.2	K & S	K	Internal genitalia organs	Name the internal genitalia organs.	C I	MK	Small group discussion Charts	MCQ		
HomUG -ObGy-I-2.3	K & S	KH	Internal genitalia organs	Draw and label the anatomy of the uterus	P2	MK	Small group discussion Charts	MCQ		

HomUG- ObGy-I-2.4	K & S	K	Internal genitalia organs	Name the blood supply of the uterus	C I	MK	Small group discussion Charts	MCQ		
Hom-UG ObGy-I-2.5	K & S	KH	Internal genitalia organs	Draw & Label the normal anatomy of the fallopian tubes.	P2	MK	Small group discussion Chars	MCQ	SAQ	
HomUG- ObGy-I-2.6	K & S	KH	Gonads	Draw & Label the normal anatomy of the ovarian structures	P2	MK	Small group discussion Charts	MCQ	SAQ	
HomUG- ObGy-I-2.7	K & S	K	Pelvic fascia, cellular tissues & ligaments	Name the pelvic floor muscles, ligaments and fascia.	C I	MK	Small group discussion Charts	MCQ	SAQ	
HomUG- ObGy-I-2.8	K & S	K	Malformation of the vagina	Discuss the vaginal abnormalities	CI	MK	Small group discussion Charts	MCQ		
HomUG- ObGy-I-2.9	K & S	K		Describe the clinical features of vaginal abnormalities	CI	MK	Small group discussion CBL CBL	MCQ		
HomUG- ObGy-I-2.10	K & S	K	Malformation of the vagina	List the vaginal mal-developments	CI	MK	Small group discussion	MCQ		
Hom-UG- ObGy-I-2.11	K & S	K		Discuss the aetiological factors for vaginal mal-development	CI	MK	Lecture Small group discussion Tutorials	MCQ		

HomUG-ObGy-I-2.12	K & S	KH	Malformation of the uterus	Describe the various malformations of the uterus.	CI	MK	Lecture Small group discussion	MCQ	SAQ	
HomUG -ObGy-I-2.13	K & S	K		Discuss the clinical features of uterine anomalies	CI	MK	Small group discussion CBL	MCQ	SAQ	
HomUG -ObGy-I-2.14	K & S	K	Malformation of the ovaries	List the anomalies of the ovaries	C2	MK	Lecture Small group discussion	MCQ		
HomUG-ObGy-I-2.15	K & S	K	Malformation of the fallopian tubes	List the anomalies of the fallopian tubes	C2	MK	Lecture Small group discussion	MCQ		

6.3. A review of the applied physiology of female reproductive system - Puberty, Menstruation and its disorders including, amenorrhea, dysmenorrhea, menorrhagia, metrorrhagia, epimenorrhoea, AUB, Postmenopausal bleeding and menopause with related ailments and its scope and management in Homoeopathy and integrate wherever necessary with other disciplines.

Sl. No.	Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG -ObGy-I-3.1	K & S	K	Endocrinology in puberty	List the hormones of Hypothalamus.	C1	MK	Lecture Small group discussion	MCQ		Physiology
HomUG -ObGy-I-3.2	K & S	K		List the functions of hormones of Hypothalamus	C1	MK	Lecture Small group discussion Tutorials	MCQ		Physiology
HomUG- ObGy-I-3.3	K & S	K	Endocrinology in puberty	Name the hormones of Anterior Pituitary.	C1	MK	Lecture Small group discussion Tutorials	MCQ		Physiology
HomUG -ObGy-I-3.4	K & S	K		List the functions of Anterior Pituitary hormones	C1	MK	Lecture Small group discussion Tutorials	MCQ		Physiology
HomUG -ObGy-I-3.5	K & S	K		Name the hormones of Posterior Pituitary	C1	MK	Lecture Small group discussion Tutorials	MCQ		Physiology

HomUG -ObGy-I-3.6	K & S	K		List the functions of Posterior Pituitary hormones	C1	MK	Lecture Small group discussion Tutorials	MCQ		Physiology
HomUG -ObGy-I-3.7	K & S	K	Endocrinology in puberty	Name the hormones of Ovary	C1	MK	Lecture Small group discussion.	MCQ		Physiology
HomUG -ObGy-I-3.8	K & S	K	Endocrinology in puberty	List the functions of ovarian hormones.	C1	MK	Lecture Small group discussion	MCQ	SAQ	Physiology
HomUG -ObGy-I-3.9	K & S	K		Discuss the Importance of HPO axis during Foetal life, Puberty & at Menopause	C1	MK	Lecture Small group discussion	MCQ	SAQ	Physiology
HomUG -ObGy-I-3.10	K & S	K	Physiology of Menstruation	Define Menstruation	C1	MK	Lecture Small group discussion Tutorials	MCQ	SAQ	Physiology
HomUG - ObGy-I-*3*.11	K & S	K		What are the Phases of Menstruation	C1	MK	Lecture Small group discussion Tutorials	MCQ	SAQ	Physiology
HomUG- ObGy-1*3*.12	K & S	K	Hormonal changes during each phase of menstruation	Discuss the Hormonal Changes during each Phase of Menstruation	C1	MK	Lecture Small group discussion Tutorials	MCQ	SAQ	Physiology
HomUG- ObGy-I 3.13	K & S	K	Uterine changes during each phase of menstruation	Describe the Ovarian Changes during each phase of Menstruation	C1	MK	Lecture Small group discussion		SAQ	Physiology

HomUG- ObGy-I-3.14	K & S	K		Describe the Uterine Changes occurs during each phase of Menstruation	C1	MK	Lecture Small group discussion Tutorials		SAQ	Physiology
HomUG -ObGy-I-3.15	K & S	K	Puberty	Define puberty	C1	MK	Lecture Small group discussion	MCQ		
HomUG- ObGy-I-3.16	K & S	K	Precocious puberty	Describe the Pubertal changes as per Tanner's Classification	C1	MK	Lecture Small group discussion Tutorials		SAQ	
HomUG- ObGy-I-3.17	K & S	K		Define Precocious puberty	C1	MK	Lecture Small group discussion	MCQ	SAQ	
HomUG- ObGy-I-3.18	K & S	K		Discuss the causes of Precocious puberty	C1	MK	Lecture Small group discussion	MCQ	SAQ	
HomUG- ObGy-I-3.19	K & S	K		Find the diagnostic features of Precocious puberty	C1	MK	Lecture Small group discussion CBL CBL	MCQ		
Hom-UG ObGy-I-3.20	K & S	K	Delayed puberty	Define Delayed puberty	C1	MK	Lecture Small group discussion	MCQ		

HomUG-ObGy-I-3.21	K & S	K		Discuss the causes for Delayed puberty	C1	MK	Lecture Small group discussion		SAQ	
HomUG-ObGy-I-3.22	K & S	K		Discuss the characteristic features of delayed puberty	C1	MK	Lecture Small group discussion Tutorials		SAQ	
HomUG -ObGy-I-3.23	K & S	K	Menorrhagia	Define puberty menorrhagia	C1	MK	Lecture Small group discussion	MCQ		
Hom-UG-ObGy-I-3.24	K & S	K		Discuss the causes of Puberty menorrhagia	C1	MK	Lecture Small group discussion		SAQ	
HomUG -ObGy-I-3.25	K & S	K		Discuss the Diagnostic features of Puberty menorrhagia	C1	MK	Lecture Small group discussion CBL PBL	MCQ		
HomUG-ObGy-I-3.26	H O	K	Materia medica Therapeutics	Discuss the Homoeopathic remedies for delayed puberty	C1	MK	Lecture Small group discussion CBL PBL		SAQ	**Materia medica**
HomUG -ObGy-I-3.27	H O	K		Discuss the Homoeopathic remedies for puberty menorrhagia	C1	MK	Lecture Small group discussion CBL PBL		SAQ	**Materia medica**

HomUG -ObGy-I-3.28	H O	K		Discuss the characteristic features of the indicated remedies	C1	MK	Lecture Small group discussion CBL PBL		SAQ	**Materia medica**
HomUG- ObGy-I-3.29	H O	K	Management	Explain the management for Anomalies of Gonadal Function	C1	MK	Lecture Small group discussion CBL CBL	MCQ		**Organon of medicine**
HomUG- ObGy-I-3.26	K & S	K	Amenorrhoea	Define Amenorrhoea	C1	MK	Lecture Small group discussion CBL	MCQ	SAQ	
HomUG- ObGy-I-3.30	K & S	KH		Classify Amenorrhoea	C1	MK	Lecture Small group discussion Tutorials	MCQ	SAQ	
HomUG -ObGy-I-3.31	K & S	K		Define Primary Amenorrhoea	C1	MK	Lecture Small group discussion CBL PBL	MCQ	SAQ	
HomUG- ObGy-I-3.32	K & S	K	Primary amenorrhoea	Describe the causes of Primary amenorrhoea	C2	MK	Lecture Small group discussion CBL Tutorials	MCQ	SAQ	
HomUG- ObGy-I-3.33	K & S	K	Secondary amenorrhoea	Define Secondary amenorrhoea	C1	MK	Lecture Small group discussion Tutorials	MCQ	SAQ	

HomUG-ObGy-I-3.34	K & S	K		Describe the causes of Secondary amenorrhoea	CI	MK	Lecture Small group discussion	MCQ	SAQ	
HomUG-ObGy-I-3.35	K & S	K	Cryptomenorrhoea	Define Cryptomenorrhoea	C1	MK	Lecture Small group discussion CBL	MCQ	SAQ	
HomUG-ObGy-I-3.36	K & S	K		Discuss the causes of Cryptomenorrhoea	C1	MK	Lecture Small group discussion CBL	MCQ	SAQ	
HomUG-ObGy-I-3.37	K & S	Shows	Examinations	Demonstrate the general physical, systemic and per vaginal examination in Primary amenorrhoea	P3	MK	Clinical examinations CBL PBL			
HomUG-ObGy-I-3.38	K & S	KH	Investigations	Explain the clinical, laboratory and radiological investigations done in Primary amenorrhoea	C2	MK	Lecture Small group discussion CBL			
HomUG-ObGy-I-3.39	K & S	KH		Discuss clinical, laboratory and radiological investigations done in secondary amenorrhoea	C2	MK	Lecture Small group discussion CBL CBL	MCQ		

HomUG-ObGy-I-3.40	H O	KH	Management	Discuss the general management for Primary amenorrhoea	C2	MK	Lecture Small group discussion CBL	MCQ/		
HomUG-ObGy-I-3.41	H O	KH	Homoeopathic Materia medica & therapeutics	Discuss the Homoeopathic remedies for Primary amenorrhoea	C2	MK	Small group discussion PBL CBL	MCQ		**Materia medica**
HomUG-ObGy-I-3.42	H O	KH		Discuss the Homeopathic remedies for Secondary Amenorrhoea	C2	MK	Lecture Small group discussion CBL Tutorials	MCQ		**Materia Medica**
HomUG-ObGy-I-3.43	H O	K		Discuss the characteristic features of the indicated remedies	C2	MK	Lecture Small group discussion PBL CBL	MCQ		**Materia Medica**
HomUG-ObGy-I-3.44	K & S	K	Hypomenorrhoea	Define Hypomenorrhoea	C1	MK	Lecture Small group discussion CBL	MCQ		
HomUG-ObGy-I-3.45	K & S	K		Discuss the Causes of Hypomenorrhoea	C1	MK	Lecture Small group discussion CBL	MCQ	SAQ	
HomUG-ObGy-I-3.46	K & S	K	Oligomenorrhoea	Define Oligomenorrhoea	C1	MK	Lecture Small group discussion CBL	MCQ	SAQ	

HomUG-ObGy-I-3.47	K & S	K	Polymenorrhoea	Discuss the causes of Oligomenorrhoea	C1	MK	Lecture Small group discussion CBL	MCQ	SAQ	
HomUG-ObGy-I-3.48	K & S	K		Define Polymenorrhoea	C1	MK	Lecture Small group discussion CBL	MCQ		
HomUG-ObGy-I-3.49	K & S	K		Discuss the causes of Polymenorrhoea	C1	MK	Lecture Small group discussion CBL Tutorials	MCQ	SAQ	
HomUG-ObGy-I-3.50	K & S	K	Metrorrhagia	Define Metrorrhagia	C1	MK	Lecture Small group discussion CBL Tutorials	MCQ		
HomUG-ObGy-I-3.51	K & S	KH		Discuss the causes of Metrorrhagia	C1	MK	Lecture Small group discussion Tutorials CBL	MCQ	SAQ	
HomUG-ObGy-I-3.52	K & S	K	Menorrhagia	Define menorrhagia	C1	MK	Lecture Small group discussion CBL Tutorials	MCQ		
HomUG-ObGy-I-3.53	K & S	K		Discuss the causes of menorrhagia	C1	MK	Lecture Small group discussion Tutorials CBL	MCQ	SAQ	
HomUG-ObGy-I-3.54	K & S	K	AUB	Define Abnormal Uterine Bleeding	C1	MK	Lecture Small group discussion CBL Tutorials	MCQ		

HomUG-ObGy-I-3.55	K & S	KH		Classify Abnormal Uterine Bleeding	C1	MK	Lecture Small group discussion CBL Tutorials	MCQ	SAQ	
HomUG-ObGy-I-3.56	K & S	KH		Discuss the causes of AUB	C1	MK	Lecture Small group discussion CBL Tutorials	MCQ	SAQ	
HomUG-ObGy-I-3.57	K & S	KH	Investigations for AUB	Discuss the important investigation to be done in AUB	C1	MK	Lecture Small group discussion CBL Tutorials	MCQ	SAQ	
HomUG-ObGy-I-3.58	K & S	KH	Management of AUB	Explain the general Management of AUB	C2	MK	Lecture Small group discussion CBL Tutorials	MCQ	SAQ	
HomUG -ObGy-I-3.59	K & S	K	Metropathia haemorrhagica	Define Metropathia haemorrhagica	C1	MK	Lecture Small group discussion CBL Tutorials	MCQ		
HomUG-ObGy-I-3.60	K & S	KH		Discuss the causes of metropathia hemorrhagica	C1	MK	Lecture Small group discussion CBL Tutorials		SAQ	
HomUG-ObGy-I-3.61	H O	KH	Homoeopathic materia medica & therapeutics	Discuss the homoeopathic remedies for AUB	C1	MK	Lecture Small group discussion CBL Tutorials		SAQ	Materia Medica

HomUG-ObGy-I-3.62	H O	KH		Discuss the characteristic features of the indicated remedies	C1	MK	Lecture Small group discussion Tutorials CBL PBL		SAQ	Materia Medica
HomUG-ObGy-I-3.63	K & S	K	Dysmenorrhoea	Define dysmenorrhoea	C1	MK	Lecture Small group discussion Tutorials CBL PBL	MCQ	SAQ	
HomUG-ObGy-I-3.64	K & S	KH		Classify dysmenorrhoea	C1	MK	Lecture Small group discussion Tutorials	SAQ/MCQ	SAQ	
HomUG-ObGy-I-3.65	K & S	KH		Discuss the causes of Primary Dysmenorrhoea	C1	MK	Lecture Small group discussion Tutorials	SAQ/MCQ	SAQ	
HomUG-ObGy-I-3.66	K & S	KH		Discuss the causes of Secondary dysmenorrhoea	C I		Lecture Small group discussion CBL Tutorials		SAQ	
HomUG -ObGy-I-3.67	K & S	KH	Dysmenorrhoea	Discuss the clinical features Primary Dysmenorrhoea	C1	MK	Lecture Small group discussion Tutorials CBL PBL	MCQ	SAQ	
HomUG-ObGy-I-3.68	K & S	KH		Discuss the clinical features Secondary Dysmenorrhoea	C1	MK	Lecture Small group discussion Tutorials CBL PBL	MCQ	SAQ	

HomUG-ObGy-I-3.69	K & S	KH		Differentiate Primary and Secondary Dysmenorrhoea	C1	MK	Small group discussion Tutorials CBL PBL	MCQ	SAQ	
HomUG-ObGy-I-3.70	K & S	K		Define Mittelschmerz's syndrome	C1	MK	Lecture Small group discussion CBL PBL	MCQ	SAQ	
HomUG-ObGy-I-3.71	K & S	KH		Discuss the causes for Mittelschmerz's syndrome	C1	MK	Lecture Small group discussion Tutorials	MCQ	SAQ	
HomUG-ObGy-I-3.72	K & S	KH		Discuss the general Management of Dysmenorrhoea	C2	MK	Small group discussion Tutorials CBL PBL	MCQ	SAQ	
HomUG-ObGy-I-3.73	H O	KH	Homoeopathic materia medica & therapeutics	Discuss the homoeopathic remedies in Spasmodic dysmenorrhoea	C2	MK	Small group discussion Tutorials CBL PBL	MCQ	SAQ	Materia Medica
HomUG -ObGy-I-3.74	H O	KH		Discuss the homoeopathic remedies in Congestive dysmenorrhoea	C2	MK	Small group discussion Tutorials PBL CBL	MCQ	SAQ	Materia Medica

HomUG-ObGy-I-3.75	H O	KH		Discuss the homoeopathic remedies in Membranous dysmenorrhoea	C2	MK	Small group discussion Tutorials CBL CBL	MCQ	SAQ	Materia Medica
HomU-G ObGy-I-3.76	H O	KH		Discuss the characteristic features of indicated remedies in dysmenorrhoea	C2	MK	Lecture Small group discussion Tutorials CBL PBL	MCQ	SAQ	Materia Medica
HomUG-ObGy-I-3.77	K & S	K	PMS	Define Premenstrual Syndrome	C1	MK	Lecture Small group discussion Tutorials CBL PBL	MCQ	SAQ	
HomUG-ObGy-I-3.78	K & S	KH		Discuss the causes for premenstrual syndrome	C1	MK	Lecture Small group discussion Tutorials	MCQ	SAQ	
HomUG-ObGy-I-3.79	K & S	K		Discuss the clinical features of premenstrual syndrome	C1	MK	Lecture Small group discussion CBL PBL Tutorials	MCQ	SAQ	
HomUG-ObGy-I-3.80	K & S	KH		Discuss the general management of premenstrual Syndrome	C1	MK	Lecture Small group discussion Tutorials CBL	MCQ	SAQ	

HomUG-ObGy-I-3.81	H O	KH	Homoeopathic materia medica & therapeutics	Explain the Homoeopathic remedies in Premenstrual complaints	C1	MK	Small group discussion Tutorials CBL PBL	MCQ	SAQ	Materia Medica
HomUG-ObGy-I-3.82	H O	KH		Discuss the characteristic features of indicated remedies in Premenstrual complaints	C1	MK	Lecture Small group discussion CBL Tutorials	MCQ	SAQ	Materia Medica
HomUG-ObGy-I-3.83	K & S	K	Menopause	Define Menopause	C1	MK	Lecture Small group discussion Tutorials	MCQ		
HomUG-ObGy-I-3.84	K & S	K		Discuss the Pathophysiology of Menopause	C1	MK	Lecture Small group discussion CBL Tutorials	MCQ	SAQ	
HomUG-ObGy-I-3.85	K & S	K		Discuss the Anatomical Changes taking place during menopause	C1	MK	Lecture Small 0	MCQ	SAQ	
HomUG-ObGy-I-3.86	K & S	K		Discuss the clinical features of menopause	C1	MK	Lecture Small group discussion PBL CBL	SAQ/MCQ		
HomUG-ObGy-I-3.87	K & S	K		Define Menopausal syndrome	C1	MK	Lecture small group discussion PBL CBL	MCQ	SAQ	

HomUG-ObGy-I-3.88	K & S	K		Discuss the anatomical and metabolic changes taking place during menopause	C1	MK	Lecture small group discussion PBL CBL	MCQ	SAQ	C1
HomUG-ObGy-I-3.89	K & S	K	Perimenopause	Define Perimenopause	C1	MK	Lecture small group discussion PBL CBL	MCQ	SAQ	C1
HomUG-ObGy-I-3.90	K & S	K	Artificial menopause	Define Artificial menopause	C1	MK	Lecture small group discussion PBL CBL	MCQ	SAQ	C1
HomUG-ObGy-I-3.91	K & S	K	Premature menopause	Define Premature Menopause	C1	MK	Lecture/ Small group discussion	MCQ		
HomUG-ObGy-I-3.92	K & S	K		Discuss aetiology of Premature Menopause	C1	MK	Lecture/ Small group discussion		SAQ	
HomUG-ObGy-I-3.93	K & S	K	Delayed menopause	Define delayed menopause	C1	MK	Lecture Small group discussion	MCQ		
HomUG-ObGy-I-3.94	K & S	K		Discuss causes of delayed menopause	C1	MK	Lecture Small group discussion		SAQ	
HomUG-ObGy-I-3.95	K & S	KH	Management	Discuss the general management of Menopause	C1	MK	Lecture small group discussion PBL CBL		SAQ	

HomUG-ObGy-I-3.96	K & S	KH	Homoeopathic Materia medica & therapeutics	List the Homoeopathic remedies for Menopause.	C2	MK	Ssmall group discussion PBL CBL	MCQ	SAQ	
HomUG-ObGy-I-3.97	K & S	KH		Discuss the characteristic features of the indicated remedies.	C2	MK	Lecture small group discussion PBL CBL	MCQ	SAQ	
HomUG-ObGy-I-3.98	K & S	K	Postmenopausal bleeding Investigations	Define Postmenopausal bleeding	C1	MK	Lecture/ small group discussion PBL CBL	MCQ	SAQ	
HomUG-ObGy-I-3.99	K & S	KH		Discuss the causes for Postmenopausal bleeding	C1	MK	Lecture small group discussion PBL CBL	MCQ	SAQ	
HomUG-ObGy-I-3.100	K & S	KH		Discuss the important investigations required for postmenopausal bleeding	C2	MK	Lecture/ small group discussion PBL CBL	MCQ	SAQ	
HomUG-ObGy-I-3.101	K & S	KH	Investigations	Discuss what are the investigation required in case of post-menopausal bleeding	C2	MK	Lecture/ small group discussion PBL CBL	MCQ	SAQ	
HomUG-ObGy-I-3.102	K & S	KH	Differential diagnosis	Discuss the differential diagnosis for postmenopausal bleeding	C1	MK	Lecture / small group discussion PBL CBL	MCQ	SAQ	

HomUG- ObGy-I-3.103	K & S	KH	Materia Medica & therapeutics	Discuss the homoeopathic remedies for postmenopausal bleeding	C2	MK	Lecture / small group discussion PBL CBL	MCQ	SAQ	
HomUG -ObGy-I-3.104	K & S	KH		Discuss the characteristic features of the indicated remedies.	C2	MK	Lecture/ small group discussion PBL CBL	MCQ	SAQ	

6.4 Gynaecological case taking, Physical examination, investigation and approach to clinical diagnosis and differential diagnosis

Sl. No.	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-ObGy-14.1	H O	K	Case taking	Discuss the format of history taking in gynaecological conditions.	C 2	MK	Small group discussion CBL			
HomUG-ObGy-14.2	H O	Shows		Explain the importance of communication skills while case taking.	P2	MK	Small group discussion CBL			
HomUG-ObGy-14.3	H O	KH		Explain the importance of clinical skills in case taking	C I	MK	Small group discussion CBL Clinical examination	VIVA		
HomUG-ObGy-14.4	H O	KH		Discuss the Homoeopathic case	C 2	MK	Small group discussion	VIVA		

				taking in female complaints as per Organon of Medicine			Case based learning CBL			
HomUG- ObGy-1 4.5	P C	Does	Physical examination	Demonstrate the general physical examination	P 2	MK	Small group discussion Clinical demonstration	MCQ		
HomUG- ObGy-1 4.6	P C	Does	Abdominal examination	Describe how to perform per abdominal examination.	P 2	MK	Small group discussion Tutorials CBL Bedside	MCQ		
Hom-UG ObGy-1 4.7	P C	Does	Vaginal examination	Describe how to perform per vaginal speculum examination.	P 2	MK	Small group discussion Tutorials CBL Bedside	MCQ		
HomUG- ObGy-1 4.8	K & S	KH	Investigations	Discuss the investigations required in dysmenorrhea	C 2	MK	Small group discussion Tutorials CBL PBL	MCQ		
HomUG- ObGy-1 4.9	K & S	KH		Discuss the investigation required in Amenorrhoea	C 2	MK	Small group discussion Tutorials CBL PBL	MCQ		
HomUG- ObGy-1	K & S	KH		Discuss the investigations	C 2	MK	Small group discussion	MCQ		

4.10				required in AUB case.			Tutorials CBL PBL			
HomUG ObGy-1 4.11	K & S	KH		Discuss the investigation required in malformations of the FGT	C 2	MK	Small group discussion CBL PBL	MCQ		
Hom-UG- ObGy-1 4.12	K & S	KH	Clinical diagnosis	Derive the clinical diagnosis from the signs & symptoms	C 2	MK	Small group discussion CBL PBL	MCQ		
HomUG- ObGy-1 4.13	K & S	KH	Pathological diagnosis	Derive the pathological diagnosis with a help of laboratory and radiological findings.	C 2	MK	Small group discussion CBL PBL	MCQ		
HomUG- ObGy-1 4.14	K & S	KH	Differential diagnosis	Discuss the differential diagnosis with relation to patient history & Signs & Symptoms,	C 2	MK	Small group discussion CBL PBL	MCQ		

6.5 Epidemiology – Predisposition including fundamental miasm; personality type known to develop particular disease

Sl. No.	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-ObGy-15.1	H O	K	Predisposition	Define predisposition	C1	MK	Lecture Small group discussion Tutorials	MCQ		Organon of medicine
HomUG-ObGy-15.2	H O	K		Discuss the relevance of predisposing factors for the disease.	C1	MK	Lecture Small group discussion Tutorials	MCQ		Organon of medicine
HomUG-ObGy-15.3	H O	K	Miasm	Define miasm	C1	MK	Lecture Small group discussion Tutorials	MCQ		Organon of medicine
HomUG-ObGy-15.4	H O	K		Discuss the types of miasms	C1	MK	Lecture Small group discussion Tutorials	MCQ		Organon of medicine
HomUG-ObGy-15.5	H O	K		Discuss the relevance of miasm for the disease conditions	C1	MK	Lecture Small group discussion	MCQ		Organon of medicine

							Tutorials			
HomUG-ObGy-15.6	H O	K	Fundamental miasm	Define fundamental miasm	C1	MK	Lecture Small group discussion Tutorials	MCQ		Organon of medicine
HomUG-ObGy-15.7	H O	K		Discuss the relevance of fundamental miasm for the disease	C1	MK	Lecture Small group discussion Tutorials	MCQ		Organon of medicine
HomUG-ObGy-15.8	H O	K	Personality type	Discuss the importance of personality of the patient for developing Disease condition.	C1	MK	Lecture Small group discussion Tutorials	MCQ		Organon of medicine

6.6 Uterine displacements- Prolapse, retroversion and inversion with its exciting and maintaining causes, disease manifestations, prognosis, management and scope in homoeopathic perspective.

Sl. No.	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MIM	Assessment		Integration
								Formative	Summative	
HomUG-ObGy-1 6.1	K & S	K	Genital Prolapse	Define Genital prolapse	C1	MK	Lecture Small group discussion Charts	MCQ	SAQ	
HomUG-ObGy-1 6.2	K & S	K		Discuss the aetiology of Genital prolapse	C1	MK	Lecture Small group discussion Tutorials Charts	MCQ	SAQ	
HomUG-ObGy-1 6.3	K & S	K		Classify genital prolapses	C1	MK	Lecture Small group discussion Tutorials Charts	MCQ	SAQ	
HomUG-ObGy-1 6.4	K & S	K	Rectocele	Define Rectocele	C1	MK	Lecture Small group discussion Tutorials Charts	MCQ	SAQ	
HomUG-ObGy-1 6.5	K & S	K	Cystocele	Define cystocele	C1	MK	Lecture Small group discussion	MCQ	SAQ	

HomUG-ObGy-16.6	K & S	K		Discuss the degrees of cystocele	C1	MK	Lecture Small group discussion CBL	MCQ	SAQ	
HomUG-ObGy-16.7	K & S	K	Uterine prolapse	Discuss the degrees of uterine prolapse	C1	MK	Lecture Small group discussion CBL PBL	MCQ	SAQ	
HomUG-ObGy-16.8	K & S	K	Genital prolapse	Describe the aetiology of genital prolapse	C1	MK	Lecture Small group discussion Tutorials Charts	MCQ	SAQ	
HomUG-ObGy-16.9	K & S	K		Discuss the Clinical Features of Genital prolapse	C2	MK	Lecture Small g Clinical examination CBL CBL	MCQ	SAQ	
HomUG-ObGy-16.10	K & S	K		Discuss the Differential Diagnosis of Genital prolapse	C2	MK	Lecture Small group discussion	MCQ	SAQ	
HomUG-ObGy-16.11	K & S	K		Discuss the Prophylaxis of Genital prolapse	C2	MK	Small group discussion Tutorials	MCQ	SAQ	
HomUG-ObGy-16.12	K & S	K		Discuss the general management for Genital prolapse	C2	DK	Lecture Small group discussion Tutorials	MCQ	SAQ	
HomUG-ObGy-1	K & S	K		Define Procidentia	C2	DK	Lecture	MCQ	SAQ	

6.13							Small group discussion Tutorials			
HomUG- ObGy-1 6.14	K & S	K		Discuss the complications of genital prolapse	C2	DK	Lecture Small group discussion Tutorials	MCQ	SAQ	
HomUG- ObGy-1 6.15	K & S	K	Homoeopathic Materia medica & therapeutics	Discuss the Homoeopathic remedies for genital prolapse	C2	MK	Lecture Small group discussion Tutorials	MCQ	SAQ	
HomUG- ObGy-1 6.16	K & S	K	Discuss the	Discuss the Characteristic features of indicated remedies.	C2	MK	Lecture Small group discussion Tutorials	MCQ	SAQ	
HomUG- ObGy-1 6.17	K & S	K	Pessary treatment	Define Pessary treatment	C2	MK	Lecture Small group discussion Tutorials Charts	MCQ		
HomUG- ObGy-1 6.18	K & S	K		Discuss the indications & contraindications of pessary treatment	C2	MK	Lecture Small group discussion Tutorials	MCQ/	SAQ	
HomUG- ObGy-1 6.19	K & S	K	Surgical management	List the surgical management for genital prolapse	C2	DK	Lecture Small group discussion	MCQ		
HomUG- ObGy-1 6.20	K & S	K		Define retroversion of uterus	C1	MK	Lecture Small group discussion	MCQ		

HomUG-ObGy-16.21	K & S	K	Retroversion	Discuss the causes of retroverted uterus	C2	MK	Lecture Small group discussion	MCQ	SAQ	
HomUG-ObGy-16.22	K & S	K		List the types of retroverted uterus	C1	MK	Lecture Small group discussion	MCQ	SAQ	
HomUG-ObGy-16.23	K & S	K		Discuss the clinical features of retroverted uterus	C1	MK	Lecture Small group discussion	MCQ	SAQ	
HomUG-ObGy-16.24	K & S	K	Retroversion degrees	Discuss the degrees of retroversion of uterus	CI	MK	Lecture Small group discussion	MCQ	SAQ	
HomUG-ObGy-16.25	K & S	K	Differential diagnosis	Discuss the Differential Diagnosis of retroverted uterus	C2	MK	Lecture Small group discussion	MCQ	SAQ	
HomUG-ObGy-16.26	K & S	K	Homoeopathic material medica & therapeutics	Discuss the Homoeopathic remedies for retroverted uterus	C2	MK	Lecture Small group discussion Tutorials	MCQ	SAQ	
HomUG-ObGy-16.27	K & S	K		Discuss the characteristic features of indicated remedies.	C2	MK	Lecture Small group discussion Tutorials	MCQ	SAQ	
HomUG-ObGy-16.28	K & S	K	Inversion	Define inversion of uterus	C1	MK	Lecture Small group discussion Tutorials	MCQ	SAQ	
HomUG-ObGy-16.29	K & S	K		Recall the aetiology of inverted uterus	C1	MK	Lecture Small group discussion Tutorials	MCQ	SAQ	

HomUG-ObGy-16.30	K & S	K	Scope & Limitation of Homoeopathy	Classify the types of inversion of uterus	C2	MK	Lecture Small group discussion Tutorials	MCQ	SAQ	
HomUG-ObGy-16.31	K & S	K		Discuss the Clinical Features of inverted uterus	C1	MK	Lecture Small group discussion Tutorials	MCQ	SAQ	
HomUG-ObGy-16.32	K & S	KH		Discuss the scope & limitation of Homoeopathy in inversion of uterus	C2	MK	Lecture Small group discussion Tutorials	MCQ	SAQ	
HomUG-ObGy-16.33	K & S	KH	Homoeopathic materia medica & therapeutics	List the Homoeopathic remedies indicated in inversion of uterus	C2	MK	Small group discussion CBL PBL	MCQ	SAQ	

6.7 Sex & Intersexuality – Knowledge and scope to eradicate genetic Dyscrasias, predisposition, miasm and personality types known to develop particular diseases through Homoeopathic outlook

Sl. No.	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG- ObGy-1 7.1	K & S	K	Sex & Intersexuality	Define Klinifelters syndrome	C1	DK	Lecture Small group discussion Tutorials Charts	MCQ		
HomUG - ObGy-1 7.2	K & S	K		Define Inter-sex	C2	DK	Lecture Small group discussion Tutorials Charts	MCQ		
HomUG- ObGy-1 7.3	K & S	K	Turner's syndrome	Explain Turner's syndrome	C1	DK	Lecture Small group discussion Tutorials Charts		SAQ	
HomUG- ObGy-1 7.4	K & S	K	Hermaphrodites	Discuss True Hermaphrodites & mention types	C2	DK	Lecture Small group discussion Tutorials Charts		SAQ	
HomUG- ObGy-1	K & S	K	Male intersex	Discuss the male Inter-sex	C2	DK	Lecture	VIVA		

7.5							Small group discussion Tutorials Charts			
HomUG-ObGy-1 7.6	H O	K	Personality Type	Discuss the relevance of Predisposition with respect to Intersexuality	C2	MK	Small group discussion Tutorials Charts	VIVA		Organon of medicine
HomUG-ObGy-1 7.7	H O	K	H O	Discuss the relevance of miasm with respect to intersexuality.	C2	MK	Lecture Small group discussion Tutorials	VIVA		Organon of medicine
HomUG-ObGy-1 7.8	H O	K	H O	Discuss the relevance of predisposition with respect to intersexuality	C2	MK	Lecture Small group discussion Tutorials	VIVA		Organon of medicine
HomUG-ObGy-1 7.9	H O	K	H O	Discuss the importance of personality of the patient for developing Disease condition	C2	MK	Lecture Small group discussion Tutorials	VIVA		Organon of medicine
HomUG-ObGy-1 7.10	H O	K	Homoeopathic materia medica & therapeutics	Discuss the homoeopathic matria medica therapeutics for Intersexuality	C2	DK	Lecture Small group discussion Tutorials	MCQ		Materia Medica

6.8 General & Homeopathic Management, Repertorisation, Therapeutics, Posology, Formulation of prognostic criteria and prognosis of related topics in Gynaecology

Sl. No.	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-ObGy-18.1	H O	KH	Management	Explain the general management in Dysmenorrhoea	C 2	MK	Lecture Small group discussion Tutorials CBL	Viva	SAQ	
HomUG-ObGy-18.2	H O	KH		Explain the general management in Amenorrhoea	C 2	MK	Lecture Small group discussion Tutorials CBL	Viva	SAQ	
HomUG-ObGy-18.3	H O	KH		Explain the general management in Genital prolapse	C 2	MK	Lecture Small group discussion Tutorials CBL	VIVA	SAQ	
HomUG-ObGy-18.4	H O	KH		Explain the general management in retroversion of the uterus	C 2	MK	Lecture Small group discussion Tutorials CBL	VIVA	SAQ	

HomUG-ObGy-18.5	H O	K	Repertory	Discuss the repertory medium used in different gynaecological conditions	C 2	MK	Lecture Small group discussion Tutorials CBL	VIVA		
HomUG-ObGy-18.6	H O	KH		Discuss the selection of repertory based on symptoms	C 2	MK	Lecture Small group discussion Tutorials CBL	VIVA		
HomUG-ObGy-18.7	H O	K	Homoeopathic Materia medica & therapeutics and posology	Co-relate the homoeopathic remedies, potency selection and repetition of dose in relation to gynaecological conditions	C 2	MK	Lecture Small group discussion Tutorials CBL	VIVA		

Unit 2: Obstetrics, Infant Care & Homoeopathic Therapeutics

6.9 Introduction to Obstetrics and Newborn care related with Homoeopathic Philosophy. Therapeutics and Repertorisation

Sl. No.	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-ObGy-19.1	K & S	K	Introduction to Obstetrics	Define Obstetrics	C1	MK	Lecture Tutorials Small group discussion	MCQ		
HomUG-ObGy-19.2	K & S	K	Introduction to newborn care	Define the term New born Infant	C1	MK	Lecture Tutorials Small group discussion	MCQ		
HomUG-ObGy-19.3	K & S	K	Introduction to newborn care	Define Still birth	C1	MK	Lecture Tutorials Small group discussion	MCQ		
HomUG-ObGy-19.4	H O	K	Homoeopathic case taking	Explain the Homoeopathic case taking in female complaints as per Organon of Medicine.	P1	MK	Lecture Tutorials Small group discussion	VIVA		Organon of medicine
HomUG-ObGy-19.5	H O	K		Describe the Hahnemann's concept of action of homoeopathic medicines in pregnant women & infants. Foot note aphorism 284	C2	MK	Lecture Small group discussion Tutorials	VIVA		Organon of medicine

HomUG-ObGy-19.6	H O	KH	Homoeopathic Materia Medica & Therapeutic source books	Discuss the Homoeopathic Materia Medica with Obstetrics and new born care from source books	C2	MK	Lecture Small group discussion Tutorials	VIVA		Organon of medicine
HomUG-ObGy-19.7	H O	K	Repertory	Discuss the repertory medium used in different obstetrical and new born care.	C2	MK	Lecture Small group discussion Tutorials	VIVA		Repertory
HomUG-ObGy-19.8	H O	K	Repertory	Discuss the selection of repertory based on symptoms in obstetrics.	C2	MK	Lecture Small group discussion Tutorials CBL	MCQ		Repertory
HomUG-ObGy-19.9	H O	K	Repertory	Discuss the selection of repertory based on symptoms in new born care.	C2	MK	Lecture Small group discussion Tutorials CBL	MCQ		Repertory

6.10 Fundamentals of reproduction

Sl. No.	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-ObGy-1 10.1	K & S	K	Gametogenesis	Define oogenesis	C1	MK	Lecture Tutorials Small group discussion	MCQ		Physiology, Anatomy
HomUG-ObGy-1 10.2	K & S	KH		Discuss the stages of oogenesis	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	Physiology, Anatomy
HomUG-ObGy-1 10.3	K & S	KH		Define Spermatogenesis	C1	MK	Lecture Tutorials Small group discussion	MCQ		Physiology, Anatomy
HomUG-ObGy-1 10.4	K & S	KH		Discuss the stages of spermatogenesis	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	Physiology, Anatomy
HomUG-ObGy-1 10.5	K & S	KH	Ovulation	Define ovulation	C1	MK	Lecture Tutorials Small group discussion	MCQ		Physiology, Anatomy
HomUG-ObGy-1 10.6	K & S	K		Describe the mechanism of ovulation	C1	MK	Lecture Tutorials		SAQ	Physiology, Anatomy

							Small group discussion			
HomUG-ObGy-1 10.7	K & S	K		Describe the hormonal regulation of ovulation	C1	MK	Lecture Tutorials Small group discussion		SAQ	Physiology, Anatomy
HomUG-ObGy-1 10.8	K & S	K	Fertilization	Define Fertilization	C1	MK	Lecture Tutorials Small group discussion	MCQ		Physiology, Anatomy
HomUG-ObGy-1 10.9	K & S	K		Describe Morula	C1	MK	Lecture Tutorials Small group discussion	MCQ		Physiology, Anatomy
HomUG-ObGy-1 10.10	K & S	K		Describe Blastocyst	C1	MK	Lecture Tutorials Small group discussion	MCQ		Physiology, Anatomy
HomUG-ObGy-1 10.11	K & S	K	Implantation	Define Implantation	C1	MK	Lecture Tutorials Small group discussion	MCQ		Physiology, Anatomy
HomUG-ObGy-1 10.12	K & S	K		Discuss the Stages of Implantation	C1	MK	Lecture Tutorials Small group discussion	MCQ		Physiology, Anatomy
HomUG-ObGy-1 10.13	K & S	K		Discuss the functions of Trophoblast	C1	MK	Lecture Tutorials Small group discussion	MCQ		Physiology, Anatomy
HomUG-ObGy-1	K & S	K	Decidua	Define Decidua	C1	MK	Lecture Tutorials	MCQ		Physiology, Anatomy

10.14							Small group discussion			
HomUG-ObGy-1 10.15	K & S	K		Define Decidual Reaction	C1	MK	Lecture Tutorials Small group discussion	MCQ		Physiology, Anatomy
HomUG-ObGy-1 10.16	K & S	K		Describe the layers of Decidua	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	Physiology, Anatomy
HomUG-ObGy-1 10.17	K & S	K		Describe the Functions of Decidua	C1	MK	Lecture Tutorials Small group discussion		SAQ	Physiology, Anatomy
HomUG-ObGy-1 10.18	K & S	K	Chorion & Chorionic Villi	Define Chorion	C1	MK	Lecture Tutorials Small group discussion	MCQ		Physiology, Anatomy
Hom-UG ObGy-1 2.28	K & S	K		Describe the Chorionic Villi	C1	MK	Lecture Tutorials Small group discussion		SAQ	Physiology, Anatomy
HomUG-ObGy-1 10.19	K & S	K	Inner Cell Mass	Describe the development of Inner Cell Mass	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	Physiology, Anatomy

6.10.1 Development of Intra Uterine Pregnancy- Placenta and foetus.

Sl. No.	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-ObGy-11.1	K & S	K	Placenta	Define Placenta	C1	MK	Lecture Tutorials Small group discussion	MCQ		Physiology, Anatomy
HomUG-ObGy-11.2	K & S	K		Discuss the development of Placenta	C1	DK	Lecture Tutorials Small group discussion	MCQ		Physiology, Anatomy
HomUG-ObGy-11.3	K & S	K		Describe the Placenta at Term	C1	DK	Lecture Tutorials Small group discussion	MCQ		Physiology, Anatomy
HomUG-ObGy-11.4	K & S	K		Describe the Structure of Placenta	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	Physiology, Anatomy
HomUG-ObGy-11.5	K & S	K		Describe the Placental Circulation	C1	MK	Lecture Tutorials Small group discussion	MCQ		Physiology, Anatomy
HomUG-ObGy-11.6	K & S	K		Discuss the changes with Placental Ageing	C1	DK	Lecture Tutorials	MCQ		Physiology, Anatomy

							Small group discussion			
HomUG-ObGy-1 11.7	K & S	K		List the Functions of Placenta	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	Physiology, Anatomy
HomUG-ObGy-1 11.8	K & S	K		List the Hormones of Placenta	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	Physiology, Anatomy
HomUG-ObGy-1 11.9	K & S	K		List Functions of the hormones of Placenta	C1	DK	Lecture Tutorials Small group discussion	MCQ	SAQ	Physiology, Anatomy
HomUG-ObGy-1 11.10	K & S	K	Foetal Membranes	Describe the Structure of Chorion	C1	DK	Lecture Tutorials Small group discussion	MCQ		Physiology, Anatomy
HomUG-ObGy-1 11.11	K & S	K		Describe Structure of Amnion	C1	DK	Lecture Tutorials Small group discussion	MCQ		Physiology, Anatomy
HomUG-ObGy-1 11.12	K & S	K		List the Functions of Foetal Membranes	C1	DK	Lecture Tutorials Small group discussion	MCQ		Physiology, Anatomy
HomUG-ObGy-1 11.13	K & S	K	Amniotic Cavity, Amniotic Fluid	Discuss the development of Amniotic Cavity	C1	DK	Lecture Tutorials Small group discussion	MCQ		Physiology, Anatomy
HomUG-ObGy-1	K & S	K		Discuss the Circulation of Amniotic Fluid	C1	DK	Lecture Tutorials	MCQ		Physiology, Anatomy

11.14							Small group discussion			
HomUG-ObGy-1 11.15	K & S	K		Discuss the Physical Features of Amniotic Fluid	C1	DK	Lecture Tutorials Small group discussion	MCQ	SAQ	Physiology, Anatomy
HomUG-ObGy-1 11.16	K & S	K		Discuss the Composition of Amniotic Fluid	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	Physiology, Anatomy
HomUG-ObGy-1 11.17	K & S	K		Discuss the Functions of Amniotic Fluid	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	Physiology, Anatomy
HomUG-ObGy-1 11.18	K & S	K	Umbilical Cord	Discuss the development of Umbilical Cord	C1	DK	Lecture Tutorials Small group discussion	MCQ		
HomUG-ObGy-1 11.19	K & S	K		Discuss the Structure of Umbilical Cord	C1	MK	Lecture Tutorials Small group discussion Charts	MCQ		
HomUG-ObGy-1 11.20	K & S	K		Discuss the Characteristics of Umbilical Cord	C1	DK	Lecture Tutorials Small group discussion	MCQ		
HomUG-ObGy-1 11.21	K & S	K	The Foetus	List the periods of Prenatal Development of Foetus	C1	DK	Lecture Tutorials Small group discussion	MCQ		

HomUG-ObGy-1 11.22	K & S	K		Discuss the Criteria for assessment of Growth of Foetus	C1	NK	Lecture Tutorials Small group discussion Charts	MCQ		
HomUG-ObGy-1 11.23	K & S	K		Discuss the Systemic & Physiological changes occurs during intra uterine life.	C1	DK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-1 11.24	K & S	K		Discuss the Foetal Circulation	C1	MK	Lecture Tutorials Small group discussion Charts	MCQ	SAQ	
HomUG-ObGy-1 11.25	K & S	K		Discuss the changes in Foetal Circulation at birth.	C1	MK	Lecture Tutorials Small group discussion Charts	MCQ	SAQ	
HomUG-ObGy-1 11.26	K & S	K	Foetus in Utero	Define Lie	C1	MK	Lecture Tutorials Small group discussion Clinical	MCQ VIVA		
HomUG-ObGy-1 11.27	K & S	K		Define Presentation	C1	MK	Lecture Tutorials Small group discussion Manikin	MCQ VIVA		
HomUG-ObGy-1 11.28	K & S	K		Define Presenting part	C1	MK	Lecture Tutorials	MCQ VIVA		

							Small group discussion Manikin			
HomUG-ObGy-1 11.29	K & S	K		Define Attitude	C I P 2	MK	Lecture Tutorials Small group discussion Manikin	MCQ VIVA		
HomUG-ObGy-1 11.30	K & S	K		Define Denominator	C1 P 2	MK	Lecture Tutorials Small group discussion Manikin	MCQ VIVA		
HomUG-ObGy-1 11.31	K & S	K		Define Position	Ci P2	MK	Lecture Tutorials Small group discussion Manikin	MCQ VIVA		
HomUG-ObGy-1 11.32	K & S	K	Foetal Skull and Maternal Pelvis	Demonstrate the Areas of Foetal Skull	CI P2	MK	Lecture Tutorials Small group discussion Charts	MCQ VIVA		
HomUG-ObGy-1 11.33	K & S	K		Demonstrate the Sutures of Foetal Skull	C1 P2	MK	Lecture Tutorials Small group discussion Demonstration	MCQ VIVA		
HomUG-ObGy-1 11.34	K & S	K		Demonstrate the Fontanels of Foetal Skull	C1 P2	MK	Lecture Tutorials Small group discussion	MCQ		

							Demonstration			
HomUG-ObGy-1 11.35	K & S	K		Demonstrate the Diameters of Foetal Skull	C1 P2	MK	Lecture Tutorials Small group discussion Demonstration	MCQ	SAQ	
HomUG-ObGy-1 11.36	K & S	K		Define Moulding	C1	MK	Lecture Tutorials Small group discussion	MCQ VIVA		
HomUG-ObGy-1 11.37	K & S	K		Describe Mechanism of Moulding	C1	MK	Lecture Tutorials Small group discussion Charts	MCQ VIVA		
HomUG-ObGy-1 11.38	K & S	K		Discuss the Importance of Moulding	C1	MK	Lecture Tutorials Small group discussion Dummy	VIVA		
HomUG-ObGy-1 11.30	K & S	K		Define Caput Succedaneum	C1	MK	Lecture Tutorials Small group discussion	MCQ VIVA	SAQ	
HomUG-ObGy-1 11.39	K & S	K		Describe Mechanism of formation of Caput Succedaneum	C1	MK	Lecture Tutorials Small group discussion Dummy	MCQ VIVA	SAQ	
HomUG-ObGy-1 11.40	K & S	K		Discuss Importance of Caput Succedaneum	C1	MK	Lecture Tutorials	MCQ VIVA	SAQ	

							Small group discussion Dummy			
HomUG-ObGy-1 11.41	K & S	K		Define False Pelvis	C 1 P 2	MK	Lecture Tutorials Small group discussion Charts	MCQ VIVA		
HomUG-ObGy-1 11.42	K & S	K		Define True Pelvis	C1 P 2	MK	Lecture Tutorials Small group discussion Pelvis	MCQ VIVA		
HomUG-ObGy-1 11.43	K & S	K		Describe the Inlet of the Pelvis	C 1 P 2	MK	Lecture Tutorials Small group discussion Pelvis	MCQ VIVA		
HomUG-ObGy-1 11.44	K & S	K		Demonstrate the diameters of the Pelvis	C1 P2	MK	Lecture Tutorials Small group discussion Pelvis	MCQ		
HomUG-ObGy-1 11.45	K & S	S		Demonstrate Inlet & outlet of the Pelvis	C1 P2	MK	Lecture Tutorials Small group discussion Pelvis	MCQ		
HomUG-ObGy-1 11.46	K & S	S		Demonstrate Mid pelvis	C1	MK	Lecture Tutorials Small group discussion	MCQ		

							Pelvis			
HomUG-ObGy-1 11.47	K & S	S		Demonstrate the anterior and transverse diameters of the pelvic inlet	C 1 P 2	MK	Lecture Tutorials Small group discussion Manikin	MCQ	SAQ	

6.11 Diagnosis of pregnancy, Investigations & examinations, applied anatomy & physiology, Normal pregnancy – Physiological Changes

Sl. No.	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-ObGy-1 12.1	K & S	K	Diagnosis of Pregnancy	Define Gestational age of Foetus	C1	DK	Lecture Tutorials Small group discussion Manikin	MCQ		
HomUG-ObGy-1 12.2	K & S	K		Define Ovulatory age of Foetus	C1	MK	Lecture Tutorials Small group discussion Manikin	MCQ		
HomUG-ObGy-1 12.3	K & S	K		Discuss the subjective symptoms in 1st trimester of pregnancy.	C1	MK	Lecture Tutorials Small group discussion Manikin	MCQ		

HomUG-ObGy-1 12.4	K & S	K		Discuss the objective signs in 1st trimester pregnancy.	C1	MK	Lecture Tutorials Small group discussion Manikin	MCQ	SAQ	
HomUG-ObGy-1 12.5	K & S	K		List the Immunological tests for diagnosis of Pregnancy in 1st Trimester	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-1 12.6	K & S	K		Discuss the subjective symptoms of 2nd trimester of pregnancy	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-1 12.7	K & S	K		Discuss the objective signs of 2nd trimester of pregnancy	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-1 12.8	K & S	K		List the investigations of 2nd trimester of pregnancy	C 2	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-1 12.9	K & S	K		Discuss the subjective symptoms of 3rd trimester of pregnancy	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-1	K & S	K		Discuss the objective signs of 3rd trimester of pregnancy	C1	MK	Lecture Tutorials	MCQ	SAQ	

12.10							Small group discussion			
HomUG-ObGy-1 12.11	K & S	K		List the investigations of 3rd trimester of pregnancy	C2	MK	Lecture Tutorials Small group discussion\	MCQ	SAQ	
HomUG-ObGy-1 12.12	K & S	K		Discuss the Differential Diagnosis of Pregnancy	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-1 12.13	K & S	K		List the signs of previous childbirth	C1	DK	Lecture Tutorials Small group discussion	MCQ		
HomUG-ObGy-1 12.14	K & S	K		Describe the methods of calculation of EDD	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-1 12.15	K & S	S		Calculate EDD of Pregnant Woman using Nagele's formula	P1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-1 12.16	P C	S	Methods of Obstetrical Examination	Demonstrate the Abdominal Examination	P-2	MK	Tutorials Small group discussion Mannikin Bedside	MCQ	SAQ	
HomUG-ObGy-1	P C	K		List the types of Obstetrical grips	C 1 P 2	MK	Lecture Tutorials	MCQ	SAQ	

12.17							Small group discussion			
HomUG-ObGy-1 12.18	P C	S		Demonstrate the Obstetrical grips	C 1 P I	MK	Lecture Tutorials Small group discussion Mannikin Bedside	MCQ		
HomUG-ObGy-1 12.19	P C	PI		Demonstrate the pelvic grips	C 1 P 2	MK	Lecture Tutorials Small group discussion	MCQ		
HomUG-ObGy-1 12.20	K & S	K		Explain Braxton-Hicks contraction(3)	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-1 12.21	K & S	K	Physiological changes during pregnancy	Describe the physiological changes occurs in the genital organs during pregnancy.	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-1 12.22	K & S	K		Describe the physiological changes occurring in Breast during pregnancy	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-1 12.23	K & S	K	Cutaneous changes	Discuss the cutaneous changes occurs during pregnancy	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-1 12.24	K & S	K	Weight gain	Discuss the physiological weight gain during pregnancy	C1	MK	Lecture Tutorials	MCQ	SAQ	

							Small group discussion			
HomUG-ObGy-1 12.25	K & S	K	Metabolic	Discuss the metabolic changes occurs during pregnancy	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-1 12.26	K & S	K	Physiological changes	Discuss the haematological changes occurs during pregnancy	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-1 12.27	K & S	K	Haematological changes	Discuss the Cardio vascular changes occurs during pregnancy						
HomUG-ObGy-1 12.28	K & S	K	C V S	Discuss the Systemic changes occurs during pregnancy	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	

6.12 Antenatal care – aims, objectives, visits, advise, procedures, investigations, identifying high risk cases, scope and limitation of management in Homeopathy

Sl. No.	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-ObGy-1 13.1	K & S	K	Antenatal care	Define Antenatal Care	C1	MK	Lecture Tutorials Small group discussion	MCQ		
HomUG-ObGy-1 13.2	K & S	K		Discuss the Aims of Antenatal Care	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-1 13.3	K & S	K		Discuss the Objectives of Antenatal Care	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-1 13.4	P C	K		Discuss the procedure at first ANC visit	C1	MK	Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-1 13.5	P C	K		Discuss the procedure at subsequent visits	C1	MK	Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-1	P C	K		Discuss the important Investigations done for	C1	MK	Lecture Tutorials	MCQ	SAQ	

13.6				Clinical Assessment of Foetal well being			Small group discussion			
HomUG-ObGy-1 13.7	K & S	K		Discuss the important Investigations done in Late Pregnancy	C1	DK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-1 13.8	K & S	K		Discuss the Methods of Prenatal Genetic Screening	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-1 13.9	K & S	K		Discuss the Invasive procedures for Prenatal Diagnosis	C1	NK	Lecture Tutorials Small group discussion	MCQ		
HomUG-ObGy-1 13.10	K & S	K		List the Non Invasive procedures for Prenatal Diagnosis	C1	NK	Lecture Tutorials Small group discussion	MCQ		
HomUG-ObGy-1 13.11	K & S	K		Explain the antenatal advice given to the mother	C1 P I	MK	Lecture Tutorials Small group discussion		SAQ	
HomUG-ObGy-1 13.12	K & S	K		Discuss the importance of Antenatal care	C1 P I	MK	Lecture Tutorials Small group discussion		SAQ	
HomUG-ObGy-1 13.13	K & S	K		Discuss the relevance of Pre-conceptional Counselling	C1	MK	Lecture Tutorials Small group discussion	VIVA		

HomUG-ObGy-1 13.14	P C	KH	Antenatal visits	Discuss the normal antenatal visits during pregnancy	C2	MK	Lecture Tutorials Small group discussion	VIVA		
HomUG-ObGy-1 13.15	P C	KH	Antenatal diet	Discuss the antenatal diet to the pregnant mother	C2	MK	Lecture Tutorials Small group discussion Chart	MCQ		
HomUG-ObGy-1 13.16	H O	KH	Scope of homoeopathy	Discuss the Scope of Homoeopathic management in antenatal complaints	C I P 1	MK	Lecture Tutorials Small group discussion		SAQ	
HomUG-ObGy-1 13.17	H O	KH	Management in Homoeopathy	Discuss the Scope of Homoeopathic management in high risk cases pregnancy	C1 P1	MK	Lecture Tutorials Small group discussion CBL	MCQ VIVA		Organon of Medicine, Materia Medica, Repertory
HomUG-ObGy-1 13.18	H O	K	Scope & Limitations	Discuss the Limitations of Homoeopathic management in high risk pregnancy	C1 P 1	MK	Lecture Tutorials Small group discussion CBL	VIVA		Organon of Medicine, Materia Medica, Repertory

6.13 Common conditions such as Vomiting, backache, constipation in pregnancy and Homoeopathic Management

Sl. No.	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-ObGy-1 14.1	K & S	K	Vomiting in pregnancy	Define simple vomiting in pregnancy	C1	MK	Lecture/ Integrated teaching/ AV aids	MCQ VIVA		
HomUG-ObGy-1 14.2	K & S	K		Define hyperemesis gravidarum	C1	MK	Lecture/ Integrated teaching/ AV aids	MCQ VIVA		
HomUG-ObGy-1 14.3	K & S	K		List aetiology of Hyperemesis gravidarum	C1	MK	Lecture/ Integrated teaching/ AV aids		LA SAQ	
HomUG-ObGy-1 14.4	K & S	K		Discuss the clinical features of Hyperemesis gravidarum	C1	MK	Lecture/ Integrated teaching/ AV aids		SAQ	
HomUG-ObGy-1 14.5	K & S	K		Explain the Investigations required for Hyperemesis gravidarum	C1	MK	Lecture/ Integrated teaching/ AV aids		SAQ	
HomUG-ObGy-1 14.6	K & S	K		Discuss the Complications of Hyperemesis gravidarum	C1	MK	Lecture/ Integrated teaching/ AV aids		SAQ	

HomUG-ObGy-1 14.7	K & S	K		Discuss the Management of Hyperemesis gravidarum	C1	MK	Lecture/ Integrated teaching/ AV aids		SAQ	
HomUG-ObGy-1 14.8	H O	K	Homoeopathic Management	Discuss the homoeopathic Therapeutics for Hyperemesis Gravidarum	C2	MK	Lecture/ Integrated teaching/ Project Based Learning		SAQ	Materia Medica
HomUG-ObGy-1 14.9	K & S	K	Backache	List the causes of backache during pregnancy	C1	MK	Lecture/ Integrated teaching/ AV aids	MCQ VIVA	SAQ	Physiology
HomUG-ObGy-1 14.10	K & S	K		Discuss the Auxilliary management of backache during pregnancy	C2	MK	Lecture/ Integrated teaching/ AV aids	MCQ VIVA		Physiology
HomUG-ObGy-1 14.11	H O	K	Homoeopathic Management	Discuss the homoeopathic Therapeutics for Backache during Pregnancy	C2	MK	Lecture/ Integrated teaching/ Project Based Learning	MCQ VIVA	SAQ	Materia Medica
HomUG-ObGy-1 14.12	K & S	K	Constipation	Discuss the Physiological cause for constipation during pregnancy	C1	MK	Lecture/ Integrated teaching/ AV aids		SAQ	Physiology
HomUG-ObGy-1 14.13	H O	K	Homoeopathic Management	Discuss the homoeopathic Therapeutics for Constipation during Pregnancy	C2	MK	Lecture/ Integrated teaching/ Project Based Learning	MCQ VIVA	SAQ	Materia Medica
HomUG-ObGy-1 14.14	H O	K		Discuss the homoeopathic Therapeutics for Minor Ailments during Pregnancy	C2	MK	Lecture/ Integrated teaching/ Project Based Learning	MCQ VIVA	SAQ	Materia Medica

6.13.1 Normal labour with its causes of onset, anatomy, physiology, mechanism, stages, events and clinical course in each stage, importance of Homoeopathic Scope and management

Sl. No.	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integrated
								Formative	Summative	
HomUG-ObGy-115.1	K & S	K	Normal labour	Define Normal labour	C1	MK	Lecture Tutorials Small group discussion	MCQ		
HomUG-ObGy-115.2	K & S			Define Eutocia	C I	MK	Lecture Tutorials Small group discussion	MCQ		
HomUG-ObGy-115.3	K & S	K		Define Abnormal Labour	C1	MK	Lecture Tutorials Small group discussion	MCQ		
HomUG-ObGy-115.4	K & S	K		Discuss the causes of onset of labour	C1	MK	Lecture Tutorials Small group discussion		LA SAQ	Physiology
HomUG-ObGy-115.5	K & S	K		Describe the features of True labour pains	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-115.6	K & S	K		Describe the features of False labour pains	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	

HomUG-ObGy-115.7	K & S	KH		Differentiate true labour pains from false labour pains	C2	MK	Lecture Tutorials Small group discussion		SAQ	
HomUG-ObGy-115.8	K & S	K		Describe the characteristic features of pre-term labour	C1	MK	Lecture Tutorials Small group discussion	MCQ		
HomUG-ObGy-115.9	K & S	K	Normal labour	Describe the Physiology of Normal Labour	C1	MK	Lecture Tutorials Small group discussion		SAQ	
HomUG-ObGy-115.10	K & S	K	Stages of labour	Classify the Stages of Normal Labour	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-115.11	K & S	K		Describe the Stages of Normal Labour	C1	MK	Lecture Tutorials Small group discussion		SAQ	
HomUG-ObGy-115.12	K & S	K		Discuss the events taking place in 1st stage of labour	C1	MK	Lecture Tutorials Small group discussion		SAQ	
HomUG-ObGy-115.13	K & S	K		Discuss the events taking place in 2nd stage of labour	C1	MK	Lecture Tutorials Small group discussion		SAQ	
HomUG-ObGy-115.14	K & S	K	Events 1st, 2nd and 3rd stage of labour	Discuss the events taking place in 3rd stage of labour	C1	MK	Lecture Tutorials Small group discussion		SAQ	
HomUG-ObGy-115.15	K & S	K		Discuss the 1st stage of labour & the duratration	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-115.16	K & S	K		Discuss the 2nd stage of labour & the duration	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	

HomUG-ObGy-115.17	K & S	K	Stages of 1st, 2nd and 3rd stage of labour	Discuss the 3rd stage of labour & the duration	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-115.18	K & S	K		Discuss the 4th stage of labour	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-115.19	K & S	K		Define Episiotomy	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-115.20	K & S	K		Discuss the types of episiotomy	C1	MK	Lecture Tutorials Small group discussion Mannikin	MCQ	SAQ	
HomUG-ObGy-115.21	K & S	KH		Discuss the complications of episiotomy	C2	MK	Lecture Tutorials Small group discussion		SAQ	
HomUG-ObGy-115.22	K & S	K		Describe the mechanism of labour	C1 P I	MK	Lecture Tutorials Small group discussion Clinical demonstration Mannikin		LA SAQ	
HomUG-ObGy-115.23	K & S	K	Episiotomy	Define crowning	C1	MK	Lecture Tutorials Small group discussion Mannikin	MCQ	SAQ	
HomUG-ObGy-115.24	K & S	K		Define Restitution	C1	MK	Lecture Tutorials Small group discussion Mannikin	MCQ	SAQ	
HomUG-ObGy-115.25	K & S	KH		Discuss the management of 1st stage of labour	C2	MK	Lecture Tutorials Small group discussion Mannikin		SAQ	

HomUG-ObGy-15.26	K & S	KH		Discuss the management of 2nd stage of labour	C2	MK	Lecture Tutorials Small group discussion Mannikin		SAQ	
HomUG-ObGy-15.27	K & S	KH	Mechanism of labour	Discuss the management of 3rd stage of labour	C2	MK	Lecture Tutorials Small group discussion Mannikin		SAQ	
HomUG-ObGy-15.28	K & S	KH	Management of 1st, 2nd 3rd, and 4th stage of labour	Discuss the management of 4th stage of labour	C2	MK	Lecture Tutorials Small group discussion Mannikin		SAQ	
HomUG-ObGy-15.29	H O	KH	Scope and limitation of homeopathy	Discuss the Scope of Homoeopathic in Labour normal Labour	C2	MK	Lecture Tutorials Small group discussion		LA SAQ	
HomUG-ObGy-15.30	H O	K	Scope and limitation of homeopathy	Discuss the limitation of Homoeopathy Labour	C1 P I	MK	Lecture Tutorials Small group discussion		LA SAQ	
HomUG-ObGy-15.31	H O	KH	Homoeopathic Materia medica &therapeutics	Discuss the homoeopathic remedies in labour	C2	MK	Lecture Tutorials Small group discussion	MCQ	LA SAQ	
HomUG-ObGy-15.32	H O	KH		Discuss the characteristic features of indicated remedies	C2	MK	Lecture Tutorials Small group discussion	MCQ	LA SAQ	

6.14 Postnatal & puerperal care – scope and limitation of management in Homoeopathy

Sl. No.	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-ObGy-1 16.1	K & S	K	Postnatal care	Define postnatal care	C1	MK	Lecture Tutorials Small group discussion	MCQ		
HomUG-ObGy-1 16.2	K & S	K	Puerperium	Define Puerperium	C1	MK	Lecture Tutorials Small group discussion	MCQ		
HomUG-ObGy-1 16.3	K & S	K		Explain the duration of normal puerperium	C1	MK	Lecture Tutorials Small group discussion	MCQ		
HomUG-ObGy-1 16.4	K & S	K		Define Involution	C1	MK	Lecture Tutorials Small group discussion	MCQ		
HomUG-ObGy-1 16.5	K & S	K		Define Sub-involution	C1	MK	Lecture Tutorials Small group discussion	MCQ		

HomUG-ObGy-1 16.6	K & S	K		Discuss the Anatomical Consideration of Involution of Uterus	C1	MK	Lecture Tutorials Small group discussion	MCQ		
HomUG-ObGy-1 16.7	K & S	K		Discuss the Physiological Consideration of Involution of Uterus	C1	MK	Lecture Tutorials Small group discussion	MCQ		
HomUG-ObGy-1 16.8	K & S	D		Demonstrate the clinical Assessment of Involution of Uterus	P-1	MK	Lecture Tutorials Small group discussion	MCQ VIVA	SAQ	
HomUG-ObGy-1 16.9	K & S	K		Discuss the Involution of other Pelvic Structures	C1	MK	Lecture Tutorials Small group discussion	VIVA		
HomUG-ObGy-1 16.10	K & S	K		Define lochia	C1	MK	Lecture Tutorials Small group discussion	MCQ		
HomUG-ObGy-1 16.11	K & S	K		Describe the types of Lochia	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-1 16.12	K & S	K		Discuss the composition of lochia	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-1 16.13	K & S	K		Mention the normal duration of Lochia	C1	MK	Lecture Tutorials Small group discussion	MCQ		

HomUG-ObGy-1 16.14	K & S	K		Discuss the clinical importance of Lochia	C1	MK	Lecture Tutorials Small group discussion		SAQ	
HomUG-ObGy-1 16.15	K & S	K		Discuss the Normal Physiological changes occurs during puerperium.	C1	MK	Lecture Tutorials Small group discussion		SAQ	
HomUG-ObGy-1 16.16	K & S	K		Discuss the general management during Puerperium	C1	MK	Lecture Tutorials Small group discussion		SAQ	
HomUG-ObGy-1 16.17	H O	KH	Homoeopathic Management	Discuss the homoeopathic remedies for puerperium.	C2	MK	Lecture Tutorials Small group discussion		SAQ	
HomUG-ObGy-1 16.18	H O	KH		Discuss the characteristic features of indicated remedies	C2	MK	Lecture Tutorials Small group discussion		SAQ	
HomUG-ObGy-1 16.19	K & S	K		Define Lactation	C1	MK	Lecture Tutorials Small group discussion	MCQ VIVA		
HomUG-ObGy-1 16.20	K & S	K		Define Colostrum	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-1 16.21	K & S	K		List Composition of Colostrum	C1	MK	Lecture TutorialsSmall group discussion	MCQ	SAQ	

HomUG-ObGy-1 16.22	K & S	K		Describe the 4 stages in Physiology of Lactation	C1	MK	Lecture Tutorials Small group discussion		SAQ	
HomUG-ObGy-1 16.23	H O	KH	Homoeopathic Management	Discuss the homoeopathic remedies for increasing the milk	C2	MK	Lecture Tutorials Small group discussion		SAQ	Materia Medica
HomUG-ObGy-1 16.24	K & S	KH		Discuss the characteristic features of indicated remedy	C2	MK	Lecture Tutorials Small group discussion		SAQ	Materia Medica
HomUG-ObGy-1 16.25	K & S	K	Postnatal care	Define Postnatal care	C1	MK	Lecture Tutorials Small group discussion	MCQ		
HomUG-ObGy-1 16.26	K & S	K		Discuss the Objectives of postnatal care	C1	MK	Lecture Tutorials Small group discussion	MCQ	SAQ	
HomUG-ObGy-1 16.27	K & S	S		Demonstrate the procedure of Postnatal examination of the Mother	C1	DK	Lecture Tutorials Small group discussion			
HomUG-ObGy-1 16.28	K & S	S		Demonstrate the procedure of Postnatal examination of the Baby	C1 P I	DK	Lecture Tutorials Small group discussion			
HomUG-ObGy-1 16.29	K & S	K		Discuss the advice given to the postnatal mother	P I	MK	Lecture Tutorials Small group discussion		SAQ	

HomUG-ObGy-1 16.30	H O	KH	Homoeopathic management	Discuss the Scope of Homoeopathic remedies in Postnatal care	C2	MK	Lecture Tutorials Small group discussion		SAQ	Materia medica
HomUG-ObGy-1 16.31	H O	K		Discuss the Limitation of Homoeopathic management in postnatal puerperal case	C1 P 1	MK	Lecture Tutorials Small group discussion		SAQ	Organon of medicine

6.15 Care of new born in homoeopathic point of view:

Sl. No.	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-ObGy-1 17.1	K & S	K	New born infant	Define New born infant	C1	MK	Lecture Tutorials Small group discussion	MCQ		Paediatrics
HomUG-ObGy-1 17.2	K & S	K		Explain weaning of infant.	C1 P I	MK	Lecture Tutorials Small group discussion Clinical demonstration	VIVA		

HomUG-ObGy-1 17.3	K & S	K	New born infant	Describe the physical features of new born infant at birth	C 1	MK	Lecture Tutorials Small group discussion Clinical demonstration		SAQ	
HomUG-ObGy-1 17.4	K & S	S		Demonstrate the vital signs of new born infant immediate after birth.	C 1 P I	MK	Lecture Tutorials Small group discussion Manikin Bedside	MCQ		
HomUG-ObGy-1 17.5	K & S	S		Demonstrate the general physical examination findings of new born	C1 P I	MK	Lecture Tutorials Small group discussion Clinical demonstration	MCQ		
HomUG-ObGy-1 17.6	K & S	S		Elicit the reflexes of new born	C1	MK	Lecture Tutorials Small group discussion Clinical bed side demonstration	MCQ		
HomUG-ObGy-1 17.7	K & S	KH		Explain the Immediate care of new born	C1 P I	MK	Lecture Tutorials Small group discussion Manikin Bedside		SAQ	
HomUG-ObGy-1 17.8	K & S	K		Discuss the advantage of breast feeding	C1 P I	MK	Lecture Tutorials Small group discussion		SAQ	

HomUG-ObGy-1 17.9	K & S	K	Breast feeding	Discuss the contraindications for breast feeding	C1 P I	MK	Lecture Tutorials Small group discussion		SAQ	
HomUG-ObGy-1 17.10	K & S	KH		Describe the indication for Artificial feeding.	C 2	MK	Lecture Tutorials Small group discussion		SAQ	
HomUG-ObGy-1 17.11	K & S	KH		Discuss the difficulties faced during breast feeding due to mother & Baby	C2	MK	Lecture Tutorials Small group discussion		SAQ	
HomUG-ObGy-1 17.12	K & S	KH		Discuss the Daily Observation and care of new born	C2	DK	Lecture Tutorials Small group discussion		SAQ	Paediatrics
HomUG-ObGy-1 17.13	K & S	S		Discuss Infant Growth Assessment	C1	NK	Lecture Tutorials Small group discussion		SAQ	Paediatrics
HomUG-ObGy-1 17.14	K & S	K		Define APGAR Score of Newborn	C1	MK	Lecture Tutorials Small group discussion Clinical demonstration	MCQ	SAQ	Paediatrics
HomUG-ObGy-1 17.15	K & S	K		Describe the parameters of APGAR Scoring of New-born	C1 P 1	MK	Lecture Tutorials Small group discussion Clinical demonstration		SAQ	Paediatrics
HomUG-ObGy-1 17.16	K & S	K		Discuss importance of performing APGAR	C1	DK	Lecture Tutorials	MCQ	SAQ	Paediatrics

				Scoring at intervals after birth			Small group discussion			
HomUG-ObGy-1 17.17	H O	KH	Homoeopathic Management	Discuss the Scope of Homoeopathy in New born Care	C2	MK	Lecture Tutorials Small group discussion		SAQ	Organon of medicine
HomUG-ObGy-1 17.18	H O	KH	Homoeopathic Management	Discuss Homoeopathic remedies in new born care	C2	MK	Lecture Tutorials Small group discussion	SAQ		Materia medica
HomUG-ObGy-1 17.19	H O	K		Discuss the characteristic features of indicated remedies	C2	MK	Lecture Tutorials Small group discussion	SAQ		Materia medica

6.16 General and Homoeopathic management, repertorisation, therapeutics, posology. Formulation of prognostic criteria and Prognosis of related topics in Obstetrics and new born care

Sl. No.	Domain Competency	Miller	Content	Specific learning objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integrated
								Formative	Summative	
HomUG-ObGy-1 18.1	H O	KH	Homoeopathic therapeutics	Discuss the Homoeopathic materia medica & therapeutics in Antenatal ailments	C2	MK	Lecture Tutorials Small group discussion		SAQ	Materia medica
HomUG-ObGy-1 18.2	H O	KH		List the Homoeopathic remedies commonly used in obstetrics	C2	MK	Lecture Tutorials Small group discussion		SAQ	Materia medica
HomUG-ObGy-1 18.3	H O	KH		Discuss the characeteristic features of the indicated remedies.	C2	MK	Lecture Tutorials Small group discussion		SAQ	Materia medica
HomUG-ObGy-1 18.4	H O	KH		List the Homoeopathic remedies commonly used in New born care	C2	MK	Lecture Tutorials Small group discussion		SAQ	Materia medica
HomUG-ObGy-1 18.5	H O	KH		Discuss the characteristic features of indicated remedies	C2	MK	Lecture Tutorials		SAQ	Materia medica

							Small group discussion			
HomUG-ObGy-1 18.6	H O	KH		Discuss the differentiation of the remedies	C1	MK	Lecture Tutorials Small group discussion	MCQ		Materia medica
HomUG-ObGy-1 18.7	H O	KH		Discuss the remedy relationship wherever applicable	C1	MK	Lecture Tutorials Small group discussion	MCQ		Materia medica
HomUG-ObGy-1 18.8	H O	KH	Repertorisation	Discuss the selection of repertories in Obstetrical care	C-3	MK	Lecture Tutorials Small group discussion	MCQ		Repertory
HomUG-ObGy-1 18.9	H O	KH		Discuss the selection of repertories in New born care	C-3	MK	Lecture Tutorials Small group discussion	MCQ		Repertory
HomUG-ObGy-1 18.10	H O	S		Explain how to convert symptoms into rubrics from different repertories in Obstetricas.	C-3	MK	Lecture Tutorials Small group discussion	MCQ		Repertory
HomUG-ObGy-1 18.11	H O	S		Explain how to convert symptoms into rubrics from different repertories in New born care.	C-3	MK	Lecture Tutorials Small group discussion	MCQ		Repertory
HomUG-ObGy-1 18.12	H O	K		Discuss the selection of repertory based on symptomatology	C-1	MK	Lecture Tutorials Small group discussion	MCQ		Repertory

HomUG-ObGy-1 18.13	H O	KH	Posology	Discuss the selection of similimum based on symptomatology	C1	MK	Lecture Tutorials Small group discussion	MCQ		Organon of medicine
HomUG-ObGy-1 18.14	H O	KH		Describe methods of potency selection	C1	MK	Lecture Tutorials Small group discussion	MCQ		Organon of medicine
HomUG-ObGy-1 18.15	H O	K		Discuss the factors for selection of posology.	C1	MK	Lecture Tutorials Small group discussion	MCQ		Organon of medicine
HomUG-ObGy-1 18.16	H O	K		Discuss the criteria for repetition of doses	C1	MK	Lecture Tutorials Small group discussion	MCQ		Organon of medicine

6.17 Important Investigations for diagnosis in Obstetrics

Sl. No.	Domain Competency	Miller	Content	Specific learning objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-ObGy-119.1	P C	K	Ultrasonography	Discuss the indications for USG in 1st trimester.	C1	MK	Small group discussion Tutorials CBL PBL	MCQ		Radiology
HomUG-ObGy-119.2	P C	K		Discuss the findings of hydatidiform mole in USG	C1	MK	Small group discussion Tutorials CBL PBL	MCQ		Radiology
HomUG-ObGy-119.3	P C	K		Discuss the finding of abortion in USG	C1	MK	Small group discussion Tutorials CBL PBL	MCQ		Radiology
HomUG-ObGy-119.4	P C	K		Discuss the findings of normal pregnancy in USG	C1	MK	Small group discussion Tutorials CBL PBL	MCQ		Radiology

HomUG-ObGy-119.5	P C	K		Discuss the findings of Anterio – posterior diameters of the fetal skull in USG.	C1	MK	Small group discussion Tutorials CBL PBL	MCQ		Radiology
HomUG-ObGy-119.6	P C	K		Discuss the findings of biparietal (BPD) diameters of the fetal skull in USG.	C1	MK	Small group discussion Tutorials CBL PBL	MCQ		Radiology
HomUG-ObGy-119.7	P C	K		Discuss the findings of Crown Rump Length in USG	C1	MK	Small group discussion Tutorials CBL PBL	MCQ		Radiology
HomUG-ObGy-119.8	P C	K		Discuss the findings of Amniotic fluid in USG	C1	MK	Small group discussion Tutorials CBL PBL	MCQ		Radiology
HomUG-ObGy-119.9	P C	K		Discuss the findings of foetal growth in each trimester in USG	C1	MK	Small group discussion Tutorials CBL PBL	MCQ		Radiology
HomUG-ObGy-119.10	P C	K		Discuss the findings of Malformations of the foetus in USG	C1	MK	Small group discussion Tutorials CBL PBL	MCQ		Radiology

HomUG-ObGy-19.11	P C	K		Discuss the findings of malformation of the uterus in USG	C1	MK	Small group discussion Tutorials CBL PBL	MCQ		Radiology
HomUG-ObGy-19.12	P C	K		Discuss the urine test pregnancy test in amenorrhoea women	C1	MK	Small group discussion Tutorials CBL PBL	MCQ		Biochemistry
HomUG-ObGy-19.13	P C	K		Discuss the immunological test for pregnancy	C1	MK	Small group discussion Tutorials CBL PBL	MCQ		Biochemistry
HomUG-ObGy-19.14	P C	K	Blood test	Discuss the conditions where B-HCG tests are done.	C1	DK	Small group discussion Tutorials CBL PBL			Biochemistry
HomUG-ObGy-19.15	P C	K		Discuss the importance of Hb in pregnancy.	C1	MK	Small group discussion Tutorials CBL PBL	MCQ		Biochemistry
HomUG-ObGy-19.16	P C	K		Discuss the importance of blood group & Rh group in pregnancy.	C1	MK	Small group discussion Tutorials CBL PBL	MCQ		Biochemistry

HomUG-ObGy-119.17	P C	K		Discuss the importance of FBS, RBS and PPBS in pregnancy	C1	MK	Small group discussion Tutorials CBL PBL	MCQ		
HomUG-ObGy-119.18	P C	K		Describe the importance of Thyroid function tests in pregnancy	C1	MK	Small group discussion Tutorials CBL PBL	MCQ		

7 Teaching learning methods

Lectures (Theory)	**Non-lectures (Practical/Demonstrative)**
Lectures	Clinical demonstration
Small group discussion	Problem based discussion
Integrated lectures	Case based learning
	Assignments
	Library reference
	Self-learning

8 Details of assessment

Note- ***The assessment in II BHMS shall be done only as Internal Assessment (IA) in terms of*** **Periodical Assessments** ***(PA) and*** **Term Tests (*TT) as detailed below. There shall not be any Final University Examination (FUE) at this level. The marks obtained in IA during II BHMS will be added to the marks of IA in the III BHMS University Examination.***

Overall Scheme of Internal Assessment (IA)***

Professional Course/ Subject	**Term I (1-6 Months)**		**Term II (7-12 Months)**	
II BHMS/ Obstetrics & Gynaecology	PA I (end of 3 months)	TT I (end of 6 months)	PA II (end of 9 months)	TT II (end of 12 months)
	20 Marks Viva- **A**	100 Marks Clinical/Practical and Viva - **E** i) Viva voce -50 marks ii) Clinical/practical*- 50	20 Marks Viva- **B**	100 Marks Clinical/Practical and Viva - **F** i) Viva voce -50 marks ii) Clinical/practical**- 50

****Practical Examinations TT I:***

a) Case taking: Recording of case in Obstetrics & Gynaecology**. (20 marks)**

b) Demonstration: **(15 Marks)**

- General physical examination
- Per abdominal examination
- Pelvic grips

c) Lab Investigations: Suggest the relevant lab investigations for 1st, 2nd and 3rd trimester **(5 marks)**

d) Demonstration of foetal skull & Pelvic diameters **(10 marks)**

****Practical Examinations TT II:***

a) **Case taking**: Recording of case taking in Obstetrics & Gynaecology. (**20 marks).**
b) Examination of the patient (10 marks)
- General physical examination
- Breast examination
- Obstetric examinations
- Post-natal examinations.
- New born care examination

c) Analysis of the case (5 marks)
d) **Journal submission - 5 cases (10 marks)**
Journal shall have following cases with analysis-
Gynaec-3, ANC-1, PNC-1
e) **Dummy & Pelvis:** Demonstration of fetal skull diameters, Sutures and pelvic diameters. (**05 marks)**

*****Method of Calculation of Internal Assessment Marks in II BHMS for Final University Examination to be held in III BHMS:**

Marks of PA I	Marks of PA II	Periodical Assessment Average PA I+ PA II /2	Marks of TT I	Marks of TT II	Terminal Test Average TT I + TT II / 200 x 20	Final Internal Assessment Marks
A	**B**	**D**	**E**	**F**	**G**	**D+G/2**

9 List of recommended text/reference books

- Dutta,D.C,(2023).*Text book of Obstetrics,*10th edition, New Central Book Agency Pvt Ltd.,
- Dutta D.C (2020).*Text book of Gynaecology*, 8th edition, New Central Book Agency Pvt Ltd.
- Lilienthal Samuel (Reprint 2003), *Homoeopathic Therapeutics,* 5 edition B Jain Publishers (P) Ltd
- Guernsey H.N. *Principles & Practice of Homoeopathy in Obstetrics & Paediatrics*.
- Minton, *Uterine therapeutics Materiamedica& Repertory, B Jain publishers (P) Ltd.*

10 List of contributors:

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COMPETENCY BASED DYNAMIC CURRICULUM FOR

SECOND BHMS PROFESSIONAL COURSE

(Applicable from Batch 2022-2023 onwards for 5 years or until further notification by National Commission for Homoeopathy whichever is earlier)

(Yoga for Health Promotion)

HOMOEOPATHY EDUCATION BOARD

NATIONAL COMMISSION FOR HOMOEOPATHY

MINISTRY OF AYUSH, GOVERNMENT OF INDIA

JAWAHAR LAL NEHRU BHARTIYA CHIKITSA AVUM HOMOEOPATHY ANUSANDHAN BHAVAN

No.61-65, Institutional Area, opp. 'D' block, Janak Puri, New Delhi-110 058

Subject: Yoga for Health Promotion

Subject Code: Hom UG-YOGA II

Program Outcome (PO): The student shall learn therapeutic yoga in a systematic manner with a combination of theory and practical classes. Special emphasis should be given on practical methods and clinical yoga therapy.

Course Outcome (CO): The student shall become competent enough in the application of Yoga and its philosophy, in various disease conditions.

Teaching Hours: 30 hours of class (including Theory and Practical)

Course Content: The topic and respective allotted hours are as follows:

S. No.	Topic	No. of hrs.
1.	What are the benefits of Asanas in the human body	02 hrs
2.	Yogic principles of yoga therapy and its application to various health conditions	02 hrs
3.	Human biology in yoga	02 hrs
4.	What is the concept of human body in yoga	02 hrs
5.	Health and yogic hygiene	02 hrs
6.	Benefits of Shatkarma kriyas	02 hrs
7.	Methods of Surya namaskar [sun salutation] and its benefits	02 hrs
8.	What are the 4 most important Yogas and their usefulness to human health and life	02 hrs
9.	How Hatha yoga helps with stress management and personality development	05 hrs
10.	Yogic concepts of health, disease and stress	05 hrs
11.	Asanas [yogic postures]	02 hrs
12.	Yogic concepts of diet and nutrition	02 hrs

List of Contributors:

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Rajasthan

COMPETENCY BASED DYNAMIC CURRICULUM FOR

THIRD BHMS PROFESSIONAL COURSE

(Applicable from Batch 2022-2023 onwards for 5 years or until further notification by National Commission for Homoeopathy whichever is earlier)

(Homoeopathic Materia Medica)

HOMOEOPATHY EDUCATION BOARD

NATIONAL COMMISSION FOR HOMOEOPATHY

MINISTRY OF AYUSH, GOVERNMENT OF INDIA

JAWAHAR LAL NEHRU BHARTIYA CHIKITSA AVUM HOMOEOPATHY ANUSANDHAN BHAVAN

No.61-65, Institutional Area, opp. 'D' block, Janak Puri, New Delhi-110 058

Subject: Homoeopathic Materia Medica

Subject code: HomUG-HMM-III

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1. Course outcomes (CO)

At the end of BHMS III course, the students should be able to-

i. Correlate the knowledge of Surgery, Gynaecology and Obstetrics, Practice of medicine in better understanding of Homoeopathic Materia Medica.
ii. Construct the drug picture/portrait of remedy using the knowledge of symptomatology and interpretation of clinical subjects.
iii. Explore the depths of clinical dimensions of Materia Medica for better understanding of a given remedy.
iv. Discuss the importance of Group characters in better understanding of Homoeopathic Materia Medica.
v. Apply understanding of Materia Medica to evolve therapeutics.
vi. Explain the relevance of Comparative Materia Medica for differentiation of remedies.
vii. Relate the dimensions of clinical knowledge with drug proving to develop Regional Materia Medica.
viii. Correlate the understanding of Miasms with symptomatology of remedies.
ix. Explore the remedy relationship and concordances.
x. Relate the concept of diathesis with symptoms of remedies.
xi. Integrate knowledge of Organon of Medicine and Repertory in better understanding and application of Homoeopathic Materia Medica.
xii. Record both acute and chronic history in proper sequence as per guidelines given in Organon.
xiii. Construct the characteristic totality of the case to arrive at the Similimum.

2. Learning objectives (LO)

i. Discuss the importance of Group characters in better understanding of Homoeopathic Materia Medica.
ii. Describe the group characters of Sarcodes, Acids, and Noble metals, Natrum, Kali, Calcarea, Ophidia and Spiders.etc
iii. Discuss the concept of Diathesis in better understanding of the symptomatology of the remedies.
iv. Understand the Remedy relationship and Concordance for better application of Homoeopathic Materia Medica.
v. Understand the drug picture of the remedies of 3rd BHMS in context of its pharmacological data, Doctrine of Signature, Sphere of action, Pathogenesis, A/F, Constitution, Temperament, Diathesis, Miasmatic Background, Mentals, Physical Generals, Physical Particulars, Modalities, Remedy Relatioship, Comparison including Clinical Indications.

vi. Integrate the knowledge of Anatomy, Physiology, Pharmacy, Pathology, Toxicology, Organon of Medicine, Surgery, Obstetrics – Gynaecology, Practice of Medicine and Repertory for better understanding of the drug.
vii. Compare and contrast symptoms of similar remedies of 1st, 2nd and 3rd BHMS Syllabus.
viii. Record both Acute and Chronic history in proper sequence as per guideline given in Organon.
ix. Demonstrate the physical examination skills with reference to knowledge of Surgery, Obstetrics –Gynaecology and Practice of Medicine.
x. Recognize the importance of investigations in a case.
xi. Analyse the symptoms of a case to categorize as Mentals, Physical Generals and Physical Particulars.
xii. Evaluate the symptoms of the case.
xiii. Consruct the characteristic totality of the case to arrive at the similimum.
xiv. Arrive at indicated remedy with appropriate posology and auxiliary mode of treatment.
xv. Correlate the symptoms of the case to Repertorial Rubrics.

3. Course content and its term wise distribution

3.1. Content for Term I:

3.1.1. Assessment of entry behaviour for I and II BHMS syllabus
3.1.2. Explain the importance of group study in understanding Homoeopathic Materia Medica
3.1.3 Describe the group characters of Calcareas, Kali, Natrum and Noble Metals.
3.1.4 Integrating the knowledge of Surgery, Gynaecology and Obstetrics, Practice of medicine and Organon of medicine in a better understanding of Homoeopathic Materia Medica
3.1.5 Study the remedy relationship and concordance
3.1.6 Study the concept of diathesis in understanding the symptomatology of the remedies
3.1.7 Correlate knowledge of Miasms in understanding symptomatology of remedies

3.1.8 Homoeopathic Medicines:

1. ArgentumMetallicum	2. Collinsonia	3. Murex
4. AurumMetallicum	5. Conium	6. Muriatic Acid
7. Asafoetida	8. Crocus sativus	9. Nitric Acid
10. Asteriarubens	11. Cyclamen	12. Phosphoric Acid
13. Bismuth	14. Graphites	15. Picric Acid
16. Bovista	17. Helonias	18. Platina
19. Capsicum	20. Hydrastis	21. Raphanus Sativus
22. Carbolic Acid	23. Iodum	24. Ratanhia
25. Caulophyllum	26. Liliumtigrinum	27. Sulphuric Acid

3.2. Content of Term II

3.2.1. Group characters of and Acid group, Ophidia, Spiders and sarcodes

3.2.2. Homoeopathic Medicines:

1.Actea spicata	14.Lachesis	27.Tabacum
2.Adrenaline	15.Lithium Carbonicum	28.Taraxacum
3.Aranea Diadema	16.Millifolium	29.Tarentula Cubensis
4.Benzoic Acid	17.Naja Tripudans	30.Tarentula Hispanica
5. Bufo	18.Onosmodium	31.Terebinthina
6. Caladium	19.Oxalic acid	32.Thalapsi bursa pastoris
7. Clematis erecta	20.Physostigma	33.Theridion
8. Cholesterinum	21.Radium Bromatum	34.Thyroidinum
9. Coca	22.Sabal serrulata	35.Trillium pendulum
10.Crotalus Horridus	23.Sabina	36.Ustilago
11.Erigeron	24. Sarsaparilla	37.Vibernum opulus
12. Fluoric Acid	25. Selenium	38.X Ray
13. Kreosotum	26. Staphysagria	

4. Teaching hours

4.1. Gross division of teaching hours:

Homoeopathic Materia Medica		
Year	**Teaching hours- Lectures**	**Teaching hours- Non-lectures**
IIIBHMS	150	50

4.2. Teaching hours (Theory)

S. no.	**List of Topics**	**Hours**
1.	Assessment of entry behavior of I and II BHMS syllabus	2
2.	Explain the importance of group study, remedy relationship and concordance, concept of Diathesis	5
3.	Describe the group characters of Sarcodes, Calcarea, Ophidia and Spider group of remedies	8
4.	Describe the group characters of Acids, Noble metals, Natrum and Kali group of remedies	8
5.	Integrating the knowledge of Surgery, Gynaecology and Obstetrics, Practice of medicine and Organon of medicine in a better understanding of Homoeopathic Materia medica	2

6.	Study of Drugs (Term I)	62
7.	Study of Drug picture (Term II)	63
	Total	**150**

4.3. Teaching Hours Non-lecture: There shall be 50non lecture hours divided into activities as mentioned in table given below

Non-Lecture Activities (Practical)

Sr. No	**Non-Lecture Teaching Learning methods**	**Term**	**Time Allotted per Activity (Hours)**
1	Clinical(to be integrated with topics under Practice of Medicine, Surgery and ObGy)	I & II	35
2	Demonstrative	I & II	15
2(a)	Seminar / Tutorials		10
2(b)	Problem based learning/ Case Based Learning /Assignment/ Symposium / Group discussion/Role play or Drug picture presentation		5
	Total		**50**

5. Content mapping (competencies table)

5. 1. Competencies table-Theory ** to be used as per the requirements of a given drug

S. No.	Competency	Millers Level:	Content	SLO/ Outcome	Blooms Domain / Guilbert's Level	Priority	T-L Methods/media	Assessment		Integration
								Formative	Summative	
HomUG-HMM-III-1.1	**K & S PC HO**	KH K	Assessment of entry behaviour of I and II BHMS syllabus	Recall the knowledge of Iand IIBHMS syllabus for Materia Medica	C1	MK	Group Discussion Quiz	MCQ	MCQ SAQ LAQ Viva	**Spiralintegration**withHomoeopathic Materia medica **Vertical integration** with Anatomy,Physiology,Pharmacy, Psychology, Organon)Pathology,Toxicology
HomUG-HMM-III-1.2	**K & S PC HO**	KH K	Explain the importance of group study, remedy relationship and	Integrate knowledge of characteristic group symptoms in study of a remedy	C2	MK	Lecture PPT Library referen	MCQ Assignment Project	SAQ	Vertical integration with Organon Spiral integration

S. No.	Competency	Millers Level :	Content	SLO/ Outcome	Blooms Domain / Guilbert's Level	Priority	T-L Methods/media	Assessment		Integration
								Formative	Summative	
HomUG-HMM-III-1.3			concordance, Explain the concept of Diathesis	Correlate the knowledge of remedy relationship and concordances in understanding of the remedies			ces			with HMM
HomUG-HMM-III-1.4				Relate the concept of diathesis with symptoms of the remedy						
Hom UG-HMM III-1.5			Integrating the knowledge of Surgery, Gynaecology and Obstetrics, Practice of medicine and Organon of medicine in a better understanding of Homoeopathic	Justify the utility of knowledge of Surgery,GyOb,POM, Organonof medicine in better understanding of Homeopathic Materismedica.	C2	MK	Team teaching	MCQ Project	SAQ Viva	
Hom UG-HMM				Describe the totality of drug in given clinical condition.						

S. No.	Competency	Millers Level :	Content	SLO/ Outcome	Blooms Domain / Guilbert's Level	Priority	T-L Methods/media	Assessment		Integration
								Formative	Summative	
III-1.6			Materia medica							
Hom UG-HM III-1.7				Explore the therapeutic application of the drug in a given condition.						

Hom UG-HMM III-1.8		KH K	Describe the group characters of a given group	Recall the basic characters of a group from the knowledge of Chemistry, Botany and Zoology.	C 1	DK	Lecture PPT Library references	MCQ Assignment Project	SAQ LAQ Viva	Spiral integration with HMM Vertical integration with Organon
Hom UG-HMM III-1.9				Co-relate the basic character of a group with the symptomatology from the materia medica (Doctrine of Signature)	C2	MK				
Hom UG-HMM III-1.10				Indicate the Source, Family, Kingdom, Preparartion	C1	NK				
Hom UG-HMM				List the common ailments of a given group	C1	MK				

III-1.11										
Hom UG-HMM III-1.12				Mention the physical constitution of the given group.	C1	MK				
Hom UG-HMM III-1.13				Mention and justify the Diathesis	C2	MK				
Hom UG-HMM III-1.14				Mention and Justify the predominant Miasm	C2	MK				
Hom UG-HMM III-1.15				Enumerate the group characteristics	C1	MK				
Hom UG-HMM III-1.16				Describe the mentals symptoms of a given group. Co-relate the mental symptoms with doctrine of signature	C2	MK				
Hom UG-HMM III-1.17				Enumerate the common modalities of agiven group	C1	MK				
Hom UG-HMM III-1.18				List the clinical indications of a given group.						
Hom				Correlate the knowledge	C2	MK				

UG-HMM III-1.19				of group indication to individual remedy of the group and differentiate individual remedy in a given group.						
Hom UG-HMM III-1.20				Compare the contrast the given group with other group.	C2	MK				
HomUG-HMM-III-1.21	**K & S PC HO**	KH K	Individual Homoeopathic medicines	Mention the common name, Mention the source/ family/kingdom, the prover	C1	NK	Lecture / Specimen	MCQ Viva	MCQ Viva	**Vertical integration** with Pharmacy
HomUG-HMM-III-1.22				Correlate with doctrine of signature	C2	NK	Lecture / Specimen	MCQ Viva	MCQ Viva	**Vertical integration** with Pharmacy and Physiology
HomUG-HMM-III-1.23				List the sphere of action	C1	MK	Lecture Self – learning Small Group Discussion Black Board PPT	Assignment Project MCQ Viva	LAQ SAQ MCQ Viva	**Horizontal Integration** with Pathology, Toxicology, ObGy,PM, Surgery and Organon& Repertory **Vertical integration**
HomUG-HMM-III-1.24				Narrate the ailments from	C1					
HomUG-HMM-III-1.25				Describe the constitution and temprament	C1					
HomUG-HMM-III-1.26				Explain the mental symptoms	C1					

HomUG-HMM-III-1.27				Explain the physical generals	C1		Handouts Role play PBL			with Anatomy Pharmacy , Psychology and Physiology
HomUG-HMM-III-1.28				Outline the general modalities	C1					
HomUG-HMM-III-1.29				Describe the particular symptoms and modalities	C2					
HomUG-HMM-III-1.30				Describe the predominant miasm	C2					
HomUG-HMM-III-1.31				Mention the relationship of the remedy	C2					
HomUG-HMM-III-1.32				Correlate with rubrics from Repertory	C 2					
HomUG-HMM-III-1.33				Correlate the pathogenesis with knowledge of Practice of medicine , Surgery and Gynecology-obstetrics and miasm	C 2					

HomUG-HMM-III-1.34				Compare and contrast the related remedies of First, Second and Third BHMS syllabus	C 2					

5. 2 Competencies table- Practical/clinical

S. No.	Competency	Millers Level:	Content	SLO/ Outcome	Blooms Domain / Guilbert's Level	Priority	T-L Methods/ media	Assessment		Integration
								Formative	Summative	
HomUG-HMM-III-2.1	K & S PC HO CS PBLI Prf	SH KH	Case taking	Demonstrate the steps of case taking as per guidelines given in Organon of medicine.	P/A2	MK	Demonstration Checklist DOPS	DOPS CBD Small project	Clinical performance	**Horizontal Integration** with Pathology, ,ObGy,PM, Surgery Practice of Medicine, Organon&Repertory
HomUG-HMM-III-2.2			Clinical examination	Demonstrate the basic clinical examination skills	P/A2					
HomUG-HMM-III-2.3			Interpretation of investigation	Recognise the importance of interpretation of investigations.	C2					
HomU				Analyse the Case	C2					

G-HMM-III-2.4			Case analysis							
HomUG-HMM-III-2.5				Evaluate the case	C2					
HomUG-HMM-III-2.6				Construct the totality of the case	C2					
HomUG-HMM-III-2.7				Arrive at indicated remedy with appropriate posology and auxiliary line of treatment						
HomUG-HMM-III-2.8				Correlate the symptoms of case to repertorial rubrics						

6. Teaching learning methods

Lectures (Theory)	**Non-lectures (Practical)**
Lectures	Clinical demonstration
Small group discussion	Problem based discussion
Integrated lectures	Case based learning
Library reference	Tutorials
Self-learning	Seminars
	Symposium
	Role play
	Assignments

Different teaching-learning methods must be applied for understanding holistic and integrated Materia medica. There has to be classroom lectures, small group discussions, case discussion where case-based learning (CBL) and Problem-BasedLearning (PBL) are especially helpful. In the applied Materia medica, Case Discussion (CBL-PBL) method is beneficial for students. Audio visual (AV) methods for classroom teaching may be an innovative aid in order to demonstrate the related graphics and animations etc. In case of clinical demonstration – DOAP (Demonstration – Observation – Assistance – Performance) is very well applicable.

7. Details of assessment

7A - Scheme of overall assessment (Formative and Summative)

Sr. No	Professional Course	1st term (1-6 Months)		2nd Term (7-12 Months)		
1	Third Professional BHMS	1stPA	1ST TT	2nd PA	FUE	
		10 Marks Viva	50 Marks Practical/ Viva • Viva voce -25 marks • Case Taking, and Case Presentation (detailed case history, analysis, evaluation, repertorisation) – 25 marks	10 Marks Viva	100 marks theory	100 marks (Clinical/practical+ Viva+ IA)

PA: Periodical Assessment; TT: Term Test; FUE: Final University Examinations

7B- Number of papers and Marks Distribution for Final University Examination (FUE)

Sr. No.	Course Code	Papers	Theory	Practical/ Clinical	Viva Voce	Internal Assessment- Practical only (IA)**	Grand Total
1	HomUG-HMM-III	01	100 marks (*30 % of questions shall be from I &II BHMS syllabus and 70 % of questions shall be from III BHMS Syllabus*)	50 marks • Case taking and case presentation (detailed case history, analysis, evaluation, repertorisation, prescription) --- 40 marks • Journal -10 marks (Ten acute and Ten chronic cases)	40 marks	10 marks	200marks

****Method of Calculation of Internal Assessment Marks for Final University Examination:**

$$IA = \frac{PA1\ (Practical/Viva) + TT\ (Practical/\ Viva) + PA2\ (Practical/Viva)}{(10\ Marks) + (50\ Marks) + (10\ Marks)} \times 10$$

70

7C - Paper Layout

Summative assessment:
Theory- 100 marks

MCQ	**10 marks**
SAQ	**40 marks**
LAQ	**50 marks**

7 D– I - Distribution of Theory exam

Sr. No	**Paper**			**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	BHMS I& IISyllabus	I	Refer to the 8E-II	Yes	Yes	Yes
2	Importance of Group Study	I		No	No	No

3	Describe the group characters of Sarcodes, Acids,Noble metals, Natrum, Kali, Calcarea, Ophidia and spider groupof remedies	I& II		Yes	Yes	Yes
4	Integrate the knowledge of Surgery, GyOb, Practice of Medicine, Organon and Repertory in a better understanding of Materia Medica	I & II		Yes	Yes	No
5	Study of remedy relationship and concordances	I & II		Yes	No	No
6	Study of diathesis in understanding symptomatology of remedies	I & II		No	Yes	No
7	Correlate knowledge of miasms in symptomatology of remedies	I & II		Yes	Yes	No
8	Correlate symptomatology of remedies to rubrics in repertory	I & II		No	No	No
9	Sixty five fiveHomoeopathic Medicines	I & II		Yes	Yes	Yes

7D– II - Theme table

Theme	Topics	Term	Marks	MCQ's	SAQ's	LAQ's
A-F	BHMS I& II Syllabus	-	30	Yes	Yes	Yes
G*	Importance of Group Study	I	-	No	No	No

H	Describe the group characters of Sarcodes, Acids,Noble metals, Natrum, Kali, Calcarea, Ophidia and spider groupof remedies	I & II	6	Yes	Yes	Yes
I	Integrate the knowledge of Surgery, GyOb, Practice of Medicine, Organon and Repertory in a better understanding of Materia Medica	I & II	6	Yes	Yes	No
J	Study of remedy relationship and concordances	I & II	1	Yes	No	No
K	Study of diathesis in understanding symptomatology of remedies	I & II	5	No	Yes	No
L	Correlate knowledge of miasms in symptomatology of remedies	I &II	6	Yes	Yes	No
M*	Correlate symptomatology of remedies to rubrics in repertory	I &II	-	No	No	No
N	Sixty five Homoeopathic Medicines	I&II	46	Yes	Yes	Yes

***Note : Theme G and Theme M are for conceptual understanding only**

7E- Question paper Blueprint

A Question Serial Number	B Type of Question	Question Paper Format (Refer table 7D- II Theme table for themes)
Q1	Multiple Choice Questions(MCQ) 10 Questions 1 mark each All compulsory Must know part: 7 MCQ Desirable to know: 2 MCQ. Nice to know: 1 MCQ	1. Theme A-F 2. Theme A-F 3. Theme A-F 4. Theme A-F 5. Theme A-F 6. Theme H 7. Theme I 8. Theme J 9. Theme L 10. Theme N
Q2	Short answer Questions (SAQ) Eight Questions 5 Marks Each All compulsory Must Know part: 6 SAQ Desirable to Know: 2 SAQ	1. Theme A-F 2. Theme A-F 3. Theme A-F 4. Theme H 5. Theme I 6. Theme K 7. Theme L 8. Theme N
Q3	Long answer Questions (LAQ)	1. Theme A-F 2. Theme N

	Five Questions 10 marks each All compulsory All questions on Must Know No Questions on Nice to Know and Desirable to Know	3. Theme N 4. Theme N 5. Theme N

8. List of recommended text/reference books:

- Allen H.C.(2005). Keynotes Rearranged and Classified with Leading Remedies of the Materia Medica and Bowel Nosodes, (Reprint edition), B.Jain Publishers, New Delhi
- ChoudhuriN.M. (2006).A Study On Materia Medica Enriched with real case studies,(Reprint revised edn).B.Jain Publishers, New Delhi.
- Kent J.T. (2015). Lectureson Homoeopathic MateriaMedica (Reprint edn,) B.Jain Publishers, New Delhi.
- BoerickeW.(2015) , New manual of Homoeopathic MateriaMedica and Repertory. (Reprint ed.)B. Jain Publishers Pvt Ltd New Delhi
- Clarke JH (2008), A Dictionary of Practical MateriaMedica .B. Jain Publishers Pvt Ltd New Delhi.
- Burt W. (2009).Physiological MateriaMedica, (Third edn) B.Jain Publishers, New Delhi.
- NashE.B. (2007).Leaders in Homeopathic Therapeutics with Grouping and Classicfication, (Sixth edn.)B Jain Publishers, New Delhi.
- TylerM.L. (2007).Homoeopathic Drug Picture.(First edn), B Jain Publishers , New Delhi.
- FarringtonE.A. (2007) Lectures on Clinical Materia Medica in family order (Fourth edn.)B Jain Publishers PvtLtd, New Delhi.
- Lilienthal S. (2006) Homoeopathic Therapeutics.(Second edn), B.JainPublishersPvtLtd,NewDelhi.
- FarringtonE.A. (2005), Comparative Materia Medica. (Reprintedn.) B.Jain Publishers, New Delhi
- Lesser Otto(2019) Text book of Homoeopathic Materia Medica, B. Jain Publishers Pvt Ltd New Delhi
- Dewey W. A. (2009) Practical Homoeopathic Therapeutics(Third edition revised and enlarged)Medica, B. Jain Publishers Pvt Ltd New Delhi

- Phatak S. R.(2007)Materia Medica of Homoeopathic Medicines(Second edition Revised and Enlarged),B. Jain Publishers Pvt Ltd New Delhi
- Patil J. D.(2007)Group Study in Homoeopathic Materia Medica, B. Jain Publishers Pvt Ltd New Delhi
- BoerickeW.(2003) A compendium of the Principles of Homoeopathy,as taught by Hahnemann and verified by a Century of Clinical Application(First reprint edition), B. Jain Publishers Pvt Ltd New Delhi
- All source books.

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COMPETENCY BASED DYNAMIC CURRICULUM FOR THIRD BHMS PROFESSIONAL COURSE

(Applicable from Batch 2022-2023 onwards for 5 years or until further notification by National Commission for Homoeopathy whichever is earlier)

(Organon of Medicine and Homoeopathic Philosophy)

HOMOEOPATHY EDUCATION BOARD

NATIONAL COMMISSION FOR HOMOEOPATHY

MINISTRY OF AYUSH, GOVERNMENT OF INDIA

JAWAHAR LAL NEHRU BHARTIYA CHIKITSA AVUM HOMOEOPATHY ANUSANDHAN BHAVAN

No.61-65, Institutional Area, opp. 'D' block, Janak Puri, New Delhi-110 058

Subject Name: Organon of Medicine and Homeopathic Philosophy

Subject Code: Hom UG-OM-III

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1. **Course Outcomes (CO)**

At the end of III BHMS the student should be able to

i. Correlate the clinicopathological understanding with evolution of disease and miasm in OPD / IPD Cases.
ii. Apply the Hahnemannian Classification of disease in the cases
iii. Understand the scope and limitations of Homeopathy
iv. Use the concept of susceptibility in the cases to determine the posology and the remedy reactions
v. Understand the remedy response after the prescription in follow up in various cases.
vi. Corelate the concept of palliation and suppression in Management of patient.
vii. Apply the concept of Miasms in Case solving and its management
viii. Apply the concept of ancillary management, diet and regimen in the OPD / IPD patients

2. Learning Objectives:

i. Correlation of clinicopathological understanding with evolution of disease and miasm
ii. Further enhancing the insight into the classification of disease
iii. Understanding the concept of susceptibility vis-a-vis clinicopathological dimension of the disease
iv. Developing further insight into case taking by correlating bio-psycho-social model of aetiopathogenesis and evolution of individual from predisposition to disposition to diathesis to disease
v. Understanding Surgical diseases- classification, scope and limitation
vi. Knowing Posology and its correlation with clinicopathological understanding of the disease
vii. Understanding remedy response by incorporating current concept of disease
viii. Understanding suppression in terms of current medical practices
ix. Further developing insight into the management of acute and chronic illness
x. Understanding the scope and limitation of homoeopathy
xi. Understanding Concept of palliation and correlation with susceptibility
xii. Knowing concept of chronic disease and miasm and current advances in the modern concept of causation, pathology and clinical expression, investigation.

xiii. Knowing Hering's law of cure and its correlation with clinical understanding of remedy response

xiv. Concept of ancillary treatment, education and diet as per Hahnemannian guidelines and current evolution.

3. Course content and its term –wise distribution

A. Content:

In addition to revision of Aphorisms studied in First B.H.M.S. and Second B.H.M.S., the following shall be covered, namely: -

1. Hahnemann's Preface and Introduction to Organon of Medicine.

2. Aphorisms 146 to 209, 231-294 of Hahnemann's Organon of Medicine, including foot notes (6th Editions translated by R.E. Dudgeon and W. Boericke)

- 2.1 Actions of medicine- points necessary for the cure
- 2.2 Management and Treatment of various kind of diseases- acute/chronic/surgical/one sided/epidemic, etc.
- 2.3 Repetition, Follow up and Prejudice in Prescription
- 2.4 Pharmacy, Routes of Administration and some fundamental Laws of Homeopathy.
- 2.5 Diet and Regimen, Ancillary-auxiliary measures.

3. Philosophy:

- 3.1 Susceptibility
- 3.2 Idiosyncrasy
- 3.3 Palliation and Suppression
- 3.4 Remedy Reaction and Second Prescription
- 3.5 Posology

4. Hahnemannian classification of diseases further insight and correlation with scope and limitation

- 4.1 Scope of Homeopathy
- 4.2 General Pathology of Homoeopathy

5. Chronic Diseases

- 5.1. Hahnemann's Theory of Chronic Diseases.
- 5.2. J.H. Allen's The Chronic Miasms – Psora and Pseudo-psora; Sycosis.

Special directives:

(a) Emphasis should be given on the way in which each miasmatic state evolves, and the characteristic expressions are manifested at various levels and attempt should be made to impart a clear understanding of Hahnemann's theory of chronic miasms.

(b) The characteristics of the miasms need to be explained in the light of knowledge acquired from different branches of medicine.

(c) Teacher should explain clearly therapeutic implications of theory of chronic miasms in practice and this will entail a comprehension of evolution of natural disease from miasmatic angle, and it shall be correlated with applied Materia Medica.

Horizontal integration with HMM, Repertory,Community Medicine, Modern Pharmacology, Practice of Medicine, Gynaecology and Obstetrics and Surgery

B. Term-wise distribution of the content-

Sl. No.	Topic
	Term I
1.	Hahnemann's Preface and Introduction to Organon of Medicine
2.	Actions of medicine- points necessary for the cure (§ 146-149)
3.	Management and Treatment of various kind of diseases- acute/chronic/surgical/one sided/epidemic, etc. (§ 150-209)
4.	Revision of Aphorism 1-70
5.	Hahnemann's Theory of Chronic Diseases
	Term II
6.	Management and Treatment of various kind of diseases- (§ 231-244)
7.	Repetition, Follow up and Prejudice in Prescription (§ 245-258)
8.	Pharmacy, Routes of Administration and some fundamental Laws of Homeopathy (§264-285)
9.	Diet and Regimen, Ancillary-auxiliary measures (§259-263, §285-291)
10.	Susceptibility, idiosyncrasy, suppression, palliation, remedy reaction, Second prescription, posology
11.	Hahnemannian classification of diseases further insight and correlation with scope and limitation
12.	J.H. Allen's The Chronic Miasms – Psora and Pseudo-psora; Sycosis
13.	Revision of Aphorism 71-145

Table of Topics with reference list referring to Chapters from the Philosophy text books

Topic	**Kent J. T.** (Lectures on Homoeopathic Philosophy)	**Roberts H. A.** (The Principles and Art of Cure by Homoeopathy)	**Close Stuart** (The Genius of Homoeopathy)
Correlation of clinicopathological understanding with evolution of disease and Miasm	18-21	22-31	8
Further enhancing the insight into the classification of disease	18-21	22	8
Understanding the concept of susceptibility vis-a-vis clinic-pathological dimension of the disease	17	14	7
Surgical diseases classification scope and limitation	5	19	4
Posology and its correlation with clinical-pathological understanding of the disease	34, 35, 36	12,13	13, 14, 15
Understanding the remedy response by incorporating current concept of disease	34, 35, 36	14	13
Suppression in terms of current medical practices	37	18	6,9
Further developing insight in the management of acute and chronic illness	26	22, 19	8
Understanding the scope and limitation of homoeopathy	35,37	19	4
Concept of palliation and correlation with susceptibility	14, 37	19	7
Concept of chronic disease and Miasm and current advance in the modern concept of causation, pathology and clinical expression, investigation.	17-21	22-31	8
Second Prescription	36	16	
Hering's law of cure and its correlation with clinical understanding of remedy response	35,36	14	9,11

4. Teaching Hours

4.1 Gross division of teaching hours- lectures and non-lectures

Organon of Medicine and Homoeopathic Philosophy		
Year	**Teaching hours- Lectures**	**Teaching hours- Non-lectures**
III BHMS	150	50

4.2 Teaching hours theory

Sl. No	**List of Topics**	**Hours**
1.	Hahnemann's Preface and Introduction to Organon of Medicine	5
2.	Actions of medicine- points necessary for the cure (§ 146-149)	2
3.	Management and Treatment of various kind of diseases- acute/chronic/surgical/one sided/epidemic, etc (§ 150-209)	25
4.	Revision of Aphorism 1-70	10
5.	Hahnemann's Theory of Chronic Diseases	20
6.	Management and Treatment of various kind of diseases- (§ 231-244)	10
7.	Repetition, Follow up and Prejudice in Prescription (§ 245-258)	8
8.	Pharmacy, Routes of Administration and some fundamental Laws of Homeopathy (§264-285)	8
9.	Diet and Regimen, Ancillary-auxiliary measures (§259-263, §285-291)	7
10.	Susceptibility, idiosyncrasy, suppression, palliation, remedy reaction, Secondprescription, posology	20
11.	Hahnemannian classification of diseases further insight and correlation with scope and limitation	5
12.	J.H. Allen's The Chronic Miasms – Psora and Pseudo-psora; Sycosis	20
13.	Revision of Aphorism 71-145	10

	Total	**150**

The number of lectures is based upon the weightage but can be changed to suit the needs of the learning of the students as per the formative assessment conducted by the faculties from time to time.

4.3 Teaching hours Non-lecture

Sr. No	**Non-Lecture Activity**	**Term**	**Time Allotted per Activity (Hours)**
1	Clinical (to be integrated with topics under Pathology, Practice of Medicine, Surgery and Obstetrics-Gynae)	I & II	35
2	Demonstrative	I & II	15
2(a)	Seminar / Tutorials		10
2(b)	Problem based learning/ Case Based Learning		05
2(c)	Assignment/ Symposium / Group discussion		
	Total		**50**

5. Content Mapping

5.1. Hahnemann's Preface and Introduction to Organon of Medicine -Term I

Sl. No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-OM-III 1.1	K & HO	KH	Preface a) Translator	Discuss the changes from 5th to 6th edition	Cognitive Recall Understand and Interpret LevelI & II	DK	Lecture Small Group Discussion	MCQ SAQ	MCQSAQ, Viva	Organon (V)
HomUG-OM-III 1.2			b) James Krauss	Discuss 4 epochal figures in History of Medicine						
HomUG-OM-III 1.3				Define Tolle causam						
HomUG-OM-III 1.4				Discuss Cessat effectus cessat causa						
HomUG-OM-III 1.5				Describe Hahnemann's Experiment of Cinchona						
HomUG-OM-III 1.6			c) Author's Samuel Hahnemann	Discuss the advantages of Homeopathy						

HomUG-OM-III 1.7	K & HO	KH	Introduction to Organon	List the accidental homeopathic cures	Cognitive Recall Understand and Interpret LevelI & II	DK	Lecture Small Group Discussion	MCQ SAQ	MCQSAQ, Viva	Organon
HomUG-OM-III 1.8				Discuss the methods of treatment during and before Hahnemann						
HomUG-OM-III 1.9				Discuss materia peccans						
HomUG-OM-III 1.10				Discuss the criticism on blood letting and Duce naturae and the management of intestinal parasites						

5.2. Actions of medicine- points necessary for the cure (§ 146-149)

Sl. No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG	K &	KH	**§ 146**	Discuss the	Cognitive	MK	Lecture	MC	MCQSAQ	Materia

-OM-III 2.1	HO		Appropriate therapeutic employment of medicines	reasons for most appropriate therapeutic employment of medicines	Understandandinterpret LevelII		Small Group Discussion	Q SAQ	, Viva	Medica (V) Repertory (V)
HomUG -OM-III 2.2	K & HO	KH	**§ 147-149**	Define specific remedy	Cognitive Understandandinterpret LevelII	MK	Lecture Small Group Discussion	SAQ	SAQ, Viva	
HomUG -OM-III 2.3				Discuss the probable explanation of Homeopathic Cure						

5.3. Management and Treatment of various kind of diseases- acute/chronic/surgical/one sided/epidemic, etc (§ 150-209)&(§ 231-244)

Sl. No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG -OM-III 3.1	K HO PC	KH	**§ 150** Indisposition	Define Indisposition Discuss cause and Management Illustrate with examples	Cognitive Understandandinterpret LevelII	MK	Lecture Small Group Discussion	MCQ SAQ	MCQ SAQ, Viva	Organon (S)
HomUG	K	KH	**§151**	Discuss the	Cognitive	MK	Lecture	SAQ	SAQ	Organon

-OM-III 3.2	HO PC		Complete picture of disease	importance of detailed case taking	Understandandinterpret LevelII		Small Group Discussion		, Viva	(S)
HomUG -OM-III 3.3	K HO PC	KH	**§152** Remedy selection in acute disease	Define Antitype Summarise case taking in acute disease	Cognitive Understandandinterpret LevelII	MK	Lecture Small Group Discussion	SAQ	SAQ , Viva	Organon (V) Materia Medica
HomUG -OM-III 3.4	K HO PC	KH	**§ 153** PQRS	List some *striking,singular, uncommon & peculiar symptoms* Discuss the difference between common and characteristic symptom	Cognitive Understandandinterpret LevelII	MK	Lecture Small Group Discussion	SAQ	SAQ , Viva	Organon (V)
HomUG -OM-III 3.5	K HO	KH	**§154** Antitype and its response	Discuss the concept of Susceptibility and similarity between drug and disease	Cognitive Understandandinterpret LevelII	MK	Lecture Small Group Discussion	SAQ Viva	SAQ , Viva	Oraganon (S)
HomUG -OM-III 3.6	K HO	KH	**§155-156** Homeopathic Cure	Discuss homeopathic cure without disturbance Discuss the	Cognitive Understandandinterpret LevelII	DK	Lecture Small Group Discussion	SAQ Viva	SAQ , Viva	

				cause for such freedom from disturbance						
HomUG-OM-III 3.7	K HO PC	KH	**§ 157-161** Remedy response in acute diseases	Discuss Homeopathic aggravation and its prognostic value	Cognitive Understandandinterpret LevelII	MK	Lecture Small Group Discussion	SAQ Viva	SAQ, Viva	Organon (V)
HomUG-OM-III 3.8	K HO PC	KH	**§ 162-163** Partial Similimum	Discuss the concept of partial similimum Recognize the accessory symptom of not perfectly appropriate remedy	Cognitive Understandandinterpret LevelII	MK	Lecture Small Group Discussion	SAQ Viva	MCQ SAQ, Viva	
HomUG-OM-III 3.9	K HO PC PBL CS	KH SH	**§ 164-167** Paucity of symptoms Accessory symptoms	Discuss the success and failure in case of Paucity of symptoms	Cognitive Understandandinterpret LevelII	MK	Lecture Small Group Discussion Clinical demonstration	SAQ Viva SAQ Viva Case solving	MCQ SAQ, Viva	
HomUG-OM-III 3.10			**§ 168-171** Zigzag mode of treatment Change of remedies	State the rules for treatment in such cases						

HomUG-OM-III 3.11	K HO PC PBL	KH SH	**§ 172-184** One sided disease	Define One sided disease, List different types of one sided disease, Explain the reasons for one sidedness, State the rules for treatment & Identify one sided disease	Cognitive Understandandinterpret LevelII Psychomotor Level I	MK	Lecture Small Group Discussion Seminar Clinical demonstration	MCQ SAQ Viva Case solving	MCQ SAQ, Viva	Practice of Medicine Materia Medica (H)
HomUG-OM-III 3.12	K HO PC PBL	KH SH	**§ 185-203** Local maladies	Define local maladies, discuss their management& discuss the fallacy of labelling disease as local maladies &State the rules for treatment in one sided disease	Cognitive Understandandinterpret LevelII	MK	Lecture Small Group Discussion Clinical demonstration	SAQ Viva SAQ Viva Case solving	MCQ SAQ, Viva	

				Compare the advantage of internal treatment vs Local applications.						
HomUG-OM-III 3.13	K HO PC PBL PBL PC PBL PBL CS	KH SH KH KH KH	**§ 204-209** Anti miasmatic management	Recognize the effect of miasm and the importance of vicarious local symptoms Discuss the management of these symptoms Discuss the management of complex miasmatic diseases Mention the importance of history of past treatments Identify the various factors	Cognitive Understandandinterpret LevelII	MK	Lecture Small Group Discussion Clinical demonstration	SAQ Viva SAQ Viva Case solving	MCQ SAQ, Viva	Organon (S)

	PBL CS	KH SH KH SH		favouring or hindering treatment Discuss the importance of repeated conversations with the patients in treating miasmatic diseases Illustrate with examples						
HomUG-OM-III 3.14	K HO PC PBL	KH SH	**§ 231-234** Intermittent Diseases	Define & discuss Intermittent and Alternating diseases with examples	Cognitive Understandandinterpret LevelII	MK	Lecture Small Group Discussion Clinical demonstration	SAQ Viva SAQ Viva Case solving	MCQ SAQ, Viva	
HomUG-OM-III 3.15	K HO PC PBL	KH SH	**§ 235-244** Intermittent Fevers	List the types of Intermittent fevers Discuss the methods of finding similimum in	Cognitive Understandandinterpret LevelII	MK	Lecture Small Group Discussion Clinical demonstration	SAQ Viva SAQ Viva Case solving	MCQ SAQ, Viva	Practice of Medicine (V)

				intermittent fevers Discuss the time of administering the medicines in Intermittent fever with reasons Discuss the management of epidemic intermittent fevers Discuss the management of pernicious intermittent fevers Discuss the management of endemic intermittent fevers						

5.4. Hahnemann's Theory of Chronic Diseases

S.No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-OM-III 4.1	K & S HO P C	K	Nature of Chronic Diseases	Appreciate Hahnemann's selfless motivation in sharing his discovery of homoeopathy Discuss Hahnemann's concern that contemporaries might not comprehend or follow his teachings	C-II	NK NK	Lecture Small Group Discussion	MCQ SAQ	MCQ SAQ LAQ Viva	Organon (V)
HomUG-OM-III 4.2	K & S HO PC			Recognise the limitations of homoeopathy in treating non-venereal chronic diseases Discuss the events leading to discovery of chronic miasms	C-II	MK	Lecture Small Group Discussion	MCQ SAQ	MCQ SAQ LAQ Viva	

				Analyse Hahnemann's discovery that Psora, a chronic miasmatic disease, is the root cause of most non-venereal chronic diseases Identify 4 characters which helped Hahnemann to discover Chronic miasms Discuss the history of occidental Psora Infer how Psora became the most universal mother of diseases Recall the 3					

				important moments in the origin of chronic maladies Define Latent Psora Identify and discuss the symptoms of Latent Psora						
HomUG-OM-III 4.3	K & S HO PC		Sycosis	Differentiate syphilis and sycosis Appreciate the consequences of suppressed sycosis Discuss the homeopathic treatment for sycosis Recognize the complexity of treating complicated	C-II	MK	Lecture Small Group Discussion	MCQ SAQ	MCQ SAQ LAQ Viva	

				cases						
HomUG -OM-III 4.4	K & S HO PC		Syphilis	Distinguish the three states in cure of syphilis Discuss the nature and appearance of chancre Discuss the nature of syphilis its development Identify the dangers of conventional treatments for syphilis Describe the way to treat syphilis with homeopathy Discuss the treatment of Syphilis complicated with Psora	C-II	MK	Lecture Small Group Discussion	MCQ SAQ	MCQ SAQ LAQ Viva	

HomUG -OM-III 4.5	K & S HO PC		Understanding Psora and Its Treatment	Discuss the nature of Psora Recognise the signs and symptoms of Psora Describe the dangers of suppressing the primary Psora eruption Identify the dangers of suppressing the primary Psora eruption Discuss the principles of homeopathic treatment for Psora Discuss the limitations and potential hindrances to the cure of Psora	C-II	MK	Lecture Small Group Discussion	MCQ SAQ	MCQ SAQ LAQ Viva	

				Discuss the principles of a healthy lifestyle in the context of treating chronic disease Justify the appropriate use of adjuvants in anti-psoric treatment List the 3 chief errors in the cure of Chronic diseases Summarise the time of administration of anti psoric medicines						

5.5. Repetition, Follow up and Prejudice in Prescription (§ 245-258)

Sl.No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-OM-III 5.1	K HO PC PBL	KH SH	**§ 245-251** Repetition of Dose	Discuss the reason and effect of deviated dose	Cognitive Understandandinterpret LevelII	MK	Lecture Small Group Discussion Clinical demonstration	SAQ Viva SAQ Viva Case solving	MCQ SAQ, Viva	Organon (V)
HomUG-OM-III 5.2			**§ 246**	Compare the result of unchanged dose and deviated dose						
HomUG-OM-III 5.3			**§ 247**	Analyse the effect of repetition with unchanged dose						
HomUG-OM-III 5.4			**§ 248**	Explain the preparation of deviated dose						

HomUG-OM-III 5.5			**§ 249**	Discuss the repetition of deviated doses in various situations						
HomUG-OM-III 5.6			**§ 250**	Discuss the indication of antidote						
HomUG-OM-III 5.7			**§ 251**	Analyse the reasons for change of remedy& Recognize the conditions to repeat the unchanged dose of same medicine						
HomUG-OM-III 5.8	K HO PC PBL	KH SH	**§ 252-256** Follow up of cases	Analyse the reason for lack ofimprovement in a case, List the signs of improvement & aggravation &Discuss the	Cognitive Understandandinterpret LevelII	MK	Lecture Small Group Discussion Clinical demonstration	SAQ Viva SAQ Viva Case solving	MCQ SAQ, Viva	Practice of Medicine (V)

				importance of detailed follow up						
HomUG-OM-III 5.9	K HO PC PBL	KH SH	**§ 257-258** Prejudice in prescriptions	Discuss the need of being unprejudiced towards selection of remedy with examples	Cognitive Understandandinterpret LevelII	MK	Lecture Small Group Discussion Clinical demonstration	SAQ Viva SAQ Viva Case solving	MCQ SAQ, Viva	

5.6.Pharmacy, Routes of Administration and some fundamental Laws of Homeopathy(§264-285)

Sl. No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-OM-III 6.1	K HO PC PBL	KH SH	**§ 264-265**	Differentiate between food and medicines	Cognitive Understandandinterpret LevelII	DK	Lecture Small Group Discussion Clinical demonstration	SAQ Viva	MCQ SAQ, Viva	Homoeopathic Pharmacy
HomUG-OM-III 6.2			**§ 267**	Describes the preparation of medicines (indigenous) from fresh plants						

HomU G-OM-III 6.3			**§ 268**	Describe the preparation of medicines (exotic) from dry vegetable substances						
HomU G-OM-III 6.4			**§ 269-271**	Describe the mode of preparing crude medicinal substances peculiar to Homeopathy						
HomU G-OM-III 6.5	K HO PC PBL	KH SH	**§ 272-273** Law of Simplex	Discuss the logic behind employing single medicine	Cognitive Understandandinterpret LevelII	MK	Lecture Small Group Discussion Clinical demonstration	SAQ Viva	MCQ SAQ, Viva	
HomU G-OM-III 6.6			**§ 274**	Discuss the disadvantage of multiple remedies						
HomU G-OM-III 6.7	K HO PC PBL	KH SH	**§ 275-283** Posology	Analyse the suitableness of homeopathic medicine, ,Discuss the effect	Cognitive Understandandinterpret LevelII	MK	Lecture Small Group Discussion	SAQ Viva	MCQ SAQ, Viva	Materia Medica

	PBL			of homoeopathically selected remedy in a chronic case ,Discuss homeopathic aggravation&Design the management of homeopathic aggravation&Discuss the use of large doses of specific remedies	Affective II		Clinical demonstration	Case solving	Case solving	
HomUG-OM-III 6.8	K HO PC PBL	KH SH	**§ 284-285**	Discuss the Routes of Administration	Cognitive Understandandinterpret LevelII	MK	Lecture Clinical demonstration	SAQ Viva	MCQ SAQ, Viva Case solving	

5.7.Diet and Regimen, Ancillary-auxiliary measures(§259-263, §285-291)

Sl. No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-OM-III 7.1	K HO PC PBL	KH SH	**§ 259** Diet and Regimen	Discuss the reason for proper Diet & Regimen during homeopathic treatment	Cognitive Understandandinterpret LevelII C-I & II	MK	Lecture Small Group Discussion Clinical demonstration	SAQ Viva Case solving	MCQ SAQ, Viva	Materia Medica Practice of Medicine
HomUG-OM-III 7.2	PC CS		**§ 260-261**	List the errors in diet & regimen forming obstacles to cure	C-II & III					Organon
HomUG-OM-III 7.3	PBL PC		**§ 262-263**	Discuss and plan Diet and Regimen for acute diseases						Community Medicine (S)

HomUG-OM-III 7.4	K HO PC PBL	KH SH	**§ 286-§ 291** Auxiliary modes of treatment	List the various auxiliary modes of treatment (Electricity, Galvanism, Minerals, Magnet, Mesmerism,Mineral baths); Discuss the modes of each and advantages of each	Cognitive Understand and interpret Level II	MK	Lecture Small Group Discussion Clinical demonstration	SAQ Viva SAQ Viva Case solving	MCQ SAQ, Viva	

5.8.1 Philosophy: Susceptibility

Sl. No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	

Hom UG-OM-II 8.1.1	K & S HO PC PBL	K	**Susceptibility** Kent Chapter XIV	Analyse § 31-33	Cognitive Understandandinterpret LevelII	MK	Lecture Small Group Discussion	SAQ Viva Case solving	MCQ SAQ, LAQ Viva Case solving	Organon (V)

Hom UG-OM-II 8.1.2			Roberts Chapter XVII	Analyse the rules of susceptibility Recognize the importance of normal susceptibility Infer the relation of susceptibility with immunity			Clinical demonstration			
Hom UG-OM-II 8.1.3			Stuart Close Chapter VII	Define Susceptibility Discuss how susceptibility is modified Define deficient and excessive reaction						Organon (V)

5.8.2. Philosophy: Idiosyncrasy

Sl.No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-OM-III 8.2.1	K & S HO PBL	K HO	**Idiosyncrasy** Stuart Close Chapter VIII & Kent Chapter XXIX	List the types of Idiosyncrasy Discuss the relation between Idiosyncrasy &drug disease Differentiate between Idiosyncrasy and allergy	Cognitive Understandandinterpret LevelII	MK	Lecture Small Group Discussion	SAQ Viva	MCQ SAQ, LAQ Viva	

5.8.3. Philosophy: Suppression and Palliation

Sl. No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-OM-III 8.3.1	K & S HO PC PBL	K	**Suppression** Robert Chapter XVIII	Define Suppression Discuss various types of Suppressio	Cognitive Understandandinterpret LevelII	MK	Lecture Small Group Discussion	SAQ Viva Case solving	MCQ SAQ, LAQ Viva	

				n Detect suppression in modern practice			Clinical demonstration			
HomUG-OM-III 8.3.2			Stuart Close Ch. VI & IX	Describe the ill effects of Suppression			Lecture Clinical Demonstration	SAQ Viva Case solving	MCQ SAQ, LAQ Viva	
HomUG-OM-III 8.3.3	K & S HO P C	K SH	**Palliation** Kent Chapter XXXVII	Define Palliation Identify conditions where palliation is required	Cognitive Understandandinterpret LevelII	MK	Lecture Small Group Discussion Clinical demonstration	MCQ SAQ Viva	MCQ SAQ, LAQ Viva	**Repertory (H)**
HomUG-OM-III 8.3.4	PBL CS		Roberts Chapter XIX	Discuss the law of Palliation and its application in daily practice						

5.8.4. Philosophy: Remedy Reaction and Second Prescription

Sl. No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-OM-III 8.4.1	K & S HO PC PBL CS	K KH SH SH	**Remedy reaction** Kent Chapter XXXIV & XXXV Roberts Chapter XIV	List the different Observations of Kent after the action of the remedy Discuss the prognosis of each of the observations Demonstrate these observations in the OPD Identify the most necessary attribute of the	Cognitive Understandandinterpret LevelII	MK	Lecture Small Group Discussion Clinical demonstration	MCQ SAQ Viva	MCQ SAQ, LAQ Viva	

				homeopathic physician Recognise the significance of various aggravations and amelioration Identify the potential risks associated with the use of high potencies, particularly in patients with advanced or incurable diseases Determine the appropriate course of action based						

				on the patient's reaction to the remedy						
HomUG-OM-III 8.4.2	K & S HO PBL	K	**Second Prescription** Kent Chapter XXXVI	Define Second Prescription List the types of	Cognitive Understandandinterpret LevelII	MK	Lecture Small Group Discussion	MCQ SAQ Viva	MCQ SAQ, LAQ Viva	Practice of Medicine (V) Gynae and Obst. (V) Surgery

	PC CS		Roberts Chapter XVI	Second prescription Identify the conditions requiring different second prescriptions Diagnose the conditions requiring antidote	C III		Clinical demonstration Clinical demonstration	Case solving Case solving	Case solving Case solving	(V) Materia Medica Repertory

5.8.5. Philosophy: Posology

Sl. No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-OM-III 8.5.1	K & S HO	K	**Posology** Robert Ch. XII, XIII	Summarise the historical context of homoeopathic dosage Explain the concept of the dynamic	Cognitive Understandandinterpret LevelII	MK	Lecture Small Group Discussion Clinical demonstration	MCQ SAQ Viva	MCQ SAQ, LAQ Viva	

				nature of disease and its implication for homoeopathic dosage Relate the principle of the minimum dose to the dynamic nature of disease Explain Hahnemann's observations on the primary and secondary actions of drugs and their relevance to homoeopathic dosage Describe the concept of homoeopathic						

				aggravation and its significance in dosage determination Illustrate the importance of individual susceptibility in determining the appropriate dose Interpret the relationship between potency and the degree of similarity between drug symptoms and disease symptoms Discuss the dangers of using large doses in homoeopathic						

				practice						
HomUG-OM-III 8.5.2			Stuart Close Chapter XIII	Estimate the importance of posology in homœopathy Define the concept of the minimum dose Distinguish between physiological, therapeutic, and pathogenetic doses List the factors that influence the choice of dose Explain how to assess the susceptibility of a patient						

				Describe how the stage and nature of the disease influence the choice of dose Describe the principles of dose repetition						

5.9. Philosophy : Hahnemannian classification of diseases further insight and correlation with scope and limitation

Sl. No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-OM-II 9.1	K & S HO PC	K	**Kent's Chapter XVII**	Distinguish between acute and chronic diseases Validate the impact of drug use on chronic diseases	C-II C-III	DK	Lecture Small Group Discussion Clinical Demonstration	MCQ SAQ	MCQ SAQ Viva	

HomUG -OM-II 9.2	K & S HO PC		**Kent's Chapter XVIII**	Discuss the concept of Psora as the fundamental cause of all chronic diseases Describe the evolution and progression of Psora Recognize the impact of suppressive treatments on Psora Explain the importance of observing the backward progression of disease Analyse the role of acute remedies in relation to Psora Differentiate between acute	C-II	DK	Lecture Small Group Discussion Clinical Demonstration	MCQ SAQ	MCQ SAQ LAQ Viva	

				and chronic miasms Justify the significance of detailed case taking in understanding Psora Recognize the value of homeopathic treatment in addressing Psora			Clinical Demonstration			
HomUG-OM-II 9.3	K & S HO PC		**Kent's Chapter XIX**	Explain the relationship between psora, syphilis, and sycosis Describe the historical development and progression of psora Analyse the	C-II	DK	Lecture Small Group Discussion	MCQ SAQ	MCQ SAQ LAQ Viva	

				impact of allopathic treatment on the development of psora Identify the key symptoms and characteristics of psora						
HomUG -OM-II 9.4	K & S HO PC		**Kent's Chapter XX**	Describe the general characteristics of syphilis Recognise that syphilis, unlike acute miasms, has contagion in all its stages Analyse the challenges in immediately detecting syphilis infection	C-II	DK	Lecture Small Group Discussion	MCQ SAQ Viva Quiz	MCQ SAQ LAQ Viva	

				contracted in the secondary or tertiary stage Summarise how homoeopathic remedies act on syphilis in different stages Identify the common outward manifestations of early-stage syphilis			Clinical Demonstrati on			
HomUG -OM-II 9.5	K & S HO PC		**Kent's Chapter XXI**	Differentiate between acute and chronic gonorrhoea Recognise the serious consequences of suppressing chronic gonorrhoea Identify sycosis and distinguish it from other	C-II	DK	Lecture Small Group Discussion Clinical Demonstrati	MCQ SAQ	MCQ SAQ LAQ Viva	

				miasms Estimate the impact of sycosis on marriage and offspring			on			
HomUG-OM-II 9.6	K & S HO PC		**Scope and Limitations of Homeopathy**	Define the scope of homoeopathy and its limitations Discuss the significance of symptoms in homoeopathic practice Identify the different causes of disease and their relation to homoeopathic treatment	C-II	MK	Lecture Small Group Discussion Clinical Demonstration	MCQ SAQ	MCQ SAQ LAQ Viva	

				Argue the ethical and practical challenges of applying homoeopathic principles						
HomUG-OM-II 9.7	K & S HO PC		**General Pathology of Homeopathy**	Differentiate between homeopathic and conventional general pathology Analyse Hahnemann's classification of chronic diseases based on their causative factors Discuss the doctrine of latency in chronic diseases like syphilis, gonorrhea, and tuberculosis Discuss the role	C-II	DK	Lecture Small Group Discussion	MCQ SAQ Viva	MCQ SAQ LAQ Viva	

				of metastasis in disease manifestation and the potential dangers of symptom suppression Recognise and address idiosyncrasies and drug diseases in patients						

5.10. J.H. Allen's The Chronic Miasms – Psora and Pseudo-psora; Sycosis

Sl. No	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
HomUG-OM-III 10.1	K & S HO P C	K	Psora & Pseudo psora	Define and explain the concept of chronic miasms in homeopathy Discuss Hahnemann's concept of chronic diseases as stemming from miasms	C-II	MK	Lecture Small Group Discussion	MCQ SAQ	MCQ SAQ LAQ Viva	

				Recognise the signs and symptoms of latent and developed psora Appreciate the dangers of suppressing the external symptoms of psora Illustrate the importance of treating the internal miasm for a complete cure						
HomUG -OM-III 10.2	K & S HO PC	K		Describe the process of infection and development of psora Discuss the concept of pseudo-psora and its relationship to the combination of different miasms Explain the importance of recognizing miasmatic	C-II	MK	Lecture Small Group Discussion	MCQ SAQ Viva	MCQ SAQ LAQ Viva	

				influences in case analysis and remedy selection Identify the limitations and errors that can arise in treating chronic miasmatic diseases Discuss the broader implications of miasmatic theory for understanding health, disease, and the human condition						
HomUG-OM-III 10.3	K & S HO PC	K	Miasms & their relation to pathology	Explain the difference between the two distinct schools of homeopathy Identify three points in Dr. Hughes' teachings that emphasize the value of the law of similars in homeopathy	C-II	MK	Lecture Small Group Discussion	MCQ SAQ	MCQ SAQ LAQ Viva	

				Explain why Hahnemann rejected pathology in favour of symptomatology Discuss the relationship between pathology and miasms						
HomUG -OM-III 10.4	K & S HO PC	K	Secondary Diseases or Sequelae	Explain the concept of chronic miasms and their role in disease development Describe the impact of suppressing acute diseases on the underlying miasmatic state Analyze the relationship between acute miasmatic diseases and chronic miasms	C-II	MK	Lecture Small Group Discussion	MCQ SAQ	MCQ SAQ LAQ Viva	

HomUG -OM-III 10.5	K & S HO PC	K	Bacteria & their relation to pathology	Explain the relationship between bacteria and pathology Analyze the limitations of focusing solely on the physical and chemical aspects of disease Discuss the limitations of cellular pathology in explaining the origin and development of disease Evaluate the contributions of Hahnemann and Virchow to the understanding of disease	C-II	MK	Lecture Small Group Discussion	MCQ SAQ	MCQ SAQ LAQ Viva	

	K & S HO PC	K	The relationship of the miasms to abnormal growths	Explain the relationship between miasms and abnormal growths Describe the concept of potentiality in the context of miasms Analyze the progression of disease from a miasmatic perspective Evaluate the role of suppression in miasmatic disease	C-II	MK	Lecture Small Group Discussion	MCQ SAQ	MCQ SAQ LAQ Viva	
HomUG-OM-III 10.6	K & S HO PC	K	Scrofula & its miasmatic basis	Define scrofula Explain the relationship between scrofula, syphilis, and psora Describe the symptoms and characteristics of scrofula	C-II	MK	Lecture Small Group Discussion	MCQ SAQ	MCQ SAQ LAQ Viva	

				Discuss the miasmatic treatment of scrofula						
HomUG-OM-III 10.7	K & S HO PC	K	Basic symptoms of Psora	Identify the symptoms of Psora in various system	C-II	MK	Lecture Small Group Discussion	MCQ SAQ	MCQ SAQ LAQ Viva	
HomUG-OM-III 10.8	K & S HO PC	K	Sycosis	Define and differentiate between Sycosis and gonorrhoea simplex Identify the primary, secondary, and tertiary stages of Sycosis and their accompanying symptoms Explain the dangers of suppressing Sycosis, particularly through local treatment and operative methods Describe the impact of Sycosis on various systems	C-II	MK	Lecture Small Group Discussion	MCQ SAQ	MCQ SAQ LAQ Viva	

				and organs, including the reproductive, urinary, respiratory, digestive, and nervous systems Discuss the homeopathic approach to treating Sycosis, including the use of anti-sycotic remedies and the importance of addressing the underlying miasm						

6. **Teaching Learning Methods for lectures (Theory) and non-lectures** (clinical/ practical/demonstrative)

Lectures (Theory)	**Non-lectures (Practical)**
Lectures	Clinical demonstration
Integrated lectures	Problem based group discussion, Symposium
Library reference	Case based learning
Self-learning	Tutorials
	Seminars
	Assignments

Different teaching-learning methods must be applied for understanding the subject.
There has to be classroom lectures, small group discussions, case discussion where case-based learning (CBL) and problem-based learning (PBL) are especially helpful.
Audio visual (AV) methods for classroom teaching may be an innovative aid to demonstrate the related graphics and animations etc. In case of clinical demonstration – DOAP (Demonstration – Observation – Assistance – Performance) is very well applicable.

Special attention to be paid for following during small group interactions

Project work with its presentations
Practicing evaluation & feedback system-after project work, assignment, and group discussion
Journal Entry -cases with emphasis on case taking, case processing

7. Details of assessment

7.1 Overall Scheme of assessment

<table>
<tr><td>Sr No</td><td>Professional Course</td><td colspan="2">Term I (1-6 Months)</td><td colspan="3">Term II (7-12 Months)</td></tr>
<tr><td rowspan="2">1.</td><td rowspan="2">Third Professional BHMS</td><td>PA I (end of 3 months)</td><td>TT I (end of 6 months)</td><td>PA II (end of 9 months)</td><td colspan="2">FUE (end of 12 months)</td></tr>
<tr><td>20 Marks
Viva
Practical / Viva</td><td>100 Marks
Practical / Viva
i. Viva voce 50 Marks
ii. Clinical Performance- 50 Marks
Case taking, Case solving Miasmatic Diagnosis</td><td>20 Marks
Practical / Viva</td><td>200 Marks
Theory</td><td>200 Marks
(Clinical/Practical +Viva+ IA)</td></tr>
</table>

8.2.(Summative) Number of Papers and Marks distribution

Sr No	Course Code	Paper	Theory	Practicals	Viva voce	Internal Assessment **	Grand Total
1	HomUG-OM-III	1	100 Marks	100 Marks i. Short Case-20 Marks ii. Long Case-50 Marks iii. Case presentation/ Communication Skills-10 Marks iv. Journal*-20 Marks	80 Marks	20 Marks	400 Marks
		2	100 Marks				

* Journals with 15 cases (10 long cases & 5 Short cases) needs to be maintained by the students which should include Case Taking, Case Processing-Analysis& Evaluation, Investigations, Probable and Differential Diagnosis (with ICD 11), Hahnemannian Classification of disease in that case, Susceptibility, Miasmatic understanding of the case, Remedy with reasons.

****Method of calculation of Internal assessment marks for Final University Examination**

Marks of IA- (Marks of PA-1 + Marks of TT + Marks of PA-2) / 140 X 20

7.3 Paper Layout

Summative Assessment (FUE):

Theory -200 Marks

Paper I and II: Each Paper will have distribution as follows

MCQ	**10 Marks**
SAQ	**40 Marks**
LAQ	**50 Marks**

7.4 Distribution of questions for theory exam

Sr. No	Paper I A	B	C	Type of Questions D		
	List of Topics	**Term**	**Marks**	**MCQ (1 Mark)**	**SAQ (5 Marks)**	**LAQ (10 Marks)**
1	Aphorisms 1-145	**I & II**	**17**	**2**	**1**	**1**
2	Actions of medicine- points necessary for the cure (§ 146-149)	I	**1**	**1**	**-**	**-**
3	Management and Treatment of various kind of diseases- acute/chronic/surgical/one sided/epidemic, etc (§ 150-209)	I	**22**	**2**	**2**	**1**
4	Management and Treatment of various kind of diseases- (§ 231-244)	II	**22**	**2**	**2**	**1**
5	Repetition, Follow up and Prejudice in Prescription (§ 245-258)	II	**15**	**-**	**1**	**1**
6	Pharmacy, Routes of Administration and some fundamental Laws of Homeopathy (§264-285)	II	**17**	**2**	**1**	**1**
7	Diet and Regimen, Ancillary-auxiliary measures (§259-263, §285-291)	II	**6**	**1**	**1**	**-**
Sr. No	**Paper II**			**D Type of Questions**		
	A List of Topics	**B Term**	**C Marks**	**MCQ (1 Mark)**	**SAQ (5 Marks)**	**LAQ (10 Marks)**
1	Hahnemann's Preface and Introduction to Organon of Medicine	I	**6**	**1**	**1**	
2	Hahnemann's Theory of Chronic Diseases	I	**22**	**2**	**2**	**1**
3	Susceptibility, idiosyncrasy, suppression, palliation, remedy reaction, Secondprescription, posology	II	**33**	**3**	**2**	**2**

4	Hahnemannian classification of diseases further insight and correlation with scope and limitation	II	**22**	**2**	**2**	**1**
5	J.H. Allen's The Chronic Miasms – Psora and Pseudo-psora; Sycosis	II	**17**	**2**	**1**	**1**

7.5 Theme-wise distribution

Paper I

No	Chapter / Topic	Term	Theme	Marks	LAQ	SAQ	MCQ
1	Aphorisms 1-145	I & II	A	**18**	**1**	**1**	**3**
2	Management and Treatment of various kind of diseases-acute/chronic/surgical/one sided/epidemic, etc (§ 150-209 & § 231-244)	I & II	B	**44**	**2**	**4**	**4**
3	Repetition, Follow up and Prejudice in Prescription (§ 245-258)	II	C	**15**	**1**	**1**	**-**
4	Pharmacy, Routes of Administration and some fundamental Laws of Homeopathy (§264-285)	II	D	**17**	**1**	**1**	**2**
5	Diet and Regimen, Ancillary-auxiliary measures (§259-263, §285-291)	II	E	**6**	**-**	**1**	**1**

Paper II

No	Chapter / Topic	Term	Theme	Marks	LAQ	SAQ	MCQ
1	Hahnemann's Preface and Introduction to Organon of Medicine	I	A	**6**	-	1	1
2	Hahnemann's Theory of Chronic Diseases	I	C	**22**	1	2	2
3	Susceptibility, idiosyncrasy, suppression, palliation, remedy reaction, Secondprescription, posology	II	B	**33**	2	2	3
4	Hahnemannian classification of diseases further insight and correlation with scope and limitation	II	D	**22**	1	2	2
5	J.H. Allen's The Chronic Miasms – Psora and Pseudo-psora; Sycosis	II	E	**17**	1	1	2

7.6 Question Paper blueprint: Paper I

A Question Serial Number	B Type of Question	Question Paper Format (Refer Table 8.5 for themes)
Q.1	Multiple choice Questions (MCQ) 10 Questions 1mark each All compulsory	1. ThemeA 2. Theme A 3. Theme A 4. Theme B 5. Theme B 6. Theme B 7. Theme B 8. Theme D 9. Theme D 10. Theme E
Q.2	Short Answer Questions (SAQ) 8 Questions 5 marks each All compulsory	1. Theme A 2. Theme B 3. Theme B 4. Theme B 5. Theme B 6. Theme C 7. Theme D 8. Theme E
Q.3	Long Answer Questions (LAQ) 5 Questions 10 marks each All compulsory	1. ThemeA 2. Theme B 3. Theme B 4. Theme C 5. Theme D

Paper II

A Question Serial Number	B Type of Question	Question Paper Format (Refer Table 8.5 for themes)
Q.1	Multiple choice Questions (MCQ) 10 Questions 1mark each All compulsory	1. Theme A 2. Theme B 3. Theme B 4. Theme B 5. Theme C 6. Theme C 7. Theme D 8. Theme D 9. Theme E 10. Theme E
Q.2	Short Answer Questions (SAQ) 8 Questions 5 marks each All compulsory	1. Theme A 2. Theme B 3. Theme B 4. Theme C 5. Theme C 6. Theme D 7. Theme D 8. Theme E
Q.3	Long Answer Questions (LAQ) 5 Questions 10 marks each All compulsory	1. Theme B 2. Theme B 3. Theme C 4. Theme D 5. Theme E

8. **List of Recommended Books**

- Hahnemann Samuel,Organon of Medicine 6th edition translated By W. Boericke
- Hahnemann Samuel,Organon of Medicine 5th&6th combined edition translated By R. E. Dudgeon
- Hahnemann Samuel, The Chronic Diseases, their peculiar Nature and their Homeopathic Cure, Second Edition, translated by Prof. Louis H. Tafel, Vol. I
- Allen J. Henry, The Chronic Miasms, Psora and Pseudo Psora, Vol. I and II
- Kent J.T. Lectures on Homoeopathic Philosophy
- Roberts H. A. The Principle and Art of Cure By Homoeopathy
- Close Stuart, The Genius of Homoeopathy Lectures and Essay on Homoeopathic Philosophy
- Sarkar B. K., Commentary on Organon
- Das A. K.,A Treatise on Organon of Medicine
- Schmidt Pierre, The Art of Case Taking and Interrogation
- Goel Sumit, A study on Organon of Medicine and Homoeopathic Philosophy

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COMPETENCY BASED DYNAMIC CURRICULUM FOR

THIRD BHMS PROFESSIONAL COURSE

(Applicable from Batch 2022-2023 onwards for 5 years or until further notification by National Commission for Homoeopathy whichever is earlier)

(Homoeopathic Repertory and Case-taking)

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JAWAHAR LAL NEHRU BHARTIYA CHIKITSA AVUM HOMOEOPATHY ANUSANDHAN BHAVAN

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Subject name- Homoeopathic Repertory and Case Taking

Subject code- HomUG-R-III

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1. Course Outcomes (CO)-

At the end of BHMS course, the learner will be able to:

i. Explain the need and utility of repertory as a tool to find the simillimum and in the study of Materia Medica.
ii. Describe the philosophical backgrounds, construction, utility and limitation of Kent repertory, BTBP, BBCR, Boericke repertory, other clinical repertories and modern repertories.
iii. Able to describe the various dimensions of case taking and able to demonstrate case taking in moderate and difficult cases.
iv. Classify the symptoms, evaluate the symptoms according to their importance and construct the totality of symptoms-based on different philosophies (Dr. Kent, Dr. Boenninghausen, Dr. Hahnemann, Garth Boericke).
iv. Choose an appropriate approach for the case, construct the Repertorial Totality and select the appropriate rubrics and technique of repertorisation.
v. Identify the medium, method, process and technique of Repertorisation.
vi. Display empathy with the patient and family during case taking.
vii. Communicate to the patient and attendants the need for sharing patient related information for a complete homoeopathic case taking.
viii. Develop ability to apply different case taking skills.
ix. Search for the appropriate rubrics in different repertory.
x. Understanding and evolution of modern repertories, computerized repertories, operate and use software-based repertories for repertorization.

2. Learning objectives(LO)-

At the end of III BHMS, the learner will be able to:

i. Demonstrate case taking in Moderate acute and chronic cases.
ii. Classify symptoms, evaluate the symptoms according to their importance and construct the totality of symptoms as per the philosophy of Dr. Boenninghausen, Dr. Kent and Dr. Boger.
iii. Describe the philosophical background, construction, scope, limitation and utility of BTPB, Kent's repertory and BBCR.
iv. Choose appropriate repertory (BTPB, Kent's repertory, BBCR) and method of Repertorisation for construction of repertorial totality and selection of appropriate rubric

v. Identify the medium, method, process and technique of Repertorisation.

3. Course Content and its term-wise distribution

3.1 Term I- Case taking and case processing:

3.1.1 Demonstrate case taking in moderate acute and chronic cases
3.1.2 Classification of symptoms
3.1.3 Analysis of case according to the philosophy of Dr. Boenninghausen, Dr. Kent and Dr. Boger.
3.1.4 Evaluation of symptoms according to the philosophy of Dr. Boenninghausen, Dr. Kent and Dr. Boger.
3.1.5 Construction of totality of symptoms according to the philosophy of Dr. Boenninghausen, Dr. Kent and Dr. Boger.
3.1.6 Classification of repertory - need, basis of classification, advantage, disadvantage and adaptability of each type.
3.1.7 Steps of Repertorisation
3.1.8 Identify the medium, method, process and technique of Repertorisation
3.1.9 Construction of Repertorial Syndrome (RS) and Potential Differential Field (PDF) of a Repertorial Totality (RT).

3.2 Term II-Study of general repertories and their application:

3.2.1 Study of the philosophical background, construction, scope, limitation and utility of BTPB, Kent and BBCR Repertories.
3.2.2 Identify chapters and locate rubrics for symptoms / conditions related to Gynaecology, Obstetrics, Surgery and Practice of Medicine.
3.2.3 Understanding miasm and identify rubrics related to symptoms of each miasm from BTPB, Kent and BBCR Repertories.

4. Teaching Hours-

4.1 Gross division of teaching hours- lectures and non-lectures

Homoeopathic Repertory and Case Taking		
Year	**Teaching hour - lecture**	**Teaching hour - Non-lecture**
III BHMS	**100**	**50**

4.2 Teaching hour Lectures (Theory)

S. No.	List of topics	Hours
	Term 1	
1.	Demonstration of homoeopathic case taking in moderate acute cases	**02**
2.	Demonstration of homoeopathic case taking in moderate chronic cases	**03**
3.	Classification of symptoms	**03**
4.	Analysis of case according to the philosophy of Dr. Boenninghausen.	**02**

5.	Analysis of case according to the philosophy of Dr. Kent.	**02**
6.	Analysis of case according to the philosophy of Dr. Boger.	**02**
7.	Evaluation of symptoms according to the philosophy of Dr. Boenninghausen.	**02**
8.	Evaluation of symptoms according to the philosophy of Dr. Kent	**02**
9.	Evaluation of symptoms according to the philosophy of Dr. Boger.	**02**
10.	Construction of totality of symptoms according to the philosophy of Dr. Boenninghausen.	**03**
11.	Construction of totality of symptoms according to the philosophy of Dr. Kent.	**03**
12.	Construction of totality of symptoms according to the philosophy of Dr. Boger.	**03**
13.	Classification of repertory - need, basis of classification, advantage, disadvantage and adaptability of each type.	**03**
14.	Steps of Repertorisation	**03**
15.	Identify the medium, method, process and technique of Repertorisation.	**08**
16.	Construction of Repertorial Syndrome and Potential Differential Field	**05**
Term 2		
17.	Study of the philosophical background, construction, scope, limitation and utility of Boenninghausen's Therapeutic Pocket Book (BTPB)	**15**

18.	Study of the philosophical background, construction, scope, limitation and utility of Repertory of Homoeopathic Materia Medica by J T Kent (Kent's Repertory)	**15**
19.	Study of the philosophical background, construction, scope, limitation and utility of Boger Boenninghausen's Characteristics and Repertory (BBCR).	**15**
20.	Identify chapters and locate rubrics for symptoms/ conditions related to Gynaecology, Obstetrics, Surgery and Practice of Medicine.	**05**
21.	Understanding miasm and identify rubrics related to symptoms of each miasm from BTPB, Kent and BBCR Repertories.	**02**
	TOTAL	**100**

4.3 Teaching hours Non-lecture (Clinical/practical/demonstrative activities)

S.No.	Non-lecture activity	Term	Time allotted per activity (hour)
1	**Clinical**	**I & II**	**35**
2	**Demonstrative**	**I & II**	**15**
	2.1 Seminar/ Tutorial		10
	2.2 Problem based/ Case based learning/Assignment/ Symposium/ Group Discussion/ Rubric hunting exercises		05
	TOTAL		**50**

5. Content Mapping (Competencies Table)

5.1 Topic - Demonstration of homoeopathic case taking in moderate acute cases

S. No.	Domain of competency	Millers	Content	SLO	Bloom/ Gilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-R-III-1.1	K/HO	Knows	Knowledge, skill and attitude about patient and doctor communication and examination in Moderate acute	Recall definition of acute case and Aphorisms dealing with Acute Case Taking	Cognitive/ Level -1 Remembers/ Recalls	Must know	Lecture Quiz Small Group Discussion	MCQ Viva	MCQ LAQ Viva	**Horizontal integration with Organon of Medicine**
HomUG-R-III-1.2	K/HO/ PC	Knows how		Explain the basic structure of case taking and list the steps of case taking	Cognitive/ Level -1 Remembers/	Must know	Lecture Clinical class Small Group	MCQ Viva Journal	MCQ LAQ Viva	**Spiral Integration**

			case	in moderate acute cases	Recalls		Discussion			**in IV** **BHMS**
HomUG-R-III-1.3	K/HO/ PC	Shows how		Demonstration of case taking in moderate chronic cases	Psychomotor Level -1 Interpret/ Decide/ Demonstrate	Desirable	Lecture/ Clinical Class Small Group Discussion Integrated discussion	MCQ Viva Journal	MCQ Viva	
HomUG-R-III-1.4	K/HO/ PC	Shows how		Observe the skills of clinical examination of moderate chronic case	Psychomotor Level -1 Interpret/ Decide/ Demonstrate	Desirable	Lecture/ Clinical Class Small Group Discussion Integrated	MCQ Viva Journal	MCQ Viva	

							Discussion			

5.2 Topic - Demonstration of homoeopathic case taking in moderate chronic cases

S. No.	Domain of competency	Millers	Content	SLO	Bloom/ Gilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-R-III-2.1	**K/HO**	**Knows**	Knowledge, skill and attitude about patient and doctor communication and examination	Recall the definition of chronic case and State the Aphorisms dealing with chronic Case Taking	Cognitive/ Level -1 Remembers / Recalls	Must know	Lecture Small Group Discussion Quiz	MCQ Viva	**LAQ**	**Horizontal integration with Organon of Medicine**
HomUG-R-III-	**K/HO/PC**	**Knows**		Discuss chronic case taking. List	Cognitive/ Level -1	Must know	Lecture Small	MCQ Viva	**LAQ**	

2.2		**how**	in Moderate chronic case	the steps of chronic case taking.	Remembers / Recalls		Group Discussion	Assignment Journal		**Spiral Integration in IV BHMS**
HomUG-R-III-2.3	**K/HO/PC**	**Shows how**		Demonstration of case taking in moderate chronic cases	Psychomotor Level -1 Interpret/ Decide/ Demonstrate	Desirable to know	Lecture/ Clinical Class Small Group Discussion Integrated discussion	MCQ Viva Assignment Journal		
HomUG-R-III-2.4	**K/HO/PC**	**Shows how**		Observe the skills of clinical examination of moderate	Psychomotor Level -1 Interpret/	Desirable to know	Lecture/ Clinical Class Small	MCQ Viva Journal		

				chronic case	Decide/ Demonstrate		Group Discussion Integrated Discussion			

5.3 Topic - Classification of symptoms

S. No.	Domain of competency	Millers	Content	SLO	Bloom/ Gilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-R-III-3.1	**K**	**Knows**	Acquiring knowledge and skill of	Define symptom & symptomato-	Cognitive/ Level -1	Must know	Lecture Small	**MCQ** **Viva**		**Horizontal** **integratio**

			understanding symptoms and their importance in patient care	logy	Remembers / Recalls		Group Discussion	**Assignment**		**n with Organon of Medicine Spiral Integration in III & IV BHMS**
HomUG-R-III-3.2	**K/HO**	**Knows how**		Enumerate various types of symptoms	Cognitive/ Level -1 Remembers / Recalls	Must know	Lecture Small Group Discussion	**MCQ Viva Assignment**	**SAQ**	
HomUG-R-III-3.3	**K/HO**	**Knows how**		Explain types of symptoms according to Hahnemann	Cognitive/ Understand and interpret Level II	Must know	Lecture Small Group Discussion Integrated discussion	**MCQ Viva Assignment**	**SAQ**	
HomUG-R-III-	**K/HO**	**Knows**		Explain types of symptoms according to	Cognitive/	Must know	Lecture Small	**MCQ**	**SAQ**	

3.4		**how**		Boenninghausen	Understand and interpret Level II		Group Discussion Integrated discussion	**Viva** **Assignment**		
HomUG-R-III-3.5	**K/HO**	**Knows how**		Explain types of symptoms according to Kent	Cognitive/ Understand and interpret Level II	Must know	Lecture Small Group Discussion Integrated discussion	**MCQ** **Viva** **Assignment**	**SAQ**	
HomUG-R-III-3.6	**K/HO**	**Knows how**		Explain types of symptoms according to Boger	Cognitive/ Understand and interpret	Must know	Lecture Small Group Discussio	**MCQ** **Viva** **Assignment**	**SAQ**	

					Level II		n Integrated discussio n			
HomUG-R-III-3.7	**K/HO**	**Knows** **how**		Explain types of symptoms according to Boericke	Cognitive/ Understand and interpret Level II	Must know	Lecture Small Group Discussio n Integrated discussio n	**MCQ** **Viva** **Assignment**	**SAQ**	
HomUG-R-III-3.8	**K/HO/PC**	**Shows** **how**		Analyze and demonstrate importance of various types of symptoms for totality creation and repertorisation	Psychomotor / Problem Solving	Must know	Lecture/ Clinical Class Small Group Discussio	**Viva** **Assignment**	**SAQ**	

					Level I		n Integrated Discussio n			

5.4 Topic - Analysis of case according to the philosophy of Dr. Boenninghausen.

S. No.	Domain of competency	Millers	Content	SLO	Bloom/ Gilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-R-III-4.1	**K/HO**	**Knows**	Acquiring knowledge and skill of understanding symptoms, analysis of symptoms according to the philosophy of	Identify group of symptoms as per the philosophy of Boenninghausen	Cognitive/ Level -II Understand & interpret	Must know	Lecture / Small Group Discussio n	**Viva** **Journal**	**SAQ**	**Horizontal integration with Organon of**
HomUG-R-III-	**K/HO**	**Knows**		Discuss analysis of symptoms of	Cognitive/	Must know	Lecture / Small	**Viva**	**SAQ**	

4.2		**how**	Boenninghausen	case according to the philosophy of Boenninghausen	Level -II Understand & interpret		Group Discussion	**Journal**		**Medicine** **Spiral Integration in IV BHMS**
HomUG-R-III-4.3	**K/HO**	**Shows how**		Demonstration of analysis of symptoms of case according to the philosophy of Boenninghausen	Psychomotor / observe Level I	Must know	Lecture / clinical class Small Group Discussion	**Viva** **Journal**	**SAQ**	
HomUG-R-III-4.4	**K/HO**	**Does**		Justify analysis of symptoms of case according to the philosophy of Boenninghausen	Affective/ Level I	Desirable to know	Lecture Clinical class Small Group Discussion Integrated	**Viva** **Journal**	**SAQ**	

							Discussion			

5.5 Topic - Analysis of case according to the philosophy of Dr. Kent

S. No.	Domain of competency	Millers	Content	SLO	Bloom/ Gilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-R-III-5.1	**K/HO**	**Knows**	Acquiring knowledge and skill of understanding symptoms, analysis of symptoms according to the philosophy of Kent	Identify group of symptoms as per philosophy of Kent	Cognitive/ Level -II Understand & interpret	Must know	Lecture / Small Group Discussion	**Viva Journal**	**SAQ**	**Horizontal integration with Organon of Medicine**
HomUG-R-III-5.2	**K/HO**	**Knows how**		Discuss analysis of symptoms of case according to philosophy	Cognitive/ Level -II Understand & interpret	Must know	Lecture / Small Group Discussio	**Viva Journal**	**SAQ**	

				of Kent			n			
HomUG-R-III-5.3	**K/HO**	**Shows how**		Demonstration of analysis of symptoms of case according to philosophy of Kent	Psychomotor / observe Level I	Must know	Lecture / clinical class Small Group Discussion	**Viva** **Journal**	**SAQ**	**Spiral Integration in IV BHMS**
HomUG-R-III-5.4	**K/HO**	**Does**		Justify analysis of symptoms of case according to philosophy of Kent	Affective/ Level I	Desirable to know	Lecture Clinical class Small Group Discussion Integrated discussion	**Viva** **Journal**	**SAQ**	

5.6 Topic - Analysis of case according to the philosophy of Dr. Boger

S. No.	Domain of competency	Millers	Content	SLO	Bloom/ Gilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-R-III-6.1	**K/HO**	**Knows**	Acquiring knowledge and skill of understanding symptoms, analysis of symptoms according to the philosophy of Boger	Identify group of symptoms as per philosophy of Boger	Cognitive/ Level -II Understand & interpret	Must know	Lecture / Small Group Discussion	**MCQ Viva Journal**	**SAQ**	**Horizontal integration with Organon of Medicine Spiral Integration**
HomUG-R-III-6.2	**K/HO**	**Knows how**		Discuss analysis of symptoms of case according to philosophy of Boger	Cognitive/ Level -II Understand & interpret	Must know	Lecture / Small Group Discussion	**MCQ Viva Journal**	**SAQ**	
HomUG-R-III-6.3	**K/HO**	**Shows how**		Demonstration of analysis of symptoms of case according to philosophy	Psychomotor / observe Level I	Must know	Lecture / clinical class Small	**MCQ Viva Journal**	**SAQ**	

				of Boger			Group Discussion			**in IV BHMS**
HomUG-R-III-6.4	**K/HO**	**Does**		Justify analysis of symptoms of case according to philosophy of Boger	Affective/ Level I	Desirable to know	Lecture Clinical class Small Group Discussion Integrated discussion	**MCQ Viva Journal**	**SAQ**	

5.7 Topic - Evaluation of symptoms according to the philosophy of Dr. Boenninghausen.

S. No.	Domain of competency	Millers	Content	SLO	Bloom/ Gilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-R-III-7.1	**K/HO**	**Knows**	Acquiring knowledge and skill of understanding value of symptoms according to the philosophy of Boenninghausen	Define evaluation of symptom	Cognitive/ Level -I Remember & recall	Must know	Lecture / Small Group Discussion	**MCQ Viva Journal**	**MCQ SAQ**	**Horizontal integration with Organon of Medicine Spiral Integration**
HomUG-R-III-7.2	**K/HO**	**Knows how**		Discuss concept of value of symptoms according to the philosophy of Boenninghausen	Cognitive/ Level -II Understand & interpret	Must know	Lecture / Small Group Discussion	**MCQ Viva Journal**	**MCQ SAQ**	
HomUG-R-III-	**K/HO**	**Shows**		Demonstration of evaluation	Psychomotor / observe	Must know	Lecture / clinical	**MCQ**	**MCQ**	

7.3		**how**		of symptoms according to the philosophy of Boenninghausen	Level I		class Small Group Discussion	**Viva** **Journal**	**SAQ**	**in IV** **BHMS**
HomUG-R-III-7.4	**K/HO**	**Does**		Justify evaluation of symptoms according to the philosophy of Boenninghausen	Affective/ Level I	Desirable to know	Lecture Clinical class Small Group Discussion Integrated discussion	**MCQ** **Viva** **Journal**	**MCQ** **SAQ**	

5.8 Topic - Evaluation of symptoms according to the philosophy of Dr. Kent

S. No.	Domain of competency	Millers	Content	SLO	Bloom/ Gilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-R-III-8.1	**K/HO**	**Knows**	Acquiring knowledge and skill of understanding value of symptoms according to the philosophy of Dr. Kent	Discuss concept of value of symptoms according to the philosophy of Kent	Cognitive/ Level -I Remember & recall	Must know	Lecture / Small Group Discussion	**MCQ Viva Journal**	**MCQ SAQ**	**Horizontal integration with Organon of Medicine Spiral Integration**
HomUG-R-III-8.2	**K/HO**	**Shows how**		Demonstration of evaluation of symptoms according to the philosophy of Kent	Psychomotor / observe Level I	Must know	Lecture / clinical class Small Group Discussion	**MCQ Viva Journal**	**MCQ SAQ**	
HomUG-R-III-	**K/HO**	**Does**		Justify evaluation of	Affective/	Desirable to know	Lecture Clinical	**MCQ**	**MCQ**	

8.3				symptoms according to the philosophy of Boenninghausen	Level I		class Small Group Discussion Integrated Discussion	**Viva** **Journal**	**SAQ**	**in IV** **BHMS**

5.9 Topic - Evaluation of symptoms according to the philosophy of Dr. Boger

S. No.	**Domain of competency**	**Millers**	**Content**	**SLO**	**Bloom/ Gilbert**	**Priority**	**TL MM**	**Assessment**		**Integration**
								Formative	**Summative**	
HomUG-R-III-	**K/HO**	**Knows**	Acquiring knowledge and skill of	Discuss concept of value of	Cognitive/	Must know	Lecture / Small	**MCQ**	**MCQ**	**Horizontal**

9.1			understanding value of symptoms according to the philosophy of Dr. Boger	symptoms according to the philosophy of Boger	Level -I Remember & recall		Group Discussion	**Viva** **Journal**	**SAQ**	**integration** **with** **Organon of** **Medicine** **Spiral** **Integration** **in IV** **BHMS**
HomUG-R-III-9.2	**K/HO**	**Shows how**		Demonstration of evaluation of symptoms according to the philosophy of Boger	Psychomotor / observe Level I	Must know	Lecture / clinical class Small Group Discussion	**MCQ** **Viva** **Journal**	**MCQ** **SAQ**	
HomUG-R-III-9.3	**K/HO**	**Does**		Justify evaluation of symptoms according to the philosophy of Boger	Affective/ Level I	Desirable to know	Lecture Clinical class Small Group Discussion Integrated	**MCQ** **Viva** **Journal**	**MCQ** **SAQ**	

							discussion			

5.10 Topic - Construction of totality of symptoms according to the philosophy of Dr. Boenninghausen.

S. No.	Domain of competency	Millers	Content	SLO	Bloom/ Gilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-R-III-10.1	**K/HO**	**Knows**	Acquiring knowledge and skill of construction of totality of symptom according to the philosophy of Boenninghausen	Define Totality of symptom according to Hahnemann	Cognitive/ Level -I Remember & recall	Must know	Lecture / Small Group Discussion	**MCQ Viva Journal**	**SAQ LAQ**	**Horizontal integration with Organon of Medicine**
HomUG-R-III-10.2	**K/HO**	**Knows**		Define Totality of symptom according to Boenninghausen	Cognitive/ Level -I Remember & recall	Must know	Lecture / Small Group Discussion	**MCQ Viva Journal**	**SAQ LAQ**	

HomUG-R-III-10.3	**K/HO**	**Knows how**		Enumerate and discuss symptoms in totality according to Boenninghausen	Cognitive/ Level -II Understand & interpret	Must know	Lecture Small Group Discussion	**MCQ Viva Journal**	**SAQ LAQ**	**Spiral Integration in IV BHMS**
HomUG-R-III-10.4	**K/HO/PC**	**Shows how**		Demonstration of totality according to Boenninghausen	Psychomotor / observe Level I	Must know	Lecture Clinical class Small Group Discussion	**MCQ Viva Journal**	**SAQ LAQ**	
HomUG-R-III-10.5	**K/HO/PC**	**Does**		Justification of construction of totality according to Boenninghausen	Affective/ Level I	Desirable to know	Lecture Clinical class Small Group Discussion	**MCQ Viva Journal**	**SAQ**	

5.11 Topic - Construction of totality of symptoms according to the philosophy of Dr. Kent.

S. No.	Domain of competency	Millers	Content	SLO	Bloom/ Gilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-R-III-11.1	**K/HO**	**Knows**	Acquiring knowledge and skill of construction of totality of symptom according to the philosophy of Dr. Kent	Define Totality of symptom according to Kent	Cognitive/ Level -I Remember & recall	Must know	Lecture / Small Group Discussion	**MCQ Viva Journal**	**SAQ LAQ**	**Horizontal integration with Organon of Medicine Spiral Integratio**
HomUG-R-III-11.2	**K/HO**	**Knows how**		Enumerate and discuss symptoms in totality according to Kent	Cognitive/ Level -II Understand & interpret	Must know	Lecture Small Group Discussion	**MCQ Viva Journal**	**SAQ LAQ**	
HomUG-R-III-	**K/HO/PC**	**Shows**		Demonstration of construction	Psychomot	Must	Lecture	**MCQ**	**SAQ**	

11.3		**how**		of totality according to Kent	or / observe Level I	know	Clinical class Small Group Discussion	**Viva** **Journal**	**LAQ**	**n** **in IV** **BHMS**
HomUG-R-III-11.4	**K/HO/PC**	**Does**		Justification of construction of totality according to Kent	Affective/ Level I	Desirable to know	Lecture Clinical class Small Group Discussion	**MCQ** **Viva** **Journal**	**SAQ**	

5.12 Topic - Construction of totality of symptoms according to the philosophy of Dr. Boger.

S. No.	**Domain of competency**	**Millers**	**Content**	**SLO**	**Bloom/ Gilbert**	**Priority**	**TL MM**	**Assessment**		**Integration**
								Formative	**Summative**	

HomUG-R-III-12.1	**K/HO**	**Knows**	Acquiring knowledge and skill of construction of totality of symptom according to the philosophy of Dr. Boger	Define Totality of symptom according to Boger	Cognitive/ Level -I Remember & recall	Must know	Lecture / Small Group Discussion	**MCQ Viva Journal**	**SAQ LAQ**	**Horizontal integration with Organon of Medicine Spiral Integration in IV BHMS**
HomUG-R-III-12.2	**K/HO**	**Knows how**		Enumerate and discuss factors of totality according to Boger	Cognitive/ Level -II Understand & interpret	Must know	Lecture Small Group Discussion	**MCQ Viva Journal**	**SAQ LAQ**	
HomUG-R-III-12.3	**K/HO/PC**	**Shows how**		Demonstration of construction of totality according to Boger	Psychomotor / observe Level I	Must know	Lecture Clinical class Small Group Discussion	**MCQ Viva Journal**	**SAQ LAQ**	

HomUG-R-III-12.4	**K/HO/PC**	**Does**		Justification of construction of totality according to Boger	Affective/ Level I	Desirable to know	Lecture Clinical class Small Group Discussion	**MCQ** **Viva** **Journal**	**SAQ**	

5.13 Topic - Classification of repertory - need, basis of classification, advantage, disadvantage and adaptability of each type.

S. No.	**Domain of competency**	**Millers**	**Content**	**SLO**	**Bloom/ Gilbert**	**Priority**	**TL MM**	**Assessment**		**Integration**
								Formative	**Summative**	
HomUG-R-III-13.1	**K/HO**	**Knows**	Classify repertories according to various groups to understand	Define repertory	Cognitive/ Level -I Remember & recall	Must know	Lecture / Small Group Discussio	**MCQ** Assignment	**MCQ** **SAQ**	**Horizontal** **integration**

			advantage, disadvantage and adaptability				n			**with Organon of Medicine Spiral Integration in IV BHMS**
HomUG-R-III-13.2	**K/HO**	**Knows**		Discuss need of classification of repertory	Cognitive/ Level -I Remember & recall	Nice to know	Lecture / Small Group Discussion	**MCQ** Assignment Viva	**MCQ SAQ**	
HomUG-R-III-13.3	**K/HO**	**Knows how**		Enumerate various types of repertories and basis of classification of repertories	Cognitive/ Level -II Understand & interpret	Must know	Lecture Small Group Discussion	**MCQ** Assignment	**MCQ SAQ**	
HomUG-R-III-13.4	**K/HO**	**Knows how**		Discuss advantages and disadvantages of each type of repertory	Cognitive/ Level -II Understand & interpret	Must know	Lecture Small Group Discussion Problem	**MCQ** Assignment Viva	**MCQ SAQ**	

							based learning			
HomUG-R-III-13.5	**K/HO/PC**	**Shows how**		Demonstrate adaptability of each type of repertory with examples	Psychomotor/ skill Level I	Desirable to know	Lecture Clinical class Small Group Discussion	**MCQ** Assignment	**MCQ** **SAQ**	

5.14 Topic - Steps of Repertorisation

S. No.	**Domain of competency**	**Millers**	**Content**	**SLO**	**Bloom/ Gilbert**	**Priority**	**TL MM**	**Assessment**		**Integration**
								Formative	**Summative**	
HomUG-R-III-14.1	**K/HO**	**Knows**	Acquiring knowledge and skill to apply	Define repertorisation	Cognitive/ Level -I	Must know	Lecture / Small	**MCQ** Assignme	**LAQ**	**Horizontal** **integratio**

			steps of repertorisation in patient care		Remember & recall		Group Discussion	nt Viva		**n with Organon of Medicine Spiral Integration in IV BHMS**
HomUG-R-III-14.2	**K/HO**	**Knows**		List the steps of repertorisation	Cognitive/ Level -I Remember & recall	Must know	Lecture / Small Group Discussion	**MCQ** Assignment Viva	**LAQ**	
HomUG-R-III-14.3	**K/HO**	**Knows how**		Discuss importance of each step of repertorisation to reach at simillimum	Cognitive/ Level -II Understand & interpret	Must know	Lecture Small Group Discussion	**MCQ** Assignment Viva	**LAQ**	

5.15 Topic - Identify the medium, method, process and technique of Repertorisation.

S. No.	Domain of competency	Millers	Content	SLO	Bloom/ Gilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-R-III-15.1	**K/HO**	**Knows**	**Identify the medium, method, process and technique of**	Define medium of repertorisation	Cognitive/ Level -I Remember & recall	Must know	Lecture / Small Group Discussion	**Viva MCQ**	**MCQ SAQ**	**Horizontal integration with Organon of Medicine**
HomUG-R-III-15.2	**K/HO**	**Knows**		List the various mediums of repertorisation	Cognitive/ Level -I Remember & recall	Must know	Lecture / Small Group Discussion	**Viva MCQ Assignment**	**MCQ SAQ**	
HomUG-R-III-15.3	**K/HO/PC**	**Knows how**		Discuss application of each type of medium of	Cognitive/ Level -II Understand	Desirable to know	Lecture / clinical class Small	**Viva MCQ Assignment**	**MCQ SAQ**	

			Repertorisation.	repertorisation	& interpret		Group Discussion Case based learning			**Spiral Integration in IV BHMS**
HomUG-R-III-15.4	**K/HO**	**Knows how**		Discuss advantage & disadvantage of each type of medium of repertorisation	Cognitive/ Level -II Understand & interpret	Desirable to know	Lecture / clinical class Small Group Discussion	**Viva** **MCQ** **Assignment**	**MCQ** **SAQ**	
HomUG-R-III-15.5	**K/HO**	**Knows**		Define method of repertorisation	Cognitive/ Level -I Remember & recall	Must know	Lecture / Small Group Discussion	**Viva** **MCQ** **Assignment**	**MCQ** **SAQ**	

HomUG-R-III-15.6	**K/HO**	**Knows**		List the various method of repertorisation	Cognitive/ Level -I Remember & recall	Must know	Lecture / Small Group Discussion	**Viva MCQ Assignment**	**MCQ SAQ**	
HomUG-R-III-15.7	**K/HO/PC**	**Knows how**		Discuss advantage & disadvantage of each method of repertorisation	Cognitive/ Level -II Understand & interpret	Desirable to know	Lecture / clinical class Small Group Discussion	**Viva MCQ Assignment**	**MCQ SAQ**	
HomUG-R-III-15.8	**K/HO**	**Knows**		Define process of repertorisation	Cognitive/ Level -I Remember & recall	Nice to know	Lecture / Small Group Discussion	**Viva MCQ Assignment**	**MCQ SAQ**	
HomUG-R-III-				Discuss types of processes of	Cognitive/ Level -I	Nice to know	Lecture / Small	**Viva MCQ**	**MCQ SAQ**	

15.9				repertorisation	Remember & recall		Group Discussion	**Assignment**		
HomUG-R-III-15.10	**K/HO**	**Knows**		Discuss advantage & disadvantage of each type of process of repertorisation	Cognitive/ Level -I Remember & recall	Nice to know	Lecture / Small Group Discussion	**Viva MCQ Assignment**	**MCQ SAQ**	
HomUG-R-III-15.11	**K/HO**	**Knows**		Define technique of repertorisation	Cognitive/ Level -I Remember & recall	Must know	Lecture / Small Group Discussion	**Viva MCQ Assignment**	**MCQ SAQ**	
HomUG-R-III-15.12	**K/HO**	**Knows**		Discuss various techniques of repertorisation	Cognitive/ Level -I Remember & recall	Must know	Lecture / Small Group Discussion	**Viva MCQ Assignment**	**MCQ SAQ**	

HomUG-R-III-15.13	**K/HO**	**Knows**		Discuss advantages & disadvantages of each type of techniques of repertorisation	Cognitive/ Level -I Remember & recall	Must know	Lecture / Small Group Discussion Case based discussion	**Viva MCQ Assignment**	**MCQ SAQ**	

5.16 Topic - Construction of repertorial totality and Potential differential field

S. No.	Domain of competency	Millers	Content	SLO	Bloom/ Gilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-R-III-16.1	**K/HO**	**Knows**	Acquiring knowledge and skill to construct repertorial totality and	Define conceptual images & repertorial Syndrome	Cognitive/ Level -I Remember & recall	Must know	Lecture / Small Group Discussion	**Viva MCQ Assignment**	**MCQ SAQ**	**Horizontal integration**

HomUG-R-III-16.2	**K/HO**	**Knows**	potential field	Define potential differential field	Cognitive/ Level -I Remember & recall	Nice to know	Lecture / Small Group Discussion	**Viva MCQ Assignment**	**MCQ SAQ**	**with Organon of Medicine**
HomUG-R-III-16.3	**K/HO**	**Knows how**		Correlation of Conceptual image with Repertorial totality	Cognitive/ Level -I Remember & recall	Nice to know	Lecture Small Group Discussion	**Viva MCQ Assignment**	**MCQ SAQ**	**Spiral Integration in III & IV BHMS**
HomUG-R-III-16.4	**K/HO**	**Knows how**		Discuss application of PDF in repertorisation and selection of medicine	Cognitive/ Level -II Understand & interpret	Desirable to know		**Viva MCQ Assignment**	**MCQ SAQ**	
And HomUG-R-III-16.5	**K/HO**	**Shows how**		Demonstrate construction of repertorial totality, RS and PDF	Psychomotor/ Level -II Skill	Desirable to know		**Viva MCQ Assignment**	**MCQ SAQ**	

5.17 Topic - Study of the philosophical background, construction, scope, limitation and utility of Boenninghausen's therapeutic Pocket Book (BTPB)

S. No.	Domain of competency	Millers	Content	SLO	Bloom/ Gilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-R-III-17.1	**K/HO**	**Knows**		Discuss the life history of Boenninghausen and its influence to his contributions to repertory	Cognitive/ Level -I Remember & recall	Nice to know know	Lecture	**Viva**	**Viva**	**Horizontal integration with Organon of Medicine**
HomUG-R-III-17.2	**K/HO**	**Knows**		Sources and history of publication of BTPB	Cognitive/ Level -I Remember	Nice to know	Lecture	**Viva MCQ**	**Viva MCQ**	

					& recall					**Spiral Integration in III & IV BHMS**
HomUG-R-III-17.3	**K/HO**	**Knows**		Discuss contribution of Allen and Robert in BTPB	Cognitive/ Level -I Remember & recall	Must know	Lecture Small Group Discussion	**Viva MCQ Assignment**	**MCQ SAQ LAQ Viva**	
HomUG-R-III-17.4	**K/HO**	**Knows**		Discuss philosophical background of BTPB	Cognitive/ Level -II Understand & interpret	Must know	Lecture Small Group Discussion	**Viva MCQ Assignment**	**MCQ SAQ LAQ Viva**	
HomUG-R-III-17.5	**K/HO**	**Knows**	Acquiring knowledge about Boenninghausen's therapeutic Pocket Book	Discuss plan & construction of BTPB	Cognitive/ Level -II Understand & interpret	Must know	Lecture Small Group Discussion	**Viva MCQ Assignment Journal**	**MCQ SAQ LAQ Viva**	

			(BTPB)							
HomUG-R-III-17.6	**K/HO**	**Knows how**		Correlate the construction of repertory and chapter arrangement with philosophical background of BTPB	Cognitive/ Level -II Understand & interpret	Must know	Lecture Small Group Discussion	**Viva MCQ Assignment Journal**	**MCQ SAQ LAQ Viva**	
HomUG-R-III-17.7	**K/HO**	**Shows how**		Identify rubrics from various chapters to explain concept complete symptom and analogy	Psychomotor / level II	Must know	Lecture Rubric hunting Case based learning	**Viva MCQ Assignment**	**MCQ SAQ LAQ Viva**	

HomUG-R-III-17.8	**K/HO**	**Knows how**		Mention the Scope, Limitation & utility of BTPB	Cognitive/ Level -2 Understands	Desirable	Lecture Rubric hunting Case based learning	**Viva Assignment**	**MCQ SAQ Viva**	

5.18 Topic - Study of the philosophical background, construction, scope, limitation and utility of Repertory of Homoeopathic Materia Medica by JT Kent (Kent's repertory)

S. No.	Domain of competency	Millers	Content	SLO	Bloom/ Gilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-R-III-18.1	**K/HO**	**Knows**		Discuss the life history of Kent and its influence to his contributions to	Cognitive/ Level -I Remember & recall	Nice to know know	Lecture	**Viva**	**Viva**	

				repertory						
HomUG-R-III-18.2	**K/HO**	**Knows**		Sources and history of publication of Kent's repertory	Cognitive/ Level -I Remember & recall	Nice to know	Lecture	**Viva MCQ**	**Viva**	
HomUG-R-III-18.3	**K/HO**	**Knows**		Discuss philosophical background of Kent repertory	Cognitive/ Level -II Understand & interpret	Must know	Lecture Small Group Discussion	**Viva MCQ Assignment**	**LAQ Viva**	**Horizontal integration with Organon of Medicine**
HomUG-R-III-18.4	**K/HO**	**Knows**		Discuss plan and construction of Kent repertory	Cognitive/ Level -II Understand & interpret	Must know	Lecture Small Group Discussion	**Viva MCQ Assignment**	**LAQ Viva**	
HomUG-R-III-18.5	**K/HO**	**Shows how**	Acquiring	Identify rubrics from various chapters to	Psychomotor / level II	Must know	Lecture Rubric hunting	**Viva MCQ Assign**	**LAQ Viva**	**Spiral Integratio**

			knowledge about Repertory of Homoeopathic Materia Medica by JT Kent (Kent's repertory)	understand rubric arrangement			Case based learning	**ment** **Journal**		**n** **In IV** **BHMS**
HomUG-R-III-18.6	**K/HO**	**Knows** **how**		Mention the Scope, Limitation & utility of Kent's repertory	Cognitive/ Level -2 Understands	Desirable	Lecture Rubric hunting Case based learning	**Viva** **MCQ** **Assignment** **Journal**	**Viva**	
								Viva **MCQ** **Assignment**		

5.19 Topic - Study of the philosophical background, construction, scope, limitation and utility of Boger's Boenninghausen's Characteristics & Repertory (BBCR)

S. No.	Domain of competency	Millers	Content	SLO	Bloom/ Gilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-R-III-19.1	K/HO	Knows		Discuss the life history of Boger and its influences contributions to repertory	Cognitive/ Level -I Remember & recall	Nice to know know	Lecture	Viva	Viva	Horizontal integration with Organon of Medicine Spiral Integration
HomUG-R-III-19.2	K/HO	Knows		Sources and history of publication of BBCR	Cognitive/ Level -I Remember & recall	Nice to know	Lecture	Viva MCQ	Viva	
HomUG-R-III-19.3	K/HO	Knows		Discuss philosophical background of BBCR	Cognitive/ Level -II Understand	Must know	Lecture Small Group	Viva MCQ Assignmen	LAQ Viva	

					& interpret		Discussion	**t**		**in III & IV** **BHMS**
HomUG-R-III-19.4	**K/HO**	**Knows**		Discuss plan and construction of BBCR	Cognitive/ Level -II Understand & interpret	Must know	Lecture Small Group Discussion	**Viva** **MCQ** **Assignment**	**LAQ** **Viva**	
HomUG-R-III-19.5	**K/HO**	**Knows** **how**	Acquiring knowledge about Boger Boenninghausen's Characteristics & Repertory (BBCR)	Correlate the construction of repertory and chapter arrangement with philosophical background of BBCR	Cognitive/ Level -II Understand & interpret	Must know	Lecture Small Group Discussion	**Viva** **MCQ** **Assignment** **Journal**	**LAQ** **Viva**	
HomUG-R-III-19.6	**K/HO**	**Shows** **how**		Identify rubrics from various chapters to understand rubric	Psychomotor / level II	Must know	Lecture Rubric hunting Case based	**Viva** **MCQ** **Assignment**	**LAQ** **Viva**	

				arrangement			learning	**Journal**		
HomUG-R-III-19.7	**K/HO**	**Knows how**		Mention the Scope, Limitation & utility of BBCR	Cognitive/ Level -2 Understands	Desirable	Lecture Rubric hunting Case based learning	**Viva MCQ Assignment**	**Viva**	

5.20 Topic - Identify chapters and locate rubrics for symptoms/ conditions related to Gynaecology, Obstetrics, Surgery and Practice of Medicine.

S. No.	**Domain of competency**	**Millers**	**Content**	**SLO**	**Bloom/ Gilbert**	**Priority**	**TL MM**	**Assessment**		**Integration**
								Formative	**Summative**	
HomUG-R-III-20.1	**K/HO**	**Knows how**	Identify chapters and locate rubrics for symptoms/	Identify chapters and locate rubrics for symptoms/ conditions related to Gynaecology & Obstetrics	Cognitive/ Level -II Understand & interpret	Desirable to know	Lecture / clinical class Rubric hunting exercise	**MCQ Viva Assignment Rubric**	**MCQ Rubric hunting**	**Horizontal integration with Gynaecol**

			conditions related to Gynaecology, Obstetrics, Surgery and Practice of Medicine from BTPB, BBCR, Kent's Repertory	from BTPB, Kent & BBCR				**hunting**		**ogy, Obstetrics, Surgery and Practice of Medicine.** **Spiral Integration in III & IV BHMS**
HomUG-R-III-20.2	**K/HO**	**Knows how**		Identify chapters and locate rubrics for symptoms/ conditions related to Surgery from BTPB, Kent & BBCR	Cognitive/ Level -II Understand & interpret	Desirable to know	Lecture / clinical class Rubric hunting exercise	**MCQ Viva Assignment Rubric hunting**	**MCQ Rubric hunting**	
HomUG-R-III-20.3	**K/HO**	**Knows how**		Identify chapters and locate rubrics for symptoms/ conditions related to Practice of Medicine from BTPB, Kent's repertory, BBCR	Cognitive/ Level -II Understand & interpret	Desirable to know	Lecture / clinical class Rubric hunting exercise	**MCQ Viva Assignment Rubric hunting**	**MCQ Rubric hunting**	

5.21 Topic - Understanding miasm and identify rubrics related to symptoms of each miasm from BTPB, Kent's repertory and BBCR.

S. No.	Domain of competency	Millers	Content	SLO	Bloom/ Gilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-R-III-21.1	**K/HO**	**Knows**	Understanding miasm and identify rubrics related to symptoms of each miasm from BTPB, Kent's repertory and BBCR.	Recall definition of fundamental cause	Cognitive/ Level -I Remember & recall	Must know	Lecture	**Viva MCQ**	**Viva**	**Horizontal integration with Organon of Medicine.** Spiral Integratio
HomUG-R-III-21.2	**K/HO**	**Knows**		Recall Hahnemann's concept of miasm	Cognitive/ Level -I Remember & recall	Must know	Lecture	**Viva MCQ**	**Viva**	
HomUG-R-III-21.3	**K/HO**	**Knows hows**		Explain characteristics of Psora, Sycosis & Syphilis	Cognitive/ Level -II Understand & interpret	Desirable to know	Lecture Small group discussion	**Viva MCQ**	**Viva**	

										n **in III & IV** **BHMS**
HomUG-R-III-21.4	**K/HO**	**Knows hows**		Identify the rubrics representing different Miasm and their symptoms from BTPB, Ken and BBCR Repertories.	Cognitive/ Level -II Understand & interpret	Desirable to know	Lecture Clinical class **Rubric hunting exercise**	**Viva** **MCQ** **Assignment** **Rubric hunting**	**MCQ** **Rubric hunting**	

6. Teaching-Learning methods-

Lectures (Theory)	**Non-lectures (Practical/Demonstrative)**
Lecture	Clinical Class
Small Group Discussion	Rubric hunting exercises
Integrated discussion with subjects of Organon of Medicine, Gynaecology, Obstetrics, Surgery and Practice of Medicine.	Case based learning
Assignments	Seminar
	Tutorial
	Group Discussion

7. Details of Assessment-

7.1 Overall Scheme of Assessment (Summative)

Sr. No	**Professional Course**	**Term I (1-6 Months)**		**Term II (7-12 Months)**		
1	**Third professional BHMS**	**PA I (end of 3 months)**	**TT I (end of 6 months)**	**PA II (end of 9 months)**	**FUE (end of 12 months)**	
		10 Marks Viva	50 Marks Clinical/Practical and Viva i) Viva voce -25 marks ii) Clinical/practical- 25 a. Recording of moderate acute case and analysis of case = 10 marks b. Recording of moderate chronic case and analysis of case = 15 marks	10 Marks Viva	100 marks theory	100 marks (Clinical/practical+ Viva+ IA)

PA: Periodical Assessment; TT: Term Test; FUE: Final University Examinations; IA: Internal Assessment

7.2 Number of papers and Mark Distribution for Final University Examination (FUE)

Sr. No.	Course Code	Papers	Theory	Practical/ Clinical	Viva Voce	Internal Assessment*	Grand Total
1	HomUG-R-III	1	100	50 (30+10+10) a) Case taking and processing of moderate	40	10 (Marks of PA I	200

				acute & chronic case = 30 b) Rubric hunting = 10 c) Journal ** = 10		+ TT I + PA II)	

*__Method of Calculation of Internal Assessment Marks for Final University Examination:__

Marks of IA (M) = S + T /2

S = Marks of IA in II BHMS

T = Marks of IA in III BHMS = (Marks of PA-1 + Marks of TT + Marks of PA-2) / 70 X 10

***Journal with 10 cases needs to be maintained by the students which should include Case Taking, Case Processing -Analysis & Evaluation, Investigations, Probable Diagnosis, Totality, Repertorial Totality, repertorisation and repertorial result analysis*

Note- for the Internal assessment, only viva marks obtained in two PAs and practical/clinical + viva marks in one TT will be considered as and to be calculated as above. Theory marks shall not be considered for this purpose.

7.3 Paper Layout for Summative assessment-

Theory- 100 marks

MCQ	**10 marks**
SAQ	**40 marks**
LAQ	**50 marks**

7.4. Theme-wise distribution of questions for theory exam-

Theme table showing the distribution of topics distributed to different themes (named as theme A, B, C….), marks allotted to each type of questions (/to MCQ, SAQ and LAQ) and total marks allotted to each theme:

Theme	**Paper**	**B** **Term**	**C*** **Marks**	**D** **Type of Questions**		
	A **List of Topics** **(As per Course content & topics)**			**MCQ** **(1 Mark)**	**SAQ** **(5 Marks)**	**LAQ** **(10 Marks)**
A	Study of the philosophical background, construction, scope, limitation and utility of Boericke repertory	II BHMS CBDC TERM II	6	1	1	0

		Syllabus				
B	Demonstrate Case-taking in moderate acute and chronic cases	I	10	0	0	1
C	Classification of symptoms	I	6	1	1	0
D	Analysis of case according to the philosophy of Dr. Boenninghausen, Dr. Kent and Dr. Boger.	I	10	0	0	1
E	Evaluation of symptoms according to the philosophy of Dr. Boenninghausen, Dr. Kent and Dr. Boger.	I	6	1	1	0
F	Construction of totality of symptoms according to the philosophy of Dr. Boenninghausen, Dr. Kent and Dr. Boger.	I	10	0	0	1
G	Classification of repertory - need, basis of classification, advantages, disadvantages and adaptability of each type.	I	6	1	1	0
H	Steps of Repertorisation	I	11	1	0	1
I	Identify the medium, method, process and technique of Repertorisation	I	6	1	1	0
J	Construction of Repertorial Syndrome (RS) totality and Potential Differential Field (PDF) of a	I	6	1	1	0

	Repertorial Totality (RT).					
K	Study of the philosophical background, construction, scope, limitation and utility of BTPB, Kent's repertory and BBCR Repertories.	II	11	1	0	1
L	Identify chapters and locate rubrics for symptoms / conditions related to Gynaecology, Obstetrics, Surgery and Practice of Medicine.	II	6	1	1	0
M	Understanding miasm and identify rubrics related to symptoms of each miasm from BTPB, Kent's repertory and BBCR Repertories.	II	6	1	1	0

7.5 Question paper blueprint-

Showing number of questions, types of questions, choices and distribution of themes to the questions:

A **Question Serial Number**	**B** **Type of Question**	**Question Paper Format** **(Refer table 7.4 for themes)**
Q 1 - Q 10	Multiple Choice Questions (MCQ) Questions = 10 in number 1 mark each question All compulsory Must know part: 7 Desirable to know: 2	Theme B Theme E Theme G Theme H Theme I Theme J

	Nice to know: 1	Theme K Theme L
Q 11 - Q 18	Short answer Questions (SAQ) Questions = 08 in number 5 Marks Each All compulsory Must Know part: 6 Desirable to Know: 2	Theme A Theme C Theme D Theme E Theme F Theme G Theme I Theme J Theme K
Q 19 - Q 23	Long answer Questions (LAQ) Questions = 05in number 10 marks each All compulsory All questions on Must Know	Theme B Theme F Theme H Theme K

8. List of recommended reference books
Standard textbooks:

- Bidwell GI.(1915). How to Use the Repertory.
- Boericke, W. (2003). New manual of homoeopathic materia medica and repertory.
- Hahnemann, S. (2014). Organon of Medicine.
- Kent, J. T. (2008). Lectures on Homeopathic Philosophy.
- Kent, J. T. (2016). Repertory of the homeopathic materia medica.

- Kent, J. T: How to study the Repertory, how to use the Repertory.
- Tiwari SK. (2007). Essentials of Repertorization.
- Allen TF (2016). The Principles & Practicability of Boenninghausen's Therapeutic Pocket Book
- Ahmed Munir R(2016). Fundamentals of repertories: Alchemy of homeopathic methodology.

- Boger (2019). Boger Boenninghausen's Characteristics & repertory

Reference texts

Textbooks and reference books indicated in the subjects of Materia Medica, Obstetrics & Gynecology, Surgery, Practice of Medicine, Organon of Medicine & Homoeopathic Philosophy.

9. List of contributors

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COMPETENCY BASED DYNAMIC CURRICULUM FOR THIRD BHMS PROFESSIONAL COURSE

(Applicable from Batch 2022-2023 onwards for 5 years or until further notification by National Commission for Homoeopathy whichever is earlier)

(Practice of Medicine)

HOMOEOPATHY EDUCATION BOARD

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Subject: Practice of Medicine
Subject code: HomUG PM-II

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1. Preamble

Practice of Medicine with Homoeopathic therapeutics is concerned with study of clinical methods, clinical presentations of systemic diseases, differential diagnosis and prognosis, general management and integration with Homoeopathic principles to evolve homoeopathic therapeutics.

Homoeopathy has a distinct approach to the concept of disease. It recognizes the ailing individual by studying him as a whole rather than in terms of sick parts and emphasizes the study of the man, his state of health, state of Illness.The emphasis is on study of man in respect of health, disposition, diathesis, disease, taking all predisposing and precipitating factors, i.e. fundamental cause, maintaining cause and exciting cause. The study of the concept of individualization is essential so that the striking features which are characteristic to the individual become clear, in contrast to the common picture of the respective disease condition. Hahnemann's theory of chronic miasms provides us an evolutionary understanding of the chronic diseases: psora, sycosis, tubercular and syphilis, and acute manifestations of chronic diseases and evolution of the natural disease shall be comprehended in the light of theory of chronic miasms.

This will demand correlation of the disease conditions with basics of anatomy, physiology, biochemistry and pathology. Application of Knowledge of Organon of Medicine and Homoeopathic Philosophy, Materia Medica and Repertory in dealing with the disease conditions should be actively taught.

Lifestyle disorders have burgeoned in modern times. Homoeopathy has a great deal to offer through its classical holistic approach. There are plenty of therapeutic possibilities which Homoeopathy needs to exploit in the years to come.

2. Course outcomes (CO)

i. Develop as a sound homoeopathic clinician who can function indifferent clinical settings by applying knowledge, clinical skills and attitudes in studying the individual as a whole.

ii. Able to correlate the disease conditions with the basics of anatomy, physiology, biochemistry and pathology.

iii. Able to apply the knowledge of causation, pathophysiology, pathogenesis, manifestations, and diagnosis (including differential diagnosis) to understand the disease.

iv. Develop adequate knowledge for rational use of investigations and its interpretation to arrive at a final diagnosis of disease.

v. Ability to make a rational assessment of prognosis and general management of different disease conditions.

vi. Ability to understand and provide preventive, curative, palliative, rehabilitative and holistic care with compassion, following the principles of Homoeopathy.

vii. Able to integrate the clinical state of the disease with the concepts of Organon of Medicine and Homoeopathic Philosophy, Repertory and Homoeopathic Materia Medica for the management of the patient.

Study of Subject:

The study of the subject will be done in THREE years - in Second BHMS, Third B.H.M.S and Fourth B.H.M.S, but Final University Examination shall be conducted at the end of Fourth B.H.M.S.

3. Learning objectives (LO)

A. Pulmonary disorders:

i. **Understand Disease Processes**:Study **pathophysiology, clinical features, and outcomes** of common pulmonary disorders like asthma, COPD, pneumonia, tuberculosis, and occupational lung diseases.

ii. **Develop Diagnostic Skills**:Perform **respiratory examinations**, order and interpret relevant tests (e.g., blood, sputum, imaging, pulmonary function tests), and formulate **differential diagnoses**.

iii. **Integrate Homoeopathic Principles**:Correlate symptoms with structural/functional changes, assess **susceptibility and miasmatic states**, and identify disease **stages** (acute, chronic, reversible, and irreversible).

iv. **Therapeutic Competence**:Create **individualized treatment plans** using homoeopathic remedies and manage acute/chronic conditions. Incorporate **ancillary measures** like diet, lifestyle changes, and avoidance of triggers.

B. Diseases of the kidney

i. **Understand Renal Anatomy and Physiology**:Learn the structure and function of the kidneys, including their role in fluid balance, electrolyte regulation, acid-base balance, and waste excretion.

ii. **Understand Disease Processes**:Study the **pathophysiology, clinical features, and outcomes** of common renal disorders like acute kidney injury (AKI), chronic kidney disease (CKD), glomerulonephritis, nephrotic syndrome, and nephrolithiasis.

iii. **Develop Diagnostic Skills**:Take detailed histories, perform systemic examinations, order relevant tests (e.g., renal profile, urine analysis, imaging), and interpret results to diagnose and differentiate kidney disorders.

iv. **Integrate Homoeopathic Principles**:Correlate symptoms with structural/functional changes in the kidneys, assess **susceptibility and miasmatic states**, and identify disease **stages** (acute, chronic, reversible, and irreversible).

v. **Therapeutic Competence**:Create **personalized homoeopathic treatment plans** based on symptoms, manage acute and chronic conditions, and recommend **dietary changes, lifestyle interventions, and adjunctive therapies** (e.g., dialysis) to slow disease progression and optimize renal function.

vi. **Manage Complications**:Develop strategies to address complications like electrolyte imbalances, hypertension, anaemia, bone disease, and cardiovascular issues, aiming to prevent further kidney damage.

vii. **Preventive Measures**:Promote renal health by managing risk factors like hypertension, diabetes, obesity, and nephrotoxic drug exposure.

viii. **Patient Education**:Educate patients about their condition, treatment options, and self-care to empower them in managing their health.

ix. **Interdisciplinary Collaboration**:Collaborate with nephrologists, dieticians, and other healthcare professionals to provide comprehensive care for renal disorders.

C. Disorders of water & electrolyte balance:

i. **Understand Physiology**:Learn the mechanisms regulating water and electrolyte balance, including the roles of the kidneys, hormones, and fluid compartments.

ii. **Understand Imbalances and Disease Processes**: Identify and interpret common electrolyte imbalances (e.g., hyponatraemia, hypernatremia, hypokalaemia, hyperkalaemia) using clinical and lab findings, and study their pathophysiology, symptoms, and outcomes.

iii. **Integrate Homoeopathic Principles**:Correlate symptoms with water and electrolyte disturbances, assess **susceptibility and miasmatic states**, and identify disease **stages** (acute, chronic, reversible, and irreversible).

iv. **Therapeutic Competence**:Design personalized homoeopathic treatments based on symptoms, manage acute and chronic conditions, and use supportive measures like fluid and electrolyte therapy to restore balance and enhance health.

D. Diseases of the digestive system and peritoneum:

i. **Understand Disease Processes**:Learn the **pathophysiology, clinical features, and outcomes** of common digestive disorders like GERD, gastritis, peptic ulcers, IBS, malabsorption, IBD, and peritonitis.

ii. **Develop Diagnostic Skills**:Learn to take GI histories, perform exams, order tests (e.g., blood, imaging), and interpret results to diagnose and differentiate digestive disorders.

iii. **Integrate Homoeopathic Principles**:Correlate symptoms with structural/functional changes in the digestive system, assess **susceptibility and miasmatic states**, and identify disease **stages** (acute, chronic, reversible, and irreversible).

iv. **Therapeutic Competence**:Create personalized homoeopathic treatment plans based on symptoms, manage acute and chronic conditions, and recommend dietary, lifestyle, and adjunctive therapies.

E. Diseases of liver, gallbladder, and pancreas:

i. **Understand Disease Processes**:Study the **pathophysiology, clinical features, and outcomes** of diseases like viral hepatitis, cholelithiasis, pancreatitis, and hepatic cirrhosis.

ii. **Develop Diagnostic Skills**:Take detailed histories, perform systemic examinations, order relevant tests (e.g., blood, imaging), and interpret results to diagnose and differentiate liver, gallbladder, and pancreatic disorders.

iii. **Integrate Homoeopathic Principles**:Correlate symptoms with structural/functional changes, assess **susceptibility and miasmatic states**, and identify disease **stages** (acute, chronic, reversible, and irreversible).

iv. **Therapeutic Competence**:Create **personalized homoeopathic treatment plans** based on symptoms, manage acute and chronic conditions, and recommend **dietary, lifestyle, and adjunctive therapies**.

F. Endocrine diseases and metabolic disorders:

i. **Understand Disease Processes**:Study the **pathophysiology, clinical features, and outcomes** of endocrine disorders like thyroid, adrenal, and pituitary gland dysfunctions.

ii. **Develop Diagnostic Skills**:Take detailed histories, perform systemic examinations, order relevant tests (e.g., hormonal assays, imaging), and interpret results to diagnose and differentiate endocrine disorders.

iii. **Integrate Homoeopathic Principles**:Correlate symptoms with structural/functional changes, assess **susceptibility and miasmatic states**, and identify disease **stages** (acute, chronic, reversible, and irreversible).

iv. **Therapeutic Competence**:Create **personalized homoeopathic treatment plans** based on symptoms, manage acute and chronic conditions, and recommend **hormonal therapy, dietary changes, lifestyle interventions, and adjunctive therapies** to restore hormonal balance and improve health.

G. Bedside clinics / demonstrative activities:

i. Develop proficiency in conducting comprehensive patient assessments, including history-taking, physical examination, and formulation of differential diagnoses during bedside clinics.

ii. Apply critical thinking and diagnostic reasoning skills to interpret clinical findings, integrate patient history and examination findings and formulate accurate diagnoses in a clinical setting.

iii. Develop ability to integrate clinic-pathologio-miasmatic corelation to appreciate state of Susceptibility [Qualitative and Quantitative] in Homoeopathic practice.

iv. Develop effective communication skills with patients, including active listening, empathy during bedside clinics.

v. Exhibit professionalism and ethical conduct in all aspects of patient care during bedside clinics, including respect for patient autonomy, confidentiality, and cultural sensitivity.

vi. Practice accurate and thorough clinical documentation skills, including recording patient histories, examination findings, diagnostic results, and treatment plans in accordance with institutional standards and guidelines.

vii. Engage in self-reflection and self-assessment of clinical skills and knowledge gaps identified during bedside clinics, and demonstrate a commitment to lifelong learning and professional development.

4. Term-wise course content and teaching hours distribution:

4.1 Term-wise distribution of course content-

Terms	Topic
I	1) Pulmonary disorders
	2) Diseases of Kidney
	3) Disorders of Water & Electrolyte Balance
II	4) Diseases of Digestive System and Peritoneum
	5) Diseases of Liver Gallbladder and Pancreas
	6) Endocrine Diseases and Metabolic Disorders

Refer tables 4.3.1 – 4.3.6 for detailed content (topics breakup)

4.2 Gross division of teaching hours:

Sr No	Subject	Lecture	Non-lecture
1	HomUG-PM-II	120 Hours	100 Hours 1. Clinical 70 2. Demonstrative – 30

4.3 Teaching hours theory: 120 hours

4.3.1 Pulmonary disorders

Sr. No.	Topics	Hours
General	Approach Patient with Disease of RS	1
1	Upper respiratory tract infections: Rhinitis, Pharyngitis, Sinusitis	1
2	Bronchial Asthma and acute Bronchitis	2
3	Chronic Obstructive Lung Disease: Chronic Bronchitis, Emphysema	3
4	Pneumonia	2

5	Bronchiectasis	1
6	Lung abscess	1
7	Pulmonary Tuberculosis	1
8	Tropical pulmonary eosinophilia	1
9	Occupational & Environmental Lung Disorders	2
10	Sarcoidosis	1
11	Pulmonary Thromboembolism	1
12	Pleurisy & Pleural Effusion	1
13	Pneumothorax	1
14	Empyema	1
15	Atelectasis	1
16	Interstitial lung diseases	2
17	Cystic fibrosis of lung	1
18	Neoplasia	1
19	Hyperventilation Syndromes	1
20	SARS	1
21	Therapeutics related to RS	3
	Total	**30**

4.3.2. Urogenital tract diseases

Sr. No.	Topics	Hours
General	Symptomatology and clinical syndromes & Renal function tests	1
1	Urinary Tract Infections: Asymptomatic bacteriuria, Acute pyelonephritis, Renal abscess, Acute cystitis, Acute urethritis, Acute prostatitis, Septicaemia	2
2	Nephrotic Syndrome	1
3	Glomerulopathies	2

4	Renal failure: acute & chronic	2
5	Renal Vascular diseases	1
6	Nephrolithiasis/obstructive uropathy.	1
7	Tumours of Genito urinary tract	1
8	Tubulo-interstitial Diseases	1
9	Cystic Kidney diseases	1
10	Thera related to renal disorders	2
Total		**15**

4.3.3. Disorder of water & electrolyte balance

SR. NO.	TOPICS	HOURS
General	Approach to disorders of electrolyte imbalance	1
1	Hypo & Hypernatremia	1
2	Hypo & Hyperkalaemia	1
3	Hypo &Hyperphosphatemia	1
4	Metabolic Acidosis & Alkalosis	1
5	Respiratory Acidosis & Alkalosis	1
6	Therapeutics related to Disorder of water & electrolyte balance	1
Total		**7**

4.3.4. Diseases of digestive system and peritoneum

Sr. No.	Topics	Hours
General	Applied Anatomic and Physiology of GIT	1
1	Aphthous Ulceration, Stomatitis	1
2	Parotitis	1
3	Achalasia cardia	1

4	Hiatus hernia	1
5	GERD and Esophagitis	1
6	Gastritis: Acute & Chronic	2
7	Peptic Ulcers	1
8	Gastric carcinoma	1
9	Malabsorption Syndrome: Coeliac disease, lactose intolerance	2
10	Irritable Bowel Syndrome	1
11	Inflammatory Bowel Diseases: Ulcerative colitis, Crohn's disease	2
12	Abdominal Tuberculosis	1
13	Neoplasia of the bowel	2
15	Anorectal disorders	1
16	Diverticulitis	1
17	Thera related to GIT	3
Total		**23**

4.3.5. Disorder of liver, gall bladder & pancreas

Sr. No.	Topics	Hours
General	Hepatobiliary - Clinical approach to hepatobiliary and Pancreatic diseases	2
1	Acute Viral Hepatitis	2
2	Chronic hepatitis	2
3	Alcoholic Liver Diseases	1
4	Cirrhosis of Liver, Portal Hypertension & Hepatic Failure	3
5	Liver abscess& Cysts	1
6	Cholecystitis: Acute & Chronic	2
7	Cholelithiasis	1
8	Acute and Chronic Pancreatitis	2
9	Hepatocellular carcinoma	1

10	Thera related to Liver, Gall bladder & Pancreas disorders	3
Total		**20**

4.3.6. Endocrine and metabolic disorders

Sr. No.	Topics	Hours
General	Approach to Endocrine disorder	2
1	Hypothyroidism	2
2	Hyperthyroidism, Thyrotoxicosis – Grave’s Disease	2
3	Autoimmune thyroid disease - Hashimoto's thyroiditis	1
4	Goitre: Simple and multi-nodular goitre - simple diffuse goitre, multinodular goitre	2
5	Hypo & Hyper Parathyroid disorders	2
6	Hypercalcaemia and Hypocalcaemia	1
7	Disorders of Adrenal Gland: Cushing's syndrome, Phaeochromocytoma, Addison’s disease, Spontaneous hypoglycaemia	3
8	Dwarfism	1
9	Nelson’s Syndrome	1
10	Acromegaly and Gigantism	1
11	Diabetes insipidus	1
12	Diabetes Mellitus	3
13	Therapeutics related to endocrine disorders	3
Total		**25**

4.4 Teaching hours Non-lecture:

Sr. No.	Non-lectures	Hours
	Clinical	
1	Case-taking and processing from the perspective of Practice of Medicine	**70**
2	DOPS- Direct observation of procedural skills, DOAP – Demonstration- Observation- Assistance-Performance (Focus on practical demonstrations of clinical skills, procedures, and patient interactions)	
3	OSCE – Objective Structured Clinical Examination (Structured clinical examination to evaluate students' clinical competence.)	
	Demonstrative	
4	Case Based / Problem Based Discussion on any of the topic of III BHMS Syllabus topic *[as per availability of the case material or patient]*	**30**
5	Skill lab training , Simulation – with mannequins (Hands-on practice of clinical skills and emergency scenarios using mannequins.)	
6	Seminars/ Tutorials/ Journal club meetings	
7	Role playing- Students act as doctors, patients, or family members to practice communication, history-taking, and empathy	
8	Projects, charts, models, assignments etc.	
Total		**100**

5. Content mapping (competencies tables)

5.1. Disorders of Respiratory System

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.1. Approach Patient with Disease of RS										
HomUG-PM II.1.1	Knowledge and Scholarship	K	Structure and function of the respiratory system	Describe the anatomy and physiology of the respiratory system.	C1	MK	Lecture, Visual aids	MCQs, SAQ	SAQ, LAQ	Anatomy, Physiology
HomUG-PM II.1.2			Common respiratory diseases and their symptoms	Identify common respiratory disorders and their symptoms.	C2	MK	Case-based learning, Simulation	MCQ, SAQ, Viva voce	SAQ, LAQ, Bedside exams, Viva	Pathology
HomUG-PM II.1.3		KH	Diagnostic tests in respiratory medicine	Explain diagnostic methods for respiratory disorders.	C2	MK	Lectures, Case studies, OPD/Clinical rounds	OSCE, SAQ	SAQ, LAQ, Bedside exams, Viva	Practice of Medicine
HomUG-PM II.1.4			Medications for respiratory disorders	Discuss pharmacological treatments for respiratory conditions.	C2	MK	Case-based learning, Problem-solving	Written assignments, Case studies	SAQ, LAQ, Bedside exams, Viva	Pharmacology, Materia Medica
HomUG-PM II.1.5	Homoeopathic Orientation	KH	Role of homoeopathy and when to refer/collaborate	(a) Explain the role of homoeopathy in respiratory care. (b) Identify its limitations.	C3	DK	Guest lectures	Team-based case management exercises	SAQ, LAQ	Organon, Homoeopathic Materia Medica, Homoeopathic Pharmacy

HomUG-PM II.1.6	Knowledge and Scholarship	KH	Non-pharmacological interventions	Describe non-pharmacological treatments for respiratory disorders.	C2	MK	Group discussions, Role play	Group projects, Presentations	Bedside Clinical assessments	Community Medicine
HomUG-PM II.1.7		SH	Educating and counselling patients	Educate and counsel patients on managing respiratory disorders.	A2	MK	Role play, Simulation	Direct observation in OPD, Role play	OSCE	Community Medicine
HomUG-PM II.1.8		KH	Applying research evidence in practice	Apply evidence-based guidelines to manage respiratory disorders.	C2	MK	Journal club, Online Research of Data Bases	Evidence-based treatment plan presentation	SAQ	Research Methodology, Community Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.2. Upper respiratory tract infections: Rhinitis, Pharyngitis, Sinusitis										
HomUG-PM II.2.1	Knowledge and Scholarship	K	Structure and function of the upper respiratory tract	(a) Describe the structures of the upper respiratory tract (nose, pharynx, sinuses). (b) Explain its functions (air filtration, humidification, warming).	C1	MK	Lecture, Visual aids	Quizzes, SAQ	MCQ, SAQ	Anatomy, Physiology

HomUG-PM II.2.2			Define Rhinitis, Pharyngitis, and Sinusitis	(a) Define Rhinitis, Pharyngitis, and Sinusitis. (b) Identify their causes (viral, bacterial, and allergic). (c) Explain the pathophysiology (e.g., inflammation in rhinitis).	C1	MK	Lectures	Case studies, Group discussions	MCQ, SAQ, LAQ	Pathology, Microbiology, ENT
HomUG-PM II.2.3			Signs and symptoms of URTIs	(a) Recognize signs and symptoms (nasal congestion, sore throat, facial pain). (b) Differentiate between acute and chronic forms.	C1	MK	Role play, Simulation	OSCE	SAQ, LAQ, Bedside Examinations, Viva	ENT, Practice of Medicine
HomUG-PM II.2.4		KH	Diagnostic tests for URTIs	(a) Describe diagnostic tests (nasal swabs, sinus imaging). (b) Demonstrate proper techniques (e.g., throat examination).	C2	MK	Lectures, Case studies, OPD/Clinical rounds	OSCE	SAQ, Bedside Examinations, Viva	Pathology, Microbiology, Surgery
HomUG-PM II.2.5			Medications for URTIs	(a) Discuss pharmacological treatments (antihistamines, decongestants, antibiotics). (b) Explain their mechanisms and side effects.	C2	MK	Case-based learning, Problem-solving	Written assignments	SAQ, Bedside Examinations, Viva	Pharmacology
HomUG-PM II.2.6	Homoeopathic Orientation		Homoeopathic principles and remedies for URTIs	(a) Identify homoeopathic principles for URTIs. (b) Select remedies based on symptoms. (c) Monitor and adjust treatment for optimal outcomes.	C2	MK	Lectures, OPD/Case discussions, Follow-up discussions	Written assignments, Case studies	SAQ, Bedside Examinations, Viva	Organon, Materia Medica, Homoeopathic Pharmacy
HomUG-PM II.2.7	Knowledge and Scholarship		Non-pharmacological interventions for URTIs	(a) Identify non-drug treatments (e.g., saline nasal irrigation). (b) Discuss lifestyle changes to prevent recurrence.	C2	MK	Group discussions, Role play	Group projects, Tutorials	SAQ, LAQ, Bedside Examinations, Viva	Pharmacology, Community Medicine

HomUG-PM II.2.8		SH	Educating and counseling patients with URTIs	(a) Educate patients on prevention (hand hygiene, avoiding close contact). (b) Counsel on medication and non-drug interventions.	A2	MK	Role play, Simulation	Direct observation, Self-assessment	Role play, OSCE	Community Medicine
HomUG-PM II.2.9		KH	Collaboration with healthcare professionals	Describe a multidisciplinary approach for comprehensive URTI care.	C2/3	MK	Guest Lectures, Team Based Learning	SAQ	SAQ, LAQ	Surgery, ENT
HomUG-PM II.2.10		KH	Applying research evidence in URTI management	(a) Apply evidence-based guidelines for URTI diagnosis and treatment. (b) Evaluate research to determine effective strategies.	C3	MK	Journal club, Online Research of Data Bases	Evidence-based treatment plan presentation	SAQ	Research Methodology
HomUG-PM II.2.11		K	Ethical and legal considerations in URTI care	(a) Discuss ethical principles (beneficence, non-maleficence). (b) Identify legal considerations (confidentiality, informed consent).	C2/3	DK	Guest Lectures, Role-playing, Patient counselling	SAQ	SAQ, LAQ, Viva	Forensic Medicine
HomUG-PM II.2.12	Homoeopathic Orientation	KH	Homoeopathic principles and remedies for URTIs	(a) Discuss homoeopathic principles for URTIs. (b) Select remedies based on symptoms. (c) Monitor and adjust treatment (d) Educate patients on homoeopathic rationale.	C2/3	MK	Case-based learning, Simulation	Written assignments, Case studies	SAQ, Viva	Organon and Homoeopathic Philosophy, Materia Medica and Homoeopathic Therapeutics, Homoeopathic Pharmacy,

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.3. Bronchial Asthma										
HomUG-PM II.3.1	Knowledge and Scholarship	K	Structural and functional changes in asthma	(a) Describe structural changes (airway remodelling, bronchoconstriction). (b) Explain physiological responses (inflammation, mucous production, hyper-responsiveness).	C1	MK	Lecture, Visual aids	Quizzes, SAQ	MCQ, SAQ	Anatomy, Physiology, Pathology
HomUG-PM II.3.2			Definition and mechanisms of asthma	(a) Define bronchial asthma and its variations. (b) Explain underlying mechanisms (inflammatory mediators, immune cells, and cytokines). (c) Describe processes leading to airway narrowing and symptoms.	C1	MK	Lectures	Case studies, Group discussions	MCQ, SAQ, LAQ	Physiology, Pathology
HomUG-PM II.3.3			Signs and symptoms of asthma	(a) Recognize signs and symptoms (wheezing, coughing, shortness of breath, chest tightness). (b) Differentiate between mild, moderate, and severe asthma exacerbations.	C2	MK	Role play, Simulation	OSCE	SAQ, LAQ, Bedside Examinations, Viva	Pathology, Practice of Medicine

HomUG-PM II.3.4		KH	Diagnostic tests for asthma	(a) Explain the use of spirometry and peak flow measurements. (b) Describe other tests (allergy testing, imaging) to assess severity and triggers.	C2/3	MK	Lectures, Case studies, OPD/Clinical rounds	OSCE	SAQ, Bedside Examinations, Viva	Physiology, Microbiology, Radiology, Practice of Medicine
HomUG-PM II.3.5			Medications for asthma	(a) Discuss mechanisms of action of asthma medications (bronchodilators, corticosteroids, leukotriene modifiers). (b) Explain principles of medication management (stepwise therapy, rescue vs. controller medications).	C2/3	MK	Case-based learning, Problem-solving	Written assignments	SAQ, Bedside Examinations, Viva	Pharmacology
HomUG-PM II.3.6		KH	Non-pharmacological interventions for asthma	(a) Identify non-drug interventions (allergen avoidance, smoking cessation, trigger education). (b) Discuss the role of pulmonary rehabilitation and physical activity.	C2	MK	Lectures, OPD/Case discussions, Follow-up discussions	Written assignments, Case studies	SAQ, Bedside Examinations, Viva	Community Medicine, Practice of Medicine
HomUG-PM II.3.7		SH	Educating and counselling patients with asthma	(a) Educate patients on proper inhaler use and techniques. (b) Counsel patients on self-management strategies and recognizing exacerbations.	A2	MK	Guest Lectures, Role play	SAQ	SAQ, LAQ	Community Medicine, Psychology
HomUG-PM II.3.8		KH	Collaboration with healthcare professionals	Discuss comprehensive asthma management plans.	C3	DK	Role play, Simulation	Direct observation, Self-assessment	Role play, OSCE	Practice of Medicine

HomUG-PM II.3.9			Applying research evidence in asthma management	(a) Apply evidence-based guidelines for asthma management. (b) Evaluate research to inform treatment decisions.	C3	MK	Journal club, Online Research of Data Bases	Evidence-based treatment plan presentation	SAQ	Research Methodology
HomUG-PM II.3.10	Homoeopathic Orientation	KH	Homoeopathic principles and remedies for asthma	(a) Discuss homoeopathic principles for asthma. (b) Select remedies based on symptoms. (c) Monitor and adjust treatment for optimal outcomes. (d) Educate patients on homoeopathic rationale.	C2/3	MK	Case-based learning, Simulation	Written assignments, Case studies	SAQ, Viva	Organon and Homoeopathic Philosophy, Materia Medica and Homoeopathic Therapeutics, Homoeopathic Pharmacy,
HomUG-PM II.3.11	Knowledge and Scholarship	K	Ethical and legal considerations in asthma care	(a) Discuss ethical principles (autonomy, beneficence, non-maleficence). (b) Identify legal considerations (confidentiality, informed consent).	C2/3	NK	Role-playing, Patient counselling	SAQ	SAQ, LAQ, Viva	Forensic Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.4. Acute Bronchitis										

HomUG-PM II.4.1	Knowledge and Scholarship	Knows	Structure and function in acute bronchitis	(a) Describe anatomical changes (inflammation in bronchial tubes causing cough and mucus). (b) Explain physiological changes (increased mucus, airway constriction).	C1	Must Know	Lecture, Visual aids	Quizzes, SAQ	MCQ, SAQ	Anatomy, Physiology, Pathology
HomUG-PM II.4.2		Knows	Definition, causes, and mechanisms of acute bronchitis	(a) Define acute bronchitis and its variants. (b) Identify viral and bacterial causes. (c) Explain the inflammatory response (role of immune cells, cytokines).	C2	Must Know	Lectures	Case studies, Group discussions	MCQ, SAQ, LAQ	Pathology, Microbiology
HomUG-PM II.4.3		Knows	Signs and symptoms of acute bronchitis	(a) Recognize common symptoms (cough, chest discomfort, fatigue). (b) Differentiate acute bronchitis from other respiratory conditions.	C2	Must Know	Role play, Simulation	OSCE	SAQ, LAQ, Bedside Examinations, Viva	Practice of Medicine
HomUG-PM II.4.4		Knows How	Diagnostic tests for acute bronchitis	(a) Explain the use of diagnostic tests (chest X-rays, sputum cultures). (b) Discuss the limitations of these tests.	C3	Must Know	Lectures, Case studies, OPD/Clinical rounds	OSCE	SAQ, Bedside Examinations, Viva	Practice of Medicine, Pathology, Microbiology, Radiology,
HomUG-PM II.4.5		Knows How	Medications for acute bronchitis	(a) Describe common medications (bronchodilators, cough suppressants). (b) Discuss the appropriate use of antibiotics.	C2/3	Must Know	Case-based learning, Problem-solving	Written assignments	SAQ, Bedside Examinations, Viva	Pharmacology

HomUG-PM II.4.6		Knows How	Non-pharmacological interventions for acute bronchitis	(a) Discuss lifestyle measures (rest, hydration, avoiding irritants). (b) Explain the role of self-care in managing symptoms and preventing complications.	C2/3	Must Know	Lectures, OPD/Case discussions, Follow-up discussions	Written assignments, Case studies	SAQ, Bedside Examinations, Viva	Practice of Medicine, Community Medicine
HomUG-PM II.4.7		Shows How	Educating and counselling patients with acute bronchitis	(a) Educate patients on self-care and when to seek medical attention. (b) Discuss prevention strategies (hand hygiene, avoiding close contact).	A2	Must Know	Role play, Simulation	Direct observation, Self-assessment	Role play, OSCE	Community Medicine
HomUG-PM II.4.8		Knows How	Applying research evidence in acute bronchitis management	(a) Apply evidence-based guidelines for acute bronchitis management. (b) Evaluate research to determine effective treatment approaches.	C2/3	Must Know	Journal club, Online Research of Data Bases	Critical appraisal, Written assignments	Written exams, Presentations	Research Methodology
HomUG-PM II.4.9	Homoeopathic Orientation	Knows How	Homoeopathic principles and remedies for acute bronchitis	(a) Select homoeopathic remedies based on symptoms. (b) Monitor and adjust treatment for optimal outcomes.	C3	Desirable to know	Case-based learning, Simulation	Written assignments, Case studies	SAQ, Viva	Organon, Homoeopathic Philosophy, Materia Medica, Homoeopathic Therapeutics, Homoeopathic Pharmacy

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.5. COPD										
HomUG-PM II.5.1	Knowledge and Scholarship	Knows	Structural and functional changes in COPD	(a) Describe structural changes (airway and lung tissue damage). (b) Describe structural changes (airway and lung tissue damage).	C1	Must Know	Lecture, Visual aids	Quizzes, Short quizzes	Written exams	Anatomy, Physiology
HomUG-PM II.5.2		Knows	Clinical definition, causes, and mechanisms of COPD	(a) Define COPD as a chronic inflammatory lung disease. (b) Identify risk factors (smoking, pollutants, and genetics). (c) Explain disease progression (inflammation, mucus hyper secretion, airway remodelling).	C2	Must Know	Case-based learning, Simulation	Case studies, Group discussions	Written exams, Presentations	Pathology

HomUG-PM II.5.3		Knows	Signs and symptoms of COPD	(a) Recognize symptoms (dyspnoea, chronic cough, sputum production). (b) Differentiate COPD from other respiratory conditions.	C2	Must Know	Role play, Simulation	OSCE, Practical exams	Written exams, Clinical assessments	Practice of Medicine
HomUG-PM II.5.4		Knows How	Diagnostic tests for COPD	(a) Discuss diagnostic tests (spirometry, chest X-ray, arterial blood gas analysis). (b) Apply diagnostic criteria to confirm COPD and assess severity.	C2/3	Must Know	Demonstration, Role play	Practical exams, OSCE	Written exams, Case studies	Practice of Medicine, Radiology, Physiology, Biochemistry,
HomUG-PM II.5.5		Knows How	Medications for COPD	(a) Describe treatment options (bronchodilators, corticosteroids, oxygen therapy). (b) Explain treatment goals (symptom relief, preventing exacerbations).	C2/3	Must Know	Case-based learning, Problem-solving	Written assignments, Case studies	Written exams, Case presentations	Pharmacology
HomUG-PM II.5.6		Knows How	Non-pharmacological interventions for COPD	(a) Discuss lifestyle modifications (smoking cessation, exercise). (b) Explain the role of pulmonary rehabilitation in improving quality of life.	C3	Must Know	Group discussions, Role play	Group projects, Presentations	Oral exams, Clinical assessments	Preventive Medicine, Practice of Medicine
HomUG-PM II.5.7		Shows How	Educating and counselling patients with COPD	(a) Educate patients on self-management (medication adherence, recognizing exacerbations). (b) Address psychosocial issues (anxiety, depression) and provide support.	A2	Must Know	Role play, Simulation	Direct observation, Self-assessment	Role play, OSCE	Psychology, Practice of Medicine, Pharmacology

HomUG-PM II.5.8		Knows How	Applying research evidence in COPD management	(a) Apply evidence-based guidelines for COPD management. (b) Evaluate research to inform clinical decisions.	C3	Must Know	Journal club, Case-based learning	Critical appraisal, Written assignments	Written exams, Presentations	Research Methodology
HomUG-PM II.5.9	Homoeopathic Orientation	Knows	Homoeopathic principles and remedies for COPD	(a) Explain homoeopathic principles for COPD management. (b) Select remedies based on COPD symptoms.	C3	Must Know	Lecture, Visual aids	Quizzes, Short quizzes	SAQ, Viva	Organon & Philosophy, Homoeopathic Materia Medica & Therapeutics, Homoeopathic Pharmacy

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.6. Pneumonia										
HomUG-PM II.6.1	Knowledge and Scholarship	Knows	Structural and functional changes in pneumonia	Describe anatomical and physiological changes in pneumonia.	C1	MK	Lecture, Visual aids	Quizzes, Short quizzes	Written exams	Anatomy, Physiology, Pathology

HomUG-PM II.6.2			Definition, causes, and mechanisms of pneumonia	(a) Define pneumonia based on its pathophysiology. (b) Explain causes (bacterial, viral, fungal) and mechanisms.	C2	MK	Case-based learning, Simulation	Case studies, Group discussions	Written exams, Presentations	Pathology, Microbiology
HomUG-PM II.6.3			Signs and symptoms of pneumonia	Identify clinical features (fever, cough, chest pain, dyspnea).	C2	MK	Role play, Simulation	OSCE, Practical exams	Written exams, Clinical assessments	Practice of Medicine
HomUG-PM II.6.4		Knows How	Diagnostic tests for pneumonia	Explain diagnostic methods (chest X-ray, sputum culture, blood tests).	C2/3	MK	Demonstration, Role play	Practical exams, OSCE	Written exams, Case studies	Practice of Medicine, Radiology, Microbiology
HomUG-PM II.6.5			Medications for pneumonia	Discuss pharmacological treatments (antibiotics, supportive care).	C3	MK	Case-based learning, Problem-solving	Written assignments, Case studies	Written exams, Case presentations	Pharmacology
HomUG-PM II.6.6			Non-pharmacological interventions for pneumonia	Describe non-drug management (rest, hydration).	C2/3	MK	Group discussions, Role play	Group projects, Presentations	Oral exams, Clinical assessments	Pharmacology, Preventive Medicine
HomUG-PM II.6.7		Shows How	Educating and counselling patients with pneumonia	Educate patients on self-management (medication adherence, follow-up care).	A2	MK	Role play, Simulation	Direct observation, Self-assessment	Role play, OSCE	Community Medicine, Psychology
HomUG-PM II.6.8		Knows How	Applying research evidence in pneumonia management	Apply evidence-based guidelines for pneumonia management.	C2/3	MK	Journal club, Online Research of Data Bases	Critical appraisal, Written assignment	Written exams, Presentations	Research Methodology

HomUG-PM II.6.9	Homoeopathic Orientation		Homoeopathic principles and remedies for pneumonia	(a) Explain homoeopathic principles for pneumonia. (b) Select remedies based on symptoms and homoeopathic principles.	C3	MK	Lecture, Visual aids	Quizzes, Short quizzes	SAQ, Viva	Organon & Philosophy, Homoeopathic Materia Medica & Therapeutics, Homoeopathic Pharmacy

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative+	
HomUG-PM II.7. Bronchiectasis										
HomUG-PM II.7.1	Knowledge and Scholarship	Knows	(a) Definition of bronchiectasis (b) Pathogenesis and progression of bronchiectasis	(a) Define bronchiectasis as a chronic condition with abnormal airway widening and mucus accumulation. (b) Explain the underlying mechanisms and progression of bronchiectasis.	C1	MK	Lecture, Reading assignments	Quizzes, SAQs	MCQ, SAQ	Pathology, Physiology
HomUG-PM II.7.2		Knows How	Causes of bronchiectasis	List common causes of bronchiectasis.	C2	MK	Case studies	SAQ, Group discussions	OSCE, SAQ	Practice of Medicine, Paediatrics
HomUG-PM II.7.3			Signs and symptoms of bronchiectasis	Identify clinical features of bronchiectasis.	C2/3	MK	Lectures, OPD rotations, Simulation	Mini-CEX, Direct observation	OSCE, SAQ, LAQ	Practice of Medicine
HomUG-PM II.7.4			Radiological and laboratory findings	Analyze imaging and test results to confirm bronchiectasis.	C2/3	MK	Workshops, Interactive seminars	Case presentations, Quiz	SAQ, Bedside examination, Viva	Pathology, Radiology

HomUG-PM II.7.5		Does	Treatment options and management strategies	Formulate a comprehensive management plan for bronchiectasis.	P2	MK	Clinical seminars, Group Discussions	Treatment planning exercise	Bedside examination, Viva	Pharmacology, Homoeopathic Therapeutics
HomUG-PM II.7.6		Shows How	Patient education and self-management	Provide clear and accurate information to patients and caregivers.	A2	DK	Role-playing, Patient counselling	SAQ	SAQ, LAQ, Viva	Practice of Medicine
HomUG-PM II.7.7		Knows How	Current research and future directions	Apply evidence-based guidelines to improve bronchiectasis management.	C3	NK	Journal clubs, Online research of data bases	Literature review, Written assignments	Participation in research projects	Research Methodology
HomUG-PM II.7.8	Homoeopathic Orientation		Homoeopathic principles and remedies for bronchiectasis	(a) Explain homoeopathic principles for bronchiectasis. (b) Select remedies based on symptoms and homoeopathic principles.	C3	MK	Lecture, Visual aids	MCQ, SAQ	SAQ, Bedside examination, Viva	Organon & Philosophy, Homoeopathic Materia Medica & Therapeutics, Homoeopathic Pharmacy

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.8. Lung abscess										

HomUG-PM II.8.1	Knowledge and Scholarship	Knows	(a) Definition of lung abscess (b) Pathogenesis and development of lung abscesses	(a) Define lung abscess as a localized pus collection in the lung parenchyma caused by infection and tissue necrosis. (b) Describe the mechanisms leading to lung abscess formation.	C1	MK	Lecture, Reading assignments	Quizzes,SAQ	MCQ, SAQ	Pathology, Microbiology
HomUG-PM II.8.2		Knows How	Risk factors and causes of lung abscesses	List and explain factors predisposing individuals to lung abscesses.	C1	MK	Case studies	SAQ, Group discussions	OSCE, SAQ	Microbiology, Practice of Medicine
HomUG-PM II.8.3			Diagnostic criteria and tools	Discuss diagnostic evaluations to confirm lung abscess.	C2/3	MK	Lectures, OPD rotations, Simulation	Mini-CEX, Direct observation	OSCE, SAQ, LAQ	Practice of Medicine, Radiology
HomUG-PM II.8.4		Does	Treatment protocols and management strategies	Define a treatment plan for lung abscess patients.	P2	MK	Clinical seminars, Group Discussions	Treatment planning exercise	Bedside examination, Viva	Pharmacology, Homoeopathic Therapeutics
HomUG-PM II.8.5		Knows How	Prevention and monitoring	Discuss strategies to prevent complications and monitor patient progress.	C3	MK	Lectures, Clinical seminars	Assignments, Tutorials	Bedside examination, Viva	Preventive Medicine, Practice of Medicine
HomUG-PM II.8.6		Shows How	Patient education and counselling	Communicate effectively about the nature, treatment, and lifestyle modifications for lung abscesses.	A2	DK	Role-playing, Patient counselling	SAQ	SAQ, LAQ, Viva	Practice of Medicine, Preventive Medicine
HomUG-PM II.8.7		Knows How	Emerging treatments and research	Apply evidence-based guidelines to improve lung abscess management.	C3	NK	Journal clubs, Online research of data bases	Literature review, Written assignments	Participation in research projects	Research Methodology

HomUG-PM II.8.8	Homoeooathic Orientation		Homoeopathic principles and remedies for lung abscess	(a) Explain homoeopathic principles for lung abscess management. (b) Select remedies based on symptoms and homoeopathic principles.	C3	MK	Lecture, Visual aids	MCQ, SAQ	SAQ, Bedside examination, Viva	Organon & Philosophy, Homoeopathic Materia Medica & Therapeutics, Homoeopathic Pharmacy

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.9. Pulmonary Tuberculosis										
HomUG-PM II.9.1	Knowledge and Scholarship	Knows	(a) Definition of pulmonary tuberculosis (PT) (b) Global burden, risk factors, and transmission	(a) Define PT as a contagious bacterial infection caused by *Mycobacterium tuberculosis*, affecting the lungs. (b) Describe (1) prevalence, (2) risk factors, and (3) modes of transmission of PT.	C1	MK	Lecture	MCQs, SAQ	SAQ, LAQ	Epidemiology, Public Health
HomUG-PM II.9.2			Characteristics, culture, and diagnosis	(a) Explain microbiological features of *M. tuberculosis*. (b) Discuss diagnostic methods for PT.	C1	MK	Lectures, Case studies	SAQ	SAQ, LAQ	Microbiology, Clinical Laboratory
HomUG-PM II.9.3		Knows How	Signs, symptoms, and clinical assessment	Recognize clinical manifestations and physical exam findings of PT.	C2/3	MK	Lectures, OPD Clinical rotations	Case presentations	OSCE, Bedside examinations, Viva, SAQ	Internal Medicine, Clinical Skills
HomUG-PM II.9.4			Complications of PT (pleural effusion, miliary TB, bronchiectasis)	(a) List complications of PT. (b) Define management strategies for complications.	C2/3	MK	Simulation training	Case presentations, SAQ, MCQs	Bedside examinations, Viva, OSCE	Pulmonology, Internal Medicine
HomUG-PM II.9.5			Imaging, sputum, and other diagnostic tests	Discuss interpretation of chest X-rays, sputum smears, and other diagnostic tests.	C2/3	MK	Simulation training	MCQs, SAQ	SAQ, OSCE, Viva, Bedside examinations	Radiology, Clinical Laboratory

HomUG-PM II.9.6			Drug regimens and management strategies	Discuss treatment plans, including drug regimens, patient factors, and comorbidities.	C3	NK	Role-playing, Group Discussions	SAQ	SAQ, Bedside examination, Viva	Pharmacology, Therapeutics
HomUG-PM II.9.7			Prevention, isolation, and monitoring	Discuss infection control measures and educate patients to prevent TB transmission.	C3	MK	Patient education, Simulation training	SAQ	SAQ, Viva	Infection Control, Public Health
HomUG-PM II.9.8			Socioeconomic factors and patient support	Discuss socioeconomic factors affecting adherence and define solutions.	C3	DK	OPD Clinical Postings, Role playing	SAQ	SAQ, LAQ, Viva	Social Work, Patient Advocacy
HomUG-PM II.9.9			Interprofessional teamwork and communication	Define a multidisciplinary approach for optimal PT care.	C3	DK	Guest Lectures, team-based projects	Group assignments	SAQ, LAQ	Practice of Medicine
HomUG-PM II.9.10			Research updates and professional growth	Apply evidence-based guidelines to improve PT management outcomes.	C3	NK	Journal clubs, Online database research	Literature review assignments	SAQ	Research Methodology
HomUG-PM II.9.11	Homoeooathic Orientation		Homoeopathic principles and remedies for PT	(a) Explain homoeopathic principles for PT management. (b) Select remedies based on symptoms and homoeopathic principles.	C3	MK	Lecture, Visual aids	MCQ, SAQ	SAQ, Bedside examination, Viva	Organon & Philosophy, Homoeopathic Materia Medica & Therapeutics, Homoeopathic Pharmacy

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.10. Tropical pulmonary eosinophilia										
HomUG-PM II.10.1	Knowledge and Scolarship	Knows	(a) Definition of Tropical Pulmonary Eosinophilia (TPE) (b) Epidemiology and causes of TPE	(a) Define TPE as a hypersensitivity reaction to parasitic infections, causing elevated eosinophils and respiratory symptoms. (b) Discuss the geographic distribution and prevalence of TPE. (c) Identify parasitic infections (e.g., filariae) linked to TPE and their role in disease pathology.	C1	MK	Lecture	Quizzes, Group discussions	Written examination	Pathology, Microbiology
HomUG-PM II.10.2			Pathophysiology	(a) Explain the immune response mechanisms leading to eosinophilia. (b) Discuss the effects of eosinophilic infiltration on lung and tissue function.	C1	MK	Lecture, Interactive map analysis	Quizzes, Interactive Q&A	Written examination	Preventive medicine
HomUG-PM II.10.3		Knows How	Symptoms and disease progression	List common symptoms of TPE (cough, dyspnoea, wheezing, nocturnal asthma-like features).	C2/3	MK	Lectures, OPD Clinical rotations	Clinical reasoning exercises	OSCE, Clinical competency exams	Practice of Medicine

HomUG-PMII.10.4			Blood tests, imaging, and serology	(a) Discuss laboratory and imaging findings for TPE diagnosis. (b) Explain the importance of differential diagnosis to avoid misdiagnosis.	C3	MK	Seminars, group discussions	Lab result interpretations	Practical exams, OSCE	Pathology, Radiology, practice of Medicine
HomUG-PMII.10.5		Does	Pharmacotherapy and monitoring plans	(a) Develop treatment strategies for TPE. (b) Discuss monitoring plans for TPE.	C3/P2	MK	Assignments, Workshops	Treatment plan assignments	Case-based examinations	Pharmacology, Homoeopathic Therapeutics
HomUG-PMII.10.6		Knows How	Managing acute and chronic complications	Discuss common and severe complications of TPE.	C3	DK	Simulation, Group Discussions	Role-playing, Simulated patients	Clinical evaluations, OSCE	Practice of Medicine
HomUG-PMII.10.7		Does	Prevention techniques and community health	Teach patients and communities prevention and control strategies for TPE.	A2	DK	Community outreach, Patient education	Educational brochures, Community talks	Feedback from community engagement	Preventive Medicine
HomUG-PMII.10.8		Knows How	Research updates and professional growth	(a) Evaluate ongoing research and emerging treatments for TPE. (b) Discuss evidence-based practices in TPE management.	C3	NK	Journal clubs, Online database research	Literature review assignments	SAQ	Research Methodology
HomUG-PMII.10.9			Inter-professional teamwork and communication	Define a multidisciplinary approach for optimal TPE care.	C3	DK	Guest Lectures, team-based projects	Group assignments	SAQ, LAQ	Practice of Medicine

HomUG-PM II.10.10	Homoeopathic Orientation		Homoeopathic principles and remedies for TPE	(a) Explain homoeopathic principles for TPE management. (b) Select remedies based on symptoms and homoeopathic principles.	C3	MK	Lecture, Visual aids	MCQ, SAQ	SAQ, Bedside examination, Viva	Organon & Philosophy, Homoeopathic Materia Medica & Therapeutics, Homoeopathic Pharmacy

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.11. Occupational & Environmental Lung Disorders										
HomUG-PM II.11.1	Knowledge and Scholarship	Knows	Types of diseases and exposure sources	(a) List major occupational lung diseases and their pathophysiological mechanisms. (b) Identify common environmental lung diseases, their causes, and health impacts.	C1	MK	Lectures, Reading assignments	Quizzes, Short essays	Written examination	Pathology, Preventive Medicine
HomUG-PM II.11.2			Workplace exposures and environmental risks	(a) Evaluate the role of environmental and occupational exposures in lung diseases. (b) Identify specific hazards (chemicals, dust, biological agents) contributing to lung disease.	C1	MK	Group discussions, Case studies	Group presentations	Multiple-choice exams	Preventive Medicine

HomUG-PM II.11.3		Shows How	Taking occupational histories and exposure assessment tools	(a) Demonstrate proficiency in taking occupational and environmental histories. (b) Correlate clinical findings with potential exposures.	P2/C2	MK	Workshops, Simulation training	Role-play exercises	OSCE	Practice of Medicine
HomUG-PM II.11.4			Diagnostic criteria, imaging, and pulmonary function tests	(a) Interpret clinical signs and symptoms of occupational/environmental lung disorders. (b) Analyze diagnostic test results (chest X-rays, CT scans, pulmonary function tests).	P2/3	Must Know	Lab sessions, Clinical rotations	Case studies evaluation	Practical exams, OSCE	Pathology, Radiology, Practice of Medicine
HomUG-PM II.11.5		Knows How	Treatment protocols and patient management plans	(a) Define individualized management plans (pharmacological and non-pharmacological). (b) Discuss workplace modifications and environmental interventions.	C3	MK	Problem-based learning, Clinical seminars	Treatment plan assignments	Clinical competency exams	Pharmacology, Homoeopathic Therapeutics
HomUG-PM II.11.6			Preventive measures and workplace safety regulations	Discuss prevention strategies, incorporating guidelines and safety standards.	C3	DK	Guest lectures, Community outreach	Workplace safety plan proposals	Poster presentations	Preventive Medicine
HomUG-PM II.11.7		Does	Team coordination and inter-professional communication	Define a multidisciplinary approach for optimal patient care.	C3	DK	Guest Lectures, team-based projects	Group assignments	SAQ, LAQ	Practice of Medicine

HomUG-PM II.11.8		Knows How	Research methodologies and current studies	Apply evidence-based guidelines to improve outcomes in occupational/environmental lung disease management.	C3	NK	Journal clubs, Online database research	Literature review assignments	SAQ	Research Methodology
HomUG-PM II.11.9	Homoeopathic Orientation		Homoeopathic principles and remedies for occupational/environmental lung disorders	(a) Explain homoeopathic principles for managing these disorders. (b) Select remedies based on symptoms and homoeopathic principles.	C3	MK	Lecture, Visual aids	MCQ, SAQ	SAQ, Bedside examination, Viva	Organon & Philosophy, Homoeopathic Materia Medica & Therapeutics, Homoeopathic Pharmacy

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.12. Sarcoidosis										
HomUG-PM II.12.1	Knowledge and Scholarship	Knows	(a) Definition of Sarcoidosis (b) Risk factors and pathogenesis	(a) Define sarcoidosis as a systemic granulomatous disease affecting the lungs and lymphatic system. (b) Explain immune responses and granuloma formation in sarcoidosis. (c) Describe genetic and environmental risk factors.	C1	MK	Lectures, Reading assignments	MCQ, SAQ	SAQ, LAQ	Pathology, Microbiology

HomUG-PM II.12.2			Symptoms and organ involvement	(a) Identify symptoms (cough, dyspnoea, skin lesions, eye inflammation). (b) Explain organ-specific manifestations (pulmonary, cardiac, neuro-sarcoidosis).	C1	MK	Lectures, Case studies, Visual aids	MCQ, SAQ	MCQ, SAQ, LAQ	Pathology, Practice of Medicine
HomUG-PM II.12.3		Knows How	Diagnostic criteria, imaging, and biopsy	(a) Describe indications for imaging and biopsy. (b) Interpret imaging findings (bilateral hilar lymphadenopathy, lung nodules). (c) Discuss the role of biopsy in confirming non-caseating granulomas.	C3	MK	Simulations, OPD Clinical rotations	OSCE, SAQ	OSCE, Viva	Radiology, Pathology, Practice of Medicine
HomUG-PM II.12.4			Treatment protocols and follow-up care	(a) Define management plans (pharmacologic and non-pharmacologic therapies). (b) Discuss lifestyle and dietary recommendations.	C3	MK	Clinical seminars, group Discussions	Group assignments, Tutorials	SAQ, LAQ, Viva	Pharmacology, Homoeopathic Therapeutics
HomUG-PM II.12.5			Long-term outcomes and complications	(a) Describe disease progression and variability in prognosis. (b) Discuss complications (pulmonary hypertension, cardiac/neurological involvement).	C3	DK	Patient counselling sessions, Role play, Simulations	OSCE	OSCE, Bedside examination, Viva	Preventive Medicine, Practice of Medicine
HomUG-PM II.12.6			Current research and new treatment modalities	(a) Discuss emerging research and clinical trials. (b) Describe evidence-based practices to improve treatment efficacy.	C3	NK	Journal clubs, Online database research	Literature review assignments	SAQ	Research Methodology
HomUG-PM II.12.7	Homoeopathic Orientation		Homoeopathic principles and remedies for sarcoidosis	(a) Explain homoeopathic principles for sarcoidosis management. (b) Select remedies based on symptoms.	C3	MK	Lecture, Visual aids	MCQ, SAQ	SAQ, Bedside examination, Viva	Organon & Philosophy, Homoeopathic Materia Medica

										&Therapeutics, Homoeopathic Pharmacy

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.13. Pulmonary Embolism										
HomUG-PM II.13. 1	Knowledge and Scholarship	Knows	Clotting cascade, risk factors, and impact of pulmonary embolism (PE)	(a) Explain the physiological process of clot formation (platelets, coagulation cascade). (b) Describe how clots travel to pulmonary arteries and affect circulation and gas exchange.	C1	MK	Lecture, Interactive Diagrams	Quizzes, Group Discussion	MCQ, SAQ, LAQ	Anatomy, Physiology, Pathology, Surgery
HomUG-PM II.13. 2		Knows How	Inherited and acquired risk factors for PE	(a) Identify common and less common risk factors (immobility, surgery, cancer, smoking, genetic predispositions). (b) Categorize risk factors based on epidemiological impact and mechanisms.	C2/3	MK	Case Studies, Group Discussion	Case Study Reviews	MCQ, SAQ, OSCE	Pharmacology, Critical Care

HomUG-PM II.13. 3		Shows How	Physical examination and risk assessment tools	(a) Perform a thorough history and physical exam, focusing on PE symptoms (shortness of breath, chest pain, and haemoptysis). (b) Discuss clinical scoring systems (e.g., Wells score) to assess PE probability.	P2/C2	MK	Simulation, Role-playing	Peer Review	Bedside Examination, Viva	Emergency Medicine
HomUG-PM II.13. 4		Knows How	Diagnostic tests for PE (D-dimer, CT angiography, V/Q scans, ultrasound)	(a) Discuss the role and limitations of D-dimer tests. (b) Analyze imaging studies (CT pulmonary angiography, V/Q scans) for normal and pathological findings.	C3/4	MK	Lecture, Workshops	Written Assignments, Presentations	MCQ, Viva	Radiology, Laboratory Medicine
HomUG-PM II.13. 5			Treatment options for PE (anticoagulation, thrombolysis, embolectomy)	(a) Discuss guidelines for anticoagulation therapy (dosing, renal function, bleeding risk). (b) Monitor patient responses to therapy (e.g., bleeding, thrombocytopenia). (c) Discuss indications for surgical interventions (e.g., embolectomy).	C3	MK	Clinical Rounds, Pharmacology Seminar	Simulation Exercises	MCQ, SAQ, Viva	Pharmacology, Surgery
HomUG-PM II.13. 6		Does	Patient education and follow-up care	(a) Instruct patients on medication adherence, lifestyle changes, and follow-up testing. (b) Educate patients on recognizing symptoms requiring immediate medical attention.	A3	DK	Patient Education Sessions, Role play	Group assignments, Tutorials	SAQ, Viva Voce	Family Medicine

HomUG-PM II.13. 7		Knows How	Staying updated with research and guidelines	(a) Discuss the latest research and guidelines on PE management. (b) Evaluate new studies for relevance and applicability to patient care.	C2/P2	NK	Journal clubs, Online database research	Literature review assignments	SAQ	Research Methodology
HomUG-PM II.13. 8	Homoeopathic Orientation		Homoeopathic principles and remedies for PE	(a) Explain homoeopathic principles and their limitations in PE management. (b) Select remedies based on PE symptoms.	C3	MK	Lecture, Visual aids	MCQ, SAQ	SAQ, Bedside examination, Viva	Organon & Philosophy, Homoeopathic Materia Medica & Therapeutics, Homoeopathic Pharmacy

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								Formative	Summative	
HomUG-PM II.14. Pleurisy & Pleural Effusion										
HomUG-PM II.14.1	Knowledge and Scholarship	Knows	Definition of pleurisy and pleural effusion	(a) Define pleurisy as inflammation of the pleura causing sharp chest pain. (b) Define pleural effusion as fluid accumulation in the pleural space.	C1	MK	Lecture, Interactive Diagrams	MCQ, SAQ	SAQ, LAQ	Physiology, Pathology

HomU G-PM II.14.2		Knows How	Pathogenesis of pleural inflammation and fluid accumulation	(a) Explain the inflammatory response in the pleural space (role of cytokines, leukocytes, and prostaglandins). (b) Discuss factors disrupting pleural fluid dynamics (increased vascular permeability, impaired lymphatic drainage, altered hydrostatic/oncotic pressures).	C2	MK	Lectures	MCQ, SAQ	MCQ, SAQ, LAQ	Pathology, Practice of Medicine
HomU G-PM II.14.3		Shows How	Causes of pleurisy and pleural effusion	Identify and categorize cau ses (infectious, inflammatory, neoplastic, and iatrogenic) and their pathophysiological mechanisms.	P2/3	MK	Lectures	OSCE, Case presentation s	Bedside examinatio n, Viva	Practice of Medicine, Community Medicine
HomU G-PM II.14.4		Knows How	Symptoms, physical examination, and diagnostic approach	(a) Elicit relevant medical history (chest pain, dyspnea, cough, risk factors). (b) Conduct a physical exam (percussion, palpation, auscultation) to identify signs (decreased breath sounds, pleural friction rub, dullness to percussion).	C3	MK	Workshops,	Written Assignments , Presentation s	Multiple Choice Questions, Bedside examinatio n, Viva	Pathology, Microbiology Practice+M2 09 of Medicine

HomUG-PM II.14.5			Diagnostic tests (chest X-rays, CT scans, ultrasound, pleural fluid analysis)	(a) Interpret chest X-rays (blunting of costophrenic angles, pleural-based densities). (b) Analyze CT scans and ultrasound findings (loculated effusions, pleural thickening). (c) Discuss pleural fluid analysis (cell count, protein, LDH, microbiological studies).	C3	MK	Clinical Rounds, Pharmacology Seminar	Simulation Exercises	Bedside examination, Viva	Pharmacology, Surgery
HomUG-PM II.14.6		Does	Medical and surgical treatment options	Discuss treatment plans (pharmacological therapies, surgical interventions) tailored to individual patients, including dosages, administration routes, and monitoring.	A2/3	DK	Patient Education Sessions	Role-playing	Viva Voce	Practice of Medicine, Community Medicine
HomUG-PM II.14.7		Knows How	Long-term effects, prognosis, and self-management strategies	Educate patients on prognosis, complications, and daily management strategies.	C3	NK	Journal Club, Seminars, Online database research	Literature review assignments	SAQ	Research Methodology
HomUG-PM II.14.8	Homoeopathic Orientation		Updates on treatment protocols and diagnostic advancements	Integrate latest research findings into clinical practice to improve patient outcomes.	C3	MK	Lecture, Visual aids	MCQ, SAQ	SAQ, Bedside examination, Viva	Organon & Philosophy, Homoeopathic Materia Medica & Therapeutics, Homoeopathic Pharmacy

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								Formative	Summative	
HomUG-PM II.15. Pneumothorax										
HomUG-PM II.15.1	Knowledge and Scholarship	Knows	Definition and types of pneumothorax	(a) Define pneumothorax. (b) Identify types (spontaneous, traumatic, tension).	C1	MK	Lecture, Discussions	MCQ, SAQ	MCQ, SAQ, LAQ	Surgery
HomUG-PM II.15.2		Knows How	Mechanisms and lung dynamics	Explain the mechanisms and physiological changes (pleural pressure, lung collapse).	C2	MK	Lectures, Videos	Group discussions, Assignments	SAQ, LAQ, Viva	Physiology, Surgery
HomUG-PM II.15.3			Signs, symptoms, and differential diagnosis	(a) Differentiate signs and symptoms of pneumothorax from other respiratory conditions. (b) Conduct a focused patient history and examination.	C2/3	MK	Case studies, OPD Clinical Postings, DOAP	Observation checklists	OSCE, Bedside examination, Viva	Practice of Medicine, Surgery
HomUG-PM II.15.4		Shows	Physical examination techniques	Demonstrate proper techniques for chest examination (inspection, palpation, percussion, auscultation).	P2/3	MK	Clinical simulations, Role-playing	Direct observation, Checklist	OSCE, Bedside examination	Surgery, Practice of Medicine
HomUG-PM II.15.5		Knows	Radiographic features and signs	(a) Recognize radiographic features of pneumothorax on chest X-rays. (b) Interpret imaging findings for diagnosis and management.	C2/P2	MK	OPD Clinical Postings, Case discussions, DOAP	Quizzes, Group Discussions, Assignments	Written exam, OSCE	Surgery, Practice of medicine

HomUG-PM II.15.6		Knows How	Treatment options, indications, and complications	Describe a comprehensive management plan, including treatment options, indications, complications, and patient-specific factors.	C3	MK	Case discussions, Problem-based learning	Tutorials, Group assignments	Bedside examination, Viva	Surgery, Practice of medicine
HomUG-PM II.15.7			Updates on treatment protocols and diagnostic advancements	Integrate latest research findings into clinical practice to improve patient outcomes.	C3	NK	Journal Club, Seminars, Online database research	Literature review assignments	SAQ	Research Methodology
HomUG-PM II.15.8	Homoeopathic Orientation		Homoeopathic principles and remedies for pneumothorax	(a) Explain homoeopathic principles and their limitations in managing pneumothorax. (b) Select remedies based on symptoms.	C3	MK	Lecture, Visual aids	MCQ, SAQ	SAQ, Bedside examination, Viva	Organon & Philosophy, Homoeopathic Materia Medica & Therapeutics, Homoeopathic Pharmacy

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.16. Empyema										
HomUG-PM II.16.1	Knowledge and Scholarship	Knows	Definition, causes, and risk factors of empyema	(a) Define empyema. (b) Discuss its aetiology (common pathogens). (c) Identify risk factors (pneumonia, lung abscess, thoracic surgery).	C1	MK	Lecture, Discussions	MCQ, SAQ	MCQ, SAQ, LAQ	Pathology, Microbiology, Surgery

HomUG-PM II.16.2		Knows How	Pathogenesis and inflammatory process	Describe the pathophysiology of empyema (infection, inflammation, and pus accumulation, complications like loculated effusion or pleural thickening).	C2	MK	Lectures, Videos	Group discussions, Assignments	SAQ, LAQ, Viva	Physiology, Pathology, Surgery
HomUG-PM II.16.3		Knows	Signs, symptoms, and differential diagnosis	(a) Recognize clinical signs and symptoms (fever, pleuritic chest pain, dyspnoea, systemic illness). (b) Distinguish empyema from other respiratory conditions.	C2/3	MK	Case studies, OPD Clinical Postings	Observation checklists	OSCE, Bedside examination, Viva	Practice of Medicine, Surgery
HomUG-PM II.16.4		Shows	Physical examination techniques	Perform a focused physical exam to detect signs (decreased breath sounds, dullness to percussion, pleural friction rub).	P2/3	MK	Clinical simulations, Role-playing	Direct observation, Checklist	OSCE, Bedside examination	Surgery, Practice of Medicine
HomUG-PM II.16.5		Knows How	Radiographic features and ultrasound findings	Interpret imaging studies (chest X-rays, ultrasound) to identify findings (pleural effusion with loculations, pleural thickening, fibrin strands).	C3	MK	OPD Clinical Postings, Case discussions	Quizzes, Group Discussions, Assignments	Written exam, OSCE	Surgery, Practice of medicine
HomUG-PM II.16.6			Treatment options, drainage techniques, and antibiotic therapy	Discuss a management plan (antibiotic therapy, drainage techniques like thoracocentesis or chest tube insertion, adjunctive therapies, or surgical intervention).	C3	MK	Case discussions, Problem-based learning	Tutorials, Group assignments	Bedside examination, Viva	Surgery, Practice of medicine

HomUG-PM II.16.7			Updates on treatment protocols and diagnostic advancements	Integrate latest research findings into clinical practice to improve patient outcomes.	C3	NK	Journal Club, Seminars, Online database research	Literature review assignments	SAQ	Research Methodology
HomUG-PM II.16.8	Homoeopathic Orientation		Homoeopathic principles and remedies for empyema	(a) Explain homoeopathic principles and their limitations in managing empyema. (b) Select remedies based on symptoms.	C3	MK	Lecture, Visual aids	MCQ, SAQ	SAQ, Bedside examination, Viva	Organon & Philosophy, Homoeopathic Materia Medica & Therapeutics, Homoeopathic Pharmacy

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.17. Atelectasis										
HomUG-PM II.17. 1	Knowledge and Scholarship	Knows	Definition, types, and aetiology of atelectasis	(a) Define atelectasis. (c) Discuss underlying causes (airway obstruction, lung compression). (b) Identify types (obstructive, compressive, and adhesive). (d) Recognize associated risk factors.	C1	MK	Lecture Discussions	MCQ, SAQ	MCQ, SAQ, LAQ	Pathology, Microbiology, Surgery
HomUG-PM II.17. 2		Knows How	Mechanisms and lung collapse	(a) Describe the pathophysiology of atelectasis (loss of surfactant, bronchial obstruction, pleural effusion). (b) Explain the physiological consequences (reduced ventilation and perfusion).	C2	MK	Lectures, Videos	Group discussions, Assignments	SAQ, LAQ, Viva	Physiology, Pathology, Surgery
HomUG-PM II.17. 3			Signs, symptoms, and differential diagnosis	(a) Recognize clinical signs and symptoms (decreased breath sounds, dullness to percussion, dyspnoea, tachypnoea). (b) Differentiate atelectasis from other respiratory conditions.	C2	MK	Case studies, OPD Clinical Postings	Observation checklists	OSCE, Bedside examination, Viva	Practice of Medicine, Surgery

HomUG-PM II.17. 4		Shows	Physical examination techniques	Perform a focused physical exam to detect signs (chest asymmetry, reduced chest expansion, abnormal breath sounds).	P2/3	MK	Clinical simulations, Role-playing	Direct observation, Checklist	OSCE, Bedside examination	Surgery, Practice of Medicine
HomUG-PM II.17. 5		Knows How	Radiographic features and CT findings	Interpret imaging studies (chest X-rays, CT scans) to identify findings (lung collapse, mediastinal shift, consolidation).	C2/P2	MK	OPD Clinical Postings, Case discussions	Quizzes, Group Discussions, Assignments	Written exam, OSCE	Surgery, Practice of medicine
HomUG-PM II.17. 6			Treatment options, lung re-expansion techniques, and prevention strategies	Discuss a management plan (bronchial hygiene, chest physiotherapy, incentive spirometry, mechanical ventilation) and prevention strategies.	C3	MK	Case discussions, Problem-based learning	Tutorials, Group assignments	Bedside examination, Viva	Surgery, Practice of medicine
HomUG-PM II.17. 7			Updates on treatment protocols and diagnostic advancements	Integrate latest research findings into clinical practice to improve patient outcomes.	C3	NK	Journal Club, Seminars, Online database research	Literature review assignments	SAQ	Research Methodology
HomUG-PM II.17. 8	Homoeopathic Orientation		Homoeopathic principles and remedies for atelectasis	(a) Explain homoeopathic principles and their limitations in managing atelectasis. (b) Select remedies based on symptoms.	C3	MK	Lecture, Visual aids	MCQ, SAQ	SAQ, Bedside examination, Viva	Organon & Philosophy, Homoeopathic Materia Medica & Therapeutics, Homoeopathic Pharmacy

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.18. Interstitial lung diseases										
HomUG-PM II.18.1	Knowledge and Scholarship	Knows	Definition and classification of ILD	(a) Define ILD. (b) Classify types based on aetiology, pathology, and clinical features. (c) Discuss the spectrum of ILD (idiopathic, connective tissue disease-associated, occupational).	C1	MK	Lecture, Discussions	MCQ, SAQ	MCQ, SAQ, LAQ	Physiology, Pathology, Practice of Medicine
HomUG-PM II.18.2		Knows How	Mechanisms and inflammatory process	(a) Explain the pathophysiology of ILD (inflammation, fibrosis, tissue remodelling). (b) Discuss how these processes impair gas exchange and lung function.	C2/3	MK	Lectures, Videos	Group discussions, Assignments	SAQ, LAQ, Viva	Physiology, Pathology, Practice of Medicine
HomUG-PM II.18.3			Signs, symptoms, and differential diagnosis	(a) Identify clinical signs and symptoms (exertional dyspnoea, dry cough, bibasilar crackles, clubbing, weight loss, fatigue). (b) Differentiate ILD from other respiratory conditions.	C2/3	MK	Case studies, OPD Clinical Postings	Observation checklists	OSCE, Bedside examination, Viva	Practice of Medicine

HomUG-PM II.18.4		Shows	Physical examination techniques	Perform a focused physical exam to detect signs (inspiratory crackles, digital clubbing, and respiratory distress).	P2/3	MK	OPD Clinical Postings, Clinical simulations, Role-playing	Direct observation, Checklist	OSCE, Bedside examination	Practice of Medicine
HomUG-PM II.18.5		Knows How	Radiographic features and HRCT findings	Interpret imaging studies (chest X-rays, HRCT) to identify features (reticular opacities, honeycombing, ground-glass opacities, traction bronchiectasis).	C2/P2	MK	OPD Clinical Postings, Case discussions	Quizzes, Group Discussions, Assignments	Written exam, OSCE	Clinical rounds, Simulation scenarios
HomUG-PM II.18.6			Treatment options and pulmonary rehabilitation	Discuss a management plan (pharmacotherapy, pulmonary rehabilitation, oxygen therapy, lung transplantation) tailored to ILD subtype and severity.	C3	NK	Case discussions, Problem-based learning	Tutorials, Group assignments	Bedside examination, Viva	Practice of Medicine
HomUG-PM II.18.7			Updates on treatment protocols and diagnostic advancements	Integrate latest research findings into clinical practice to improve patient outcomes.	C3	NK	Journal Club, Seminars, Online database research	Literature review assignments	SAQ	Research Methodology
HomUG-PM II.18.8	Homoeopathic Orientation		Homoeopathic principles and remedies for ILD	(a) Explain homoeopathic principles and their limitations in managing ILD. (b) Select remedies based on symptoms.	C3	MK	Lecture, Visual aids	MCQ, SAQ	SAQ, Bedside examination, Viva	Organon & Philosophy, Homoeopathic Materia Medica & Therapeutics, Homoeopathic Pharmacy

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.19. Cystic fibrosis of lung										
HomUG-PM II.19.1	Knowledge and Scholarship	Knows	Definition, genetics, and epidemiology of cystic fibrosis (CF)	(a) Define CF and its genetic basis (CFTR gene mutations). (b) Describe CF epidemiology (prevalence, inheritance patterns, and demographics). (c) Discuss multi-organ involvement (respiratory, gastrointestinal, endocrine systems).	C1	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ, LAQ	Pathology, Microbiology, Paediatrics
HomUG-PM II.19.2		Knows How	Molecular defects and organ involvement	(a) Explain molecular defects (CFTR protein dysfunction, ion transport issues). (b) Describe how CFTR mutations cause abnormal mucus, inflammation, and tissue damage in lungs, pancreas, and intestines. (c) Discuss CF-related complications (chronic infections, pancreatic insufficiency, and malabsorption).	C2	MK	Lectures, Molecular biology workshops	Group discussions, Assignments	SAQ, LAQ, Viva	Microbiology, Paediatrics, Practice of Medicine

HomUG-PM II.19.3			Signs, symptoms, and diagnosis	(a) Recognize signs and symptoms (chronic cough, wheezing, recurrent infections, steatorrhea, failure to thrive). (b) Describe diagnostic criteria (sweat chloride test, genetic testing, newborn screening). (c) Differentiate CF from other respiratory and gastrointestinal conditions.	C3	MK	Case studies, Clinical simulations, Paediatric OPD Postings	Observation checklists	OSCE, Bedside examination, Viva	Paediatrics, Practice of Medicine
HomUG-PM II.19.4			Sweat chloride test and genetic testing	(a) Interpret sweat chloride test results. (b) Discuss principles of genetic testing for CFTR mutations.	C3/P2/3	MK	Case studies	Direct observation, Checklist	OSCE, Bedside examination	Practice of Medicine, Paediatrics
HomUG-PM II.19.5			Pharmacotherapy and airway clearance	(a) Describe management plans based on disease severity and organ involvement. (b) Discuss pharmacotherapy options (antibiotics, mucolytics, bronchodilators, CFTR modulators). (c) Explain the importance of airway clearance, pulmonary rehabilitation, and nutritional interventions.	C3	MK	Lectures, Case discussions	Quizzes, Group Discussions, Assignments	Written exam, OSCE	Pharmacology, Practice of Medicine

HomUG-PM II.19.6		Shows	Disease education and self-management	(a) Communicate essential CF information to patients and families. (b) Provide guidance on self-management (airway clearance, medication adherence, nutrition, and lifestyle). (c) Offer psychosocial support and referrals to support services.	A2	NK	OPD Clinical postings, Role-playing, Patient counselling	Tutorials, Group assignments	Bedside examination, Viva	Practice of Medicine, Preventive Medicine, Psychology
HomUG-PM II.19.7		Knows How	Updates on treatment protocols and diagnostic advancements	Integrate latest research findings into clinical practice to improve patient outcomes.	C3	NK	Journal Club, Seminars, Online database research	Literature review assignments	SAQ	Research Methodology
HomUG-PM II.19.8	Homoeopathic Orientation		Homoeopathic principles and remedies for CF	(a) Explain homoeopathic principles and their limitations in managing CF. (b) Select remedies based on symptoms.	C3	MK	Lecture, Visual aids	MCQ, SAQ	SAQ, Bedside examination, Viva	Organon & Philosophy, Homoeopathic Materia Medica & Therapeutics, Homoeopathic Pharmacy

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.20. Pulmonary Neoplasia										
HomUG-PM II.20.1	Knowledge and Scholarship	Knows	Definition, types, and epidemiology of pulmonary neoplasia	(a) Define pulmonary neoplasia and its types (primary lung cancer, metastatic tumors). (b) Describe epidemiology (incidence, risk factors like smoking, environmental exposures, demographics). (c) Differentiate benign and malignant lung tumors based on histology, behaviour, and prognosis.	C1	MK	Lecture, Discussions	MCQ, SAQ	MCQ, SAQ, LAQ	Pathology, Microbiology, Surgery, Preventive Medicine
HomUG-PM II.20.2		Knows How	Carcinogenesis and tumor progression	(a) Explain carcinogenesis and tumor progression (genetic mutations, cell proliferation, invasion, and metastasis). (b) Describe the role of risk factors (smoking, pollutants, and genetic predisposition). (c) Discuss molecular mechanisms of oncogenesis and implications for targeted therapy.	C2	MK	Lectures, Videos	Group discussions, Assignments	SAQ, LAQ, Viva	Pathology, Practice of Medicine, Surgery

HomUG-PM II.20.3			Signs, symptoms, and diagnostic approach	(a) Discuss signs and symptoms (persistent cough, hemoptysis, dyspnea, chest pain, weight loss, metastatic symptoms). (b) Describe the diagnostic approach (history, physical exam, imaging, biopsy). (c) Differentiate primary lung cancer from other pulmonary conditions.	C2	MK	Case studies, OPD Clinical Postings	Observation checklists	OSCE, Bedside examination, Viva	Practice of Medicine, Pathology, Surgery
HomUG-PM II.20.4			Imaging studies and biopsy techniques	(a) Interpret imaging studies (chest X-ray, CT scan) to identify lesions, tumor size, location, and metastasis. (b) Discuss indications, risks, and limitations of diagnostic procedures (bronchoscopy, EBUS, transthoracic biopsy, thoracoscopy).	C3/P2	MK	Clinical simulations, Role-playing	Direct observation, Checklist	OSCE, Bedside examination	Surgery, Practice of Medicine
HomUG-PM II.20.5			Surgical options, chemotherapy, and radiation therapy	(a) Discuss individualized treatment plans based on tumor histology, stage, and patient factors. (b) Explain treatment modalities (surgery, chemotherapy, radiation, immunotherapy, targeted therapy).	C2/3	NK	OPD Clinical Postings, Case discussions	Quizzes, Group Discussions, Assignments	Written exam, OSCE	Pharmacology, Surgery, Practice of Medicine

HomUG-PM II.20.6		Shows	Disease education and treatment options	(a) Communicate essential information about pulmonary neoplasia (prognosis, treatment options, side effects, supportive care). (b) Provide education on smoking cessation, symptom management, coping strategies, and end-of-life care.	A2/3	NK	Case discussions, Role play	Tutorials, Group assignments	SAQ, Bedside examination, Viva	Surgery, Practice of Medicine
HomUG-PM II.20.7		Knows How	Updates on treatment protocols and diagnostic advancements	Integrate latest research findings into clinical practice to improve patient outcomes.	C3	NK	Journal Club, Seminars, Online database research	Literature review assignments	SAQ	Research Methodology
HomUG-PM II.20.8	Homoeopathic Orientation		Homoeopathic principles and remedies for pulmonary neoplasia	(a) Explain homoeopathic principles and their limitations in managing pulmonary neoplasia. (b) Select remedies based on symptoms.	C3	MK	Lecture, Visual aids	MCQ, SAQ	SAQ, Bedside examination, Viva	Organon & Philosophy, Homoeopathic Materia Medica & Therapeutics, Homoeopathic Pharmacy

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.21. Hyperventilation Syndromes										
HomUG-PM II.21.1	Knowledge and Scholarship	Knows	Definition and pathophysiology of hyperventilation syndrome	(a) Define hyperventilation syndrome (excessive ventilation, hypocapnia, respiratory alkalosis). (b) Explain the pathophysiology (respiratory alkalosis, stress/anxiety response, feedback mechanisms).	C1	MK	Lecture, Reading, Discussions	Quizzes, Peer assessment	Written exam, OSCE	Respiratory physiology lectures, Psychiatry rotations
HomUG-PM II.21.2		Knows How	Clinical presentation and differential diagnosis	(a) Describe clinical symptoms (dyspnoea, chest tightness, dizziness, palpitations, and paraesthesia). (b) Recognize signs (rapid respiratory rate, normal oxygen saturation, absence of distress/cyanosis). (c) Differentiate hyperventilation syndrome from other respiratory/cardiovascular conditions.	C3	MK	Case studies, Clinical simulations	Observation checklists	OSCE, Clinical skills exam	Emergency department rotations, Pulmonary clinics

HomUG-PM II.21.3			Diagnostic tests and exclusion of other conditions	(a) Identify diagnostic criteria (self-reported symptoms, documented hyperventilation, and exclusion of other conditions). (b) Discuss the role of diagnostic tests (arterial blood gas, pulmonary function tests, cardiopulmonary exercise testing).	C3	MK	Case discussions, Problem-based learning	Oral presentations, Team projects	Clinical case write-ups	Pulmonary function testing sessions, Cardiology rounds
HomUG-PM II.21.4		Knows How/ Shows	Behavioral interventions and breathing exercises	(a) Discuss behavioural interventions (relaxation techniques, breathing retraining, and cognitive-behavioural therapy). (b) Teach breathing exercises (diaphragmatic breathing, paced breathing, pursed lip breathing). (c) Discuss stress management, lifestyle changes, and avoiding triggers.	C3/P2	NK	Role-playing, Patient counselling	Feedback, Reflection	OSCE, Patient education session	Psychiatry clinics, Stress management workshops
HomUG-PM II.21.5	Homoeopathic Orientation	Knows How	Homoeopathic principles and remedies for hyperventilation syndrome	(a) Explain homoeopathic principles and their limitations in managing hyperventilation syndrome. (b) Select remedies based on symptoms.	C3	MK	Lecture, Visual aids	MCQ, SAQ	SAQ, Bedside examination, Viva	Organon & Philosophy, Homoeopathic Materia Medica & Therapeutics, Homoeopathic Pharmacy

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.22. SARS COV-2										
HomUG-PM II.22.1	Knowledge and Scholarship	Knows	Definition, virology, and epidemiology of SARS-CoV-2	(a) Define SARS-CoV-2 as the virus causing COVID-19. (b) Explain its virology (genetic structure, spike proteins, replication, and transmission). (c) Describe epidemiology (transmission modes, incubation period, and global distribution).	C1	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ, LAQ	Pathology, Microbiology, Preventive Medicine
HomUG-PM II.22.2		Knows How	Viral entry and immune response	(a) Explain viral entry via ACE2 receptors, replication, and host immune response. (b) Describe the role of cytokines, immune dysregulation, and hypercoagulability in severe COVID-19. (c) Discuss factors contributing to the spectrum of clinical manifestations.	C3	MK	Lectures, Videos	MCQ, SAQ	SAQ, Viva	Pathology, Microbiology, Practice of Medicine

HomUG-PM II.22.3			Signs, symptoms, and complications	(a) Discuss symptoms (fever, cough, dyspnoea, fatigue, anosmia, ageusia, gastrointestinal issues). (b) Describe the clinical course (mild to severe disease, ARDS, thromboembolism). (c) Differentiate COVID-19 from other respiratory infections.	C3	MK	Group Discussion, Presentations	Assignments, Tutorials	OSCE, Bedside Examination, Viva	Infectious disease clinics, Emergency medicine rotations
HomUG-PM II.22.4			Diagnostic tests (PCR, antigen tests, serology)	(a) Describe diagnostic tests (RT-PCR, antigen tests, serology, and imaging). (b) Discuss specimen collection, handling, and processing. (c) Discuss limitations, sensitivity, specificity, and turnaround time of tests.	C3	MK	Group Discussion, Presentations	SAQ	OSCE, Viva	Pathology, Microbiology, Practice of Medicine
HomUG-PM II.22.5			Pharmacotherapy and supportive care	(a) Discuss pharmacotherapy (antivirals, corticosteroids, immunomodulators, and anticoagulants). (b) Discuss prevention strategies (PPE, isolation, vaccination).	C3	MK	Case discussions, Problem-based learning	Oral presentations, Team projects	Clinical case write-ups	Pharmacology, Preventive Medicine, Practice of Medicine

HomUG-PM II.22.6		Shows	Disease education and preventive measures	(a) Communicate essential information about COVID-19 (transmission, prevention, vaccination). (b) Provide education on symptom recognition, self-isolation, and seeking care. (c) Engage in community outreach and public health campaigns.	A2	NK	Role-playing, Patient counselling		OSCE, Viva	Preventive Medicine
HomUG-PM II.22.7	Homoeopathic Orientation	Knows How	Homoeopathic principles and remedies for SARS-CoV-2	(a) Explain homoeopathic principles and their limitations in managing SARS-CoV-2. (b) Select remedies based on symptoms.	C3	MK	Lecture, Visual aids	MCQ, SAQ	SAQ, Bedside examination, Viva	Organon & Philosophy, Homoeopathic Materia Medica & Therapeutics, Homoeopathic Pharmacy

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Sumative	
HomUG-PM II.23. Homoeopathic Therapeutics										

HomUG-PM II.23.1	Knowledge and Scholarship	Knows	Definition, types, and common symptoms of respiratory disorders	(a) Define respiratory disorders in homoeopathic medicine (acute/chronic, upper/lower respiratory tract). (b) Describe common symptoms (cough, dyspnoea, wheezing, chest tightness, and expectoration).	C2	MK	Lecture, Reading, Discussions	MCQ	SAQ, OSCE	Respiratory physiology, Practice of Medicine
HomUG-PM II.23.2	Homoeopathic Orientation	Knows How	Similia principle and individualization	(a) Explain homoeopathic principles (law of similars, individualization, vital force). (b) Discuss the holistic approach, dynamic nature of disease, and use of potentized remedies.	C3	MK	Lectures	Group discussions, Tutorials, Assignments	Viva	Organon
HomUG-PM II.23.3		Shows	Case-taking and repertorization techniques	(a) Demonstrate case-taking techniques (eliciting characteristic symptoms, modalities, concomitants). (b) Select remedies using repertory rubrics, software, and charts.	P2/3	MK	OPD Clinical Postings, Case discussions	SAQ	OSCE, Bedside Examination, Viva	Organon, Homoeopathic Repertory
HomUG-PM II.23.4		Knows How	Materia medica and repertory	(a) Identify key homoeopathic remedies for respiratory disorders based on symptomatology and modalities. (b) Utilize materia medica and repertory tools for remedy selection.	C3	MK	OPD Clinical Postings, Case studies	SAQ	OSCE, Bedside Examination, Viva	Homoeopathic clinics, Materia medica sessions

HomUG-PM II.23.5			Prescribing and potency selection	(a) Describe individualized treatment plans using homoeopathic principles (similars, potency selection, and posology). (b) Prescribe remedies based on symptom totality, constitution, and clinical progress.	C3/4/5	MK	OPD Clinical Postings	Group discussions, Tutorials, Assignments	OSCE, Viva	Homoeopathic Pharmacy, Organon, Homoeopathic Philosophy
HomUG-PM II.23.6		Shows	Patient education and therapeutic expectations	(a) Communicate effectively about homoeopathic treatment principles and expectations. (b) Provide education on lifestyle modifications, diet, and preventive measures.	A2/3	NK	OPD Clinical Postings, Role-playing		OSCE, Patient education session	Organon, Homoeopathic Philosophy, Materia Medica, Preventive Medicine

5.2. Renal Disorders

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to	T-L Methods	Assessment		Integration
								Formative	Summative	

						know				
HomUG-PM II.24. Symptomatology and clinical syndromes & Renal function tests										
HomUG-PM II.24.1	Knowledge and Scholarship	K	Symptomatology	Identify common symptoms of renal dysfunction	C2	MK	Lectures	MCQ	MCQ, SAQ	Practice of Medicine
HomUG-PM II.24.2		KH		Recognize the significance of symptoms such as hematuria, proteinuria, oliguria, dysuria, flank pain and edema	C3/4	MK	Lectures, Group Discussions	MCQ, SAQ	MCQ, SAQ	Pathology, Practice of Medicine
HomUG-PM II.24.3			Clinical Syndromes	Discuss the clinical presentation of renal syndromes such as acute kidney injury, nephrotic syndrome, chronic kidney disease, nephritic syndrome and renal calculi	C2	MK	Lectures, Group Discussions, Assignments	MCQ, SAQ, Tutorials	MCQ, SAQ, LAQ	Pathology, Practice of Medicine

HomUG-PM II.24.4			Renal Function Tests	Describe the common renal function tests including serum creatinine,blood urea nitrogen, estimated glomerular filtration rate (eGFR), urine analysis, and renal biopsy	C3/P2	MK	Lectures, Group Discussions, Lab Simulations	Test Result Analysis Exercises	Bedside Examination, Viva	Physiology, Biochemistry, Practice of Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.25. Urinary Tract Infections										
HomUG-PM II.25.1	Knowledge and Scholarship	K	Definition and classification of UTIs	(i) Define UTIs . (ii) Classify UTI into (a) asymptomatic bacteriuria, (b) acute pyelonephritis, (c) renal abscess, (d) acute cystitis, (e) acute urethritis, (f) acute prostatitis, and (g) septicaemia	C1	MK	Lectures, reading materials	Concept mapping exercise	Multiple-choice questions (MCQs)	Microbiology

HomUG-PM II.25.2			Risk factors, common pathogens	(a) Recognize the risk factors associated with UTIs. (b) List the common causative agents of UTI	C1	MK	Lectures, Case studies, literature review	Risk factor assessment quiz	SAQ	Microbiology, Practice of Medicine
HomUG-PM II.25.3		KH	Mechanisms of infection, host response	Explain the pathophysiological processes involved in UTIs, including (a) bacterial invasion, (b) host immune response, and (c) tissue damage	C2	MK	Lectures, Assignments, Diagrams, Chart making	Pathophysiology case studies	MCQ, SAQ, LAQ	Pathology, Practice of Medicine
HomUG-PM II.25.4			Symptoms, physical findings	List the clinical manifestations and physical exam findings associated with different types of UTIs	C2	MK	OPD/Clinical rotations, patient simulations	Clinical observation checklist	OSCE stations, Bedside examinations	Practice of Medicine
HomUG-PM II.25.5			Urine analysis, culture, imaging	Interpret diagnostic tests for UTIs, including (a) urine analysis, (b) urine culture, and (c) imaging studies	P2	MK	Lectures, Lab demonstrations, virtual labs	Interpretation of test results	MCQ, SAQ	Physiology, Biochemistry, Pathology, Radiology
HomUG-PM II.25.6			Antibiotic therapy, supportive measures	Describe evidence-based treatment plans for various UTIs, considering antimicrobial resistance patterns and patient-specific factors	C3/4	MK	Case/Group discussions	Tutorials, SAQ	Case-based exams, SAQ, LAQ	Pharmacology, Practice of Medicine
HomUG-PM II.25.7		SH	Hygiene practices, lifestyle modification	Counsel patients on preventive measures to reduce the risk of UTIs recurrence	A2/3	DK	Patient education sessions, role-playing	Patient counselling assessment, Chart making	SAQ, LAQ	Community Medicine

HomUG-PM II.25.8		Does	Follow-up protocols, response assessment	(a) Monitor patients' response to treatment. (b) Define the management plans based on the response.	C4/5	DK	OPD/Clinical rounds	MCQ	Bedside case analysis, Viva	Pharmacology, Practice of Medicine
HomUG-PM II.25.9		SH	Sepsis, renal failure, urosepsis	(a) Identify the complications arising from UTIs. (b) Define the management strategy of sepsis, renal failure, and urosepsis	C3/4	DK	Lectures, Case studies, critical care simulations, Assignments	MCQ, SAQ	Bedside Examination, Viva	Practice of Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.26. Nephrotic Syndrome										
HomUG-PM II.26.1	Knowledge and Scholarship	K	Definition, key features	(a) Define Nephrotic syndrome. (b) Describe the clinical presentations of Nephrotic syndrome.	C1	MK	Lectures, reading materials	MCQ, SAQ	MCQ, SAQ	Practice of Medicine
HomUG-PM II.26.2		KH	Glomerular injury mechanisms	Explain the pathophysiological mechanisms underlying nephrotic syndrome, including glomerular injury	C2	MK	Lectures - Diagrammatic presentations	MCQ, SAQ	SAQ, LAQ	Pathology

HomUG-PM II.26.3		SH	Edema, proteinuria, hypoalbuminemia	Recognize the clinical manifestations and physical exam findings associated with nephrotic syndrome	C3/P2	MK	OPD/Clinical rotations, patient simulations	OSPE	OSCE stations	Practice of Medicine
HomUG-PM II.26.4		KH	Urine analysis, serum albumin, kidney biopsy	List diagnostic investigations for nephrotic syndrome.	C3	MK	Lab demonstrations, virtual labs	Interpretation of test results	Bedside examinations, Viva	Physiology, Biochemistry, Practice of medicine
HomUG-PM II.26.5		SH	Pharmacotherapy, dietary modifications	Develop treatment plans for nephrotic syndrome, considering pharmacological and non-pharmacological interventions	C3/4	MK	OPD/Case discussions, treatment guidelines	Treatment plan presentation	Bedside examinations	Pharmacology, Nutrition
HomUG-PM II.26.6			Medication adherence, lifestyle changes	Counsel patients and families on disease management, medication adherence, and lifestyle modifications	A2	DK	Role-playing, Chart making	Patient counselling assessment	SAQ, LAQ	Practice of Medicine
HomUG-PM II.26.7		Does	Serum albumin levels, urine protein	(a) Monitor patients' response to treatment. (b) Describe the management of Nephrotic syndrome based on response.	C3/P2	DK	OPD/Clinical rounds, progress notes	Treatment adjustment exercise	Bedside examinations, Viva	Practice of Medicine
HomUG-PM II.26.8		SH	Thrombosis, infections, hyperlipidaemia	(a) List the complications of Nephrotic syndrome. (b) Define the management of complications associated with	C3/P2	DK	Case studies, critical care simulations	MCQ, SAQ	Bedside examinations, Viva	Practice of Medicine

				nephrotic syndrome						
HomUG-PM II.26.9		KH	Role of nephrologists, nurses, dietitians	Define multidisciplinary approach for optimal patient care in nephrotic syndrome	C4	DK	Guest Lectures, team-based projects	Group assignments	SAQ, LAQ	Practice of Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.27. Glomerulopathies										
HomUG-PM II.27.1	Knowledge and Scholarship	K	Definition, types	(a) Define Glomerulonephritis. (b) Describe its classification into (i) Primary and (ii) Secondary	C1	MK	Lectures, reading materials	MCQ, SAQ	MCQ, SAQ	Practice of Medicine
HomUG-PM II.27.2		KH	Immune mechanisms, glomerular injury	Explain the pathophysiological mechanisms underlying glomerulonephritis (including immune complex deposition and glomerular injury)	C2	MK	Lectures - Diagrammatic presentations	MCQ, SAQ	SAQ, LAQ	Pathology
HomUG-PM II.27.3		SH	Hematuria, proteinuria, hypertension	Recognize the clinical manifestations and physical exam findings associated with glomerulonephritis	C3	MK	OPD/Clinical rotations, patient simulations	Clinical observation checklist	OSCE stations	Practice of Medicine
HomUG-PM II.27.4		KH	Urine analysis, kidney biopsy, serology	List the diagnostic tests for glomerulonephritis.	C3/4	MK	Lab demonstrations, virtual labs	Interpretation of test results	Bedside examinations, Viva	Physiology, Biochemistry, Practice of medicine

HomUG-PM II.27.5		SH	Pharmacotherapy, immunosuppression	Define treatment plans for glomerulonephritis, considering pharmacological and immunosuppressive interventions	C3/4	MK	OPD/Case discussions, treatment guidelines	Treatment plan presentation	Bedside examinations	Pharmacology, Nutrition
HomUG-PM II.27.6			Medication adherence, dietary restrictions	Counsel patients and families on disease management, medication adherence, and dietary modifications	A3/4	DK	Role-playing, Chart making	Patient counselling assessment	SAQ	Practice of Medicine
HomUG-PM II.27.7		Does	Renal function tests, proteinuria levels	(a) Monitor patients' response to treatment. (b) Define the management based on response to treatment.	C3/4	DK	OPD/Clinical rounds, progress notes	Treatment adjustment exercise	Bedside examinations, Viva	Practice of Medicine
HomUG-PM II.27.8		KH	Renal failure, infections, hypertension	Identify complications associated with glomerulonephritis	C4	DK	Case studies, critical care simulations	MCQ, SAQ	Bedside examinations, Viva	Practice of Medicine
HomUG-PM II.27.9		KH	Role of nephrologists, nurses, dietitians	Define multidisciplinary approach for optimal patient care in glomerulonephritis	C4	DK	Guest Lectures, team-based projects	Teamwork assessment	SAQ, LAQ	Practice of Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.28. Renal Failure										
HomUG-PM II.28.1	Knowledge and Scholarship	K	Definition, types	(a) Define renal failure. (b) Describe its classification into acute and chronic types	C1	MK	Lectures, reading materials	MCQ, SAQ	MCQ, SAQ	Practice of Medicine
HomUG-PM II.28.2		KH	Causes, mechanisms	Explain the pathophysiological mechanisms underlying renal failure (including ischemia, inflammation, and nephron loss).	C2	MK	Lectures - Diagrammatic presentations	MCQ, SAQ,	SAQ, LAQ	Pathology
HomUG-PM II.28.3		SH	Oliguria, azotemia, fluid overload	Recognize the clinical manifestations and physical exam findings associated with acute and chronic renal failure	C2/3 P2	MK	OPD/Clinical rotations, patient simulations	Clinical observation checklist	OSCE stations	Practice of Medicine
HomUG-PM II.28.4		KH	Serum creatinine, BUN, urinalysis	Define diagnostic tests for renal failure.	C3/4	MK	Lab demonstrations, virtual labs	Interpretation of test results	Bedside examinations, Viva	Physiology, Biochemistry, Practice of Medicine
HomUG-PM II.28.5		SH	Fluid management, dialysis, transplant	Define treatment plans for renal failure (considering fluid management, dialysis, and transplantation options.)	C3/4	MK	OPD/Case discussions, treatment guidelines	Treatment plan presentation	Bedside examinations	Pharmacology, Nutrition

HomUG-PM II.28.6		Shows How	Educate patients and families about the need of Dialysis, medication adherence	Counsel patients and families on disease management (including dialysis procedures, medication adherence, and lifestyle modifications.)	A3/4	DK	Role-playing, Chart making	Patient counselling assessment	SAQ	Practice of Medicine
HomUG-PM II.28.7		Does	Serum electrolytes, fluid balance	(a) Monitor patients' response to treatment (b) Describe the management based on response to treatment.	C3/4	DK	OPD/Clinical rounds, progress notes	Treatment adjustment exercise	Bedside examinations, Viva	Practice of Medicine
HomUG-PM II.28.8		SH	Electrolyte imbalances, infection, hypertension	Identify the complications associated with renal failure (including electrolyte imbalances, infections, and hypertension.)	C3	DK	Case studies, critical care simulations	MCQ, SAQ	Bedside examinations, Viva	Practice of Medicine
HomUG-PM II.28.9		Knows How	Role of nephrologists, nurses, dietitians	Define multidisciplinary approach for an optimal patient care in renal failure	C4	DK	Guest Lectures, team-based projects	Teamwork assessment	SAQ, LAQ	Practice of Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.29. Renovascular Diseases										
HomUG-PM II.29.1	Knowledge and Scholarship	K	Definition, aetiology	(a) Define renovascular disease and renovascular hypertension (b) Describe the aetiopathogenesis of Renovascular diseases.	C1	MK	Lectures, reading materials	MCQ, SAQ	MCQ, SAQ	Practice of Medicine
HomUG-PM II.29.2		KH	Renal artery stenosis, systemic effects	Explain the pathophysiological mechanisms underlying renovascular disease (including renal artery stenosis and its systemic effects)	C2	MK	Lectures - Diagrammatic presentations	MCQ, SAQ, Tutorials	SAQ, LAQ	Pathology, Surgery
HomUG-PM II.29.3		SH	Hypertension, renal bruits, renal function	Recognize the clinical manifestations and physical exam findings associated with renovascular disease and hypertension	C2/3 P2	MK	OPD/Clinical rotations, patient simulations	OSPE	OSCE stations	Practice of Medicine
HomUG-PM II.29.4		Does	Doppler ultrasound, angiography, renal scintigraphy	Define the diagnostic tests for renovascular disease and hypertension.	C3/4	MK	Lab demonstrations, virtual labs	Interpretation of test results	Bedside examination, Viva	Practice of Medicine, Radiology

HomUG-PM II.29.5		KH	Revascularization, antihypertensive therapy	Define treatment plans for renovascular disease and hypertension (considering revascularization procedures and antihypertensive medications)	C3/4	MK	OPD/Case discussions, treatment guidelines	Treatment plan presentation	Bedside examinations	Surgery, Pharmacology, Practice of Medicine
HomUG-PM II.29.6			Blood pressure monitoring, renal function tests	(a) Monitor patients' response to treatment. (b) Describe the management based on response to treatment.	C3/4	DK	OPD/Clinical rounds, progress notes	Treatment adjustment exercise	Bedside examination, Viva	Pharmacology, Medicine
HomUG-PM II.29.7			Renal insufficiency, post-procedural complications	Identify the complications associated with renovascular disease and hypertension	C3	DK	Case studies, critical care simulations	MCQ, SAQ	Bedside examination, Viva	Surgery, Practice of Medicine
HomUG-PM II.29.8			Role of nephrologists, interventional radiologists	Define multidisciplinary approach for an optimal patient care in renovascular disease and hypertension	C4	DK	Guest Lectures, team-based projects	Teamwork assessment	SAQ, LAQ	Practice of Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.30. Obstructive Uropathy										

HomUG-PM II.30.1	Knowledge and Scholarship	Knows	Definition, aetiology	(a) Define obstructive uropathy (b) Describe the etiopathogenesis of obstructive uropathy.	C1	MK	Lectures, reading materials	MCQ, SAQ	MCQ, SAQ	Internal Medicine, Surgery
HomUG-PM II.30.2		KH	Causes, mechanisms	Explain the pathophysiological mechanisms underlying obstructive uropathy (including urinary tract obstruction and its effects on renal function)	C2	MK	Lectures - Diagrammatic presentations	MCQ, SAQ, Tutorials	SAQ, LAQ	Pathology
HomUG-PM II.30.3		SH	Flank pain, urinary retention, hydronephrosis	Recognize the clinical manifestations and physical exam findings associated with obstructive uropathy	C2/3 P2	MK	OPD/Clinical rotations, patient simulations	Clinical observation checklist	OSCE stations	Internal Medicine, Surgery
HomUG-PM II.30.4		KH	Renal ultrasound, CT scan, urography	Define the diagnostic tests for obstructive uropathy.	C3/4	MK	Lab demonstrations, virtual labs	Interpretation of test results	Bedside examinations, Viva	Laboratory Medicine
HomUG-PM II.30.5		SH	Relief of obstruction, supportive care	Define treatment plans for obstructive uropathy (considering relief of obstruction and supportive measures)	C3/4	MK	OPD/Case discussions, treatment guidelines	Treatment plan presentation	Bedside examinations	Urology, Nephrology
HomUG-PM II.30.6			Self-catheterization, follow-up care	Counsel patients and families on disease management (including self-care techniques, follow-up appointments, and potential complications)	A3/4	DK	Role-playing, Chart making	Patient counselling assessment	SAQ	Surgery, Practice of Medicine

HomUG-PM II.30.7		KH	Renal function tests, imaging follow-up	(a) Monitor patients' response to treatment (b) Define the management plans based on response to treatment.	C3/4	DK	OPD/Clinical rounds, progress notes	Treatment adjustment exercise	Bedside examinations, Viva	Practice of Medicine
HomUG-PM II.30.8			Infection, renal failure, electrolyte imbalances	Identify the complications associated with obstructive uropathy	C3	DK	Case studies, critical care simulations	MCQ, SAQ	Bedside examinations, Viva	Surgery, Practice of Medicine
HomUG-PM II.30.9			Role of urologists, radiologists, nurses	Define multidisciplinary approach for an optimal patient care in obstructive uropathy	C4	DK	Guest Lectures, team-based projects	Teamwork assessment	SAQ, LAQ	Practice of Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.31. Tumors of Genito urinary tract										
HomUG-PM II.31.1	Knowledge and Scholarship	K	Definition, types	(a) Define tumours of the genitourinary tract. (b) Describe the classification of Tumours of GUT into various types (e.g., renal cell carcinoma, bladder cancer)	C1	MK	Lectures, reading materials	MCQ, SAQ	MCQ, SAQ	Pathology, Surgery
HomUG-PM II.31.2		KH	Risk factors, molecular pathways	Explain the etiopathogenesis of genitourinary tract tumours (including common risk factors and molecular pathways involved in tumorigenesis)	C2	MK	Lectures - Diagrammatic presentations	MCQ, SAQ, Tutorials	SAQ, LAQ	Pathology, Surgery
HomUG-PM II.31.3		SH	Haematuria, flank pain, urinary symptoms	Recognize the clinical manifestations and physical exam findings associated with genitourinary tract tumours	C2/3 P2	MK	OPD/Clinical rotations, patient simulations	Clinical observation checklist	OSCE stations	Surgery, Practice of Medicine
HomUG-PM II.31.4		KH	Imaging studies, biopsy	Define the diagnostic tests for genitourinary tract tumours	C3/4	MK	Lab demonstrations, virtual labs	Interpretation of test results	Bedside examinations, Viva	Radiology, Pathology, Surgery

HomUG-PM II.31.5		SH	Surgery, chemotherapy, radiation therapy	Define treatment plans for genitourinary tract tumours (surgical interventions, chemotherapy, and radiation therapy)	C3/4	MK	OPD/Case discussions, treatment guidelines	Treatment plan presentation	Bedside examinations	Surgery, Practice of Medicine, Pharmacology

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.32. Tubulo-interstitial Diseases										
HomUG-PM II.32.1	Knowledge and Scholarship	K	Definition, aetiology	(a) Define tubulointerstitial nephritis. (b) List the causes of Tubulointerstitial Nephritis (including common causes such as drug reactions and autoimmune disorders)	C1	MK	Lectures, reading materials	MCQ, SAQ	MCQ, SAQ	Physiology, Practice of Medicine
HomUG-PM II.32.2		KH	Immune mechanisms, tubular injury	Explain the pathophysiological mechanisms underlying tubulointerstitial nephritis (including immune-mediated damage and tubular injury)	C2	MK	Lectures - Diagrammatic presentations	MCQ, SAQ, Tutorials	SAQ, LAQ	Pathology

HomUG-PM II.32.3		SH	Acute kidney injury, electrolyte disturbances	Recognize the clinical manifestations and physical exam findings associated with tubulointerstitial nephritis	C2/3 P2	MK	OPD/Clinical rotations, patient simulations	Clinical observation checklist	OSCE stations	Practice of Medicine
HomUG-PM II.32.4		KH	Urinalysis, renal biopsy, imaging studies	Define the diagnostic tests for tubulointerstitial nephritis.	C3/4	MK	Lab demonstrations, virtual labs	Interpretation of test results	Bedside examination, Viva	Physiology, Practice of Medicine, Biochemistry
HomUG-PM II.32.5			Discontinue offending agents, corticosteroids	Develop treatment plans for tubulointerstitial nephritis (including discontinuation of offending agents and corticosteroid therapy)	C3/4	MK	OPD/Case discussions, treatment guidelines	Treatment plan presentation	Bedside examinations	Pharmacology
HomUG-PM II.32.6			Medication side effects, follow-up care	Counsel patients and families on disease management (including potential medication side effects, follow-up appointments, and lifestyle modifications)	C3/4	DK	OPD/Clinical rounds, progress notes	Treatment adjustment exercise	Bedside examination, Viva	Pharmacology, Practice of medicine
HomUG-PM II.32.7			Renal function tests, symptom assessment	(a) Monitor patients' response to treatment. (b) define the management plans based on response to treatment.	C3	DK	Case studies, critical care simulations	MCQ, SAQ	Bedside examination, Viva	Physiology, Practice of medicine

HomUG-PM II.32.8			Renal failure, recurrent disease	List the complications associated with tubulointerstitial nephritis (including renal failure and recurrent disease)	C4	DK	Guest Lectures, team-based projects	Teamwork assessment	SAQ, LAQ	Practice of Medicine
HomUG-PM II.32.9			Role of nephrologists, pharmacists, nurses	Define multidisciplinary approach for an optimal patient care in tubulointerstitial nephritis	C4	Desirable to Know	Interprofessional education sessions, team-based projects	Teamwork assessment	SAQ, LAQ	Practice of Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.33. Cystic Kidney diseases										
HomUG-PM II.33.1	Knowledge and Scholarship	K	Definition, types	(a) Define renal cystic disease (b) Describe its classification into various types (e.g., simple renal cysts, polycystic kidney disease)	C1	MK	Lectures, reading materials	MCQ, SAQ	MCQ, SAQ	Surgery, Practice of Medicine
HomUG-PM II.33.2		KH	Genetic mutations, cyst formation	Explain the etiopathogenesis of renal cystic disease (including genetic mutations and the process of cyst formation)	C2	MK	Lectures - Diagrammatic presentations	MCQ, SAQ, Tutorials	SAQ, LAQ	Pathology, Surgery, Practice of Medicine

HomUG-PM II.33.3			Abdominal pain, haematuria, hypertension	Define the clinical manifestations and physical exam findings associated with renal cystic disease	C2/3 P2	MK	OPD/Clinical rotations, patient simulations	Clinical observation checklist	OSCE stations	Surgery, Practice of Medicine
HomUG-PM II.33.4			Ultrasound, CT scan, genetic testing	Define the diagnostic tests for renal cystic disease.	C3/4	MK	Lab demonstrations, virtual labs	Interpretation of test results	Bedside examination, Viva	Radiology, Pathology
HomUG-PM II.33.5			Symptom management, surveillance	Describe the treatment plans for renal cystic disease (including symptom management and surveillance strategies for disease progression)	C3/4	MK	OPD/Case discussions, treatment guidelines	Treatment plan presentation	Bedside examinations	Surgery, Practice of Medicine
HomUG-PM II.33.6			Disease progression, genetic counselling	Counsel patients and families on disease management (including disease progression, genetic counselling, and family planning options)	C3/4	DK	OPD/Clinical rounds, progress notes	Treatment adjustment exercise	Bedside examination, Viva	Pathology, ObnG, Practice of Medicine
HomUG-PM II.33.7			Imaging follow-up, symptom assessment	(a) Monitor patients' response to treatment (b) Describe the management plans based on the response to treatment.	C3	DK	Case studies, critical care simulations	MCQ, SAQ	Bedside examination, Viva	Surgery, Practice of Medicine
HomUG-PM II.33.8			Infection, renal failure, hemorrhage	Identify the complications associated with renal cystic disease (including infection, renal failure, and hemorrhage)	C4	DK	Guest Lectures, team-based projects	Teamwork assessment	SAQ	Surgery, Practice of Medicine

HomUG-PM II.33.9			Role of nephrologists, genetic counsellors, surgeons	Define multidisciplinary approach for an optimal patient care in renal cystic disease	C4	Desirable to Know	Interprofessional education sessions, team-based projects	Teamwork assessment	SAQ, LAQ	Practice of Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.34. Homoeopathic concepts and Therapeutics										
HomUG-PM II.34.1	Homoeopathic orientation	KH	Understanding how miasmatic influences relate to renal disorders such as nephritis, nephrotic syndrome, and chronic kidney disease.	1. Identify miasmatic influences related to various renal disorders. 2. Evaluate how these miasms impact disease presentation. 3. Analyze treatment options based on miasmatic evaluation.	C2-3	MK	Lectures, group discussions, case studies	Group presentations on miasmatic influences	Written case analysis incorporating miasmatic evaluation	Pathology, Immunology, and Homoeopathic Philosophy
HomUG-PM II.34.2		KH	Application of homeopathic remedies for renal disorders based on miasmatic evaluation and individual symptomatology, Repertorisation	1. Select remedies using repertory rubrics, repertory software, and repertory charts. 2. Select appropriate remedies based on miasmatic evaluation and clinical presentation. 3. Develop individualized treatment plans for patients with renal disorders.	C2-3	MK	Practical demonstrations,	Practical assessments on remedy selection	Clinical exam involving case management	PM, Materia Medica, Homoeopathic philosophy, Repertory

5.3.Water and Electrolyte Imbalance

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.35. Approach to disorders of electrolyte imbalance										
HomUG-PM II.35.1	Knowledge and Scholarship	K	Overview of electrolyte functions and homeostasis; Clinical manifestations of imbalances	Identify the signs and symptoms of electrolyte imbalances	C1	MK	Lectures	Quizzes, Group discussions	MCQs	Physiology, Biochemistry, Pathology
HomUG-PM II.35.2		KH	Etiology and pathophysiology of common electrolyte disorders	Describe the causes and mechanisms of electrolyte imbalances	C2	MK	Case studies, Problem-based learning (PBL)	Written assignments, Case presentations	SAQ	Biochemistry, Pathology, Practice of Medicine
HomUG-PM II.35.3		SH	History taking, Physical examination, Interpreting laboratory tests	Perform clinical assessment and diagnosis of electrolyte disorders	P2	MK	Simulated patient labs, DOPS	OSCE, Peer feedback	OSCE, Clinical viva	Practice of Medicine
HomUG-PM II.35.4			Patient education strategies, Communication skills	Educate patients and caregivers on managing electrolyte imbalances	P2	DK	Workshops, Role-playing exercises	Chart making, Presentations		Community Medicine, Homoeopathic Philosophy
HomUG-PM II.35.5			Team dynamics, Roles of different healthcare professionals	Collaborate with an interprofessional team for comprehensive care	Application/Analysis	NK	Team-based learning	Team project presentations,	SAQ	Forensic Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.36. Sodium Imbalance										
HomUG-PM II.36.1	Knowledge and Scholarship	K	Explaining why Sodium is important in the body	Define the role of sodium in the body	C1	MK	Lecture, Discussion	MCQ	SAQ	Physiology, Biochemistry
HomUG-PM II.36.2		KH	Recognizing reasons for sodium levels being too high or too low	Identify causes of high and low sodium levels	C2	MK	Lecture, Discussion	MCQ	SAQ, Viva voce	Physiology, Practice of Medicine
HomUG-PM II.36.3			Understanding how the body manages sodium levels	Describe how sodium balance is regulated	C2	MK	Problem-based learning	Assignments, MCQ	SAQ, LAQ	Physiology, Biochemistry
HomUG-PM II.36.4			Knowing symptoms of high and low sodium levels	Recognize signs of sodium imbalance	C2	MK	Interactive workshops, Case-based learning	MCQ	SAQ, LAQ	Physiology, Practice of Medicine
HomUG-PM II.36.5			Knowing how to check for sodium problems	Discuss how sodium imbalance is diagnosed	C2	MK	Group Discussion	Tutorials, MCQ	SAQ, Viva voce	Biochemistry, Practice of Medicine
HomUG-PM II.36.6			Description of treatment options for correcting sodium imbalance	Discuss ways to treat sodium imbalance	C2	MK	Lectures, Seminars	Tutorials, Assignments	SAQ	Biochemistry, Practice of Medicine
HomUG-PM II.36.7		SH	Analysis of the physiological and clinical consequences of sodium disorders	Evaluate the impact of sodium imbalance	P1	DK	Lectures, Seminars	Assignments	OSCE	Practice of Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.37. Potassium Imbalance										
HomUG-PM II.37.1	Knowledge and Scholarship	K	Explaining what potassium is and why it's important	Define potassium and its role in the body	C1	MK	Lecture, Discussion	Quizzes, Class participation	SAQ	Physiology, Biochemistry
HomUG-PM II.37.2			Recognizing where potassium comes from and what it does	Identify sources and functions of potassium	C2	MK	Lecture, Discussion	Case presentations, MCQ	Viva voce	Physiology, Practice of medicine
HomUG-PM II.37.3		KH	Understanding how the body keeps potassium levels balanced	Describe the regulation of potassium levels	C2	MK	Problem-based learning	Assignments, MCQ	SAQ,	Physiology, Biochemistry
HomUG-PM II.37.4			Knowing symptoms of high and low potassium levels	Recognize signs of potassium imbalance	C2	MK	Interactive workshops, Case-based learning	MCQ	SAQ	Physiology, Practice of medicine
HomUG-PM II.37.5			Knowing how doctors check for potassium problems	Discuss how potassium imbalance is diagnosed	C2	MK	Problem-solving scenarios, Group Discussion	Tutorials, MCQ	SAQ, Viva voce	Biochemistry, Practice of Medicine
HomUG-PM II.37.6			Talking about how doctors fix potassium levels	Discuss ways to treat potassium imbalance	C2	MK	Lectures, Seminars	Tutorials, Assignments	SAQ	Biochemistry, Practice of Medicine
HomUG-PM II.37.7		SH	Analyzing how potassium problems affect patients	Evaluate the impact of potassium imbalance	P1	DK	Lectures, Seminars	Assignments	OSCE	Practice of Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.38. Phosphate Imbalance										
HomUG-PM II.38.1	Knowledge and Scholarship	K	Explaining what phosphate is and why it's important in the body	Define the physiological significance of phosphate	C1	MK	Lecture, Discussion	Quizzes, Class participation	SAQ	Physiology, Biochemistry
HomUG-PM II.38.2			Recognizing where phosphate comes from and its roles in the body	Identify sources and functions of phosphate	C2	MK	Lecture, Discussion	Case presentations, MCQ	Viva voce	Physiology, Practice of Medicine
HomUG-PM II.38.3		KH	Understanding how the body maintains phosphate balance	Describe the regulation of phosphate levels	C2	MK	Problem-based learning	Assignments, MCQ	SAQ,	Physiology, Biochemistry
HomUG-PM II.38.4			Identifying symptoms of high and low phosphate levels	Recognize signs of phosphate imbalance	C2	MK	Interactive workshops, Case-based learning	MCQ	SAQ	Physiology, Practice of Medicine
HomUG-PM II.38.5			Understanding diagnostic methods for assessing phosphate levels	Discuss how phosphate imbalance is diagnosed	C2	MK	Problem-solving scenarios, Group Discussion	Tutorials, MCQ	SAQ, Viva voce	Biochemistry, Practice of Medicine
HomUG-PM II.38.6			Discussing approaches to correcting high or low phosphate levels	Discuss treatment options for phosphate imbalance	C2	MK	Lectures, Seminars	Tutorials, Assignments	SAQ	Biochemistry, Practice of Medicine
HomUG-PM II.38.7		SH	Analyzing the effects of phosphate problems on patients	Evaluate the impact of phosphate imbalance	P1	DK	Lectures, Seminars	Assignments	OSCE	Practice of Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.39. Metabolic Acidosis & Alkalosis										
HomUG-PM II.39.1	Knowledge and Scholarship	K	Explanation of metabolic acidosis and its etiology	Describe metabolic and its causes	C1	MK	Lecture, Discussion	Quizzes, Class participation	SAQ	Physiology, Biochemistry
HomUG-PM II.39.2			Overview of conditions leading to metabolic acidosis such as renal failure, diabetic ketoacidosis, and lactic acidosis	Recognition of common etiologies of metabolic acidosis	C2	MK	Lecture, Discussion	Case presentations, MCQ	Viva voce	Physiology, Practice of Medicine
HomUG-PM II.39.3		KH	Explanation of mechanisms leading to decreased serum bicarbonate or increased acid production	(a) Define metabolic acidosis. (b) Describe the patho-physiological processes underlying metabolic acidosis	C2	MK	Problem-based learning	Assignments, MCQ	SAQ,	Physiology, Biochemistry
HomUG-PM II.39.4			Description of symptoms associated with metabolic acidosis such as Kussmaul breathing, nausea, and confusion	Identification of clinical features suggestive of metabolic acidosis	C2	MK	Interactive workshops, Case-based learning	MCQ	SAQ	Physiology, Practice of Medicine
HomUG-PM II.39.5			Explanation of laboratory tests and ABG interpretation in metabolic acidosis	Discuss the diagnostic approach to metabolic acidosis (including laboratory tests and arterial blood gas analysis)	C2	MK	Problem-solving scenarios, Group Discussion	Tutorials, MCQ	SAQ, Viva voce	Biochemistry, Practice of Medicine

HomUG-PM II.39.6			Description of treatment options for correcting metabolic acidosis	Discuss management strategies for metabolic acidosis(including correction of underlying causes and administration of bicarbonate)	C2	MK	Lectures, Seminars	Tutorials, Assignments	SAQ, LAQ	Biochemistry, Practice of Medicine
HomUG-PM II.39.7		SH	Analysis of the physiological and clinical consequences of metabolic acidosis	Evaluate the impact of metabolic acidosis on patient outcomes and prognosis	P1	DK	Lectures, Seminars	Assignments	OSCE	Practice of Medicine
HomUG-PM II.39.8		K	Explanation of metabolic alkalosis and its etiology	(a) Define metabolic alkalosis. (b) Describe the patho-physiological processes underlying metabolic alkalosis.	C1	MK	Lecture, Discussion	Quizzes, Class participation	SAQ	Physiology, Biochemistry
HomUG-PM II.39.9			Overview of conditions leading to metabolic alkalosis such as vomiting, diuretic use, and excessive bicarbonate intake	Recognition of common etiologies of metabolic alkalosis	C2	MK	Lecture, Discussion	Case presentations, MCQ	Viva voce	Physiology, Practice of Medicine
HomUG-PM II.39.10		KH	Explanation of mechanisms leading to increased serum bicarbonate or decreased acid production	Discuss the patho-physiological processes underlying metabolic alkalosis	C2	MK	Problem-based learning	Assignments, MCQ	SAQ,	Physiology, Biochemistry
HomUG-PM II.39.11			Description of symptoms associated with metabolic alkalosis such as muscle cramps, tetany, and altered mental status	Identification of clinical features suggestive of metabolic alkalosis	C2	MK	Interactive workshops, Case-based learning	MCQ	SAQ	Physiology, Practice of Medicine

HomUG-PM II.39.12			Explanation of laboratory tests and ABG interpretation in metabolic alkalosis	Describe the diagnostic approach to metabolic alkalosis (including laboratory tests and arterial blood gas analysis)	C2	MK	Problem-solving scenarios, Group Discussion	Tutorials, MCQ	SAQ, Viva voce	Biochemistry, Practice of Medicine
HomUG-PM II.39.13			Description of treatment options for correcting metabolic alkalosis	Discuss management strategies for metabolic alkalosis (including correction of underlying causes and administration of fluids and electrolytes)	C2	MK	Lectures, Seminars	Tutorials, Assignments	SAQ, LAQ	Biochemistry, Practice of Medicine
HomUG-PM II.39.14		SH	Analysis of the physiological and clinical consequences of metabolic alkalosis	Evaluate the impact of metabolic alkalosis on patient outcomes and prognosis	P1	DK	Lectures, Seminars	Assignments	OSCE	Practice of Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.40. Respiratory Acidosis & Alkalosis										
HomUG-PM II.40.1	Knowledge and Scholarship	K	Explanation of respiratory acidosis and its aetiology	(a) Define Respiratory acidosis. (b) List the causes of respiratory acidosis	C1	MK	Lecture, Discussion	MCQ	SAQ	Physiology, Biochemistry
HomUG-PM II.40.2			Overview of conditions leading to respiratory acidosis such as COPD, pneumonia, and opioid overdose	Recognition of common aetiologies of respiratory acidosis	C2	MK	Lecture, Discussion	Case presentations, MCQ	Viva voce	Physiology, Practice of Medicine

HomUG-PM II.40.3		KH	Explanation of mechanisms leading to increased PaCO2 and decreased pH	Discuss the physiological processes underlying respiratory acidosis	C2	MK	Problem-based learning	Assignments, MCQ	SAQ,	Physiology, Biochemistry
HomUG-PM II.40.4			Description of symptoms associated with respiratory acidosis such as dyspnea, confusion, and respiratory distress	Identification of clinical features suggestive of respiratory acidosis	C2	MK	Interactive workshops, Case-based learning	MCQ	SAQ	Physiology, Practice of Medicine
HomUG-PM II.40.5			Explanation of ABG interpretation and PFTs in respiratory acidosis assessment	Describe the diagnostic approach to respiratory acidosis (including arterial blood gas analysis and pulmonary function tests)	C2	MK	Problem-solving scenarios, Group Discussion	Tutorials, MCQ	SAQ, Viva voce	Biochemistry, Practice of Medicine
HomUG-PM II.40.6			Description of treatment options for correcting respiratory acidosis	Discuss management strategies for respiratory acidosis (including correction of underlying causes and ventilator support)	C2	MK	Lectures, Seminars	Tutorials, Assignments	SAQ, LAQ	Biochemistry, Practice of Medicine
HomUG-PM II.40.7		SH	Analysis of the physiological and clinical consequences of respiratory acidosis	Evaluate the impact of respiratory acidosis on patient outcomes and prognosis	P1	DK	Lectures, Seminars	Assignments	OSCE	Practice of Medicine
HomUG-PM II.40.8		K	Explanation of respiratory alkalosis and its etiology	(a) Define Respiratory alkalosis. (b) List the causes of respiratory alkalosis.	C1	MK	Lecture, Discussion	Quizzes, Class participation	SAQ	Physiology, Biochemistry
HomUG-PM II.40.9			Overview of conditions leading to respiratory alkalosis such as hyperventilation, anxiety, and fever	Recognition of common etiologies of respiratory alkalosis	C2	MK	Lecture, Discussion	Case presentations, MCQ	Viva voce	Physiology, Practice of Medicine
HomUG-PM II.40.10		KH	Explanation of mechanisms leading to decreased PaCO2 and increased pH	Discuss the physiological processes underlying respiratory alkalosis	C2	MK	Problem-based learning	Assignments, MCQ	SAQ,	Physiology, Biochemistry

HomUG-PM II.40.11			Description of symptoms associated with respiratory alkalosis such as dizziness, tingling, and palpitations	Identification of clinical features suggestive of respiratory alkalosis	C2	MK	Interactive workshops, Case-based learning	MCQ	SAQ	Physiology, Practice of Medicine
HomUG-PM II.40.12			Explanation of ABG interpretation and respiratory function tests in respiratory alkalosis assessment	Describe the diagnostic approach to respiratory alkalosis (including arterial blood gas analysis and assessment of respiratory function)	C2	MK	Problem-solving scenarios, Group Discussion	Tutorials, MCQ	SAQ, Viva voce	Biochemistry, Practice of Medicine
HomUG-PM II.40.13			Description of treatment options for correcting respiratory alkalosis and managing symptoms	Discuss management strategies for respiratory alkalosis (including addressing underlying causes and providing supportive care)	C2	MK	Lectures, Seminars	Tutorials, Assignments	SAQ, LAQ	Biochemistry, Practice of Medicine
HomUG-PM II.40.14		SH	Analysis of the physiological and clinical consequences of respiratory alkalosis	Evaluate the impact of respiratory alkalosis on patient outcomes and prognosis	P1	DK	Lectures, Seminars	Assignments	OSCE	Practice of Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.41. Therapeutics related to Disorder of water & electrolyte balance										

HomUG-PM II.41.1	Knowledge and Scholarship	K	History and philosophy of homoeopathy, Law of Similars, Minimum Dose, Totality of Symptoms	Discuss the basic principles of homoeopathy and their application	C1	MK	Lectures, Readings, assignments	MCQ	SAQ, LAQ	Organon & Philosophy, Materia Medica
HomUG-PM II.41.2		K	Signs and symptoms of imbalances in sodium, potassium, alkalosis and acidosis	Recognize symptoms of water and electrolyte imbalances	C1	MK	Symptomatology exercises	Assignments, MCQ	OSCE	Pathology, Practice of Medicine
HomUG-PM II.41.3		KH	Materia Medica relevant to electrolyte imbalances, Repertory usage for symptom matching	Select appropriate homoeopathic remedies for water and electrolyte imbalances based on symptom similarity	C2	MK	Repertory exercises, Materia Medica review	Case simulations, Assignments	Practical exams, Viva	Materia Medica, Repertory
HomUG-PM II.41.4		SH	Case taking, Remedy selection, Potency determination, Dose and repetition	Develop comprehensive treatment plans (including remedy, potency, and follow-up)	P2	MK	Interactive seminars	Treatment plan development, Reflective journals	Bedside examination, Viva	Materia Medica, Organon, Pharmacy
HomUG-PM II.41.5		SH	Importance of diet and hydration in managing electrolyte balance, Patient education techniques	Educate the patients about their lifestyle changes to support treatment	A2	DK	Role-playing, Workshop on communication skills	Patient counselling simulations	Patient education project, Oral exams	Community Medicine
HomUG-PM II.41.6		KH	Understanding the role of homoeopathy within the broader healthcare system, Referral protocols	(a) Explain how homeopathy can be used in the management of electrolyte disorders (b) Describe the limitations of Homoeopathy in managing electrolyte disorders	C3	DK	Guest lectures	SAQ	SAQ, LAQ	Medical Ethics

HomUG-PM II.41.7		KH	Research methodology, Critical appraisal of homoeopathic literature	Utilize principles of evidence-based medicine in clinical practice	C3	DK	Group Discussions, Online databases training	Article critiques, Assignments	SAQ	Research Methodology

5.4. Diseases of Digestive System and Peritoneum

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.42. Applied Anatomic and Physiology of GIT										
HomUG-PM II.42.1	Knowledge and Scholarship	Knows	Structural components, organization	(a) **Define** the anatomy of the GIT (mouth, oesophagus, stomach, small intestine, large intestine). (b) **Describe** the organization of the GIT (layers of the intestinal wall, blood/nerve supply, lymphatic drainage). (c) **Identify** anatomical landmarks and relationships with adjacent structures (liver, pancreas, spleen, abdominal vasculature).	C1	MK	Lecture, Reading, Discussions	MCQ, SAQ	SAQ, LAQ	Anatomy, Surgery

HomUG-PM II.42.2		Understands	Physiological processes in the GIT	(a) Explain digestion and absorption processes (ingestion, secretion, motility, digestion, absorption, excretion). (b) Describe the role of enzymes, hormones, and neurotransmitters in GIT function. (c) Identify nutrient absorption sites (small intestine, villi, microvilli).	C2	MK	Lectures	Concept maps, Group discussions	SAQ, Viva	Physiology
HomUG-PM II.42.3		Knows How	Etiology, pathogenesis, and clinical features of gastrointestinal disorders	(a) Identify the aetiology and pathogenesis of common gastrointestinal disorders (Crohn's disease, ulcerative colitis, GERD, peptic ulcer disease, gastrointestinal cancers). (b) Recognize clinical features and manifestations (abdominal pain, bloating, diarrhoea, constipation, weight loss, anaemia, jaundice). (c) Describe disease classification, staging, prognosis, and the impact of genetic, environmental, and lifestyle factors.	C2	MK	Lectures, Group Discussions	MCQ, SAQ	OSCE, Bedside Examination, Viva	Pathology, Practice of Medicine

HomUG-PM II.42.4		Knows How	Diagnostic investigations for gastrointestinal disorders	((a) Discuss investigations (endoscopy, colonoscopy, biopsy, imaging, laboratory tests). (b) Discuss indications, contraindications, risks, and limitations of diagnostic modalities. (c) Interpret test results in the context of clinical presentation.	C2/3	MK	OPD Clinical Postings, Case studies	Tutorials, assignments	OSCE, Bedside Examination, Viva	Pathology, Surgery, Practice of Medicine.

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.43. Aphthous Ulceration										
HomUG-PM II.43.1	Knowledge and Scholarship	Knows	Definition, aetiology, and types of aphthous ulcers	(a) Define aphthous ulcers as painful oral mucosal lesions with a yellowish-white pseudo membrane and erythematous margins. (b) Describe the aetiology (trauma, stress, hormonal changes, immune dysregulation, nutritional deficiencies, and genetic predisposition). (c) Classify aphthous	C2/3	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ	Surgery, Practice of Medicine

				ulcers into minor, major, and herpetiform types.						
HomUG-PM II.43.2		Knows How	Symptoms, morphology and differential diagnosis	(a) Describe clinical symptoms (pain, difficulty eating/speaking, erythema, and swelling). (b) Recognize morphology (shallow, well-defined ulcers with a greyish/yellowish centre and erythematous halo). (c) Differentiate aphthous ulcers from other oral lesions (herpes labialis, traumatic ulcers, oral thrush, and oral malignancies).	C2/P2	MK	Lectures, OPD Clinical Postings, DOPS	MCQ, SAQ	MCQ, SAQ, Bedside examination, Viva	Surgery

HomUG-PM II.43.3		Knows How	Predisposing factors and triggers	(a) Identify predisposing factors (dental trauma, orthodontic appliances, sharp food). (b) Discuss systemic factors (stress, hormonal changes, dietary allergies, autoimmune diseases). (c) Explain genetic susceptibility (HLA alleles, familial clustering).	C2/3	MK	Lectures, OPD Clinical Postings	SAQ, Group assignments	MCQ, LAQ, Viva	Surgery, Preventive Medicine
HomUG-PM II.43.4		Knows How	Similar lesions and oral manifestations of systemic diseases	(a) Discuss differential diagnosis of aphthous ulcers. (b) Differentiate from herpes labialis (lesion morphology, prodromal symptoms, HSV testing). (c) Recognize features of traumatic ulcers, oral thrush, erythema multiforme, and oral malignancies.	C2/3	MK	OPD Clinical Postings,	Group assignments, Tutorials	OSCE, Bedside Examination, Viva	Surgery, Practice of Medicine

HomUG-PM II.43.5		Knows How	Pharmacotherapy, topical agents and lifestyle modifications	(a) Discuss treatment options (topical corticosteroids, analgesics, antimicrobials, oral rinses). (b) Explain systemic medications (corticosteroids, immunomodulators, and vitamin/mineral supplements).	C3	NK	Lectures, Journal clubs, Online research of data bases	Group assignments, Tutorials	OSCE, Bedside examination, Viva	Pharmacology, Research Methodology
HomUG-PM II.43.6		Shows	Oral hygiene and dietary modifications	(a) Educate patients on preventive measures (oral hygiene, avoiding abrasive/acidic foods, minimizing trauma). (b) Counsel patients on stress management and lifestyle modifications.	A2	NK	Role-playing, Patient counselling in OPD Clinical Posting	SAQ	OSCE, SAQ,LAQ	Preventive Medicine, Practice of Medicine
HomUG-PM II.43.7	Homoeopathic Orientation	Knows How	Knowledge of homoeopathic principles and remedies for Aphthous Ulcers	(a) Explain homoeopathic principles for managing aphthous ulcers. (b) Select remedies based on symptoms.	C3	MK	Lecture, Visual aids	MCQ, SAQ	SAQ, Bedside examination, Viva	Organon & Philosophy, Homoeopathic Materia Medica & Therapeutics, Homoeopathic Pharmacy

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.44. Stomatitis										
HomUG-PM II.44.1	Knowledge and Scholarship	Knows	Definition, aetiology, and classification of stomatitis	(a) Define stomatitis as inflammation of the oral mucosa causing pain, redness, swelling, and ulceration. (b) Describe the aetiology (infectious agents, systemic diseases, allergic reactions, chemical irritants). (c) Classify stomatitis into subtypes (herpetic, aphthous, candidal, drug-induced).	C2/3	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ	Surgery, Practice of Medicine

HomUG-PM II.44.2		Knows How	Symptoms, morphology and differential diagnosis	(a) Describe clinical symptoms (oral pain, burning sensation, difficulty eating/swallowing, altered taste). (b) Recognize lesion morphology (erythematous patches, vesicles, ulcers, pseudo membranes, plaques). (c) Discuss differential diagnosis (infectious, inflammatory, autoimmune, neoplastic, drug-related causes).	C2/3	MK	Lectures, OPD Clinical Postings	MCQ, SAQ	MCQ, SAQ, Bedside examination, Viva	Surgery
HomUG-PM II.44.3		Knows How	Infectious agents, systemic diseases and irritants	(a) Identify common causes (viral, bacterial, fungal infections). (b) Discuss associations with systemic diseases (autoimmune, hematologic, gastrointestinal disorders). (c) Explain the role of allergic reactions, irritants, and medications in stomatitis.	C3	MK	Lectures, OPD Clinical Postings	SAQ, Group assignments	MCQ, LAQ, Viva	Surgery, Practice of Medicine

HomUG-PM II.44.4		Knows How	Similar lesions and oral manifestations of systemic diseases	(a) Discuss differential diagnosis of stomatitis. (b) Differentiate between viral, bacterial, and fungal stomatitis. (c) Recognize allergic and drug-induced stomatitis.	C3	MK	OPD Clinical Postings, DOAP	Group assignments, Tutorials	OSCE, Bedside Examination, Viva	Surgery, Practice of Medicine
HomUG-PM II.44.5		Knows How	Pharmacotherapy, topical agents and systemic management	(a) Discuss treatment plans (pharmacotherapy, topical agents, and systemic medications). (b) Explain supportive care (analgesics, oral rinses, corticosteroids, oral hygiene).	C3	NK	Lectures, Journal clubs, Online research of data bases	Group assignments, Tutorials	OSCE, Bedside examination, Viva	Pharmacology, Research methodology
HomUG-PM II.44.6		Shows	Medication adherence, lifestyle modifications	(a) Educate patients on management (medication adherence, oral hygiene, dietary modifications). (b) Counsel patients on self-care measures (avoiding irritants, staying hydrated).	A2	NK	Role-playing, Patient counselling in OPD Clinical Posting	SAQ	OSCE, SAQ,LAQ	Preventive Medicine, Practice of Medicine

HomUG-PM II.44.7	Homoeopathic Orientation	Knows How	Knowledge of homoeopathic principles and remedies for Stomatitis	(a) Explain homoeopathic principles for managing stomatitis. (b) Select remedies based on symptoms.	C3	MK	Lecture, Visual aids	MCQ, SAQ	SAQ, Bedside examination, Viva	Organon & Philosophy, Homoeopathic Materia Medica & Therapeutics, Homoeopathic Pharmacy

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.45. Parotitis										
HomUG-PM II.45.1	Knowledge and Scholarship	Knows	Definition, aetiology, and types of parotitis	(a) Define parotitis as inflammation of the parotid gland causing swelling, pain, and tenderness. (b) Describe the aetiology (viral, bacterial, fungal infections; obstructive factors like salivary stones). (c) Differentiate between acute and chronic parotitis and recognize complications (abscess, cellulitis, systemic spread).	C2/3	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ	Surgery, Practice of Medicine
HomUG-PM II.45.2		Knows How	Symptoms, signs and complications	((a) Describe clinical symptoms (parotid swelling, pain with chewing/swallowing, fever, erythema). (b) Recognize signs of severe parotitis (trismus, purulent discharge, facial asymmetry, and lymphadenopathy). (c) Perform a systematic physical examination (inspection, palpation, salivary flow assessment).	C2/P2	MK	Lectures, OPD Clinical Postings	MCQ, SAQ	MCQ, SAQ, Bedside examination, Viva	Surgery

HomUG-PM II.45.3		Knows How	Infectious agents and obstructive factors	(a) Identify common infectious agents (mumps virus, *Epstein-Barr virus*, *Staphylococcus aureus*, *Streptococcus pyogenes*). (b) Discuss risk factors (age, immunocompromised status, poor oral hygiene, dehydration). (c) Explain the role of obstructive factors (salivary stones, strictures) and preventive measures (hydration, oral hygiene).	C2/3	MK	Lectures, OPD Clinical Postings	SAQ, Group assignments	MCQ, LAQ, Viva	Surgery, Preventive Medicine
HomUG-PM II.45.4		Knows How	Similar conditions and complications	(a) Discuss differential diagnosis (infectious, inflammatory, autoimmune, neoplastic, obstructive causes). (b) Differentiate between viral, bacterial, and other salivary gland disorders based on clinical findings and diagnostic tests.	C2/3	MK	OPD Clinical Postings, DOAP	Group assignments, Tutorials	OSCE, Bedside Examination, Viva	Surgery, Practice of Medicine
HomUG-PM II.45.5		Knows How	Pharmacotherapy and supportive care	(a) Discuss treatment plans (antibiotics, antivirals, analgesics, supportive care, and surgical interventions). (b) Select appropriate antimicrobial agents based on susceptibility patterns and patient factors.	C3	NK	Lectures, Journal clubs, Online research of data bases	Group assignments, Tutorials	OSCE, Bedside examination, Viva	Pharmacology, Research Methodology

HomUG-PM II.45.6		Shows	Medication adherence and preventive measures	(a) Educate patients on management (oral hygiene, hydration, avoiding exacerbating factors). (b) Counsel patients on self-care measures (warm compresses, gland massage, analgesics).	A2	NK	Role-playing, Patient counselling in OPD Clinical Posting	SAQ	OSCE, SAQ,LAQ	Preventive Medicine, Practice of Medicine
HomUG-PM II.45.7	Homoeopathic Orientation	Knows How	Knowledge of homoeopathic principles and remedies for Parotitis	(a) Explain homoeopathic principles for managing parotitis. (b) Select remedies based on symptoms.	C3	MK	Lecture, Visual aids	MCQ, SAQ	SAQ, Bedside examination, Viva	Organon & Philosophy, Homoeopathic Materia Medica & Therapeutics, Homoeopathic Pharmacy

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.46. Achalasia cardia										
omUG-PM II.46.1	Knowledge and Scholarship	Knows	Definition, epidemiology and pathophysiology	(a) Define achalasia cardia as a motility disorder with impaired LES relaxation and absent peristalsis. (b) Describe epidemiology (age distribution, gender predilection, familial/genetic predisposition).	C2/3	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ	Surgery, Practice of Medicine

				(c) Explain pathophysiology (degeneration of myenteric plexus, loss of inhibitory neural input).						
HomUG-PM II.46.2		Knows How	Symptoms, signs and diagnostic criteria	(a) Describe clinical symptoms (dysphagia, regurgitation, chest pain, weight loss). (b) Recognize physical exam findings (epigastric mass, malnutrition signs). (c) Interpret diagnostic criteria (barium swallow, oesophageal manometry, EGD findings).	C2/P2	MK	Lectures, OPD Clinical Postings	MCQ, SAQ	MCQ, SAQ, Bedside examination, Viva	Surgery, Practice of Medicine
HomUG-PM II.46.3		Knows How	Imaging modalities, manometry and endoscopy	(a) Discuss diagnostic tests (barium swallow, oesophageal manometry, EGD). (b) Explain the role of additional tests (HRM, pH monitoring).	C2/3	MK	Lectures, OPD Clinical Postings	SAQ, Group assignments	MCQ, LAQ, Viva	Surgery, Practice of Medicine

HomUG-PM II.46.4		Knows How	Similar conditions and complications	(a) Discuss differential diagnosis (GERD, oesophageal strictures, eosinophilic esophagitis, motility disorders, malignancies). (b) Differentiate achalasia from pseudoachalasia. (c) Recognize complications (oesophageal dilation, food impaction, aspiration pneumonia, Barrett's oesophagus, oesophageal carcinoma).	C2/3	MK	OPD Clinical Postings, DOAP	Group assignments, Tutorials	OSCE, Bedside Examination, Viva	Surgery, Practice of Medicine
HomUG-PM II.46.5		Knows How	Pharmacotherapy, endoscopic and surgical interventions	(a) Discuss treatment plans tailored to patient needs. (b) Explain pharmacotherapy options (calcium channel blockers, nitrates, phosphodiesterase-5 inhibitors). (c) Evaluate endoscopic and surgical interventions (pneumatic dilation, botulinum toxin injection, Heller myotomy, POEM).	C3	NK	Lectures, Journal clubs, Online research of data bases	Group assignments, Tutorials	OSCE, Bedside examination, Viva	Pharmacology, Surgery, Research Methodology

HomUG-PM II.46.6		Shows	Prognosis and lifestyle modifications	(a) Educate patients on disease management (chronic nature, symptom progression, follow-up). (b) Counsel patients on lifestyle modifications (dietary adjustments, behavioural changes, postural manoeuvres).	A2	NK	Role-playing, Patient counselling in OPD Clinical Posting	SAQ	OSCE, SAQ,LAQ	Surgery, Practice of Medicine
HomUG-PM II.46.7	Homoeopathic Orientation	Knows How	Homoeopathic principles and remedies for achalasia cardia	(a) Explain homoeopathic principles and their limitations in managing achalasia cardia. (b) Select remedies based on symptoms..	C3	MK	Lecture, Visual aids	MCQ, SAQ	SAQ, Bedside examination, Viva	Organon & Philosophy, Homoeopathic Materia Medica & Therapeutics, Homoeopathic Pharmacy

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.47. Hiatus hernia										
HomUG-PM II.47.1	Knowledge and Scholarship	Knows	Definition, types, and prevalence of hiatus hernia	(a) Define hiatus hernia as the protrusion of the stomach through the oesophageal hiatus. (b) Describe types (sliding, paraesophageal). (c) Discuss prevalence and complications	C2/3	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ	Surgery, Practice of Medicine

				(incarceration, strangulation).						
HomUG-PM II.47.2		Knows How	Symptoms, signs and diagnostic criteria	(a) Describe clinical features (heartburn, regurgitation, chest pain, dysphagia, respiratory symptoms). (b) Recognize physical exam findings (epigastric tenderness, palpable masses, respiratory compromise). (c) Discuss diagnostic criteria (barium swallow, EGD, manometry)..	C2/P2	MK	Lectures, OPD Clinical Postings	MCQ, SAQ	MCQ, SAQ, Bedside examination, Viva	Surgery, Practice of Medicine
HomUG-PM II.47.3		Knows How	Imaging modalities and endoscopy	a) Describe diagnostic tests (barium swallow, chest X-ray). (b) Discuss additional modalities (EGD with biopsy, pH monitoring, impedance testing).	C2/3	MK	Lectures, OPD Clinical Postings	SAQ, Group assignments	MCQ, LAQ, Viva	Surgery, Practice of Medicine

HomUG-PM II.47.4		Knows How	Similar conditions and complications	(a) Discuss differential diagnosis (GERD, oesophageal motility disorders, peptic ulcer disease, and cardiac conditions). (b) Differentiate between sliding and paraesophageal hernias. (c) Identify complications (volvulus, obstruction, haemorrhage).	C2/3	MK	OPD Clinical Postings,	Group assignments, Tutorials	OSCE, Bedside Examination, Viva	Surgery, Practice of Medicine
HomUG-PM II.47.5		Knows How	Pharmacotherapy, lifestyle modifications and surgical interventions	(a) Discuss treatment plans based on symptom severity and complications. (b) Explain pharmacotherapy options (PPIs, H2RAs, prokinetic agents). (c) Discuss lifestyle modifications and surgical interventions for refractory cases.	C3	NK	Lectures, Journal clubs, Online research of data bases	Group assignments, Tutorials	OSCE, Bedside examination, Viva	Pharmacology, Surgery, Research Methodology

HomUG-PM II.47.6		Shows	Prognosis and preventive measures	(a) Educate patients on management (chronic nature, treatment goals, adherence to lifestyle changes and medications). (b) Counsel patients on dietary modifications (avoiding trigger foods, smaller meals, weight management).	A2	NK	Role-playing, Patient counselling in OPD Clinical Posting	SAQ	OSCE, SAQ, LAQ	Surgery, Practice of Medicine
HomUG-PM II.47.7	Homoeopathic Orientation	Knows How	Homoeopathic principles and remedies for hiatus hernia	(a) Explain homoeopathic principles and their limitations in managing hiatus hernia. (b) Select remedies based on symptoms.	C3	MK	Lecture, Visual aids	MCQ, SAQ	SAQ, Bedside examination, Viva	Organon & Philosophy, Homoeopathic Materia Medica & Therapeutics, Homoeopathic Pharmacy

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.48. GERD and Esophagitis										
omUG-PM II.48.1	Define GERD and Esophagitis	Knows	Definition, pathophysiologyand aetiologyof GERD and esophagitis	(a) Define GERD as retrograde flow of gastric contents causing heartburn, regurgitation, and complications. (b) Explain pathophysiology (LES dysfunction, impaired oesophageal clearance, increased intra-abdominal pressure). (c) Describe esophagitis as inflammation of the oesophageal mucosa and differentiate erosive vs. non-erosive forms.	C2/3	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ	Surgery, Practice of Medicine

HomUG-PM II.48.2	Describe Clinical Presentation	Knows How	Symptoms, signs and diagnostic criteria	(a) Describe clinical features of GERD (heartburn, regurgitation, dysphagia, chronic cough, chest pain). (b) Recognize physical exam findings (epigastric tenderness, respiratory signs, extraesophageal manifestations). (c) Interpret diagnostic criteria (endoscopy, pH monitoring, and symptom assessment tools).	C2/P2	MK	Lectures, OPD Clinical Postings	MCQ, SAQ	MCQ, SAQ, Bedside examination, Viva	Surgery, Practice of Medicine
HomUG-PM II.48.3	Identify Diagnostic Tests	Knows How	Imaging modalities, endoscopy and pH monitoring	(a) Describe diagnostic tests (barium swallow, EGD with biopsy). (b) Discuss additional tests (pH monitoring, impedance testing, and oesophageal manometry).	C2/3	MK	Lectures, OPD Clinical Postings	SAQ, Group assignments	MCQ, LAQ, Viva	Surgery, Practice of Medicine
HomUG-PM II.48.4	Perform Differential Diagnosis	Knows How	Similar conditions and complications	(a) Discuss differential diagnosis (peptic ulcer disease, biliary colic, pancreatitis, oesophageal motility disorders, and cardiac conditions). (b) Differentiate GERD from non-GERD causes of esophagitis (infectious,	C2/3	MK	OPD Clinical Postings, DOAP	Group assignments, Tutorials	OSCE, Bedside Examination, Viva	Surgery, Practice of Medicine

				eosinophilic, and drug-induced).						
HomUG-PM II.48.5	Develop Treatment Plans	Knows How	Pharmacotherapy, lifestyle modifications and surgical interventions	(a) Discuss treatment plans based on patient presentation and severity. (b) Explain pharmacotherapy options (PPIs, H2RAs, prokinetic agents). (c) Evaluate lifestyle modifications (dietary changes, weight loss, smoking cessation) and surgical interventions (fundoplication, LINX device).	C3	NK	Lectures, Journal clubs, Online research of data bases	Group assignments, Tutorials	OSCE, Bedside examination, Viva	Pharmacology, Surgery, Research Methodology
HomUG-PM II.48.6	Educate Patients about Management	Shows	Prognosis and preventive measures	(a) Educate patients on disease management (chronic nature, treatment goals, adherence to lifestyle changes and medications). (b) Counsel patients on dietary modifications (avoiding trigger foods, smaller meals, upright posture after eating).	A2	NK	Role-playing, Patient counseling in OPD Clinical Posting	SAQ	OSCE, SAQ, LAQ	Surgery, Practice of Medicine

HomUG-PM II.48.7	Homoeopathic Orientation	Knows How	Homoeopathic principles and remedies for GERD and esophagitis	(a) Explain homoeopathic principles and their application in managing GERD and esophagitis. (b) Select remedies based on symptoms.	C3	MK	Lecture, Visual aids	MCQ, SAQ	SAQ, Bedside examination, Viva	Organon & Philosophy, Homoeopathic Materia Medica & Therapeutics, Homoeopathic Pharmacy

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.49. Gastritis: Acute & Chronic										
HomUG-PM II.49.1	Knowledge and Scholarship	Knows	Definition, classification and aetiology	(a) Define gastritis as inflammation of the gastric mucosa. (b) Classify gastritis into acute and chronic forms. (c) Explain the aetiology (infectious, autoimmune, chemical, stress-related factors).	C2/3	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ	Surgery, Practice of Medicine

HomUG-PM II.49.2		Knows How	Symptoms, signs and diagnostic criteria	(a) Describe clinical features of acute gastritis (abdominal pain, nausea, vomiting, and hematemesis). (b) Discuss chronic gastritis (asymptomatic or nonspecific symptoms like dyspepsia, bloating, anaemia).	C2/P2	MK	Lectures, OPD Clinical Postings	MCQ, SAQ	MCQ, SAQ, Bedside examination, Viva	Surgery, Practice of Medicine
HomUG-PM II.49.3		Knows How	Imaging modalities, endoscopy and biopsy	(a) Describe diagnostic tests (barium swallow, abdominal USG). (b) Discuss additional tests (endoscopy with biopsy, H. pylori tests, serologic testing for autoimmune gastritis).	C2/3	MK	Lectures, OPD Clinical Postings	SAQ, Group assignments	MCQ, LAQ, Viva	Surgery, Practice of Medicine
HomUG-PM II.49.4		Knows How	Similar conditions and complications	(a) Discuss differential diagnosis (peptic ulcer disease, GERD, gastroparesis, biliary colic, pancreatic pathology). (b) Differentiate acute vs. chronic gastritis. (c) Recognize red flag symptoms (persistent vomiting, hematemesis, weight loss, and dysphagia).	C2/3	MK	OPD Clinical Postings, DOAP	Group assignments, Tutorials	OSCE, Bedside Examination, Viva	Surgery, Practice of Medicine

HomUG-PM II.49.5		Knows How	Pharmacotherapy, lifestyle modifications and dietary changes	(a) Describe treatment plans based on patient presentation and aetiology. (b) Discuss pharmacotherapy options (PPIs, H2-receptor antagonists, mucosal protectants, H. pylori eradication). (c) Explain lifestyle modifications (dietary changes, smoking cessation, and alcohol avoidance) and dietary supplements (vitamin B12, iron).	C3	NK	Lectures, Journal clubs, Online research of data bases	Group assignments, Tutorials	OSCE, Bedside examination, Viva	Pharmacology, Surgery, Practice of Medicine, Research Methodology
HomUG-PM II.49.6		Shows	Prognosis and preventive measures	(a) Educate patients on disease management (chronic nature, treatment goals, adherence to lifestyle changes and medications). (b) Counsel patients on dietary modifications (avoiding trigger foods, smaller meals, fiber-rich foods, probiotics).	A2	NK	Role-playing, Patient counselling in OPD Clinical Posting	SAQ	OSCE, SAQ, LAQ	Surgery, Practice of Medicine

HomUG-PM II.49.7	Homoeopathic Orientation	Knows How	Homoeopathic principles and remedies for gastritis	(a) Explain homoeopathic principles and their application in managing gastritis. (b) Select remedies based on symptoms.	C3	MK	Lecture, Visual aids	MCQ, SAQ	SAQ, Bedside examination, Viva	Organon & Philosophy, Homoeopathic Materia Medica & Therapeutics, Homoeopathic Pharmacy

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.50. Peptic Ulcers										
HomUG-PM II.50.1	Knowledge and Scholarship	Knows	Definition and classification of peptic ulcers	(a) Define peptic ulcers as mucosal erosions in the stomach or duodenum. (b) Classify peptic ulcers based on aetiology (H. pylori, NSAIDs, stress, idiopathic).	C2/3	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ	Physiology, Pathology, Surgery, Practice of Medicine,
HomUG-PM II.50.2		Knows	Aetiology and pathogenesis	Explain the pathophysiology of peptic ulcers (imbalance between aggressive factors and mucosal defence mechanisms).						
HomUG-PM II.50.3		Knows How	Symptoms, signs, and diagnostic criteria	(a) Describe clinical features (epigastric pain, dyspepsia, nausea, hematemesis, melena). (b) Differentiate gastric ulcers (postprandial pain, weight loss) from duodenal ulcers (nocturnal pain, weight gain). (c) Discuss diagnostic criteria (endoscopy, biopsy, and imaging).	C2/P2	MK	Lectures, OPD Clinical Postings	MCQ, SAQ	MCQ, SAQ, Bedside examination, Viva	Surgery, Practice of Medicine

HomUG-PM II.50.4		Knows How	Imaging modalities, endoscopy, and biopsy	(a) Discuss investigations (endoscopy, biopsy, H. pylori tests). (b) Explain additional diagnostic modalities (barium studies, serologic tests, stool antigen tests, molecular assays).	C2/3	MK	Lectures, OPD Clinical Postings	SAQ, Group assignments	MCQ, LAQ, Viva	Pathology, Surgery, Practice of Medicine
HomUG-PM II.50.5		Knows How	Similar conditions and complications	(a) Discuss differential diagnosis (GERD, gastritis, biliary colic, pancreatic pathology, malignancy). (b) Differentiate gastric vs. duodenal ulcers. (c) Recognize red flag symptoms (persistent vomiting, weight loss, dysphagia, bleeding).	C2/3	MK	OPD Clinical Postings, DOAP	Group assignments, Tutorials	OSCE, Bedside Examination, Viva	Surgery, Practice of Medicine
HomUG-PM II.50.6		Knows How	Pharmacotherapy, lifestyle modifications, and dietary changes	(a) Discuss treatment plans based on clinical presentation and aetiology. (b) Explain pharmacotherapy options (PPIs, H2-receptor antagonists, mucosal protectants, H. pylori eradication). (c) Evaluate lifestyle modifications (dietary changes, smoking cessation, and alcohol avoidance) and surgical interventions.	C3	NK	Lectures, Journal clubs, Online research of data bases	Group assignments, Tutorials	OSCE, Bedside examination, Viva	Pharmacology, Surgery, Research Methodology

HomUG-PM II.50.7		Shows	Prognosis and preventive measures	(a) Educate patients on disease management (chronic nature, treatment goals, adherence to lifestyle changes and medications). (b) Counsel patients on dietary modifications (avoiding trigger foods, smaller meals, fibre-rich foods, and probiotics). (c) Empower patients to explore alternative therapeutic options.	A2	NK	Role-playing, Patient counselling in OPD Clinical Posting	SAQ	OSCE, SAQ, LAQ	Surgery, Practice of Medicine, Preventive Medicine
HomUG-PM II.50.8	Homoeopathic Orientation	Knows How	Homoeopathic principles and remedies for peptic ulcers	(a) Explain homoeopathic principles and their application in managing peptic ulcers. (b) Select remedies based on symptoms.	C3	MK	Lecture, Visual aids	MCQ, SAQ	SAQ, Bedside examination, Viva	Organon & Philosophy, Homoeopathic Materia Medica & Therapeutics, Homoeopathic Pharmacy

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.51. Gastric carcinoma										

HomUG-PM II.51.1	Knowledge and Scholarship	Knows	Definition and classification of gastric carcinoma	(a) Define gastric carcinoma as a malignant tumor of the stomach. (b) Classify gastric carcinoma based on histological subtypes and anatomical location.	C2/3	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ	Physiology, Pathology, Surgery, Practice of Medicine,
HomUG-PM II.51.2		Knows	Aetiology of gastric carcinoma	Explain the aetiology (H. pylori infection, dietary factors, smoking, alcohol, genetic predisposition, socioeconomic factors).	C2	MK	Lectures	MCQ, SAQ	MCQ, SAQ	Surgery, Practice of Medicine
HomUG-PM II.51.3		Knows How	Symptoms, signs, and diagnostic criteria	(a) Describe clinical features (dyspepsia, epigastric pain, weight loss, dysphagia, gastrointestinal bleeding). (b) Recognize advanced-stage symptoms (ascites, jaundice, bone pain, neurologic deficits). (c) Interpret diagnostic criteria (endoscopy, imaging, tumor markers).	C2/P2	MK	Lectures, OPD Clinical Postings	MCQ, SAQ	MCQ, SAQ, Bedside examination, Viva	Surgery, Practice of Medicine
HomUG-PM II.51.4		Knows How	Imaging modalities, biopsy, and staging	(a) Discuss investigations (endoscopy, biopsy, endoscopic ultrasound). (b) Explain additional diagnostic modalities (CT, MRI, molecular	C2/3	MK	Lectures, OPD Clinical Postings	SAQ, Group assignments	MCQ, LAQ, Viva	Pathology, Surgery, Practice of Medicine

				profiling).						
HomUG-PM II.51.5		Knows How	Similar conditions and metastases	(a) Discuss differential diagnosis (peptic ulcer disease, gastritis, GERD, benign tumors, non-gastric malignancies). (b) Differentiate early-stage vs. advanced-stage gastric carcinoma. (c) Recognize red flag symptoms (persistent dyspepsia, weight loss, gastrointestinal bleeding).	C2/3	MK	OPD Clinical Postings, DOAP	Group assignments, Tutorials	OSCE, Bedside Examination, Viva	Surgery, Practice of Medicine
HomUG-PM II.51.6		Knows How	Surgery, chemotherapy, and radiotherapy	(a) Discuss treatment plans based on tumor characteristics, stage, and patient factors. (b) Explain multimodal approaches (surgery, adjuvant/neoadjuvant therapy, palliative care). (c) Evaluate targeted therapy, immunotherapy, and supportive care interventions.	C3	NK	Lectures, Journal clubs, Online research of data bases	Group assignments, Tutorials	OSCE, Bedside examination, Viva	Pharmacology, Surgery, Research Methodology

HomUG-PM II.51.7		Shows	Prognosis and preventive measures	(a) Educate patients on disease management (treatment options, side effects, and prognosis). (b) Counsel patients on lifestyle modifications (dietary changes, smoking cessation, and alcohol avoidance). (c) Provide supportive care and psychological support.	A2	MK	Role-playing, Patient counselling in OPD Clinical Posting	SAQ	OSCE, SAQ, LAQ	Surgery, Practice of Medicine, Preventive Medicine
HomUG-PM II.51.8	Homoeopathic Orientation	Knows How	Homoeopathic principles and remedies for gastric carcinoma	(a) Explain homoeopathic principles and their application in managing gastric carcinoma. (b) Select remedies based on symptoms.	C3	MK	Lecture, Visual aids	MCQ, SAQ	SAQ, Bedside examination, Viva	Organon & Philosophy, Homoeopathic Materia Medica & Therapeutics, Homoeopathic Pharmacy

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.52. Malabsorption Syndromes										
HomUG-PM II.52.1	Knowledge and Scholarship	Knows	Definition and classification of malabsorption syndromes	(a) Define malabsorption syndromes as disorders impairing nutrient absorption.	C2	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ	Physiology, Pathology, Practice of Medicine,

				(b) Classify malabsorption syndromes based on aetiology (primary vs. secondary causes).						
HomUG-PM II.52.2		Knows	Aetiology and pathogenesis	Explain the pathophysiology of malabsorption syndromes (abnormalities in digestion, absorption, or transport mechanisms).	C2	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ	Physiology, Pathology, Practice of Medicine,
HomUG-PM II.52.3		Knows How	Symptoms, signs, and diagnostic criteria	(a) Describe clinical features (chronic diarrhoea, abdominal pain, bloating, weight loss, fatigue). (b) Recognize specific malabsorption disorders (celiac disease, pancreatic insufficiency, bile acid malabsorption). (c) Interpret diagnostic criteria (clinical history, lab tests, imaging, and endoscopy).	C3/P2	MK	Lectures, OPD Clinical Postings	MCQ, SAQ	MCQ, SAQ, Bedside examination, Viva	Physiology, Practice of Medicine
HomUG-PM II.52.4		Knows How	Laboratory tests and imaging modalities	(a) Describe investigations (blood tests, stool studies, serological markers). (b) Explain the role of imaging (USG, CT, MRI) in assessing structural abnormalities and inflammation.	C3	MK	Lectures, OPD Clinical Postings	SAQ, Group assignments	MCQ, LAQ, Viva	Physiology, Pathology, Practice of Medicine
HomUG-PM II.52.5		Knows How	Similar conditions and complications	(a) Discuss differential diagnosis (inflammatory bowel disease, infectious gastroenteritis, bacterial overgrowth, lactose	C3/4	MK	OPD Clinical Postings, DOAP	Group assignments, Tutorials	OSCE, Bedside Examination, Viva	Surgery, Practice of Medicine

				intolerance). (b) Differentiate primary vs. secondary malabsorption disorders. (c) Recognize red flag symptoms (severe diarrhoea, weight loss, gastrointestinal bleeding).						
HomUG-PM II.52.6		Knows How	Nutritional therapy, pharmacotherapy, and dietary changes	a) Discuss treatment plans based on aetiology and severity. (b) Explain nutritional therapy (dietary modifications, oral supplements, parenteral nutrition). (c) Evaluate pharmacotherapy options (immunosuppressants, antibiotics, bile acid sequestrants, anti-diarrheals).	C3	NK	Lectures, Journal clubs, Online research of data bases	Group assignments, Tutorials	OSCE, Bedside examination, Viva	Pharmacology, Research Methodology, Practice of Medicine, Research Methodology
HomUG-PM II.52.7		Shows	Prognosis and preventive measures	(a) Educate patients on disease management (chronic nature, adherence to treatment, nutritional optimization). (b) Counsel patients on dietary modifications and symptom management.	A2	NK	Role-playing, Patient counselling in OPD Clinical Posting	SAQ	OSCE, SAQ, LAQ	Practice of Medicine, Preventive Medicine
HomUG-PM II.52.A. Malabsorption Syndromes - Coeliac disease										

HomUG-PM II.52.A.1	Knowledge and Scholarship	Knows	Definition, pathophysiology, and epidemiology of coeliac disease	(a) Define coeliac disease as a chronic autoimmune disorder triggered by gluten. (b) Describe the epidemiology (prevalence, age/gender distribution, geographic variation).	C2	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ	Physiology, Pathology, Practice of Medicine,
HomUG-PM II.52.A.2		Knows	Pathophysiology of coeliac disease	Explain the pathophysiology (immune response to gluten, T-cell activation, cytokine production, villous atrophy).	C2	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ	Physiology, Pathology, Practice of Medicine,
HomUG-PM II.52.A.3		Knows How	Symptoms, signs, and diagnostic criteria	(a) Describe clinical features (gastrointestinal symptoms, extra-intestinal manifestations). (b) Recognize atypical or silent coeliac disease. (c) Interpret diagnostic criteria (serological tests, intestinal biopsy).	C3/P2	MK	Lectures, OPD Clinical Postings	MCQ, SAQ	MCQ, SAQ, Bedside examination, Viva	Physiology, Practice of Medicine
HomUG-PM II.52.A.4		Knows How	Serological tests and intestinal biopsy	(a) Describe diagnostic tests (serological assays for tTG-IgA, EMA-IgA). (b) Explain the role of duodenal biopsy and histological assessment.	C3	MK	Lectures, OPD Clinical Postings	SAQ, Group assignments	MCQ, LAQ, Viva	Physiology, Pathology, Practice of Medicine

HomUG-PM II.52.A.5		Knows How	Similar conditions and complications	(a) Discuss differential diagnosis (inflammatory bowel disease, irritable bowel syndrome, malabsorption syndromes). (b) Differentiate classical vs. non-classical coeliac disease. (c) Recognize red flag symptoms (weight loss, severe diarrhea, anemia, failure to thrive).	C3/4	MK	OPD Clinical Postings, DOAP	Group assignments, Tutorials	OSCE, Bedside Examination, Viva	Surgery, Practice of Medicine
HomUG-PM II.52.A.6		Knows How	Gluten-free diet and nutritional support	(a) Discuss treatment plans (strict gluten-free diet, mucosal healing, and prevention of complications). (b) Explain nutritional therapy (vitamin and mineral supplementation). (c) Evaluate pharmacotherapy options.	C3	NK	Lectures, Journal clubs, Online research of data bases	Group assignments, Tutorials	OSCE, Bedside examination, Viva	Pharmacology, Research Methodology, Practice of Medicine, Research Methodology
HomUG-PM II.52.A.7		Shows	Prognosis and preventive measures	(a) Educate patients on lifelong adherence to a gluten-free diet. (b) Counsel patients on dietary management (reading labels, avoiding cross-contamination, sourcing gluten-free alternatives).	A2	NK	Role-playing, Patient counselling in OPD Clinical Posting	SAQ	OSCE, SAQ, LAQ	Practice of Medicine, Preventive Medicine
HomUG-PM II.52.B. Malabsorption Syndromes - Lactose intolerance										

HomUG-PM II.52.B.1	Knowledge and Scholarship	Knows	Definition and epidemiology of lactose intolerance	(a) Define lactose intolerance as the inability to digest lactose due to lactase deficiency. (b) Explain the epidemiology (prevalence, genetic determinants, and age-related variations).	C2	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ	Physiology, Pathology, Practice of Medicine,
HomUG-PM II.52.B.2		Knows	Pathophysiology of lactose intolerance	Describe the pathophysiology (insufficient lactose hydrolysis, osmotic effects, bacterial fermentation).	C2	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ	Physiology, Pathology, Practice of Medicine,
HomUG-PM II.52.B.3		Knows How	Symptoms, signs, and diagnostic criteria	(a) Describe clinical features (abdominal cramps, bloating, flatulence, diarrhoea). (b) Recognize variability in symptom severity and onset. (c) Interpret diagnostic criteria (hydrogen breath test, lactose tolerance test).	C3/P2	MK	Lectures, OPD Clinical Postings	MCQ, SAQ	MCQ, SAQ, Bedside examination, Viva	Physiology, Practice of Medicine
HomUG-PM II.52.B.4		Knows How	Hydrogen breath test and lactose tolerance test	(a) Describe diagnostic tests (hydrogen breath test, lactose tolerance test). (b) Explain the principles, indications, and interpretation of diagnostic tests.	C3	MK	Lectures, OPD Clinical Postings	SAQ, Group assignments	MCQ, LAQ, Viva	Physiology, Pathology, Practice of Medicine

HomUG-PM II.52.B.5		Knows How	Similar conditions and complications	(a) Discuss differential diagnosis (IBS, IBD, SIBO, food allergies, infectious gastroenteritis). (b) Differentiate lactose intolerance from other gastrointestinal disorders. (c) Identify red flag symptoms (persistent diarrhoea, rectal bleeding, and weight loss).	C3/4	MK	OPD Clinical Postings, DOAP	Group assignments, Tutorials	OSCE, Bedside Examination, Viva	Surgery, Practice of Medicine
HomUG-PM II.52.B.6		Knows How	Dietary modifications and lactase supplementation	(a) Discuss treatment plans (lactose restriction, lactase enzyme supplementation). (b) Explain nutritional therapy strategies (lactose-free dairy, fortified foods, supplements). (c) Evaluate pharmacotherapy options (lactase enzyme supplements, prebiotics/probiotics).	C3	NK	Lectures, Journal clubs, Online research of data bases	Group assignments, Tutorials	OSCE, Bedside examination, Viva	Pharmacology, Research Methodology, Practice of Medicine, Research Methodology
HomUG-PM II.52.B.7		Shows	Prognosis and preventive measures	(a) Educate patients on dietary modifications to alleviate symptoms and prevent complications. (b) Counsel patients on practical dietary management (reading labels, avoiding hidden lactose, social situations).	A2	NK	Role-playing, Patient counselling in OPD Clinical Posting	SAQ	OSCE, SAQ, LAQ	Practice of Medicine, Preventive Medicine

HomUG-PM II.52.B.8	Homoeopathic Orientation	Knows How	Homoeopathic principles and remedies for malabsorption syndromes	(a) Explain homoeopathic principles and their application in managing malabsorption syndromes. (b) Select remedies based on symptoms.	C3	MK	Lecture, Visual aids	MCQ, SAQ	SAQ, Bedside examination, Viva	Organon & Philosophy, Homoeopathic Materia Medica & Therapeutics, Homoeopathic Pharmacy

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.53. Irritable Bowel Syndrome										
HomUG-PM II.53.1	Knowledge and Scholarship	Knows	Definition, pathophysiology, and epidemiology of IBS	(a) Define IBS as a chronic functional gastrointestinal disorder. (b) Explain the epidemiology (prevalence, gender distribution, age of onset, impact on quality of life).	C2	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ	Physiology, Practice of Medicine

HomUG-PM II.53.2		Knows	Pathophysiologyof IBS	Describe the pathophysiology (visceral hypersensitivity, altered gut motility, gut-brain axis dysregulation, psychosocial factors).	C2	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ	Physiology, Practice of Medicine
HomUG-PM II.53.3		Knows How	Symptoms, signs and diagnostic criteria	(a) Describe clinical features (abdominal pain, bloating, altered bowel habits). (b) Classify IBS into subtypes (IBS-D, IBS-C, IBS-M, IBS-U). (c) Interpret diagnostic criteria (Rome IV criteria).	C2	MK	Lectures, OPD Clinical Postings	MCQ, SAQ	MCQ, SAQ, Bedside examination, Viva	Practice of Medicine
HomUG-PM II.53.4		Knows How	Rome criteria and exclusion of other conditions	(a) Discuss diagnostic tests and criteria (Rome IV criteria, patient history, and physical examination). (b) Explain the role of diagnostic tests to rule out other conditions (CBC, celiac screening, stool tests, colonoscopy).	C2/3	MK	Lectures, OPD Clinical Postings	SAQ, Group assignments	MCQ, LAQ, Viva	Pathology, Practice of Medicine

HomUG-PM II.53.5		Knows How	Similar conditions and complications	(a) Discuss differential diagnosis (inflammatory bowel disease, celiac disease, lactose intolerance, bacterial overgrowth, colorectal cancer). (b) Differentiate IBS from other gastrointestinal conditions. (c) Recognize red flag symptoms (weight loss, fever, nocturnal symptoms, and family history of colorectal cancer).	C3	MK	OPD Clinical Postings, DOAP	Group assignments, Tutorials	OSCE, Bedside Examination, Viva	Practice of Medicine, Surgery
HomUG-PM II.53.6		Knows How	Lifestyle changes, dietary modifications and homeopathic remedies	(a) Discuss treatment plans (lifestyle changes, dietary modifications, and pharmacotherapy). (b) Explain the role of homeopathic remedies in IBS management.	C3	MK	Lectures, Journal clubs, Online research of data bases	Group assignments, Tutorials	OSCE, Bedside examination, Viva	Pharmacology, Research Methodology, Organon & Philosophy, Homoeopathic Materia Medica & Therapeutics, Research Methodology

HomUG-PM II.53.7		Shows	Prognosis and preventive measures	(a) Educate patients on the chronic nature of IBS and the importance of lifestyle and dietary modifications. (b) Counsel patients on practical strategies (low FODMAP diet, avoiding triggers, regular bowel habits, over-the-counter medications).	A2	NK	Role-playing, Patient counselling in OPD Clinical Posting	SAQ	OSCE, SAQ, LAQ	Primary care clinics, Patient support groups

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.54. Inflammatory Bowel Diseases - Crohn's Disease, Ulcerative Colitis										
HomUG-PM II.54.1	Knowledge and Scholarship	Knows	Definition of IBD	Define IBD as chronic inflammatory disorders of the gastrointestinal tract (Crohn’s disease, ulcerative colitis).	C2	MK	Lecture, Reading, Discussions	SAQ	SAQ	Physiology, Practice of Medicine

HomUG-PM II.54.2		Knows	Definition and epidemiology of Crohn's Disease	(a) Define Crohn's disease as transmural inflammation affecting any part of the GI tract. (b) Explain the epidemiology (prevalence, age of onset, gender distribution, and geographical variation).	C2	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ	Pathology, Practice of Medicine
HomUG-PM II.54.3		Knows	Pathophysiology of Crohn's Disease	Describe the pathophysiology (genetic susceptibility, immune dysregulation, environmental triggers, and microbial factors).	C2	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ	Pathology, Practice of Medicine
HomUG-PM II.54.4		Knows how	Symptoms, signs and complications of Crohn's Disease	(a) Describe clinical features (chronic diarrhoea, abdominal pain, weight loss, fatigue, rectal bleeding). (b) Outline complications (fistulas, strictures, abscesses, extraintestinal manifestations). (c) Explain disease variability and impact on quality of life.	C2/3	MK	Lectures, OPD Clinical Postings	MCQ, SAQ	MCQ, SAQ, Bedside examination, Viva	Practice of Medicine

HomUG-PM II.54.5		Knows How	Endoscopy, imaging, lab tests, and biopsy for Crohn's disease	(a) Discuss diagnostic tests (endoscopy, MRI, CT enterography, lab tests, and biopsy). (b) Interpret findings (segmental involvement, cobblestone appearance, granulomas).	C3/P2	MK	Lectures, OPD Clinical Postings	SAQ, Group assignments	MCQ, LAQ, Viva	Pathology, Practice of Medicine
HomUG-PM II.54.6		Knows How	Similar conditions and distinguishing features of Crohn's Disease	(a) Discuss differential diagnosis (ulcerative colitis, IBS, infectious colitis, ischemic colitis, diverticulitis, colorectal cancer). (b) Differentiate Crohn's disease from other conditions. (c) Outline red flag symptoms requiring further evaluation.	C3/4	MK	OPD Clinical Postings, DOAP	Group assignments, Tutorials	OSCE, Bedside Examination, Viva	Surgery, Practice of Medicine
HomUG-PM II.54.7		Knows How	Medical management, surgical options, and homeopathic remedies for Crohn's disease	(a) Discuss treatment plans (pharmacotherapy, surgery, homeopathic remedies). (b) Explain nutritional therapy (enteral nutrition, dietary modifications, and supplementation).	C3	MK	Lectures, Journal clubs, Online research of data bases	Group assignments, Tutorials	OSCE, Bedside examination, Viva	Pharmacology, Surgery, Homoeopathic Therapeutics, Practice of Medicine, Research Methodology, Preventive Medicine

HomUG-PM II.54.8		Knows	Definition and epidemiology of ulcerative colitis	(a) Define ulcerative colitis as continuous mucosal inflammation limited to the colon and rectum. (b) Explain the epidemiology (prevalence, age of onset, gender distribution, and geographical variation).	C2	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ	Practice of Medicine
HomUG-PM II.54.9			Pathophysiology of Ulcerative Colitis	Describe the pathophysiology (immune dysregulation, genetic predisposition, environmental factors, and microbial influences).	C2	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ	Pathology, Practice of Medicine
HomUG-PM II.54.10		Knows How	Symptoms, signs and complications of Ulcerative Colitis	(a) Describe clinical features (chronic diarrhoea, rectal bleeding, abdominal pain, urgency, tenesmus, weight loss). (b) Outline complications (toxic megacolon, perforation, colorectal cancer risk). (c) Explain disease course and impact on quality of life.	C2/3	MK	Lectures, OPD Clinical Postings	MCQ, SAQ	MCQ, SAQ, Bedside examination, Viva	Practice of Medicine
HomUG-PM II.54.11		Knows How	Endoscopy, imaging, lab tests, and biopsy for ulcerative colitis	(a) Discuss diagnostic tests (endoscopy, imaging, lab tests, and biopsy). (b) Explain the role of diagnostic tests in confirming diagnosis,	C3/P2	MK	Lectures, OPD Clinical Postings, DOAP	SAQ, Group assignments	MCQ, LAQ, Viva	Pathology, Practice of Medicine, Surgery

				assessing severity, and monitoring treatment. (c) Interpret findings (continuous inflammation, crypt abscesses, and mucosal ulcers).						
HomUG-PM II.54.12		Knows How	Similar conditions and distinguishing features of ulcerative colitis	(a) Discuss differential diagnosis (Crohn's disease, IBS, infectious colitis, ischemic colitis, diverticulitis, colorectal cancer). (b) Differentiate ulcerative colitis from other conditions. (c) Outline red flag symptoms requiring further evaluation.	C3/4	MK	OPD Clinical Postings, DOAP	Group assignments, Tutorials	OSCE, Bedside Examination, Viva	Surgery, Practice of Medicine
HomUG-PM II.54.13		Knows How	Medical management, surgical options, and homeopathic remedies for ulcerative colitis	(a) Discuss treatment plans (pharmacotherapy, surgery, homeopathic remedies). (b) Explain nutritional therapy (enteral nutrition, dietary modifications, and supplementation).	C3	MK	Lectures, Journal clubs, Online research of data bases	Group assignments, Tutorials	OSCE, Bedside examination, Viva	Pharmacology, Surgery, Homoeopathic Therapeutics, Practice of Medicine, Research Methodology, Preventive Medicine

HomUG-PM II.54.14		Knows How	Lifestyle changes, medication adherence, prognosis of IBD	(a) Educate patients on the chronic nature of IBD, medication adherence, lifestyle changes, and regular follow-up. (b) Counsel patients on practical strategies (avoiding triggers, maintaining nutrition, coping with psychosocial impact).	C3/A2	NK	Lectures, Journal clubs, Online research of data bases	Group assignments, Tutorials	OSCE, Bedside examination, Viva	Practice of Medicine, Preventive Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.55. Abdominal Tuberculosis										
HomUG-PM II.55.1	Knowledge and Scholarship	Knows	Definition and epidemiology of abdominal tuberculosis	(a) Define abdominal tuberculosis as extrapulmonary TB affecting the GI tract, peritoneum, or abdominal organs. (b) Explain the epidemiology (prevalence, risk factors, and modes of transmission).	C2	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ	Pathology, Surgery, Preventive Medicine, Practice of Medicine

HomUG-PM II.55.2		Knows	Pathophysiology	Describe the pathophysiology (granulomatous inflammation caused by Mycobacterium tuberculosis).	C2	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ	Pathology, Surgery, Practice of Medicine
HomUG-PM II.55.3		Knows How	Symptoms, signs and complications	(a) Describe clinical features (abdominal pain, weight loss, fever, night sweats, anorexia, altered bowel habits). (b) Identify complications (intestinal obstruction, perforation, abscesses, and fistulae).	C2/3	MK	Lectures, OPD Clinical Postings	MCQ, SAQ	MCQ, SAQ, Bedside examination, Viva	Surgery, Practice of Medicine
HomUG-PM II.55.4		Knows How	Imaging, lab tests and biopsy, endoscopy	(a) Describe investigations (imaging, lab tests, endoscopy, and biopsy). (b) Interpret findings (thickened bowel loops, mesenteric lymphadenopathy, caseating granulomas).	C2-3/P2	MK	Lectures, OPD Clinical Postings	SAQ, Group assignments	MCQ, LAQ, Viva	Pathology, Surgery, Practice of Medicine

HomUG-PM II.55.5		Knows How	Similar conditions and distinguishing features	(a) Discuss differential diagnosis (Crohn's disease, ulcerative colitis, IBS, lymphoma, abdominal malignancies). (b) Differentiate abdominal tuberculosis from other conditions.	C3/4	MK	OPD Clinical Postings, DOAP	Group assignments, Tutorials	OSCE, Bedside Examination, Viva	Surgery, Practice of Medicine
HomUG-PM II.55.6		Knows How	Medical management, surgical options and homeopathic remedies	(a) Discuss treatment plans (anti-tubercular drugs, surgery for complications, homeopathic remedies). (b) Explain the role of nutritional support and dietary modifications.	C3	MK	Lectures, Journal clubs, Online research of data bases	Group assignments, Tutorials	OSCE, Bedside examination, Viva	Pharmacology, Surgery, Homoeopathic Therapeutics, Practice of Medicine, Research Methodology, Preventive Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.56. Neoplasia of the bowel										

HomUG-PM II.56.1	Knowledge and Scholarship	Knows	Definition and types of bowel neoplasia	(a) Describe bowel neoplasia as abnormal cell growth in the bowel (benign or malignant). (b) Differentiate between types (adenomas, adenocarcinomas).	C2	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ	Pathology, Surgery, Practice of Medicine
HomUG-PM II.56.2		Knows How	Pathophysiology of bowel neoplasia	Describe the pathophysiology (cellular mutation, growth dysregulation, and metastasis).	C2	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ	Pathology, Surgery, Practice of Medicine
HomUG-PM II.56.3		Knows How	Symptoms, signs, and complications	(a) Describe clinical features (changes in bowel habits, rectal bleeding, abdominal pain, weight loss, anaemia). (b) Recognize complications (bowel obstruction, perforation, and metastasis).	C2/3	MK	Lectures, OPD Clinical Postings	MCQ, SAQ	MCQ, SAQ, Bedside examination, Viva	Surgery, Practice of Medicine
HomUG-PM II.56.4		Knows How	Imaging, lab tests, biopsy, and endoscopy	(a) Describe investigations (imaging, lab tests, endoscopy, and biopsy). (b) Outline the role of diagnostic tests in diagnosis, staging, and monitoring. (c) Interpret findings (imaging features, histopathological results).	C2-3/P2	MK	Lectures, OPD Clinical Postings, DOAP	SAQ, Group assignments	MCQ, LAQ, Viva	Pathology, Surgery, Practice of Medicine

HomUG-PM II.56.5		Knows How	Similar conditions and distinguishing features	(a) Discuss differential diagnosis (IBD, IBS, diverticulitis, gastrointestinal infections). (b) Differentiate bowel neoplasia from other conditions.	C3/4	MK	OPD Clinical Postings, DOAP	Group assignments, Tutorials	OSCE, Bedside Examination, Viva	Surgery, Practice of Medicine
HomUG-PM II.56.6		Knows How	Medical management, surgical options, and homeopathic remedies	(a) Discuss treatment plans (surgery, chemotherapy, radiotherapy, homeopathic remedies). (b) Explain the role of adjuvant therapies (nutritional support, managing side effects). (c) Evaluate treatment modalities based on patient needs.	C3	MK	Lectures, Journal clubs, Online research of data bases	Group assignments, Tutorials	OSCE, Bedside examination, Viva	Pharmacology, Surgery, Homoeopathic Therapeutics, Practice of Medicine, Preventive Medicine, Research Methodology

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.57. Anorectal disorders										
HomUG-PM II.57.1	Knowledge and Scholarship	Knows	Definition, types, and pathophysiology of anorectal disorders	(a) Define common anorectal disorders (haemorrhoids, anal fissures, abscesses, fistulas, rectal prolapse). (b) Explain the pathophysiology	C2	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ	Pathology,Surgery, Practice of Medicine

				(inflammation, infection, increased intra-abdominal pressure, and structural weaknesses).						
HomUG-PM II.57.2		Knows How	Symptoms, signs, and complications	(a) Discuss common symptoms (pain, bleeding, pruritus, discharge, palpable masses). (b) Describe complications (infection, chronic pain, incontinence, recurrent fistulas).	C2/3	MK	Lectures, OPD Clinical Postings	MCQ, SAQ	MCQ, SAQ, Bedside examination, Viva	Surgery, Practice of Medicine
HomUG-PM II.57.4		Knows How	Physical examination, imaging, and lab tests	(a) Enumerate diagnostic tools (physical exam, imaging, lab tests). (b) Explain how to interpret findings (haemorrhoids, fistulas, signs of infection/inflammation). (c) Describe the importance of histopathological examination when needed.	C3/P2	MK	Lectures, OPD Clinical Postings	SAQ, Group assignments	MCQ, LAQ, Viva	Pathology, Practice of Medicine, Surgery
HomUG-PM II.57.5		Knows How	Similar conditions and distinguishing features	(a) Discuss differential diagnoses (colorectal cancer, IBD, STIs, dermatological conditions). (b) Differentiate between anorectal disorders based on clinical history, symptoms, and	C3/4	MK	OPD Clinical Postings,	Group assignments, Tutorials	OSCE, Bedside Examination, Viva	Surgery, Practice of Medicine

				diagnostic findings.						
HomUG-PM II.57.6		Knows How	Medical management, surgical options, and homoeopathic remedies	(a) Discuss treatment plans (medical management, surgery, homoeopathic remedies). (b) Explain the role of lifestyle modifications (high-fiber diet, hydration, hygiene, avoiding straining).	C3	MK	Lectures, Journal clubs, Online research of data bases	Group assignments, Tutorials	OSCE, Bedside examination, Viva	Pharmacology, Surgery, Homoeopathic Therapeutics, Practice of Medicine, Preventive Medicine
HomUG-PM II.57.7		Knows How	Lifestyle changes, medication adherence, and prognosis	(a) Educate patients on early detection, treatment adherence, and follow-up. (b) Counsel patients on lifestyle modifications (high-fibre diet, hydration, exercise, anal hygiene).	C3/A2	NK	Lectures, Journal clubs, Online research of data bases	Group assignments, Tutorials	OSCE, Bedside examination, Viva	Practice of Medicine, Preventive Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.58. Diverticulitis										

HomUG-PM II.58.1	Knowledge and Scholarship	Knows	Definition and types of diverticulitis	(a) Describe diverticulitis as inflammation and infection of diverticula. (b) Differentiate between uncomplicated and complicated diverticulitis.	C2	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ	Surgery, Practice of Medicine
HomUG-PM II.58.2		Knows	Pathophysiology of diverticulitis	(a) Discuss how diverticula form due to increased intraluminal pressure. (b) Explain how trapped faecal matter causes inflammation and infection.	C2	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ	Pathology, Surgery, Practice of Medicine
HomUG-PM II.58.3		Knows How	Symptoms, signs, and complications	(a) Outline common symptoms (lower abdominal pain, fever, changes in bowel habits, nausea, vomiting). (b) Describe complications (abscess, fistula, obstruction, peritonitis).	C2/3	MK	Lectures, OPD Clinical Postings	MCQ, SAQ	MCQ, SAQ, Bedside examination, Viva	Surgery, Practice of Medicine
HomUG-PM II.58.4		Knows How	Physical examination, imaging, and lab tests	(a) Enumerate diagnostic tools (physical exam, imaging, lab tests). (b) Explain how to interpret findings (thickened bowel walls on CT, elevated WBC, inflammatory markers).	C3/P2	MK	Lectures, OPD Clinical Postings	SAQ, Group assignments	MCQ, LAQ, Viva	Pathology, Practice of Medicine, Surgery

HomUG-PM II.58.5		Knows How	Similar conditions and distinguishing features	(a) List differential diagnoses (IBS, colorectal cancer, IBD, gynaecological conditions). (b) Differentiate diverticulitis from other conditions based on clinical history and diagnostic findings.	C4/5	MK	OPD Clinical Postings,	Group assignments, Tutorials	OSCE, Bedside Examination, Viva	Surgery, Practice of Medicine
HomUG-PM II.58.6		Knows How	Medical management, surgical options, and homeopathic remedies	(a) Enumerate treatment plans (antibiotics, pain relief, surgery, homeopathic remedies). (b) Discuss dietary modifications (high-fiber diet), lifestyle changes (exercise, hydration), and preventative measures (avoiding seeds/nuts).	C3	MK	Lectures, Journal clubs, Online research of data bases	Group assignments, Tutorials	OSCE, Bedside examination, Viva	Pharmacology, Surgery, Homoeopathic Therapeutics, Practice of Medicine, Preventive Medicine
HomUG-PM II.58.7		Knows How	Lifestyle changes, medication adherence, and prognosis	(a) Educate patients on early detection, treatment adherence, and follow-up. (b) Counsel patients on lifestyle modifications (high-fiber diet, hydration, exercise, avoiding triggers).	C3/A2	NK	Lectures, Journal clubs, Online research of data bases	Group assignments, Tutorials	OSCE, Bedside examination, Viva	Practice of Medicine, Preventive Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	

HomUG-PM II.59. Homoeopathic Therapeutics										
HomUG-PM II.59.1	Homoeopathic Orientation	Knows	Major homoeopathic remedies for GI disorders	(a) Identify major remedies (Nux Vomica, Lycopodium, Arsenicum Album, and Pulsatilla). (b) Describe remedy profiles (keynotes, modalities, characteristic symptoms). (c) Differentiate remedies based on specific indications and symptoms.	C2	MK	Lecture, Reading, Discussions	MCQ, SAQ	SAQ, Bedside Examination, Viva	Materia Medica, Homoeopathic Pharmacy, Homoeopathic therapeutics
HomUG-PM II.59.2		Knows	Indications, symptoms, and signs for remedy selection	(a) Recognize indications and symptomatology for remedies in GI conditions (gastritis, peptic ulcers, IBS, diverticulitis). (b) Correlate symptoms with appropriate remedies. (c) Explain modalities (aggravating and ameliorating factors) for remedy selection.	C2	MK	OPD Clinical Postings	MCQ, SAQ	SAQ, Bedside Examination, Viva	Materia Medica, Homoeopathic Therapeutics

HomUG-PM II.59.3		Knows How	Remedy selection based on symptoms, case-taking and repertorisation	(a) Discuss the importance of thorough case-taking (symptoms, medical history, individual characteristics). (b) Select remedies using repertory rubrics, software, and charts. (c) Analyze cases to match symptom pictures with remedy profiles. (d) Choose appropriate potency and dosage based on the condition and patient vitality.	C3	MK	OPD Clinical Postings	MCQ, SAQ	SAQ, Bedside Examination, Viva	Repertory, Organon, Materia Medica, Homoeopathic Pharmacy
HomUG-PM II.59.4		Knows How	Treatment plans, follow-up and prognosis	(a) Discuss individualized treatment plans (remedies, follow-up schedules). (b) Monitor patient progress and adjust treatment plans as needed. (c) Evaluate treatment outcomes (symptom changes, patient feedback, and overall health improvement).	C3	MK	Role-playing, OPD Clinical Postings	Feedback, Reflection	OSCE, Patient education session	Practice of Medicine, Organon

HomUG-PM II.59.5		Knows How	Patient education, lifestyle advice and preventive measures	(a) Educate patients on homoeopathic principles, expected outcomes, and adherence. (b) Advise on lifestyle and dietary changes (stress reduction, hydration, and dietary modifications). (c) Discuss preventive measures (balanced diet, exercise, avoiding triggers).	C3/A2	NK	Role-playing, OPD Clinical Postings	Feedback, Reflection	OSCE, Patient education session	Organon, Practice of Medicine, Preventive Medicine

5.5. Disorders of Liver, Gall Bladder and Pancreas

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.60. Clinical approach to Hepatobiliary and Pancreatic Diseases										
HomUG-PM II.60.1	Knowledge and Scholarship	Knows	Structure and function of the liver, gallbladder, and pancreas	(a) Outline the anatomical structure (liver, gallbladder, pancreas, blood supply, biliary tree). (b) Explain physiological functions (bile production, detoxification, digestion). (c) Identify key anatomical landmarks and	C1/2/3	MK	Lecture, Reading, Discussions	MCQ, SAQ	SAQ, LAQ	Anatomy and Physiology courses

				physiological processes.						
HomUG-PM II.60.2		Knows How	Symptoms and signs of hepatobiliary and pancreatic diseases	(a) Recognize common symptoms and signs (jaundice, abdominal pain, nausea, vomiting, and changes in stool/urine color). (b) Describe clinical manifestations of specific diseases (hepatitis, cholecystitis, pancreatitis, liver cirrhosis). (c) Interpret symptoms to identify underlying conditions.	C2	MK	OPD Clinical Postings	SAQ	OSCE, Bedside Exams	Internal Medicine, Gastroenterology classes
HomUG-PM II.60.3		Knows How	History taking and physical examination techniques	(a) Take a comprehensive patient history (risk factors, symptoms, medical history). (b) Perform a physical examination (inspection, palpation, percussion, auscultation). (c) Identify clinical signs (hepatomegaly, Murphy's sign, and Cullen’s sign) and their significance.	P2	MK	OPD Clinical Postings, Bedside clinical teachings, Simulation labs		OSCE, Bedside Examinations	Clinical rotations, Internships

HomUG-PM II.60.4		Knows How	Liver function tests, imaging studies, and biopsy techniques	(a) Enumerate diagnostic tests (liver function tests, imaging, and biopsy). (b) Interpret test results and correlate with clinical findings. (c) Discuss limitations and pitfalls of diagnostic tests.	C3/P2	MK	Lectures, Discussions	Tutorials, Group Presentations	SAQ, OSCE	Pathology and Radiology integration
HomUG-PM II.60.5		Knows How	Common differential diagnoses in hepatobiliary and pancreatic diseases	(a) Formulate differential diagnoses for common symptoms. (b) Analyze clinical and diagnostic data to narrow down diagnoses. (c) Apply diagnostic criteria and guidelines for decision-making.	C3/4/5	MK	Group Discussions	Tutorials, Group Presentations	Bedside Examinations, Biva	Multidisciplinary rounds, Clinical practice
HomUG-PM II.60.6		Knows How	Homoeopathic and conventional treatment options	(a) Describe treatment plans (homoeopathic and conventional strategies). (b) Analyze patient response and adjust treatment plans. (c) Integrate input from healthcare professionals for holistic management.	C3	MK	OPD Clinical Postings	Group Presentations	OSCE, Bedside Examinations	Clinical practice, Therapeutics sessions

Sl. No	Competenc	Millers	Content	SLO	Blooms	Priority -	T-L	Assessment	Integration

	y	Level: Does/Shows how/Knows how/ Knows			Domain/ Guilbert's Level	Must Know/ Desirable to know/ nice to know	Methods	Formative	Summative	
HomUG-PM II.61. Acute Viral Hepatitis										
HomUG-PM II.61.1	Knowledge and Scholarship	Knows	Definition, causes, and types of viral hepatitis	(a) Define hepatitis as liver inflammation caused by viruses, alcohol, toxins, etc. (b) Describe types of viral hepatitis (A, B, C, D, E) and their transmission routes. (c) Identify risk factors for acute viral hepatitis.	C1	MK	Lecture, Reading	MCQ, SAQ	SAQ, LAQ, MCQ	Pathology, Microbiology
HomUG-PM II.61.2		Knows	Pathogenesis of acute viral hepatitis	Explain the pathogenesis (immune response, liver inflammation).	C1	MK	Lecture, Reading	MCQ, SAQ	SAQ, LAQ, MCQ	Pathology, Microbiology
HomUG-PM II.61.3		Knows How	Symptoms and signs of acute viral hepatitis	(a) Describe common symptoms (fatigue, jaundice, dark urine, and hepatomegaly).	C2	MK	Lectures, OPD Clinical Postings, Clinical simulations	SAQ	SAQ, OSCE, Bedside Examination, Viva	Practice of Medicine

				(b) Outline stages of acute viral hepatitis (incubation to convalescence). (c) Associate symptoms with specific types of viral hepatitis.						
HomUG-PM II.61.4		Knows How	Serological tests, liver function tests, and imaging studies	(a) List diagnostic tests (LFTs, viral serologies, imaging). (b) Interpret test results (LFTs, HBsAg, and anti-HCV). (c) Explain imaging findings (liver ultrasound, CT scan).	C2/3	MK	OPD Clinical Postings, Interactive seminars, group discussions	MCQ, SAQ	SAQ, OSCE	Pathology and Laboratory Medicine integration
HomUG-PM II.61.5		Knows How	Differential diagnoses for jaundice and related symptoms	(a) Formulate differential diagnoses for jaundice (haemolytic anaemia, cholestasis, cirrhosis). (b) Analyze clinical data to narrow down diagnoses. (c) Apply diagnostic criteria to	C3/4/5	MK	OPD Clinical Postings, Group Discussions	Tutorials, Team projects	Bedside Examinations, Viva	Practice of Medicine

				distinguish between viral hepatitis and other liver diseases.						
HomUG-PM II.61.6		Shows How	Homoeopathic and conventional treatment options	(a) Discuss treatment plans (homoeopathic and conventional strategies). (b) Monitor patient response and adjust treatment plans. (c) Integrate supportive care (hydration, nutrition, rest).	C3/4	MK	OPD Clinical Postings, Role Play	Group Discussions, SAQ	OSCE, Bedside Examinations, Viva	Practice of Medicine, Pharmacology, Homoeopathic Therapeutics
HomUG-PM II.61.7		Does	Patient education, lifestyle advice, and preventive measures	(a) Educate patients on their condition, treatment options, and adherence. (b) Counsel on lifestyle changes (avoiding alcohol, hygiene, safe food handling). (c) Discuss preventive measures (vaccination,	A2/3	NK	Role-playing, Patient counselling	Group Discussions	OSCE, Patient education session	Practice of Medicine, Community Medicine

				avoiding virus exposure).						

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.62. Chronic Hepatitis										
HomUG-PM II.62.1	Knowledge and Scholarship	Knows	Types of chronic hepatitis (B, C) and transmission	(a) Identify types of chronic hepatitis (B, C) and their modes of transmission. (b) List risk factors for chronic hepatitis (viral persistence, alcohol use, co-infections).	C1	MK	Lecture, Reading	MCQ, SAQ	SAQ, LAQ, MCQ	Pathology, Microbiology
HomUG-PM II.62.2		Knows	Pathogenesis of chronic hepatitis	Explain the pathogenesis (liver injury, fibrosis).	C1	MK	Lecture, Reading	MCQ, SAQ	SAQ, LAQ, MCQ	Pathology, Microbiology

HomUG-PM II.62.3		Knows How	Symptoms and signs of chronic hepatitis	(a) Recognize common symptoms (fatigue, malaise, anorexia, jaundice). (b) Identify clinical signs (spider angiomas, palmar erythema, and ascites). (c) Describe stages and progression (asymptomatic phase, active inflammation, cirrhosis). (d) Correlate symptoms and findings with chronic hepatitis and complications.	C2	MK	Lectures, OPD Clinical Postings, Clinical simulations	SAQ	SAQ, OSCE, Bedside Examination, Viva	Practice of Medicine
HomUG-PM II.62.4		Knows How	Liver function tests, serological tests, and imaging studies	(a) List diagnostic tests (LFTs, viral serologies, liver biopsy, and imaging). (b) Explain imaging findings (liver ultrasound, CT scan, elastography).	C2/3	MK	OPD Clinical Postings, Interactive seminars, group discussions	MCQ, SAQ	SAQ, OSCE	Physiology, Practice of Medicine
HomUG-PM II.62.5		Knows How	Differential diagnoses of chronic liver disease	(a) Discuss differential diagnoses (autoimmune hepatitis, alcoholic liver disease). (b) Analyze clinical data to narrow down diagnoses. (c) Apply diagnostic criteria to distinguish between chronic hepatitis and other liver diseases.	C3/4/5	MK	OPD Clinical Postings, Group Discussions	Tutorials, Team projects	Bedside Examinations, Viva	Practice of Medicine

HomUG-PM II.62.6		Knows How	Homoeopathic and conventional treatment options, supportive care	(a) Discuss treatment plans (homoeopathic and conventional strategies). (b) Monitor patient response, assess side effects, and adjust treatment plans. (c) Integrate supportive care (dietary modifications, liver protection, regular monitoring).	C3/4	MK	OPD Clinical Postings, Role Play	Group Discussions, SAQ	OSCE, Bedside Examinations, Viva	Practice of Medicine, Pharmacology, Homoeopathic Therapeutics
HomUG-PM II.62.7		Does	Patient education, lifestyle advice, and preventive measures	(a) Educate patients on their condition, treatment options, and adherence. (b) Counsel on lifestyle changes (avoiding alcohol, hygiene, safe food handling). (c) Discuss preventive measures (hepatitis B vaccination, avoiding virus exposure).	A2/3	NK	Role-playing, Patient counselling	Group Discussions	OSCE, Patient education session	Practice of Medicine, Community Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.63. Alcoholic Liver Diseases										

HomUG-PM II.63.1	Knowledge and Scholarship	Knows	Definition, causes and risk factorsof alcoholic liver disease (ALD)	(a) Define ALD as liver damage from excessive alcohol consumption. (b) Identify causes and risk factors (excessive alcohol, genetic predisposition). (c) Describe stages of ALD (fatty liver, alcoholic hepatitis, cirrhosis).	C1	MK	Lecture, Reading	MCQ, SAQ	SAQ, LAQ, MCQ	Physiology, Pathology, Surgery
HomUG-PM II.63.2		Knows	Pathogenesis of Alcoholic Liver disease	Explain the pathogenesis (alcohol metabolism leading to steatosis, fibrosis, and cirrhosis).	C1	MK	Lecture, Reading	MCQ, SAQ	SAQ, LAQ, MCQ	Physiology, Pathology, Surgery
HomUG-PM II.63.3		Knows How	Symptoms and signs of ALD	(a) Identify common symptoms (jaundice, fatigue, abdominal pain, and ascites). (b) Describe clinical signs (hepatomegaly, spider angiomas, palmar erythema). (c) Recognize complications (portal hypertension, ascites, varices, hepatic encephalopathy). (d) Assess severity using clinical scoring systems (Child-Pugh, MELD).	C2/3	MK	Lectures, OPD Clinical Postings, Clinical simulations	SAQ	SAQ, OSCE, Bedside Examination, Viva	Practice of Medicine, Surgery
HomUG-PM II.63.4		Knows How	Liver function tests, imaging studies, and liver biopsy	(a) Discuss diagnostic tests (LFTs, CBC, imaging, liver biopsy). (b) Interpret LFT results (elevated AST/ALT ratio, GGT). (c) Explain imaging findings (ultrasound, CT, MRI) and biopsy results.	C2/3	MK	OPD Clinical Postings, Interactive seminars, group discussions	MCQ, SAQ	SAQ, OSCE	Physiology, Practice of Medicine, Surgery

HomUG-PM II.63.5		Knows How	Differential diagnoses of liver diseases	(a) Discuss differential diagnoses (viral hepatitis, non-alcoholic fatty liver disease, autoimmune hepatitis). (b) Apply diagnostic criteria to differentiate ALD from other liver diseases.	C3/4/5	MK	OPD Clinical Postings, Group Discussions	Tutorials, Team projects	Bedside Examinations, Viva	Practice of Medicine, Surgery
HomUG-PM II.63.6		Knows How	Homoeopathic and conventional treatment options, supportive care	(a) Describe treatment plans (homoeopathic and conventional strategies). (b) Monitor patient response, manage withdrawal, and assess side effects. (c) Discuss supportive care (nutritional support, vitamin supplementation, lifestyle modifications).	C3/4	MK	OPD Clinical Postings, Role Play	Group Discussions, SAQ	OSCE, Bedside Examinations, Viva	Pharmacology, Homoeopathic Therapeutics, Surgery, Practice of Medicine
HomUG-PM II.63.7		Does	Patient education, lifestyle advice, and preventive measures	(a) Educate patients on ALD, abstinence, and treatment options. (b) Counsel on lifestyle changes (balanced diet, exercise, avoiding hepatotoxic substances). (c) Discuss preventive measures (monitoring, hepatitis vaccination, preventing liver damage).	A2/3	NK	Role-playing, Patient counselling	Group Discussions	OSCE, Patient education session	Practice of Medicine, Community Medicine
HomUG-PM II.64.A. Cirrhosis of Liver										

HomUG-PM II.64.A.1	Knowledge and Scholarship	Knows	Definition, causes, and risk factors of cirrhosis	(a) Define cirrhosis as late-stage liver scarring caused by diseases like hepatitis and chronic alcohol abuse. (b) Identify causes and risk factors (chronic alcohol use, viral hepatitis, non-alcoholic fatty liver disease). (c) Describe stages of cirrhosis (compensated to decompensated).	C1	MK	Lecture, Reading	MCQ, SAQ	SAQ, LAQ, MCQ	Physiology, Pathology, Surgery
HomUG-PM II.64.A.2		Knows	Pathogenesis of Cirrhosis	Explain the pathogenesis (chronic liver injury leading to fibrosis, nodule formation, liver dysfunction).	C1	MK	Lecture, Reading	MCQ, SAQ	SAQ, LAQ, MCQ	Physiology, Pathology, Surgery
HomUG-PM II.64.A.3		Knows How	Symptoms and signs of cirrhosis	(a) Identify common symptoms (jaundice, fatigue, pruritus, abdominal distension). (b) Describe clinical signs (spider angiomas, palmar erythema, ascites, and encephalopathy). (c) Recognize complications (portal hypertension, variceal bleeding, and hepatocellular carcinoma). (d) Assess severity using clinical scoring systems (Child-Pugh, MELD).	C2/3	MK	Lectures, OPD Clinical Postings, Clinical simulations	SAQ	SAQ, OSCE, Bedside Examination, Viva	Practice of Medicine, Surgery
HomUG-PM II.64.A.4		Knows How	Liver function tests, imaging studies, and liver biopsy	(a) Discuss diagnostic tests (LFTs, CBC, imaging, and liver biopsy). (b) Interpret LFT results (elevated AST/ALT ratio, bilirubin, and albumin). (c) Explain imaging findings (ultrasound, CT, MRI) and biopsy results.	C2/3	MK	OPD Clinical Postings, Interactive seminars, group discussions	MCQ, SAQ	SAQ, OSCE	Physiology, Surgery, Practice of Medicine

HomUG-PM II.64.A.5		Knows How	Differential diagnoses of liver diseases	(a) Discuss differential diagnoses (alcoholic liver disease, non-alcoholic fatty liver disease, autoimmune hepatitis). (b) Analyze clinical data, history, and test results to narrow down diagnoses. (c) Apply diagnostic criteria to differentiate cirrhosis from other liver diseases.	C3/4/5	MK	OPD Clinical Postings, Group Discussions	Tutorials, Team projects	Bedside Examinations, Viva	Practice of Medicine, Surgery
HomUG-PM II.64.A.6		Shows How	Homoeopathic and conventional treatment options, supportive care	(a) Describe treatment plans (homoeopathic and conventional strategies). (b) Monitor patient response, manage complications, and assess side effects. (c) Integrate supportive care (nutritional support, ascites management, regular monitoring).	C3/4	MK	OPD Clinical Postings, Role Play	Group Discussions, SAQ	OSCE, Bedside Examinations, Viva	Pharmacology, Homoeopathic Therapeutics, Surgery, Practice of Medicine

HomUG-PM II.64.A.7		Does	Patient education, lifestyle advice, and preventive measures	(a) Educate patients on cirrhosis, lifestyle modifications, and treatment options. (b) Counsel on lifestyle changes (balanced diet, exercise, avoiding hepatotoxic substances). (c) Discuss preventive measures (monitoring, hepatitis vaccination, preventing liver damage).	A2/3	NK	Role-playing, Patient counselling	Group Discussions	OSCE, Patient education session	Practice of Medicine, Community Medicine
HomUG-PM II.64.B. Portal Hypertension										
HomUG-PM II.64.B.1	Knowledge and Scholarship	Knows	Definition, causes, and risk factors of portal hypertension	(a) Define portal hypertension as increased blood pressure in the portal venous system. (b) Identify causes and risk factors (cirrhosis, hepatic vein obstruction, and schistosomiasis). (c) Describe physiological consequences (Porto systemic collaterals, varices).	C1	MK	Lecture, Reading	MCQ, SAQ	SAQ, LAQ, MCQ	Physiology, Pathology, Surgery
HomUG-PM II.64.B.2		Knows	Pathogenesis of portal hypertension	Explain the pathogenesis (increased resistance to portal blood flow leading to elevated portal venous pressure).	C1	MK	Lecture, Reading	MCQ, SAQ	SAQ, LAQ, MCQ	Physiology, Pathology, Surgery

HomUG-PM II.64.B.3		Knows How	Symptoms and signs of portal hypertension	(a) Identify common symptoms (splenomegaly, ascites, gastrointestinal bleeding). (b) Describe clinical signs (ascites, caput medusa, jaundice, and hepatic encephalopathy). (c) Recognize complications (oesophageal varices, hepatic encephalopathy, and hepatorenal syndrome).	C2/3	MK	Lectures, OPD Clinical Postings, Clinical simulations	SAQ	SAQ, OSCE, Bedside Examination, Viva	Practice of Medicine, Surgery
HomUG-PM II.64.B.4		Knows How	Liver function tests, imaging studies, endoscopy, and HVPG	(a) List diagnostic tests (LFTs, CBC, ultrasound, CT, MRI, endoscopy, HVPG). (b) Explain the significance of endoscopic findings (varices, complications).	C2/3	MK	OPD Clinical Postings, Interactive seminars, group discussions	MCQ, SAQ	SAQ, OSCE	Physiology, Surgery, Practice of Medicine
HomUG-PM II.64.B.5		Knows How	Differential diagnoses of portal hypertension	Discuss differential diagnoses (other causes of splenomegaly and ascites).	C3/4/5	MK	OPD Clinical Postings, Group Discussions	Tutorials, Team projects	Bedside Examinations, Viva	Practice of Medicine, Surgery
HomUG-PM II.64.B.6		Knows How	Homoeopathic and conventional treatment options, supportive care	(a) Describe treatment plans (homoeopathic and conventional strategies). (b) Monitor patient response, manage complications, and assess side effects. (c) Integrate supportive care (nutritional support, ascites management, regular monitoring).	C3/4	MK	OPD Clinical Postings, Role Play	Group Discussions, SAQ	OSCE, Bedside Examinations, Viva	Pharmacology, Homoeopathic Therapeutics, Surgery, Practice of Medicine

HomUG-PM II.64.B.7		Does	Patient education, lifestyle advice, and preventive measures	(a) Educate patients on portal hypertension, lifestyle modifications, and treatment options. (b) Counsel on lifestyle changes (balanced diet, exercise, avoiding hepatotoxic substances). (c) Discuss preventive measures (monitoring, hepatitis vaccination, preventing liver damage).	A2/3	NK	Role-playing, Patient counselling	Group Discussions	OSCE, Patient education session	Practice of Medicine, Community Medicine
HomUG-PM II.64.C. Hepatic Failure										
HomUG-PM II.64.C.1	Knowledge and Scholarship	Knows	Definition, causes, and risk factors of hepatic failure	(a) Define hepatic failure as loss of liver function with jaundice, coagulopathy, and encephalopathy. (b) Identify causes and risk factors (viral hepatitis, alcohol abuse, drug-induced injury, autoimmune diseases). (c) Describe stages (acute liver failure, chronic liver failure).	C1	MK	Lecture, Reading	MCQ, SAQ	SAQ, LAQ, MCQ	Physiology, Pathology, Practice of Medicine
HomUG-PM II.64.C.2		Knows	Pathogenesis of Hepatic failure	Explain the pathogenesis (liver cell injury leading to decreased liver function and systemic complications).	C1	MK	Lecture, Reading	MCQ, SAQ	SAQ, LAQ, MCQ	Physiology, Pathology, Practice of Medicine
HomUG-PM II.64.C.3		Knows How	Symptoms, signs, and complications of hepatic failure	(a) Identify common symptoms (jaundice, confusion, ascites, gastrointestinal bleeding). (b) Describe clinical signs (hepatic encephalopathy, asterixis, and coagulopathy). (c) Discuss complications (hepatorenal syndrome, variceal haemorrhage).	C2/3	MK	Lectures, OPD Clinical Postings, Clinical simulations	SAQ	SAQ, OSCE, Bedside Examination, Viva	Practice of Medicine

HomUG-PM II.64.C.4		Knows How	Liver function tests, imaging studies, and liver biopsy	(a) List diagnostic tests (LFTs, CBC, imaging, liver biopsy). (b) Discuss LFT results (elevated AST/ALT, bilirubin, INR, albumin). (c) Explain imaging findings (ultrasound, CT, MRI) and biopsy significance.	C2/3	MK	OPD Clinical Postings, Interactive seminars, group discussions	MCQ, SAQ	SAQ, OSCE	Physiology, Surgery, Practice of Medicine
HomUG-PM II.64.C.5		Knows How	Differential diagnoses of hepatic failure	(a) List differential diagnoses (acute hepatitis, cirrhosis, metabolic liver diseases). (b) Discuss diagnostic criteria to differentiate hepatic failure from other liver diseases.	C3/4/5	MK	OPD Clinical Postings, Group Discussions	Tutorials, Team projects	Bedside Examinations, Viva	Practice of Medicine, Surgery
HomUG-PM II.64.C.6		Knows How	Homoeopathic and conventional treatment options, supportive care	(a) Discuss treatment plans (homoeopathic and conventional strategies). (b) Integrate supportive care (nutritional support, ascites management, regular monitoring).	C3/4	MK	OPD Clinical Postings, Role Play	Group Discussions, SAQ	OSCE, Bedside Examinations, Viva	Pharmacology, Homoeopathic Therapeutics, Practice of Medicine
HomUG-PM II.64.C.7		Does	Patient education, lifestyle advice, and preventive measures	(a) Educate patients on hepatic failure, lifestyle modifications, and treatment options. (b) Counsel on lifestyle changes (balanced diet, exercise, avoiding hepatotoxic substances). (c) Discuss preventive measures (monitoring, hepatitis vaccination, preventing liver damage).	A2/3	NK	Role-playing, Patient counselling	Group Discussions	OSCE, Patient education session	Practice of Medicine, Community Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.65. Liver abscess & Cysts										
HomUG-PM II.65.1	Knowledge and Scholarship	Knows	Definition, causes, and risk factors of liver abscesses and cysts	(a) Define liver abscesses and cysts as localized collections of pus or fluid in the liver. (b) Identify causes and risk factors (bacterial, amoebic infections, trauma, obstruction). (c) Describe pathophysiological changes in the liver.	C1	MK	Lecture, Reading	MCQ, SAQ	SAQ, LAQ, MCQ	Physiology, Pathology, Surgery
HomUG-PM II.65.2		Knows	Pathogenesis of Liver Abscess and Cysts	Explain the pathogenesis (infection, inflammation, cyst formation).	C1	MK	Lecture, Reading	MCQ, SAQ	SAQ, LAQ, MCQ	Physiology, Pathology, Surgery
HomUG-PM II.65.3		Knows How	Symptoms, signs and complications of liver abscesses and cysts	(a) Identify common symptoms (fever, right upper quadrant pain, jaundice). (b) Describe clinical signs (hepatomegaly, tenderness, systemic infection). (c) List complications (rupture, secondary infection, systemic spread).	C2/3	MK	Lectures, OPD Clinical Postings, Clinical simulations	SAQ	SAQ, OSCE, Bedside Examination, Viva	Practice of Medicine, Surgery

HomUG-PM II.65.4		Knows How	Laboratory tests, imaging studies, and microbiological tests	(a) List diagnostic tests (LFTs, CBC, imaging, microbiological tests). (b) Discuss imaging results to identify and differentiate abscesses and cysts. (c) Explain microbiological findings for diagnosing causative organisms.	C2/3	MK	OPD Clinical Postings, Interactive seminars, group discussions	MCQ, SAQ	SAQ, OSCE	Physiology, Surgery, Practice of Medicine
HomUG-PM II.65.5		Knows How	Differential diagnoses of liver abscesses and cysts	(a) Discuss differential diagnoses (other liver masses, infections). (b) Identify criteria to differentiate abscesses and cysts from other hepatic conditions.	C3/4/5	MK	OPD Clinical Postings, Group Discussions	Tutorials, Team projects	Bedside Examinations, Viva	Practice of Medicine, Surgery
HomUG-PM II.65.6		Knows How	Homoeopathic and conventional treatment options, drainage procedures	(a) Discuss treatment plans (homoeopathic and conventional strategies). (b) Outline interventional procedures (percutaneous drainage, surgical approaches).	C2/3/4	MK	OPD Clinical Postings, Role Play	Group Discussions, SAQ	OSCE, Bedside Examinations, Viva	Pharmacology, Homoeopathic Therapeutics, Surgery, Practice of Medicine
HomUG-PM II.65.7		Does	Patient education, lifestyle advice and preventive measures	(a) Educate patients on liver abscesses and cysts, treatment adherence, and lifestyle modifications. (b) Counsel on lifestyle changes (balanced diet, exercise, avoiding	A2/3	NK	Role-playing, Patient counselling	Group Discussions	OSCE, Patient education session	Practice of Medicine, Community Medicine

				hepatotoxic substances). (c) Discuss preventive measures (hygiene, avoiding contaminated food/water, regular check-ups).						

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.66. Cholecystitis: Acute & Chronic										
HomUG-PM II.66.1	Knowledge and Scholarship	Knows	Definition, causes, and risk factors of acute and chronic cholecystitis	(a) Define cholecystitis as gallbladder inflammation, often caused by gallstones. (b) Identify causes and risk factors (gallstones, infections, biliary stasis).	C1	MK	Lecture, Reading	MCQ, SAQ	SAQ, LAQ, MCQ	Physiology, Pathology, Surgery
HomUG-PM II.66.2		Knows	Pathogenesis of acute and chronic cholecystitis	(a) Explain the pathogenesis (inflammation, infection, biliary obstruction). (b) Describe pathophysiological changes in the gallbladder.	C1	MK	Lecture, Reading	MCQ, SAQ	SAQ, LAQ, MCQ	Physiology, Pathology, Surgery

HomUG-PM II.66.3		Knows How	Symptoms and signs of acute and chronic cholecystitis	(a) Identify common symptoms of acute cholecystitis (right upper quadrant pain, fever, nausea, vomiting). (b) Describe clinical signs (Murphy's sign, jaundice, palpable gallbladder). (c) Describe symptoms and signs of chronic cholecystitis (intermittent pain, bloating, and dyspepsia).	C2/3	MK	Lectures, OPD Clinical Postings, Clinical simulations	SAQ	SAQ, OSCE, Bedside Examination, Viva	Practice of Medicine, Surgery
HomUG-PM II.66.4		Knows How	Laboratory tests, imaging studies, and liver function tests	(a) Discuss diagnostic tests (LFTs, CBC, ultrasound, HIDA scan). (b) Explain the significance of laboratory findings in differentiating acute and chronic cholecystitis.	C2/3	MK	OPD Clinical Postings, Interactive seminars, group discussions	MCQ, SAQ	SAQ, OSCE	Physiology, Surgery, Practice of Medicine
HomUG-PM II.66.5		Knows How	Differential diagnoses of acute and chronic cholecystitis	(a) Discuss differential diagnoses (other causes of abdominal pain). (b) Apply diagnostic criteria to differentiate cholecystitis from other abdominal conditions.	C3/4/5	MK	OPD Clinical Postings, Group Discussions	Tutorials, Team projects	Bedside Examinations, Viva	Practice of Medicine, Surgery

HomUG-PM II.66.6		Knows How	Homoeopathic and conventional treatment options, surgical options	(a) Discuss treatment plans (homoeopathic and conventional strategies). (b) Discuss surgical options (cholecystectomy for recurrent or complicated cases).	C3/4	MK	OPD Clinical Postings, Role Play	Group Discussions, SAQ	OSCE, Bedside Examinations, Viva	Pharmacology, Homoeopathic Therapeutics, Surgery, Practice of Medicine
HomUG-PM II.66.7		Does	Patient education, lifestyle advice and preventive measures	(a) Educate patients on cholecystitis, treatment adherence, and lifestyle modifications. (b) Counsel on lifestyle changes (balanced diet, exercise, avoiding fatty foods). (c) Discuss preventive measures (healthy weight, avoiding rapid weight loss, regular check-ups).	A2/3	NK	Role-playing, Patient counselling	Group Discussions	OSCE, Patient education session	Practice of Medicine, Community Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.67. Cholelithiasis										

HomUG-PM II.67.1	Knowledge and Scholarship	Knows	Definition, Causes and risk factors of cholelithiasis	(a) Define cholelithiasis as gallstone formation in the gallbladder. (b) Identify causes and risk factors (genetic predisposition, obesity, rapid weight loss, medications).	C1	MK	Lecture, Reading	MCQ, SAQ	SAQ, LAQ, MCQ	Physiology, Pathology, Surgery
HomUG-PM II.67.2		Knows	Pathogenesis of Cholelithiasis	(a) Explain the pathogenesis (cholesterol saturation, bile stasis, gallbladder motility issues). (b) Describe pathophysiological changes in the gallbladder and biliary system.	C1	MK	Lecture, Reading	MCQ, SAQ	SAQ, LAQ, MCQ	Physiology, Pathology, Surgery
HomUG-PM II.67.3		Knows How	Symptoms, signs& Complications of Cholelithiasis	(a) Identify common symptoms (right upper quadrant pain, biliary colic, nausea, vomiting). (b) Describe clinical signs (tenderness, positive Murphy's sign). (c) Discuss complications (acute cholecystitis, cholangitis, and pancreatitis).	C2/3	MK	Lectures, OPD Clinical Postings, Clinical simulations	SAQ	SAQ, OSCE, Bedside Examination, Viva	Practice of Medicine, Surgery
HomUG-PM II.67.4		Knows How	Laboratory tests, imaging studies and liver function tests	(a) List diagnostic tests (LFTs, CBC, ultrasound, MRCP). (b) Explain the significance of laboratory findings in diagnosing cholelithiasis.	C2/3	MK	OPD Clinical Postings, Interactive seminars, group discussions	MCQ, SAQ	SAQ, OSCE	Physiology, Surgery, Practice of Medicine

HomUG-PM II.67.5		Knows How	Differential diagnoses of Cholelithiasis	Discuss differential diagnoses (other causes of abdominal pain and biliary disorders).	C3/4/5	MK	OPD Clinical Postings, Group Discussions	Tutorials, Team projects	Bedside Examinations, Viva	Practice of Medicine, Surgery
HomUG-PM II.67.6		Knows How	Homoeopathic and conventional treatment options, surgical options	(a) Discuss treatment plans (homoeopathic and conventional strategies). (b) Discuss surgical options (laparoscopic cholecystectomy for symptomatic or complicated cases).	C3/4	MK	OPD Clinical Postings, Role Play	Group Discussions, SAQ	OSCE, Bedside Examinations, Viva	Pharmacology, Homoeopathic Therapeutics, Surgery, Practice of Medicine
HomUG-PM II.67.7		Does	Patient education, lifestyle advice and preventive measures	(a) Educate patients on cholelithiasis, treatment adherence, and lifestyle modifications. (b) Counsel on lifestyle changes (balanced diet, exercise, avoiding high-fat foods). (c) Discuss preventive measures (healthy weight, avoiding rapid weight loss, regular check-ups).	A2/3	NK	Role-playing, Patient counselling	Group Discussions	OSCE, Patient education session	Practice of Medicine, Community Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.68. Acute and Chronic Pancreatitis										
HomUG-PM II.68.1	Knowledge and Scholarship	Knows	Definition, Causes and risk factors of acute and chronic pancreatitis	(a) Define pancreatitis as inflammation of the pancreas (acute or chronic). (b) Identify causes and risk factors (gallstones, alcohol use, hypertriglyceridemia, genetic factors).	C1	MK	Lecture, Reading	MCQ, SAQ	SAQ, LAQ, MCQ	Physiology, Pathology, Surgery
HomUG-PM II.68.2		Knows	Pathogenesis of acute and chronic pancreatitis	(a) Explain the pathogenesis (pancreatic inflammation, autodigestion, and fibrosis). (b) Describe pathophysiological changes in the pancreas.	C1	MK	Lecture, Reading	MCQ, SAQ	SAQ, LAQ, MCQ	Physiology, Pathology, Surgery

HomUG-PM II.68.3		Knows How	Symptoms and signs of acute and chronic pancreatitis	(a) Identify common symptoms of acute pancreatitis (severe abdominal pain, nausea, vomiting, and fever). (b) Describe clinical signs (abdominal tenderness, jaundice, and malabsorption). (c) Identify symptoms and signs of chronic pancreatitis (persistent pain, weight loss, and steatorrhea).	C2/3	MK	Lectures, OPD Clinical Postings, Clinical simulations	SAQ	SAQ, OSCE, Bedside Examination, Viva	Practice of Medicine, Surgery
HomUG-PM II.68.4		Knows How	Laboratory tests, imaging studies, and pancreatic function tests	(a) List diagnostic tests (serum amylase, lipase, LFTs, CT, MRI, ultrasound, pancreatic function tests). (b) Discuss imaging results to identify and differentiate acute/chronic pancreatitis and assess complications. (c) Explain the significance of laboratory findings in diagnosis and monitoring.	C2/3	MK	OPD Clinical Postings, Interactive seminars, group discussions	MCQ, SAQ	SAQ, OSCE	Physiology, Surgery, Practice of Medicine
HomUG-PM II.68.5		Knows How	Differential diagnoses of acute and chronic pancreatitis	(a) Discuss differential diagnoses (other causes of abdominal pain, pancreatic disorders). (b) Define diagnostic criteria to differentiate pancreatitis from other conditions.	C3/4/5	MK	OPD Clinical Postings, Group Discussions	Tutorials, Team projects	Bedside Examinations, Viva	Practice of Medicine, Surgery

HomUG-PM II.68.6		Knows How	Homoeopathic and conventional treatment options, surgical options	(a) Describe treatment plans (homoeopathic and conventional strategies). (b) Discuss surgical options (endoscopic procedures, surgery for complications).	C3/4	MK	OPD Clinical Postings, Role Play	Group Discussions, SAQ	OSCE, Bedside Examinations, Viva	Pharmacology, Homoeopathic Therapeutics, Surgery, Practice of Medicine
HomUG-PM II.68.7		Does	Patient education, lifestyle advice, and preventive measures	(a) Educate patients on pancreatitis, treatment adherence, and lifestyle modifications. (b) Counsel on lifestyle changes (balanced diet, avoiding alcohol, regular exercise). (c) Discuss preventive measures (healthy weight, managing hyperlipidaemia, avoiding triggers).	A2/3	NK	Role-playing, Patient counselling	Group Discussions	OSCE, Patient education session	Practice of Medicine, Community Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.69. Hepatocellular Carcinoma(HCC)										

HomUG-PM II.69.1	Knowledge and Scholarship	Knows	Definition, causes, and risk factors of hepatocellular carcinoma (HCC)	(a) Define HCC as a primary malignant liver tumor often linked to chronic liver disease and cirrhosis. (b) Identify causes and risk factors (chronic hepatitis B/C, cirrhosis, aflatoxin exposure, metabolic disorders).	C1	MK	Lecture, Reading	MCQ, SAQ	SAQ, LAQ, MCQ	Physiology, Pathology, Surgery
HomUG-PM II.69.2		Knows	Pathogenesis of HCC	(a) Explain the pathogenesis (hepatic cell transformation, genetic mutations, tumor growth). (b) Describe pathophysiological changes (tumor formation, local invasion, and metastasis).	C1	MK	Lecture, Reading	MCQ, SAQ	SAQ, LAQ, MCQ	Physiology, Pathology, Surgery
HomUG-PM II.69.3		Knows How	Symptoms and signs of HCC	(a) Identify common symptoms (right upper quadrant pain, weight loss, jaundice, and ascites). (b) Describe clinical signs (hepatomegaly, liver tenderness, and chronic liver disease signs). (c) Discuss advanced HCC symptoms (portal hypertension, encephalopathy, variceal bleeding).	C2/3	MK	Lectures, OPD Clinical Postings, Clinical simulations	SAQ	SAQ, OSCE, Bedside Examination, Viva	Practice of Medicine, Surgery

HomUG-PM II.69.4		Knows How	Laboratory tests, imaging studies, and tumor markers (AFP)	(a) List diagnostic tests (LFTs, serum AFP, CT, MRI, ultrasound, liver biopsy). (b) Discuss imaging results to identify HCC, differentiate from other lesions, and assess tumor staging/metastasis.	C2/3	MK	OPD Clinical Postings, Interactive seminars, group discussions	MCQ, SAQ	SAQ, OSCE	Physiology, Pathology, Surgery, Practice of Medicine
HomUG-PM II.69.5		Knows How	Differential diagnoses of HCC	Discuss differential diagnoses (metastatic liver disease, cholangiocarcinoma, benign liver tumors).	C3/4/5	MK	OPD Clinical Postings, Group Discussions	Tutorials, Team projects	Bedside Examinations, Viva	Practice of Medicine, Surgery
HomUG-PM II.69.6		Knows How	Homoeopathic and conventional treatment options, surgical options	(a) Describe treatment plans (homoeopathic and conventional strategies). (b) Discuss surgical options (resection, liver transplantation, palliative care).	C3/4	MK	OPD Clinical Postings, Role Play	Group Discussions, SAQ	OSCE, Bedside Examinations, Viva	Pharmacology, Homoeopathic Therapeutics, Surgery, Practice of Medicine
HomUG-PM II.69.7		Does	Patient education, lifestyle advice, and preventive measures	(a) Educate patients on HCC, early detection, and treatment options. (b) Counsel on lifestyle changes (balanced diet, avoiding alcohol, managing liver conditions). (c) Discuss preventive measures (hepatitis B vaccination, regular screening, and avoiding hepatotoxic substances).	A2/3	NK	Role-playing, Patient counselling	Group Discussions	OSCE, Patient education session	Practice of Medicine, Community Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.70. Miasmatic Interpretation of Liver, Gall bladder & Pancreas disorders										
HomUG-PM II.70.1	Homoeopathic orientation	Knows How	Understanding miasms as underlying causes of chronic diseases affecting the liver, gallbladder, and pancreas.	1. Describe the concept of miasms in the context of liver, gallbladder, and pancreatic disorders. 2. Identify symptoms related to different miasms. 3. Discuss treatment approaches based on miasmatic understanding.	C2	MK	Lecture, case discussions, interactive workshops	MCQs, group presentations, case analysis	Written exam, project on miasmatic approaches	Homoeopathic Philosophy

HomUG-PM II.70.2			Analysis of liver disorders (e.g., hepatitis, cirrhosis) through the lens of miasms, such as psora, syphilis, and sycosis.	1. Analyze liver disorders in terms of psora, syphilis, and sycotic miasms. 2. Recognize clinical features and treatment methods.	C2	MK	Case studies, peer review, discussion forums	Case study presentations, reflective essays	Written report on miasmatic analysis of liver disorders	Homoeopathic Philosophy
HomUG-PM II.70.3			Analysis of gallbladder disorders (e.g., cholecystitis, gallstones) through miasmatic theories.	1. Analyze gallbladder disorders in relation to miasms. 2. Identify treatment strategies and lifestyle modifications based on miasmatic understanding.	C2	MK	Group discussions, role play, clinical scenarios	Case discussions, quizzes on gallbladder disorders	Practical exam on gallbladder disease management	Homoeopathic Philosophy
HomUG-PM II.70.4			Evaluation of pancreatic disorders (e.g., pancreatitis, pancreatic cancer) from a miasmatic perspective.	1. Evaluate pancreatic disorders in terms of miasms. 2. Discuss implications for treatment and prognosis.	C2	MK	Interactive lectures, seminars, research projects	Group presentations on case studies, peer feedback	Written exam on pancreatic disorders and miasms	Homoeopathic Philosophy

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.71. Therapeutics related to Liver, Gall bladder & Pancreas disorders										
HomUG-PM II.71.1	Homoeopathic Orientation	Knows	Key remedies for liver diseases: Chelidonium, Carduus Marianus, Lycopodium, Nux Vomica, etc.	(a) Describe key homoeopathic remedies for liver disorders. (b) Explain the indications and symptoms that guide the selection of these remedies. (c) Describe the common therapeutic uses of remedies such as Chelidonium, Carduus Marianus, and Nux Vomica in liver conditions.	C1	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ, Bedside Examination, Viva	Materia Medica, Homoeopathic Pharmacy, Homoeopathic Therapeutics
HomUG-PM II.71.2		Knows How	Differential indications of remedies for liver disorders	(a) Differentiate between homoeopathic remedies based on their specific indications for liver disorders. (b) Explain the subtle differences in symptomatology that guide remedy selection for liver conditions.	C2	MK	Case studies, OPD Clinical Postings	MCQ, SAQ	MCQ, SAQ, Bedside Examination, Viva	Practice of Medicine, Materia medica, Homoeopathic Therapeutics

HomUG-PM II.71.3		Knows	Key remedies for gall bladder diseases: Chelidonium, Carduus Marianus, Lycopodium, Nux Vomica, etc.	(a) Identify and describe key homoeopathic remedies for gall bladder disorders. (b) Explain the indications and symptoms that guide the selection of these remedies. (c) Describe the common therapeutic uses of remedies such as Chelidonium and Lycopodium in gall bladder conditions.	C1	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ, Bedside Examination, Viva	Materia Medica, Homoeopathic Pharmacy, Homoeopathic Therapeutics
HomUG-PM II.71.4		Knows How	Differential indications of remedies for gall bladder disorders	(a) Differentiate between homoeopathic remedies based on their specific indications for gall bladder disorders. (B) Explain the subtle differences in symptomatology that guide remedy selection for gall bladder conditions.	C2	MK	Case studies, OPD Clinical Postings	MCQ, SAQ	MCQ, SAQ, Bedside Examination, Viva	Practice of Medicine, Materia medica, Homoeopathic Therapeutics
HomUG-PM II.71.5		Knows	Key remedies for pancreatic diseases: Phosphorus, Iris Versicolor, Lycopodium, Nux Vomica, etc.	(a) Identify and describe key homoeopathic remedies for pancreatic disorders. (b) Explain the indications and symptoms that guide the selection of these remedies. (c) Describe the common therapeutic uses of remedies such	C1	MK	Lecture, Reading, Discussions	MCQ, SAQ	MCQ, SAQ, Bedside Examination, Viva	Materia Medica, Homoeopathic Pharmacy, Homoeopathic Therapeutics

				as Phosphorus and Iris Versicolor in pancreatic conditions.						
HomUG-PM II.71.6		Knows How	Differential indications of remedies for pancreatic disorders	(a) Differentiate between homoeopathic remedies based on their specific indications for pancreatic disorders. (b) Explain the subtle differences in symptomatology that guide remedy selection for pancreatic conditions.	C2	MK	Case studies, OPD Clinical Postings	MCQ, SAQ	MCQ, SAQ, Bedside Examination, Viva	Practice of Medicine, Materia medica, Homoeopathic Therapeutics

5.6. Endocrine and Metabolic Disorders

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.72. Approach to Endocrine Disorders										
HomUG-PM II.72.1	Knowledge and Scholarship	K	Basic endocrinology, hormone functions, and mechanisms of hormonal imbalances	Describe the physiological mechanisms leading to endocrine disorders	C1	MK	Lectures, Reading assignments	MCQ	MCQ, SAQ	Physiology, Biochemistry
HomUG-PM II.72.2			Common symptoms of endocrine dysfunction.	Identify the common symptoms associated with major endocrine disorders	C1	MK	Symptomatology exercises	Case presentations	OSCE, Viva voce	Pathology, Practice of Medicine

HomUG-PM II.72.3		SH	Self-monitoring techniques, importance of diet and exercise, stress management	(a) Educate patients on the importance of self-care in endocrine health (b) Educate patients on the importance of prevention in endocrine health.	P2	NK	Patient education workshops, Chart making	Patient education role-play	SAQ	Community Medicine.
HomUG-PM II.72.4		KH	Understanding the scope of homoeopathy and when to refer to or collaborate with other specialists	(a) Explain the role of homoeopathy in managing endocrine disorders. (b) Describe the limitations of homoeopathy in endocrine disorders.	C3	DK	Guest lectures	Team-based case management exercises	SAQ, LAQ	Organon, Homoeopathic Materia Medica
HomUG-PM II.72.5		KH	Psychoneuroendocrine Axis	(a) Define the components of the psychoneuroendocrine axis. (b) Explain its role in endocrine disorders. (c) Discuss feedback mechanisms.	C2	MK	Lectures, interactive discussions, multimedia presentations	Quizzes on axis components and functions	Written exam on PNE axis	Psychology, Physiology, PM
HomUG-PM II.72.6		KH	Clinical implications of the psychoneuroendocrine axis	(a) Identify how stress impacts endocrine function. (b) Evaluate case studies involving the psychoneuroendocrine axis.	C3	MK	Case studies, group projects	Case study presentations and discussions	Practical assessment on management strategies	Psychology, Physiology, PM

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.73. Hypothyroidism										

HomUG-PM II.73.1	Knowledge and Scholarship	K	Definition, epidemiology, causes, and risk factors of hypothyroidism	(a) Define hypothyroidism as insufficient thyroid hormone production. (b) Describe the prevalence of hypothyroidism. (c) List causes of hypothyroidism. (d) List risk factors for hypothyroidism.	C1	MK	Lecture, Reading	Quiz, Discussion	MCQ, SAQ	Practice of Medicne
HomUG-PM II.73.2			Signs and symptoms of hypothyroidism	Identify the common clinical manifestations of hypothyroidism	C1	MK	Case studies, Clinical shadowing	OSCE, Case presentation	OSCE, Clinical exam	Practice of Medicine, Pathology
HomUG-PM II.73.3		KH	Diagnostic criteria, lab tests (TSH, T4)	Interpret the results of laboratory tests for hypothyroidism diagnosis	C3	MK	Lab tutorials, Interactive lectures, DOAP	Lab result interpretation exercises	Lab test interpretation on exams	Physiology, Practice of Medicine
HomUG-PM II.73.4		SH	Treatment options, monitoring, and follow-up	Formulate a comprehensive management plan for a patient with hypothyroidism	P2	MK	Small group discussions, Clinical rotations	Treatment plan assignment	Case management exam	Pharmacology, Therapeutics
HomUG-PM II.73.5		Does	Patient education, lifestyle advice, medication adherence	(a) Educate patients on medication adherence. (b) Educate patients on lifestyle modifications.	A	MK	Role-playing, Patient education workshops	Patient counseling simulation	Oral exam	Community Medicine, Practice of meidicine
HomUG-PM II.73.6		KH	Complications, comorbidities, emergency conditions (myxedema coma)	Identify the common complications in hypothyroidism	C2	MK	Problem-based learning, Clinical seminars	Case studies analysis	Comprehensive clinical exam	Practice of Medicine
HomUG-PM II.73.7			Review of current guidelines and research	Utilize evidence-based research in the treatment of hypothyroidism	P2	DK	Journal club, Online research databases	Evidence-based treatment plan presentation	SAQ	Research Methodology

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.74. Hyperthyroidism										
HomUG-PM II.74.1	Knowledge and Scholarship	K	Definition, Pathophysiology and causes of hyperthyroidism	(a) Defined as a condition characterized by excessive production of thyroid hormones, resulting in accelerated metabolism. (b) Describe the pathophysiological evolution of hyperthyroidism. (c) State the causes for hyperthyroidism	C1	MK	Lecture, Reading assignments	MCQ	MCQ, SAQ	Physiology, Endocrinology
HomUG-PM II.74.2			Signs and symptoms	Identify the clinical manifestations associated with hyperthyroidism	C1	MK	Lecture, Video demonstartions	MCQ	MCQ, SAQ, OSCE	Practice of Medicine
HomUG-PM II.74.3		KH	Laboratory and imaging tests	Interpret the results of diagnostic tests for hyperthyroidism	C2/3	MK	Group Presnatation	Lab data interpretation exercises	Bedside examination, Viva	Pathology, Practice of Medicine
HomUG-PM II.74.4		SH	Pharmacotherapy, radioactive iodine therapy, surgery	Develop a management plan based on the latest evidence-based guidelines	P2	MK	Problem-based learning	Treatment planning assignment	Bedside examination, Viva	Pharmacology, Surgery

HomUG-PM II.74.5		Does	Disease education, lifestyle modifications, follow-up care	Educate patients on their (a) condition, (b) management plan (c) how to recognize complications	P2	MK	Role-playing	Patient counselling simulation, Chart making	Oral examination	Community Medicine
HomUG-PM II.74.6		KH	Coordination of care across specialties	Define the multidisciplinary approach to hyperthyroidism management	C4/5	DK	Guest lectures, workshops, Team-based learning	SAQ	SAQ, LAQ	Practice of Medicine
HomUG-PM II.74.7			Thyroid storm, osteoporosis, atrial fibrillation	Identify the complications of hyperthyroidism	C2	MK	Clinical simulations, Case studies	Assignments	Clinical resoning at bedside & Viva	Practice of Medicine
HomUG-PM II.74.8			Review of current guidelines and research	Utilize the evidence-based research in the treatment of hyperthyroidism	P2	DK	Journal club, Online research databases	Evidence-based treatment plan presentation	SAQ	Research Methodology

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.75. Thyroiditis										
HomUG-PM II.75.1	Knowledge and Scholarship	K	Definition, pathophysiology, and types of thyroiditis	(a) Define thyroiditis as inflammation of the thyroid gland. (b) Describe the pathophysiology of thyroiditis. (c) Describe types of thyroiditis (acute, subacute, chronic).	C1	MK	Lecture, Reading assignments	MCQ, SAQ	MCQ, SAQ	Pathology, Practice of Medicine

HomUG-PM II.75.2			Signs, symptoms, laboratory and imaging findings	(a) Identify clinical manifestations of thyroiditis. (b) Describe diagnostic criteria for thyroiditis.	C1	MK	Lectures, Clinical case discussions,	Diagnostic test interpretation exercises	OSCE	Practice of Medicine
HomUG-PM II.75.3		KH	Laboratory tests (e.g., TSH, T4, thyroid antibodies), imaging studies	Interpret the results of diagnostic tests to confirm thyroiditis	C2/3	MK	Interactive lectures	Lab data interpretation exercises	Bedside examination, Viva	Physiology, Pathology, Practice of Medicine, Radiology
HomUG-PM II.75.4		KH	Pharmacotherapy - symptomatic treatment, follow-up	Formulate a management plan tailored to the type and severity of thyroiditis	C3/P2	MK	Problem-based learning,	Assignments	Bedside examination, Viva	Pharmacology, Homoeopathic Therapeutics
HomUG-PM II.75.5		Does	Disease education, lifestyle modifications, and follow-up care	(a) Educate patients on managing thyroiditis. (b) Educate patients on medication adherence. (c) Educate patients on recognizing complications.	A3	MK	Role-playing, Patient education seminars	Patient counselling simulation, Chart making	Viva	Community Medicine
HomUG-PM II.75.6		KH	Thyroid storm, hypothyroidism, goiter	Define the management for complications of thyroiditis	C2/3	DK	Lectures, Case studies	MCQ	MCQ, SAQ, LAQ	Practice of Medicine
HomUG-PM II.75.7			Coordination of care across specialties	Define the multidisciplinary approach to thyroiditis management	C4/5	DK	Guest lectures, workshops, Team-based learning	SAQ	SQ, LAQ	Practice of Medicine, Surgery
HomUG-PM II.75.8		Does	Incorporating patient preferences and values in care plans	Engage patients in their care plans, respecting their preferences and values	A2/3	Nk	Patient interviews	Patient engagement role-play	LAQ	Forensic Medicine

Sl. No	Competency	Millers Level:	Content	SLO	Blooms	Priority -	T-L Methods	Assessment	Integration

		Does/Shows how/Knows how/ Knows			Domain/ Guilbert's Level	Must Know/ Desirable to know/ nice to know		Formative	Summative	
HomUG-PM II.76. Goiters										
HomUG-PM II.76.1	Knowledge and Scholarship	K	Definition, causes, and pathophysiology of goiter	(a) Define goiter as abnormal thyroid gland enlargement. (b) List causes of goiter. (c) Describe pathophysiological mechanisms of goiter.	,	MK	Lecture, Reading assignments	Quiz, Short essays	MCQ, SAQ	Anatomy, Physiology, Surgery
HomUG-PM II.76.2		KH	Signs and symptoms of goiter	List the signs and symptoms of goiter	C2	MK	Lectures, Clinical case discussions	Peer teaching, quizzes	OSCE, SAQ	Practice of Medicine
HomUG-PM II.76.3		SH	Physical examination techniques and diagnostic tests	(a) Define the diagnosis of goiter through clinical examination. (b) List the diagnostic investigations for goiter.	P2	MK	Practical sessions, Lab tutorials	Role-play, Diagnostic test interpretation exercises	Bedside examination, OSCE, Viva	Surgery, Practice of Medicine
HomUG-PM II.76.4		KH	Selection of homoeopathic remedies	List the Homoeopathic remedies in the management of goiter	C3	MK	Seminars, Case-based learning	Case study analysis	SAQ, Bedside examination, Viva	Pharmacology, Materia Medica
HomUG-PM II.76.5			Importance of iodine in diet, avoidance of goitrogens	Advise patients on dietary and lifestyle modifications to support treatment and prevent recurrence	A2	DK	Interactive lectures, Patient education workshops	Patient counseling simulation, Chart making	Viva	Community Medicine, Practice of Medicine

HomUG-PM II.76.6			Regular monitoring and adjustment of treatment	((a) Define the need for regular monitoring. (b) Adjust treatment plans based on response and lab results.	P2/3	DK	OPD/Clinical rotations, Journal clubs	Treatment plan adjustment exercises	Viva, Follow-up case presentation	Practice of Medicine, Homoeopathic Therapeutics
HomUG-PM II.76.7		K	Public health strategies for goiter prevention	Define the role of public health measures (e.g., iodized salt, education on goitrogens).	C1	NK	Guest lectures, Community medicine rotations	Group projects on public health strategies	SAQ, LAQ, Viva	Community Medicine
HomUG-PM II.76.8		Does	Current research and advancements in goiter treatment	Engage in continuous learning about the latest research on goiter treatment modalities.	C4/5	NK	Journal clubs, Online resaerch and presentatons	Literature review assignment	SAQ	Research Methodology.

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.77. Parathyroid disorders										
HomUG-PM II.77.1	Knowledge and Scholarship	K	Anatomy and physiology of parathyroid glands, calcium homeostasis	Explain the role of parathyroid glands in calcium regulation	C1	MK	Lecture, Reading assignments	Quiz, Short essays	MCQ, SAQ	Physiology, Anatomy

HomUG-PM II.77.2			Definition, causes, and mechanisms of parathyroid disorders	(a) Define parathyroid disorders as conditions affecting PTH secretion and calcium balance. (b) Describe causes of parathyroid disorders. (c) List risk factors for parathyroid disorders. (d) Define pathophysiological processes of parathyroid disorders.	C2	MK	Lecture, Case studies, Chart making	Group discussions, Concept maps	MCQ, SAWQ, Viva	Pathology, Biochemistry, Practive of Medicine, Surgery
HomUG-PM II.77.3		KH	Signs, symptoms, laboratory tests, and imaging studies	(a) Define diagnosis of parathyroid disorders using clinical presentation. (b) List diagnostic investigations (calcium, PTH levels, imaging).	C3/4	MK	Clinical skills workshops, Lab tutorials	Role-playing, Lab results interpretation exercise	OSCE, Viva	Practice of Medicine
HomUG-PM II.77.4			Medical management and surgical treatment options	Define the management plan for patients with parathyroid disorders	P2	MK	Seminars, OPD/Clinical rotations	Treatment planning exercises, Assignments	Bedside examination, Viva	Surgery, Practice of Medicine, Pharmacology
HomUG-PM II.77.5			Patient education on disease impact and management strategies	Provide comprehensive patient education on the disorder and management plan.	A2	DK	Patient education workshops, Role-playing	Patient counseling simulation, Chart manking	SAQ	Practice of Medicine, Community Medicine
HomUG-PM II.77.6			Interdisciplinary approach to parathyroid disorders	Define the multidisciplinary approach (endocrinology, surgery, radiology, and nursing).	C3	DK	Team-based learning, Guest Lectures	Collaborative care plan development	Bedside examination, Viva	Surgery, Practice of Medicine, Pharmacology
HomUG-PM II.77.7			Homoeopathic remedies for parathyroid disorders	List homoeopathic remedies for adjunctive treatment of parathyroid disorders.	C3	NK	Lectures on therapeutics, Materia Medica study	Case study analysis with homoeopathic perspective	SAQ, Bedside examination, Viva	Homoeopathy, Materia Medica, Pharmacology

HomUG-PM II.77.8		Does	Current research trends and advances in diagnosis and treatment	Engage in continuous learning on advances in managing parathyroid disorders.	C4/5	Nk	Journal clubs, Online research and presentations	Literature review assignment	SAQ	Research Methodology

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.78. Hypo and Hypercalcemia										
HomUG-PM II.78.1	Knowledge and Scholarship	K	Calcium metabolism and functions of calcium in the body	Describe the importance of calcium in physiological processes.	C1	MK	Lecture, Reading assignments	Quiz, Short essays	MCQ, SAQ	Physiology, Biochemistry
HomUG-PM II.78.2			Dietary sourcesand absorption pathways	(a) List the sources of dietary calcium. (b) Define the mechanisms of absorption of Calcium.	C1	MK	Nutritional science lectures, Case studies	Chart making, Group discussions	OSCE, Viva	Physiology, Biochemistry
HomUG-PM II.78.3		KH	Hormonal regulation, bone turnover, and renal excretion	Describe mechanisms maintaining calcium homeostasis (PTH, calcitonin, vitamin D).	C1/2	MK	Endocrinology lectures, Lab tutorials	Problem-solving exercises, Case-based discussions	SAQ, LAQ	Physiology, Biochemistry
HomUG-PM II.78.4		K	Causes, mechanisms, and clinical significance of hypo- and	(a) List causes of hypo- and hypercalcemia. (b) Describe pathophysiological mechanisms of hypo- and hypercalcemia.	C2	MK	Lecture, Reading assignments	Quiz, Short essays	MCQ, Viva	Biochemistry, Pathology, Practice of Medicine

			hypercalcemia							
HomUG-PM II.78.5		KH	Signs, symptoms and laboratory findings	Recognize clinical manifestations of hypo- and hypercalcemia.	C3	MK	Clinical case discussions, Lab tutorials	Diagnostic test interpretation exercises	OSCE, Viva	Practice of Medicine
HomUG-PM II.78.6			Serum calcium levels, ionized calcium, and other laboratory tests	Interpret diagnostic tests to confirm hypo- and hypercalcemia.	P2	MK	Lab tutorials, Interactive lectures	Lab data interpretation exercises	Bedside examination, Viva	Practice of Medicine
HomUG-PM II.78.7			Treatment options, addressing underlying causes, and monitoring	Define a management plan based on the causes and severity of hypo- and hypercalcemia.	C4/5	MK	Seminars, OPD/Clinical rotations	Treatment planning assignment	Bedside examination, Viva	Pharmacology, Homoeopathy Therapeutics
HomUG-PM II.78.8		Does	Patient education on dietary modifications, medication adherence	(a) Educate patients on lifestyle changes for managing hypo- and hypercalcemia. (b) Describe the importance of treatment adherence.	A2	DK	Patient education workshops, Counseling sessions	Role-playing, Patient counseling simulations	SAQ, Viva	Community Medicine
HomUG-PM II.78.9		KH	Complications of hypo- and hypercalcemia	Identify complications (renal stones, cardiac arrhythmias, neurological symptoms).	C3	DK	Clinical simulations, Case studies	Assignments	SAQ, LAQ, Bedside examination, Viva	Surgery, Practice of Medicine
HomUG-PM II.78.10			Coordination of care across specialties	Define a multidisciplinary approach to managing hypo- and hypercalcemia.	C2/3	DK	Guest lectures	Collaborative care plan development	SAQ, Viiva	Surgery, Practice of Medicine
HomUG-PM II.78.11			Current guidelines, research studies and clinical trials	Apply the latest evidence-based practices in managing hypo- and hypercalcemia.	C4/5	NK	Journal clubs, Online resaerch and presentatons	Evidence-based treatment plan presentation	SAQ, Viva	Research Methodology

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.79. Disorders of Adrenal Gland - Cushing Syndrome										
HomUG-PM II.79.1	Knowledge and Scholarship	K	Definition, Etiology and Pathophysiological mechanisms	(a) Describe Cushing Syndrome (b) Describe Cushing Syndrome's pathophysiology. (c) List the causes of Cushing's Syndrome.	C1	MK	Lectures, Readings	MCQ, SAQ	MCQ, SAQ	Biochemistry, Practice of Medicine
HomUG-PM II.79.2		KH	Signs, symptoms, and diagnostic tests	(a) Identify clinical manifestations of Cushing Syndrome. (b) List the diagnostic tests of Cushing Syndrome.	C2	MK	Lectures, Case studies, Clinical rounds	Diagnostic test interpretation exercises	OSCE, SAQ, LAQ, Viva	Practice of Medicine
HomUG-PM II.79.3			Dexamethasone suppression test, cortisol levels, imaging	Analyze diagnostic tests	C2/P2	MK	Lab tutorials, Interactive sessions	Assignments on Lab data interpretation	SAQ, Bedside examination, Viva	Practice of Medicine, Biochemistry, Radiology
HomUG-PM II.79.4			Treatment options, addressing underlying causes	Define management plans	C3	MK	Seminars, Case-based learning	Assignments treatment planning	SAQ, LAQ, Viva	Pharmacology, Homoeopathic Therapeutics
HomUG-PM II.79.5		Does	Lifestyle modifications, medication adherence	Provide patient education	A2	DK	Role-playing, Patient counseling	Chart making	SAQ, LAQ, Viva	Community Medicine

HomUG-PM II.79.6		SH	Osteoporosis, hypertension, hyperglycaemia	(a) Identify the complications. (b) Define the management strategies.	C3	DK	Clinical simulations, Case discussions	Assignments on complication management	SAQ, LAQ, Bedside examination, Viva	Practice of Medicine, Pharmacology
HomUG-PM II.79.7		KH	Coordination across specialties	Define multidisciplinary approach to manage hypo- and hypercalcemia	C3/4	DK	Interprofessional education, Team-based learning	Assignments on Collaborative care planning	SAQ, LAQ	Internal Medicine, Pharmacology, Surgery
HomUG-PM II.79.8		Does	Current guidelines, research evidence	Utilize evidence-based approaches	C4/5	NK	Journal clubs, Research discussions	Evidence-based treatment plan	SAQ, LAQ	Clinical Research

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.80. Disorders of Adrenal Gland - Addison's disease										
HomUG-PM II.80.1	Knowledge and Scholarship	K	Definition, Causes, mechanisms, and clinical significance	(a) Describe Addison's Disease (b) Describe the pathophysiological mechanisms of Addison's Disease. (c) List the causes of Addison's Disease	C1	MK	Lectures, Readings	Quizzes, Concept maps	MCQ, SAQ	Pathology, Physiology, Practice of Medicine

HomUG-PM II.80.2		KH	Signs, symptoms, laboratory findings	(a) Identify clinical manifestations of Addison's Disease. (b) Interpret diagnostic tests of Addison's Disease	C2/P2	MK	Lectures, Case studies, Clinical rounds	Diagnostic test interpretation exercises	OSCE, SAQ, LAQ, Viva	Practice of Medicine, Pathology
HomUG-PM II.80.3			Serum cortisol, ACTH levels, imaging studies	Interpret diagnostic tests to confirm Addison's Disease diagnosis	C3/P2	MK	Lab tutorials, Interactive sessions	Assignments on Lab data interpretation	SAQ, Bedside examination, Viva	Biochemistry, Radiology
HomUG-PM II.80.4			Hormone replacement therapy, addressing underlying causes, monitoring	Formulate a management plan tailored to the underlying cause and severity of Addison's Disease	C3/P2	MK	Seminars, Case-based learning	Assignments treatment planning	SAQ, LAQ, Viva	Pharmacology, Homoeopathic Therapeutics
HomUG-PM II.80.5			Medication regimen, recognition of emergency signs	Provide patient education on disease management and medication adherence	A2	DK	Role-playing, Patient counseling	Chart making	SAQ, LAQ, Viva	Practice of Medicine, Pharmacology
HomUG-PM II.80.6			Recognition,od acute adrenal crisis	Identify the symptoms of acute adrenal crises	C2/3	DK	Lectures, Case discussions	Assignments on complication management	SAQ, Bedside examination, Viva	Practice of Medicine
HomUG-PM II.80.7			Coordination across specialties	Define multidisciplinary approach to manage Addisons Disease	C3/4	DK	Guest lectures	Group Assignments	SAQ, LAQ	Practice of Medicine, Pharmacology
HomUG-PM II.80.8		Does	Current guidelines, research evidence	Utilize evidence-based approaches	C4/5	NK	Journal clubs, Research discussions	Evidence-based treatment plan	SAQ, LAQ	Clinical Research

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable	T-L Methods	Assessment		Integration
								Formative	Summative	

						to know/ nice to know				
HomUG-PM II.81. Disorders of Adrenal Gland - Pheochromocytoma										
HomUG-PM II.81.1	Knowledge and Scholarship	K	Definition, Causes, mechanisms, and clinical significance	(a) Describe Pheochromocytoma (b) Describe the pathophysiological mechanisms of Pheochromocytoma. (c) List the causes of Pheochromocytoma	C1	MK	Lectures, Readings	Quizzes, Concept maps	MCQ, SAQ	Pathology, Medicie
HomUG-PM II.81.2		KH	Signs, symptoms, laboratory findings	Identify clinical manifestations of Pheochromocytoma	C2/3	MK	Lectures, Case studies, Clinical rounds	Diagnostic test interpretation exercises	OSCE, SAQ, LAQ, Viva	Practice of Medicine, Biochemistry
HomUG-PM II.81.3			Plasma and urine metanephrines, imaging studies	Interpret diagnostic tests to confirm Pheochromocytoma diagnosis	C3/P2	MK	Lab tutorials, Interactive sessions,DOAP	Assignments on Lab data interpretation	SAQ, Bedside examination, Viva	Practice of Medicine, Biochemistry, Radiology
HomUG-PM II.81.4			Surgical resection, preoperative alpha-blockade, monitoring	Define the management strategy in treating the underlying cause and severity of Pheochromocytoma	C3/4	MK	Seminars, Case-based learning	Assignments on treatment planning	SAQ, LAQ, Viva	Pharmacology, Surgery, Homoeopathic Therapeutics
HomUG-PM II.81.5			Medication adherence, recognition of complications	Provide patient education on disease management and postoperative care	A2	DK	Role-playing, Patient counseling	Chart making	SAQ, LAQ, Viva	Community Medicine, Practice of Medicine
HomUG-PM II.81.6			Hemodynamic instability, electrolyte imbalances	Identify the complications during and after surgery	C3	DK	Lectures, Case discussions	Assignments on complication management	SAQ, LAQ, Viva	Practice of Medicine, Biochemistry

HomUG-PM II.81.7		Does	Current guidelines, research evidence	Utilize evidence-based approaches	C4/5	NK	Journal clubs, Research discussions	Assignments on evidence-based treatment plan	SAQ, LAQ	Clinical Research

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.82. Dwarfism										
HomUG-PM II.82.1	Knowledge and Scholarship	K	Definition, Types of dwarfism, genetic causes	(a) Define Dwarfism (b) Identify the different types of dwarfism	C1	MK	Lectures, Readings	Quizzes, Concept maps	MCQ, SAQ	Physiology, Biochemistry, Pediatrics
HomUG-PM II.82.2		KH	History taking, physical examination	Perform a clinical assessment of a patient with suspected dwarfism	C2/3 P/2	MK	Lectures, Case studies, Clinical rounds	Diagnostic test interpretation exercises	OSCE, SAQ, LAQ, Viva	Practice of Medicine, Pediatrics
HomUG-PM II.82.3			Genetic testing, imaging studies, hormone assays	Interpret diagnostic tests in the evaluation of dwarfism	C/3 P2	MK	Lab tutorials, Interactive sessions	Assignments on Lab data interpretation	SAQ, Bedside examination, Viva	Biochemistry, Pathology, Radiology
HomUG-PM II.82.4			Growth hormone therapy, orthopaedic interventions, psychological support	Define a comprehensive management plan (Addressing the medical, orthopaedic, and psychosocial needs)	C3/4	MK	Seminars, Case-based learning	Assignments treatment planning	SAQ, LAQ, Viva	Pharmacology, Orthopedics, Psychology

HomUG-PM II.82.5		Does	Effective communication, prognosis, treatment options	Counsel patients and families effectively regarding dwarfism	A2	DK	Role-playing, Patient counseling	SAQ	SAQ, LAQ, Viva	Forensic Medicine, Community Medicine
HomUG-PM II.82.6		Does	Current research, evidence-based practice	Utilize evidence-based approaches to improve patient care	C4/5	NK	Journal clubs, Research discussions	Assignments on evidence-based treatment plan	SAQ, LAQ	Clinical Research

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.83. Nelson Syndrome										
HomUG-PM II.83.1	Knowledge and Scholarship	K	Definition, Pathophysiology, cortisol regulation, role of ACTH	(a) Define Nelson Syndrome (b) Explain the underlying pathophysiological mechanisms of Nelson Syndrome	C1	MK	Lectures, Readings	Quizzes, Concept maps	MCQ, SAQ	Biochemistry, Pathology
HomUG-PM II.83.2		K	Clinical features, differential diagnosis	(a) List the signs and symptoms of Nelson Syndrome (b) Differentiate Nelson Syndrome from similar conditions	C2/4	MK	Lectures, Case studies, Clinical rounds DOAP	Diagnostic test interpretation exercises	OSCE, SAQ, LAQ, Viva	Practice of Medicine, Dermatology
HomUG-PM II.83.3		KH	Diagnostic criteria, imaging techniques, laboratory tests	Interpret lab and imaging results to diagnose Nelson Syndrome	C2/3 P2	MK	Lab tutorials, Interactive sessions	Assignments on Lab data interpretation	SAQ, Bedside examination, Viva	Biochemistry, Radiology

HomUG-PM II.83.4		KH	Surgical and medical management	Describe the treatment plan	C3/4	MK	Seminars, Case-based learning	Assignments on treatment planning, Tutorials	SAQ, LAQ, Viva	Pharmacology, Surgery
HomUG-PM II.83.5		Does	Patient education, prognosis, compliance with treatment	Educate patients about their condition, treatment plan and the importance of follow-up	A2	DK	Role-playing, Patient counseling	SAQ	SAQ, LAQ, Viva	Fornsic Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.84. Acromegaly and Gigantism										
HomUG-PM II.84.1	Knowledge and Scholarship	K	Definition, Pathophysiology, GH/IGF-1 axis	(a) Define gigantism and acromegaly (b) Describe the disturbances of hormone regulation in gigantism and acromegaly	C1	MK	Lectures, Readings	Quizzes, Concept maps	MCQ, SAQ	Physiology, Biochemistry, Surgery
HomUG-PM II.84.2			Signs and symptoms, complications	(a) Identify clinical manifestations (b) List the long-term complications	C2	MK	Lectures, Case studies, Clinical rounds	Diagnostic test interpretation exercises	OSCE, SAQ, LAQ, Viva	Practice of Medicine
HomUG-PM II.84.3		KH	Diagnostic criteria, laboratory and imaging tests	Interpret diagnostic tests to confirm gigantism or acromegaly	C2/3 P2	MK	Lab tutorials, Interactive sessions	Assignments on Lab data interpretation	SAQ, Bedside examination, Viva	Biochemistry, Radiology

HomUG-PM II.84.4			Medical, surgical, and radiotherapeutic management	Define management plan incorporating all possible therapeutic options	C3	Mk	Seminars, Case-based learning	Assignments on treatment planning, Tutorials	SAQ, LAQ, Viva	Surgery, Pharmacology
HomUG-PM II.84.5		Does	Psychological impact, quality of life	Provide holistic care that includes psychological support and counselling	A2	DK	Workshops	Assignments	SAQ, Viva	Psychology
HomUG-PM II.84.6		KH	Evidence-based treatment, clinical guidelines	Utilize current evidences in defining the treatment.	C4/5	NK	Journal club, workshops	Group discussion, presentation on recent articles	Written assignment on treatment guidelines	Research Methods
HomUG-PM II.84.7		Does	Patient education strategies	Effectively communicate with patients and their families about disease management and follow-up	A2	DK	Communication skill workshops, Chart making	Patient education plan,	SSQ	Community Medicine

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.85. Diabetes Insipidus										
HomUG-PM II.85.1	Knowledge and Scholarship	K	Definition, Pathophysiology of DI	(a) Define Diabetes Insipidus (b) Explain the underlying mechanisms of central and nephrogenic DI	C1	MK	Lectures, diagrams, Readings	MCQ, SAQ	MCQ, SAQ	Physiology, Pathology

HomUG-PM II.85.2			Signs and symptoms	Identify the signs and symptoms indicative of DI	C2	MK	Lectures, patient history analysis	MCQ	OSCE, SAQ, LAQ	Practice of Medicine
HomUG-PM II.85.3		KH	Laboratory tests, water deprivation test, MRI	Interpret diagnostic tests to confirm DI	C3/4 P2	MK	Simulation labs, interactive online modules	Test result analysis exercises	Viva	Laboratory Medicine, Radiology
HomUG-PM II.85.4			Treatment options for central and nephrogenic DI	Define a management plan for patients with DI, including drug therapy and monitoring	C3/4	MK	Treatment planning workshops, Assignments	Treatment plan assignment	Bedside examination, Viva	Pharmacology, Endocrinology
HomUG-PM II.85.5		Does	Patient education, lifestyle adjustments	Provide effective counselling to patients and families for managing DI	A2	DK	Patient counseling role plays	Chart making	SAQ	Forensic Medicine
HomUG-PM II.85.6		KH	Relationship with other pituitary and hypothalamic disorders	Differentiate DI with other similar endocrine disorders	C3/4	NK	Integrated case studies, Assignments	Group discussion	SAQ, LAQ	Practice of Medicine
HomUG-PM II.85.7			Current research articles and guidelines	Utilize current evidence and guidelines to inform treatment decisions	C4/5	DK	Journal club, Workshops	Presentation on recent DI research	SAQ	Research Methods,

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.86. Diabetes Mellitus										

HomUG-PM II.86.1	Knowledge and Scholarship	K	Definition, Prevalence, risk factors	(a) Define DM (b) Describe the global and regional prevalence and risk factors of diabetes	C1	MK	Lectures, reading assignments	MCQ, SAQ	MCQ, SAQ, LAQ	Epidemiology, PSM
HomUG-PM II.86.2		KH	Type 1, Type 2, Gestational	Describe the pathophysiology of diabetes types	C2	MK	Lectures, Interactive modules, videos	MCQ, SAQ	SAQ	Physiology, Pathology
HomUG-PM II.86.3			Symptoms, signs	Recognize the clinical manifestations of diabetes	C2/3 P2	MK	Lectures, OPD teaching, patient simulations	MCQ, SAQ	OSCE, SAQ, LAQ	Practice of Medicine
HomUG-PM II.86.4			Blood glucose levels, HbA1c	Interpret diagnostic tests accurately	P2	MK	Lab simulations, Group discussions	Test result analysis exercises	Practical exam, viva	Laboratory Medicine
HomUG-PM II.86.5			Pharmacological treatments, Lifestyle modifications	Define the treatment options for diabetes	C3	MK	Problem-based learning, OPD teachings	Treatment plan assignments	Bedside examination, Viva	Pharmacology, Nutrition, PSM
HomUG-PM II.86.6			Diet, exercise, monitoring	Educate the patient and families for a better disease management	A3	DK	Workshops, role-playing, assignments	Chart making	SAQ, LAQ, Viva	PSM
HomUG-PM II.86.7		Does	Follow-up protocols, adjustment criteria	Adapt management plans based on patient progress	C4/5	DK	OPD/Clinical rotations	SAQ	SAQ, LAQ, Viva	Practice of Medicine
HomUG-PM II.86.8		KH	Acute and chronic complications	(a) Identify potential complications of DM. (b) Define the management of complications of DM.	C4/5/6	MK	OPD/Clinical rotations, Seminars	Complication case study	SAQ, LAQ, Viva	Endocrinology, Surgery

HomUG-PM II.86.9			Insulin pumps, CGMs (Continuous Glucose Monitors)	Integrate technology for effective disease monitoring and management	C3	NK	Tech demos, e-learning modules			Biomedical Engineering

Sl. No	Competency	Millers Level: Does/Shows how/Knows how/ Knows	Content	SLO	Blooms Domain/ Guilbert's Level	Priority - Must Know/ Desirable to know/ nice to know	T-L Methods	Assessment		Integration
								Formative	Summative	
HomUG-PM II.87. Homoeopathic Concepts and Therapeutics										
HomUG-PM II.87.1	Homoeopathic Orientation	KH	Understanding the miasmatic influences on endocrine disorders such as diabetes, thyroid disorders, and adrenal issues.	1. Identify miasms related to endocrine disorders. 2. Evaluate how miasms influence clinical presentations. 3. Analyze treatment approaches based on miasmatic evaluation.	C2	High	Case studies, group discussions, interactive lectures	Group presentations on miasmatic influences	Written case analysis incorporating miasmatic evaluation	Homoeopathic Philosophy Materia Medica Homoeopathic Pharmacy
HomUG-PM II.87.2			Application of homeopathic remedies based on reprtorisation, miasmatic evaluation and individual symptomatology of endocrine disorders.	1. Select remedies using repertory rubrics, repertory software, and repertory charts. 2. Select appropriate remedies based on miasmatic evaluation. 3. Design individualized treatment plans for patients based on symptomatology.	C2	High	Role plays, practical demonstrations, simulation	Practical assessments on remedy selection	Clinical exam involving case management	Homoeopathic Philosophy Materia Medica Homoeopathic Pharmacy

6. Teaching learning methods

Lectures (Theory)	**Non-lectures (Practical/Demonstrative)**
Lectures- black board, AV aids	Clinical demonstration- DOAP, DOPS,OSCE
Small group discussion	Problem based learning/discussion- Case based learning.
Integrated lectures	Simulation – with mannequins
	Projects, charts, assignments
	Participatory learning e.g. tutorials, quiz, seminar, role play etc.
	Library reference
	Self-learning

7. Details of assessment

Note- ***The assessment in III BHMS shall be done only as Internal Assessment (IA) in terms of*** **Periodical Assessments** ***(PA) and*** **Term Tests (*TT) as detailed below. There shall not be any Final University Examination (FUE) at this level. The marks obtained in IA during III BHMS will be added to the marks of IA in the IV BHMS University Examination.***

Overall Scheme of Internal Assessment (IA)**

Professional Course/ Subject	**Term I (1-6 Months)**		**Term II (7-12 Months)**	
III BHMS/ Practice of Medicine	PA I (end of 3 months)	TT I (end of 6 months)	PA II (end of 9 months)	TT II (end of 12 months)
	20 Marks Viva- **A**	100 Marks Clinical/Practical and Viva - **E** i) Viva voce -40 marks ii) Clinical/practical*- 60marks : • Bedside- 25marks • Spotting – 15marks • Assignment 20marks	20 Marks Viva- **B**	100 Marks Clinical/Practical and Viva - **F** i) Viva voce -40 marks ii) Clinical/practical*- 60 • Bedside- 25marks • Spotting – 15marks • Assignment 20marks

Clinical/*Practical Examinations:

Sl.no.	**Practical/clinical activity**	**Marks**
	Clinical	
A.	**Detailed case-taking**	
a.	One case taking – detailed bedside case taking with case analysis and evaluation (include prescription in term II)	10 marks
b.	Demonstration of clinical examination of the case (OSCE)- general and systemic	10 marks
c.	Investigations, provisional diagnosis and differential diagnosis	05 marks
	Practical	
B.	**Spotters** (minimum 3 and maximum 5 spotters)	15 marks
C.	**Assignment**	
a.	Case report- detailed case, analysis, evaluation, investigations, diagnosis, differential diagnosis, homoeopathic management/prescription	10 marks
b.	Short review on a common disease with its homoeopathic therapeutics	10 marks
	Total	**60 marks**

****Method of Calculation of Internal Assessment Marks in III BHMS for Final University Examination to be held in IV BHMS:**

Marks of PA I	Marks of PA II	Periodical Assessment Average PA I+ PA II /2	Marks of TT I	Marks of TT II	Terminal Test Average TT I + TT II / 200 x 20	Final Internal Assessment Marks
A	**B**	**D**	**E**	**F**	**G**	**D+G/2**

8. Reference books:

a. Clinical Medicine

- Alagappan, R. (2017). *Manual of Practical Medicine* (6th ed.). Jaypee Brothers Medical Publishers (P) Ltd.
- Anudeep, B. A. P. (2022). Insider's guide to clinical medicine (2nd ed). Jaypee Brothers Medical (P) Ltd.
- Bickley. (2016). *BATES' POCKET GUIDE TO PHYSICAL EXAM & HISTORY TAKING* (8th ed.). Wolters Kluwer India Pvt Ltd.
- Das, K. K. (2017). *Textbook of Medicine: Two Volume Set*. JP Medical Ltd.
- Dover, A. R., Innes, J. A., & Fairhurst, K. (2023). *MACLEOD'S CLINICAL EXAMINATION INTERNATIONAL EDITION.* (15th ed.). Elsevier.
- Firth, J., Cox, T., & Conlon, C. (2020). *Oxford Textbook of Medicine: Vol. 4 volumes* (6th ed.). Oxford University Press.
- French, H. (2016). *French's index of Differential Diagnosis: An A-Z.*
- Glynn, M., & Drake, W. M. (2017). *Hutchison's clinical methods: An Integrated Approach to Clinical Practice*. Saunders.
- Golwala, A. F., & Vakil, R. J. (2008). *Physical diagnosis A textbook of symptoms and signs* (16th ed.). Media Promoters & Publishers.
- *HARRISON'S PRINCIPLES OF INTERNAL MEDICINE (2VOLS)* (21st ed.). (2022). McGraw-Hill.
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- Kamath, S. A. (2022). *API Textbook of Medicine* (12th ed., Vol. 2). Jaypee Brothers Medical Publishers.
- Ketai, L., Lofgren, R., & Meholic, A. (2006). *Fundamentals of Chest Radiology*.
- Kinirons, M. T., & Ellis, H. (2015). *FRENCH'S INDEX OF DIFFERENTIAL DIAGNOSIS AN A TO Z* (16th ed.). CRC Press.
- Kliegman, R. M., & St Geme, J. (2019). *Nelson Textbook of Pediatrics, 2-Volume set*. Elsevier.
- Loscalzo. (2022). *Harrison`s Principles of Internal Med, 2: VOL SET*. McGraw Hill / Medical Publishers.
- Mehta, N. P., Mehta, S. P., & Joshi, S. (2022). *P. J. Mehta's Practical Medicine* (22nd ed.).
- Mehta, P. J. (2017). *Understanding ECG electrocardiography* (6th ed.). CBS Publishers and Distributors Pvt Ltd.
- Narsimhan, C., & Francis, J. (2017). *Leo Schamroth An Introduction to Electrocardiography* (8th ed.). Wiley India Exclusive.
- Paul, V. K., & Bagga, A. (2022). *GHAI Essential Pediatrics* (10th ed.). CBS Publishers and Distributors Pvt Ltd.
- *The Merck Manual of Diagnosis and Therapy*. (2018). Merck.
- Thomas, J., & Monaghan, T. (2014). *Oxford Handbook of Clinical Examination and Practical Skills*. Oxford University Press, USA.

b. Homoeopathic Books References for Therapeutics:

- Allen, H. C. (1998). *Therapeutics of intermittent fever*. B. Jain Publishers
- Bell, J. B. (2016). *The homeopathic therapeutics of diarrhea, dysentery, cholera, cholera morbus, cholera infantum, and all other loose evacuations of the bowels (Classic reprint)*. Forgotten Books.
- Borland, D. M. (2004b). *Pneumonias*. B. Jain Publishers.
- Clarke, J. H. (2003). *Prescriber*. B Jain Pub Pvt Limited.
- Dewey, W. A. (2003). *Practical Homoeopathic therapeutics*. B Jain Pub Pvt Limited.
- Lilienthal, S. (2005). *Homoeopathic therapeutics*. B Jain Pub Pvt Limited.
- Tyler, M. L. (1993). *Pointers to the common remedies*. B. Jain Publishers

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COMPETENCY BASED DYNAMIC CURRICULUM FOR THIRD BHMS PROFESSIONAL COURSE

(Applicable from Batch 2022-2023 onwards for 5 years or until further notification by National Commission for Homoeopathy whichever is earlier)

(Essentials of Pharmacology)

HOMOEOPATHY EDUCATION BOARD

NATIONAL COMMISSION FOR HOMOEOPATHY

MINISTRY OF AYUSH, GOVERNMENT OF INDIA

JAWAHAR LAL NEHRU BHARTIYA CHIKITSA AVUM HOMOEOPATHY ANUSANDHAN BHAVAN

No.61-65, Institutional Area, opp. 'D' block, Janak Puri, New Delhi-110 058

Course: Essentials of Pharmacology

Course Code: HomUG-Mod.Phar

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1. Preamble

Welcome, homeopathy students, to the world of pharmacology! This course will delve into the fascinating realm of medicines and their interactions with the human body. While homeopathy focuses on stimulating the body's natural healing response, understanding conventional medications is crucial for several reasons:

Complementary Care: Homeopathy can sometimes be used alongside traditional medications

Drug Interactions: Being aware of potential interactions between homeopathic remedies and conventional drugs is essential for safe patient care.

Patient Education: Many patients will be taking other medications and understanding how they work can empower you to better educate and guide them.

This course will equip you with a foundational knowledge of pharmacology, covering key areas such as:

Drug classifications and mechanisms of action

Pharmacokinetics: How drugs are absorbed, distributed, metabolized, and excreted

Pharmacodynamics: How drugs produce their effects on the body

Common medications used in various therapeutic areas

By the end of this course, you'll gain a deeper appreciation for the science of pharmacology and its valuable role in healthcare. We'll explore how this knowledge can complement your understanding of homeopathy and ensure you provide the safest and most informed care to your future patients.

Please note: This course is designed to provide a general overview of pharmacology. It is not intended to replace the knowledge and expertise of medical doctors or pharmacists.

2. Course outcomes

Upon successful completion of this pharmacology course, homeopathy students will be able to:

i. Demonstrate a foundational knowledge of major drug classifications and their mechanisms of action.
ii. Apply a scientific foundation to their understanding of medication and therapeutics, aligning with core principles of homeopathy.
iii. Demonstrate a comprehensive understanding of major drug classifications and their mechanisms of action.
iv. Explain the pharmacokinetics and pharmacodynamics of medications, including how drugs are absorbed, distributed, metabolized, excreted, and produce their effects in the body.
v. Identify common medications used in various treatment areas.
vi. Apply their understanding of Pharmacology to assess potential interactions between homeopathic remedies and conventional medications to ensure patient safety.
vii. Communicate medication information effectively to patients, empowering them to make informed decisions about their healthcare.
viii. Provide safe and complementary care to their patients by understanding conventional medications.
ix. Educate patients about potential interactions between medications.
x. Collaborate effectively with other healthcare providers when necessary.
xi. Treat and solve the adverse drug reactions of the patients with the homeopathy drugs.

Disclaimer: This course is designed to provide a general foundation in pharmacology. It is not a substitute for the expertise of medical doctors or pharmacists.

3. Course content

I. Module 1: Pharmacology

i. Introduction to Pharmacology
ii. Definition and Scope of Pharmacology
iii. Drug Nomenclature and Classification Systems
iv. Routes of Drug Administration

II. Module 2: Pharmacokinetics

i. Absorption, Distribution, Metabolism, and Excretion of Drugs (ADME)
ii. Factors Affecting Pharmacokinetics

III. Module 3: Pharmacodynamics

i. Mechanisms of Drug Action on Body Systems
ii. Dose-Response Relationships
iii. Factors Modifying Drug Action

IV. Module 4: Major Drug Classifications

A. ANS AND AUTACOID

i. Cholinergic and Anticholinergic drugs,
ii. Adrenergic and Antiadrenergic Drugs, T/t of Glaucoma
iii. Autacoids: Serotonin and drugs acting or Serotonergic System+ T/t of Migraine,
iv. Histamine and Antihistaminic

B. NSAID- Drugs used in RA and Gout

C. CNS

i. Anxiolytics
ii. Antiepileptics
iii. Antipsychotics and Antidepressants
iv. Opioid Analgesics

D. Respiratory system

i. Drugs for cough
ii. Bronchial asthma and COPD

E. Hormones

i. Insulin and oral Hypoglycemic drugs
ii. Adrenocortical steroids
iii. Estrogens, Progesterone and OCPs
iv. Vitamin D, Calcium and Drugs affecting Calcium Balance

F. CVS

i. T/t of Hypertension
ii. Angina, MI
iii. Cardiac Glycosides and Drugs for Heart failure
iv. Hypolipidemic drugs

G. Renal system- Diuretics and Antidiuretics

H. Blood- Hematinics, T/t of Iron deficiency anaemia and Megaloblastic anemia

I. GIT

i. Drugs for Peptic Ulcer and GERD
ii. Drugs for constipation and diarrhea
iii. Antiemetics

J. Chemotherapy

i. Sulfonamides and Cotrimoxazole,
ii. Quinolones,
iii. Beta Lactam Antibiotics,
iv. Tetracyclines, Chloramphenicol
v. Aminoglycosides
vi. Ant tubercular drugs and Antileprosy drugs
vii. Antimalarial drugs

K. Miscellaneous

i. Disinfectants
ii. Vitamins

4. Teaching hours

Year/Subject	Teaching hours- Lectures
III BHMS/ Essentials of Pharmacology	45

4.1.Term-wise teaching hours division:

Sr. No	Topics	Teaching Hours
	Term I	
1	**Module 1: Pharmacology (Introduction)**	**5**
2	**Module 2: Pharmacokinetics**	**5**
3	**Module 3: Pharmacodynamics**	**5**
4	**Module 4: Major Drug Classifications**	
i	ANS AND AUTACOIDS	4
ii	NSAID, Drugs used in RA and Gout	2
iii	CNS	2
iv	Respiratory System	3
	Term II	
v	Hormones	4

vi	CVS	2
vii	Renal System	2
viii	Blood	1
ix	GIT	4
x	Chemotherapy	4
xi	Miscellaneous	2
Total		**45**

5. Content mapping (Competencies tables):

Module 1: Pharmacology-

Sl.No.	Duration of Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-Mod.Phar 1.1	Knowledge and scholarship	K	Introduction to Pharmacology	Explain the fundamental principles of pharmacokinetics (absorption, distribution, metabolism, excretion). Define key pharmacodynamic terms (agonists, antagonists, therapeutic index).	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	
				Recognize drug classifications and their mechanisms of action	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	

				Participate in clinical settings, reviewing patient medications under supervision	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	
HomUG-Mod.Phar 1.2	Knowledge and scholarship	K	Definition and Scope of Pharmacology	States the primary components of pharmacology (drug actions, mechanisms, therapeutic uses)	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology
				Lists the subdivisions of pharmacology and their relevance.	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology
				Explains how pharmacokinetics and pharmacodynamics influence drug therapy.	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology
				Describes how adverse effects or drug interactions impact patient care.	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology
				Interprets drug concentration-time curves or other pharmacokinetic data.	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology
HomUG-Mod.Phar	Knowledge and scholarship	K	Drug Nomenclature and Classification Systems	**olol**: Beta-blockers (e.g., propranolol, atenolol)	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology
				pril: ACE inhibitors (e.g., lisinopril, enalapril)	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology
				Es-: Refers to an S-enantiomer (e.g., esomeprazole)	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology
				Levo-: Refers to a levorotatory isomer (e.g., levothyroxine)	C1	MK	Lecture, Group	Quiz, Written	SAQ, MCQ	Physiology

1.3							discussion	test, MCQ		
				cillin: Penicillin derivatives (e.g., ampicillin)	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology
				statin: HMG-CoA reductase inhibitors (e.g., atorvastatin)	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology
HomUG-Mod.Phar 1.4	Knowledge and scholarship	K	Routes of Drug Administration	**<u>Drug-Related Factors:</u>** Can the drug survive the environment of the GI tract (e.g., oral vs. IV)? Is the drug lipid or water-soluble? Does the drug require bypassing the liver (e.g., sublingual, parenteral)? Does the drug require rapid action (IV) or sustained release (transdermal)? **Consciousness**: Is the patient conscious and cooperative (oral vs. IV/IM)?	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	
				<u>Patient-Related Factors:</u> **Age**: Pediatrics and geriatrics may require specific routes (e.g., rectal for children) **Physical Condition**: Difficulty swallowing (requires non-oral routes like IV, SC). **Preferences and Compliance**: Does the patient prefer certain methods for better adherence (e.g., patches over injections)? **Vomiting/NPO (Nil Per Os)**: Oral route is contraindicated	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	

				Disease or Condition Factors: **Site of Action**: Does the drug act locally (topical, inhalational) or systemically (oral, IV)? **Urgency**: Emergency conditions often require IV for rapid effect **Target Organ**: Routes like intrathecal are used for CNS delivery due to the blood-brain barrier.	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	

Module 2: Pharmacokinetics

Sl.No.	Duration of Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom UG-Mod.	Absorption, Distribution, Metabolism, and Excretion of Drugs (ADME)	K	Knowledge and scholarship	**Physicochemical Properties of the Drug** • Lipophilicity enhances crossing of cell membranes and distribution into fatty tissues. • Polarity limits drug penetration into lipid-rich	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology
				Route of Administration	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology
				Gastrointestinal Factors:	C1	MK	Lecture,	Quiz,	SAQ, MCQ	Physiolog

Phar **2.1**				• pH of the stomach or intestine (affects ionization and solubility). • Gastric emptying time and motility. • Presence of food (may enhance or reduce absorption).			Group discussion	Written test, MCQ		y
				Drug Formulation: Immediate-release vs. sustained-release forms. Coating to protect against stomach acid (e.g., enteric-coated tablets).	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology
				Blood Flow to Tissues: 1.Highly perfused organs (e.g., brain, liver, kidneys) get more drug initially. 2.Poorly perfused tissues (e.g., fat, bone) show slower distribution.	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology
				Plasma Protein Binding: • Albumin binds acidic drugs; α1-acid glycoprotein binds basic drugs. • Only free (unbound) drug is pharmacologically active. **Tissue Binding**: • Some drugs accumulate in specific tissues (e.g., tetracyclines in bones/teeth, lipophilic drugs in adipose tissue) **Special Barriers**: • Blood-brain barrier: Permits lipophilic and small molecules; restricts polar drugs. • Placental barrier: Filters certain drugs, but not all.	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology

				• Environments. **Site of Metabolism**: • Liver (primary site): Phase I and Phase II reactions. • Other tissues: Kidneys, lungs, intestines. **Phase I Reactions**: • Oxidation, reduction, hydrolysis. • Primarily mediated by cytochrome P450 enzymes. **Phase II Reactions**: • Conjugation reactions (e.g., glucuronidation, sulfation). • Make drugs more water-soluble for excretion. **First-Pass Metabolism**: • Drug is metabolized by the liver before reaching systemic circulation. • Reduces bioavailability (e.g., nitroglycerin, propranolol). **Enzyme Induction/Inhibition**: • Induction (e.g., rifampin, phenobarbital): Increases metabolism, reducing drug levels. • Inhibition (e.g., grapefruit juice, ketoconazole): Decreases metabolism, increasing drug levels. **Genetic Polymorphisms**: • Variability in enzyme activity (e.g., CYP2D6, CYP2C19) affects metabolism rates. • Primary Routes of Excretion **Hepatic (bile)**:						

				• Drug Ionization and Solubility • Renal Function						
Hom UG-Mod. Phar **2.2**	Factors Affecting Pharmacokinetics		Knowledge and scholarship	**<u>Factors Affecting Absorption</u>** **Drug-Related Factors**: • **Solubility**: Lipophilic drugs absorb better through cell membranes. • **Ionization**: Non-ionized forms cross membranes more easily. • **Molecular Size**: Smaller molecules are absorbed more rapidly. • **Formulation**: Liquid > Capsule > Tablet (for speed of absorption). • **Chemical Stability**: Drugs degraded by gastric acid or enzymes have reduced absorption (e.g., insulin). **Route of Administration**: • Oral absorption depends on GI environment, while parenteral routes bypass it. **Gastrointestinal (GI) Factors**: • **pH**: Affects drug ionization (e.g., acidic drugs absorb better in the stomach, basic drugs in the intestine). • **Gastric Emptying**: Faster emptying enhances absorption. • **Presence of Food**: Some	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology

				drugs require food (e.g., fatty meals enhance lipophilic drug absorption), while others are inhibited. **Drug Transport Mechanisms**: • Passive diffusion, active transport, facilitated diffusion, or endocytosis. **Physicochemical Properties**: • Lipid solubility and polarity affect drug penetration into tissues. **Blood Flow to Tissues**: • Highly perfused organs (brain, liver, kidneys) receive drugs faster than less perfused areas (e.g., fat, bone). **Plasma Protein Binding**: • Bound drugs are pharmacologically inactive; only free drugs can act. • Albumin binds acidic drugs; α1-acid glycoprotein binds basic drugs. **Tissue Binding**: • Drugs like tetracyclines bind						

				to calcium in bones/teeth. **Special Barriers**: • **Blood-Brain Barrier (BBB)**: Limits polar and large molecules; favors lipophilic drugs. • **Placental Barrier**: Provides partial protection to the fetus but allows passage of some drugs. **Site of Metabolism**: Liver is the primary organ (Phase I and Phase II reactions), but other tissues (kidneys, lungs, intestines) also contribute. • **Phase I (Functionalization Reactions)**: o Oxidation, reduction, hydrolysis (e.g., CYP450 enzymes). • **Phase II (Conjugation Reactions)**: o Glucuronidation, sulfation, acetylation (make drugs water-soluble for excretion).						
				<u>Factors Affecting Metabolism</u> **Enzyme Activity**: • **Induction**: Enzyme inducers	C1	MK	Lecture, Group discussio	Quiz, Written test, MCQ	SAQ, MCQ	Physiology

				(e.g., rifampin, carbamazepine) increase metabolism and reduce drug efficacy. • **Inhibition**: Enzyme inhibitors (e.g., ketoconazole, grapefruit juice) decrease metabolism and increase drug levels. **Genetic Variability**: • Polymorphisms in CYP enzymes (e.g., CYP2D6, CYP2C19) cause individual variability in drug metabolism. **First-Pass Metabolism**: • Drugs extensively metabolized in the liver or gut wall before reaching systemic circulation (e.g., propranolol, nitroglycerin). **Age**: • Neonates have immature metabolic enzymes; elderly have reduced enzyme activity.			n			
				<u>Factors Affecting Excretion</u> **Route of Excretion**: **Renal Excretion (Primary)**: • **Glomerular Filtration**: Free drugs filtered based on molecular size.	C1	MK	Lecture, Group discussio n	Quiz, Written test, MCQ	SAQ, MCQ	Physiolog y

				• **Tubular Secretion**: Active process for drug elimination (e.g., penicillin). • **Tubular Reabsorption**: pH-dependent (acidic drugs excreted faster in alkaline urine). **Biliary Excretion**: • High molecular weight drugs excreted via bile; may undergo enterohepatic recycling. **Other Routes**: • Lungs (volatile drugs, e.g., anesthetics), sweat, saliva, breast milk. **Drug Properties**: • Lipophilic drugs require metabolism to water-soluble forms for excretion. • Ionized drugs are excreted more readily in urine. **Renal Function**: • Impaired kidney function (e.g., in elderly or renal disease) reduces drug clearance. **Hepatic Function**:						

				• Liver dysfunction reduces biliary excretion and metabolism. **Age**: • Neonates have immature kidneys; elderly may have reduced renal function **Age**: • Neonates and elderly patients have reduced metabolic and excretory capacity. **Gender**: • Hormonal differences can influence metabolism and excretion. **Genetic Variations**: • Pharmacogenetics impacts enzyme activity (e.g., poor vs. ultra-rapid metabolizers). **Disease States**: Liver disease, kidney disease, heart failure, or other conditions affect ADME processes						
				<u>Patient-Related Factors</u> **Drug-Drug Interactions**:	C1	MK	Lecture, Group discussio	Quiz, Written	SAQ, MCQ	Physiology

				• Competition for enzymes, protein-binding sites, or transporters. **Lifestyle Factors**: • Diet (e.g., grapefruit juice inhibits CYP enzymes). • Smoking or alcohol use (induces enzymes like CYP1A2).			n	test, MCQ		

Module 3: Pharmacodynamics

Sl.No.	Duration of Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom	Mechanisms of Drug Action on Body Systems	K	Knowledge and scholarship	**Receptor Interaction** Agonists, antagonists (e.g., β-blockers, opioids) **Enzyme Modulation** Inhibition, activation (e.g., statins, aspirin). **Ion Channel Modulation**	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology

UG-Mod. Phar **3.1**				Blockers, openers (e.g., calcium channel blockers, sodium channel blockers). **Neurotransmitter Systems** Reuptake inhibitors, enzyme inhibitors (e.g., SSRIs, MAO inhibitors). **Hormonal Systems** Agonists, antagonists, synthesis inhibitors (e.g., insulin, tamoxifen) **Immune Modulation** Vaccines, monoclonal antibodies (e.g., rituximab) **DNA/RNA Interaction** Anticancer agents, antivirals (e.g., cyclophosphamide, AZT). **Physical/Chemical Action** Osmotic agents, antacids (e.g., mannitol, sodium bicarbonate)						
Hom UG-	Dose-Response Relationships	K	Knowledge and scholarship	**<u>Agonists, Antagonists, and Modulators</u>** **Full Agonist**: • Produces the maximum possible response (e.g., epinephrine on beta-adrenergic receptors). **Partial Agonist**: • Produces a submaximal	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology

Mod. Phar **3.2**				response, even at full receptor occupancy (e.g., buprenorphine). **Antagonist**: • Binds to receptors but does not activate them, blocking agonist effects (e.g., naloxone for opioid overdose). **Inverse Agonist**: • Produces the opposite effect of an agonist (e.g., propranolol as a beta-blocker). **Allosteric Modulators**: • Bind to a site other than the active site and modify receptor activity (e.g., benzodiazepines on GABA-A receptors).						
				<u>Variability in Dose-Response</u> **Inter-Individual Variability**: • Genetics, age, gender, disease states, and drug interactions can alter responses. **Tachyphylaxis**: • Rapid decrease in drug response with repeated doses	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology

				(e.g., nitrates for angina). **Tolerance**: • Gradual decrease in drug effect over time, requiring higher doses (e.g., opioids). **Hypersensitivity**: • Exaggerated response to a small dose.						
				<u>Drug Toxicity and Overdose</u> Indicators: **Toxic Dose (TD50)**: • Dose at which 50% of individuals experience toxic effects. **Lethal Dose (LD50)**: • Dose that is lethal to 50% of the population (typically studied in animals). **Margin of Safety**: • Difference between the therapeutic dose and the toxic dose. **Dose Adjustments**: • Based on individual patient	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology

				responses (e.g., warfarin dosing guided by INR levels).						
				<u>Applications in Clinical Practice</u> **Monitoring Therapeutic Effect**: • Measuring drug levels to ensure they are within the therapeutic range (e.g., digoxin, lithium). **Avoiding Toxicity**: • Monitoring for signs of toxicity and adjusting doses as needed.	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology
Hom UG-Mod. Phar 3.3	Factors Modifying Drug Action	K	Knowledge and scholarship	**<u>PhysiologicalFactors</u>** **Age**:**Neonates**: • Immature liver enzymes affect metabolism (e.g., chloramphenicol toxicity leads to "gray baby syndrome"). • Reduced renal clearance in newborns (e.g., aminoglycoside toxicity). **Elderly**: • Decreased liver and kidney function reduces drug clearance (e.g., accumulation of digoxin) **Gender**: • Hormonal differences	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology

				influence drug metabolism (e.g., women metabolize benzodiazepines slower than men). **Body Weight**: • Dosage adjustments are based on weight or body surface area (e.g., chemotherapy drugs).						
				<u>Pathological Factors</u> **Genetic Factors**: • Genetic polymorphisms affect drug metabolism (e.g., slow acetylators for isoniazid). **Liver Disease**: • Reduced metabolism of drugs (e.g., prolonged half-life of warfarin in hepatic dysfunction). **Kidney Disease**: • Impaired excretion of renally eliminated drugs (e.g., accumulation of aminoglycosides or lithium). **Cardiovascular Disease**: • Reduced perfusion delays drug distribution and elimination	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology

				(e.g., digoxin in heart failure). **Thyroid Function**: • Hyperthyroidism increases drug metabolism (e.g., rapid clearance of β-blockers). • Hypothyroidism decreases drug metabolism (e.g., longer half-life of digoxin)						
				<u>Pharmacogenetic Factors</u> **Indicators**: **Cytochrome P450 Enzymes**: • Variants like CYP2D6 or CYP3A4 alter drug metabolism (e.g., poor metabolizers of codeine may have reduced analgesic effects). **Drug Transporters**: • Genetic variations in P-glycoprotein (e.g., altered absorption of digoxin). **Enzyme Deficiency**: • Glucose-6-phosphate dehydrogenase (G6PD) deficiency leads to hemolysis with certain drugs (e.g., sulfonamides).	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology

				<u>Environmental Factors</u> **Indicators**: **Diet** • Grapefruit inhibits CYP3A4, increasing levels of drugs like statins. • High-fat meals delay drug absorption (e.g., delayed effect of antacids). **Smoking**: • Induces CYP1A2, increasing clearance of drugs like theophylline. **Alcohol**: • Acute alcohol use inhibits drug metabolism (e.g., potentiates sedatives). • Chronic alcohol use induces enzymes, accelerating metabolism (e.g., warfarin). **Temperature**: • Heat increases peripheral blood flow, enhancing drug absorption.	C1	MK	Lecture, Group discussio n	Quiz, Written test, MCQ	SAQ, MCQ	Physiolog y
				<u>Drug Interactions</u> **Indicators**:	C1	MK	Lecture, Group discussio	Quiz, Written test, MCQ	SAQ, MCQ	Physiolog y

				Pharmacokinetic Interactions: **Absorption**: • Antacids reduce absorption of tetracyclines. **Metabolism**: • Enzyme inducers like rifampin increase clearance of oral contraceptives. • Enzyme inhibitors like ketoconazole reduce metabolism of midazolam. **Excretion**: • Probenecid inhibits renal excretion of penicillin, prolonging its action. **Pharmacodynamic Interactions**: • Synergism (e.g., sulfonamides and trimethoprim). • Antagonism (e.g., naloxone reversing opioid effects).			n			
				<u>Tolerance and Dependence</u> **Indicators**: **Tolerance**: • Gradual decrease in drug effect with repeated use (e.g.,	C1	MK	Lecture, Group discussio n	Quiz, Written test, MCQ	SAQ, MCQ	Physiolog y

				opioids, nitrates). • Cross-tolerance (e.g., benzodiazepines and alcohol). **Dependence**: • Physical or psychological need for a drug (e.g., opioids, benzodiazepines).						
				<u>Route of Administration</u> **Indicators**: **Oral Route**: • First-pass metabolism reduces bioavailability (e.g., propranolol). **Intravenous Route**: • Rapid onset and complete bioavailability. **Intramuscular/Subcutaneous**: • Rate of absorption depends on blood flow and drug solubility	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology
				<u>Disease-Specific Factors</u> **Indicators**: **Infection and Inflammation**: • Alters drug distribution (e.g., reduced effectiveness of aminoglycosides in acidic	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology

				abscesses). **Malnutrition**: • Reduced plasma proteins (e.g., hypoalbuminemia increases free drug levels of phenytoin).						
				Psychological Factors Indicators: **Placebo Effect**: • Positive therapeutic response due to patient belief in treatment. **Nocebo Effect**: • Negative outcomes due to patient expectations of adverse effects.	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology

Module 4: Major Drug Classifications

HomUG-Mod.Phar– 4.1 (ANS AND AUTACOIDS)

Sl.No.	Duration of Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formativ	Summative	

								e		
Hom UG-Mod. Phar **4.1.1**	Cholinergic and Anticholinergic drugs	K	Knowledge and scholarship	**<u>Cholinergic Drugs</u>** • Define **Cholinergic and Anticholinergic Drugs:** Understand the pharmacological basis of these drugs, their receptors, and physiological actions. • Explain **Mechanisms of Action:** Describe how these drugs influence parasympathetic activity by either mimicking or blocking acetylcholine. • List **Clinical Applications:** Identify the therapeutic uses of cholinergic and anticholinergic drugs, such as in glaucoma, myasthenia gravis, COPD, or motion sickness. • Assess **Adverse Effects:** Recognize side effects such as dry mouth, tachycardia (anticholinergics), or diarrhea, bradycardia (cholinergics). • Compare **Drug Classes:** Differentiate between direct-acting, indirect-acting cholinergic drugs, and muscarinic antagonists.	C1	MK	Lecture, Group discussio n	Quiz, Written test, MCQ	SAQ, MCQ	Physiolog y
	Adrenergic and Antiadrenergic Drugs,	K	Knowledge and scholarship	**Miller Principles for Antiadrenergic Drugs:** • **Selective Blockade:** Selective	C1	MK	Lecture, Group discussio	Quiz, Written test, MCQ	SAQ, MCQ	Physiolog y

Hom UG-Mod. Phar **4.1.2**				α\alphaα or β\betaβ blockers minimize side effects and target specific conditions (e.g., β1\beta_1β1 blockers for heart conditions). • **Sympathetic Inhibition:** These drugs decrease heart rate, reduce cardiac output, and lower blood pressure by opposing SNS activity. • **Receptor Affinity and Potency:** Drugs with higher selectivity (e.g., atenolol for β1\beta_1β1) are preferred in specific populations to minimize adverse effects (e.g., bronchospasm). • **Clinical Uses:** Manage hypertension, arrhythmias, angina, heart failure, and conditions like pheochromocytoma. **Adverse Effects:** Monitor for bradycardia, hypotension, and fatigue, particularly in elderly or heart-compromised patients. **Antiadrenergic Drugs:** • Understand the roles of adrenergic receptors and how drugs modulate their activity. • Explain **Mechanisms of Action:** Describe how adrenergic drugs stimulate SNS activity, while antiadrenergic drugs inhibit it. • Classify **Adrenergic Agents:**			n			

				Differentiate between direct, indirect, and mixed-acting adrenergic agonists and selective/non-selective adrenergic blockers. • Identify **Therapeutic Applications:** Highlight uses in conditions such as asthma (β2\beta_2β2 agonists), hypertension (β1\beta_1β1 blockers), and shock (α\alphaα-agonists). • Discuss **Adverse Effects:** Recognize potential side effects like tachycardia (adrenergics) or bradycardia (antiadrenergics).						
Hom UG-Mod. Phar **4.1.3**	Autacoids: Serotonin and drugs acting or Serotonergic System+ T/t of Migraine,	K	Knowledge and scholarship	Selective Serotonin Reuptake Inhibitors (SSRIs): Serotonin-Norepinephrine Reuptake Inhibitors (SNRIs): 5-HT1_11 Agonists 5-HT3_33 Antagonists: 5-HT4_44 Agonists: Serotonin Modulators: Understand **the Serotonergic System:** • Describe serotonin's role in neurotransmission and its physiological functions in the	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology

				CNS and periphery. Classify **Serotonergic Drugs:** • Differentiate between SSRIs, SNRIs, triptans, serotonin receptor agonists/antagonists, and modulators. Explain **Mechanisms of Action:** • Discuss how drugs alter serotonin signaling to treat conditions like depression, migraines, and IBS. **Identify Clinical Applications:** • Match drug classes to appropriate therapeutic uses, such as SSRIs for depression or 5-HT1_11 agonists for migraines.						
Hom UG-Mod. Phar 4.1.4	Histamine and Antihistaminic	K	Knowledge and scholarship	Acute Treatments **Nonsteroidal Anti-Inflammatory Drugs (NSAIDs):** Ergot Alkaloids: Anti-Nausea Medications: Preventive Treatments Beta-Blockers	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology

				Anticonvulsants: **Calcium Channel Blockers:** CGRP (Calcitonin Gene-Related Peptide) Antagonists: Tricyclic Antidepressants (TCAs) **Understand Pathophysiology:** • Explain the neurovascular basis of migraines and the role of serotonin and CGRP pathways. **Differentiate Migraine Types:** • Identify different migraine presentations (e.g., with aura, without aura) and their implications for treatment. **Classify Therapies:** • Categorize acute and preventive migraine treatments based on their mechanisms of action.						

HomUG-Mod.Phar– 4.2 (NSAID)

Sl.No.	Duration of Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	

Hom UG-Mod. Phar **4.2.1**	Drugs used in RA and Gout	K	Knowledge and scholarship	*1. Rheumatoid Arthritis* 1. **Understand Pathophysiology:** Explain the autoimmune nature of RA and the role of cytokines (e.g., TNF-α\alphaα, IL-6) in joint destruction. 2. **Classify RA Drugs:** Differentiate between NSAIDs, corticosteroids, DMARDs, and biologics. 3. **Select Appropriate Therapies:** Design treatment plans based on disease severity and progression. 4. **Monitor for Adverse Effects:** Recognize side effects of DMARDs (e.g., hepatotoxicity with methotrexate) and biologics (e.g., infection risks). *2. Gout* 1. **Identify Pathophysiology:** Explain the role of hyperuricemia and urate crystal deposition in gout	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology

				pathogenesis. 2. **Classify Gout Drugs:** Differentiate between acute (NSAIDs, colchicine) and chronic (xanthine oxidase inhibitors, uricosurics) treatments. 3. **Manage Comorbidities:** Incorporate renal and cardiovascular considerations into gout therapy.						

HomUG-Mod.Phar– 4.3 (CNS)

Sl.No.	Duration of Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom UG-Mod. Phar **4.3.1**	Anxiolytics	K	Knowledge and scholarship	➢ **Treatment should be individualized** ➢ Minimize long-term use ➢ Balance between efficacy and safety ➢ **Combination with other treatments** ➢ Educate patients on safe use. ➢ Understanding **the pharmacology of anxiolytics**: Learners should be able to explain the different types of anxiolytics (e.g.,	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Neorology Medicine Physiology

				benzodiazepines, selective serotonin reuptake inhibitors (SSRIs), buspirone), their mechanisms of action, and their clinical indications.						
Hom UG-Mod. Phar **4.3.2**	Antiepileptics	K	Knowledge and scholarship	• **Personalized Treatment** • Appropriate Monotherapy • Dose Titration and Monitoring • **Minimize Drug Interactions** • Long-Term Management and Monitoring • Consideration of Non-Pharmacological Treatments • Patient Education and Adherence • **Seizure-Free Goal** • **Discontinuation of AEDs**: i. Understanding **the pharmacology of AEDs**: Learners should be able to explain the mechanisms of action of various antiepileptic drugs, their pharmacokinetics, and how they control seizures in different types of epilepsy. ii. Identifying **appropriate drug choices**: Learners should be able to select the most appropriate AED for a given type of epilepsy or seizure disorder based on factors such as seizure type, patient age, comorbidities, and previous response to treatment. iii. Monitoring **drug levels and adjusting doses**: Learners should understand the	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Medicine Physiology

				importance of therapeutic drug monitoring and how to interpret serum drug levels to adjust dosages of AEDs to maintain efficacy while minimizing toxicity. iv. Recognizing **side effects and drug interactions**: Learners should be able to identify the common and serious side effects associated with AEDs, including those related to cognitive function, liver and kidney toxicity, and hematologic effects. They should also understand the potential for drug-drug interactions and how these affect treatment decisions.						
Hom UG-Mod. Phar **4.3.3**	Antipsychotics and Antidepressants	K	Knowledge and scholarship	• Early and Accurate Diagnosis • Choice of Medication • Personalized Treatment • Minimizing Side Effects • Non-Pharmacological Support • Ongoing Monitoring and Adjustments • Patient Education and Adherence • Consideration for Tapering • First-Line Use of SSRIs and SNRIs: Selective serotonin reuptake inhibitors (SSRIs) and serotonin-norepinephrine reuptake inhibitors (SNRIs) • Tailored Treatment • Start Low, Go Slow • Pharmacology **of**	C1	MK	Lecture, Group discussio n	Quiz, Written test, MCQ	SAQ, MCQ	Medicine Physiolog y

				Antipsychotics and Antidepressants: Learners should understand the mechanisms of action, pharmacokinetics, and clinical indications for both antipsychotics and antidepressants, including the differences between various drug classes (e.g., atypical vs. typical antipsychotics, SSRIs vs. SNRIs).						
Hom UG-Mod. Phar **4.3.4**	Opioid Analgesics,	K	Knowledge and scholarship	Accurate Pain Assessment l: intensity, location, and underlying cause, is essential. Pain assessment tools, such as the Numeric Pain Rating Scale or Visual Analog Scale Appropriate Indications: • Acute pain (e.g., postoperative or trauma-related pain). • Chronic pain related to cancer or palliative care. • Severe pain unresponsive to non-opioid therapies. Individualized Treatment Plans: Risk Mitigation: Monitoring and Follow-Up Side Effect Management: • Constipation: Prophylactic use of laxatives. • Nausea/Vomiting: Use of antiemetics if needed. • Sedation: Adjust doses or switch medications if excessive.	C1	MK	Lecture, Group discussio n	Quiz, Written test, MCQ	SAQ, MCQ	Medicine Physiolog y

				Avoiding Long-Term Use When Possible **Understanding Pharmacology**: Demonstrate knowledge of opioid receptor mechanisms, pharmacokinetics, and pharmacodynamics, including the differences between full agonists, partial agonists, and antagonists. • **Clinical Indications**: Identify appropriate clinical scenarios for opioid use and contraindications to their prescription. • **Recognizing Risks**: Understand the risks of opioid use, including tolerance, dependence, addiction, and respiratory depression. • Pain **Management**: Effectively assess and classify pain to guide the appropriate use of opioids. • Dosing **and Titration**: Accurately calculate and titrate opioid doses, ensuring adequate pain relief while minimizing side effects. • Side **Effect Management**: Develop strategies to anticipate, recognize, and manage opioid-induced side effects. • Naloxone **Use**: Educate patients and caregivers on the use of						

				naloxone for opioid overdose prevention. • Patient-**Centered Care**: Communicate effectively with patients about the benefits, risks, and goals of opioid therapy, fostering shared decision-making.						

HomUG-Mod.Phar– <u>4.4 (Respiratory System)</u>

Sl.No.	Duration of Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom UG-Mod. Phar **4.4.1**	Drugs for cough	K	Knowledge and scholarship	**<u>1. Accurate Diagnosis of the Cough's Underlying Cause</u>** • A thorough assessment is necessary to identify the underlying cause of the cough, such as a respiratory infection (e.g., viral or bacterial), asthma, post-nasal drip, or more severe conditions like chronic obstructive pulmonary disease (COPD) or heart failure. • Treatment should focus on the underlying cause when possible (e.g., antibiotics for bacterial infections,	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Medicine Physiology

				bronchodilators for asthma), rather than merely masking the symptom. **2. Classification of Cough Type** • **Dry Cough**: Typically non-productive, can be treated with **antitussives** like **dextromethorphan** or **codeine**. • **Productive Cough**: Involves the production of mucus or phlegm and is usually treated with **expectorants** like **guaifenesin** to facilitate mucus clearance. • **Acute vs. Chronic Cough**: Coughs lasting less than three weeks are usually acute and often self-limited, whereas coughs persisting for more than eight weeks may indicate an underlying chronic condition. **3. Symptomatic Treatment** • Use **antitussives** for suppressing persistent dry cough that is uncomfortable or interfering with dailyactivities. Use **expectorants** or mucolytics for productive coughs to aid in the clearance of mucus.						

				<u>Knowledge-Based Outcomes</u> • **Pharmacological Understanding**: Demonstrate an understanding of the pharmacokinetics, pharmacodynamics, and mechanisms of action of drugs used for cough, including antitussives (e.g., dextromethorphan, codeine) and expectorants (e.g., guaifenesin). • **Cough Etiology**: Identify and differentiate the causes of acute and chronic cough and understand the role of drugs in treating these causes based on the type of cough (dry vs. productive). **Drug Safety and Side Effects**: Recognize the potential side effects and safety concerns of commonly used cough medications, such as opioids, and other non-opioid alternatives, ensuring safe use in different patient populations						
Hom UG-Mod. Phar **4.4.2**	Bronchial asthma and COPD	K	Knowledge and scholarship	*1. Accurate Diagnosis and Differentiation* • **Asthma** is typically characterized by reversible airway obstruction and inflammation, often triggered by allergens, irritants, or	C1	MK	Lecture, Group discussio n	Quiz, Written test, MCQ	SAQ, MCQ	Medicine Physiolog y

				exercise. • **COPD** is characterized by progressive, irreversible airflow limitation, most commonly caused by long-term exposure to smoking or environmental pollutants. • Early diagnosis, based on clinical symptoms, spirometry, and patient history, is essential for effective treatment. *2. Individualized Pharmacological Treatment* • **Asthma** treatment often involves controlling inflammation and bronchoconstriction, with a focus on symptom control and preventing exacerbations. • **COPD** treatment emphasizes symptom management, reducing exacerbations, and slowing disease progression. • The choice of medication should be tailored to the patient's age, disease severity, comorbidities, and frequency of exacerbations. *3. Stepwise Approach to Asthma Management* • **Step 1 (Mild Asthma)**: Use **short-acting beta-agonists (SABA)** like **albuterol** for						

				symptom relief. • **Step 2 (Persistent Asthma)**: Add **inhaled corticosteroids (ICS)** like **beclometasone** or **budesonide** to control inflammation. • **Step 3 (Moderate Asthma)**: Use **long-acting beta-agonists (LABA)** like **salmeterol** in combination with ICS to enhance bronchodilation and reduce inflammation. • **Step 4 (Severe Asthma)**: Add **leukotriene receptor antagonists (LTRAs)** like **montelukast** or consider **biologics** like **omalizumab** or **dupilumab** for severe cases. *4. COPD Pharmacological Management* • **Short-Acting Bronchodilators**: **SABA** (e.g., **salbutamol**) and **short-acting muscarinic antagonists (SAMA)** (e.g., **ipratropium**) provide quick relief for symptoms. • **Long-Acting Bronchodilators**: **LABA** (e.g., **formoterol**) and **long-acting muscarinic antagonists (LAMA)** (e.g., **tiotropium**) are used for long-term management of airflow obstruction.						

				• **Inhaled Corticosteroids (ICS)**: Used in combination with bronchodilators for patients with frequent exacerbations (e.g., **fluticasone**). *5. Monitoring and Adjusting Treatment* • Monitor **lung function** (using **spirometry**), symptoms, and exacerbation frequency to assess the efficacy of treatment and adjust medications accordingly. • For asthma, adjust treatment in response to symptom control or frequency of exacerbations, considering a **step-up** or **step-down** approach based on disease control. *For COPD, monitor symptoms, exacerbation history, and comorbidities to adjust the therapeutic regimen.* **Knowledge-Based Outcomes** • **Pathophysiology**: Demonstrate understanding of the underlying pathophysiological mechanisms of **asthma** and **COPD**, including inflammation, airway remodeling, and bronchoconstriction.						

				• **Pharmacological Principles**: Understand the classes of drugs used in asthma and COPD, including bronchodilators, corticosteroids, and other adjunctive therapies, and their mechanisms of action. • **Diagnosis and Differentiation**: Differentiate between asthma and COPD based on clinical presentation, diagnostic tests (spirometry, chest imaging), and patient history. • **Exacerbation Management**: Recognize the appropriate use of medications in managing asthma and COPD exacerbations, including the role of systemic corticosteroids, bronchodilators, and antibiotics. • **Inhaler Technique and Patient Education**: Educate patients on the proper use of inhalers, ensuring correct technique to maximize drug efficacy, and provide guidance on lifestyle modifications and non-pharmacological interventions.						

HomUG-Mod.Phar– 4.5 (Hormones)

Sl.No	Duration of Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-Mod.Phar 4.5.1	Insulin and oral Hypoglycemic drugs	K	Knowledge and scholarship	*1. Accurate Diagnosis and Classification of Diabetes* • **Type 1 Diabetes (T1D)**: An autoimmune disorder where the pancreas produces little to no insulin, requiring lifelong insulin therapy. • **Type 2 Diabetes (T2D)**: Characterized by insulin resistance and eventual pancreatic beta-cell dysfunction, managed with a combination of lifestyle changes and pharmacological therapy. *2. Insulin Therapy in Diabetes Management* **Insulin for Type 1 Diabetes**:	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Medicine Physiology

				• **Basal Insulin**: Provides a constant level of insulin, mimicking the body's natural insulin secretion (e.g., **insulin glargine**, **insulin detemir**). • **Bolus Insulin**: Used to control postprandial blood glucose levels (e.g., **insulin aspart**, **insulin lispro**). • **Continuous Insulin Infusion (Insulin Pump)**: For some Type 1 diabetic patients, especially those who need more precise control of their blood sugar. **Insulin for Type 2 Diabetes**: • Initially, T2D patients may be managed with **oral hypoglycemic agents** but may eventually require insulin as the disease progresses and pancreatic function declines. • **Combination Therapy**: Insulin may be combined with **oral hypoglycemic drugs** like **metformin** or **sulfonylureas** for enhanced control. *3. Oral Hypoglycemic Agents (OHAs) in Type 2 Diabetes* **Biguanides (e.g., Metformin)**: • First-line therapy for T2D. • Works by decreasing hepatic						

				glucose production and improving insulin sensitivity, without increasing insulin secretion (reducing the risk of hypoglycemia). **Sulfonylureas (e.g., Glibenclamide, Glimepiride)**: • Stimulate the pancreas to secrete more insulin. • Typically used when metformin alone is not enough to control blood sugar. **Thiazolidinediones (TZDs) (e.g., Pioglitazone)**: • Improve insulin sensitivity by acting on the **peroxisome proliferator-activated receptor gamma (PPAR-γ)** in the muscles and adipose tissue. **Dipeptidyl Peptidase-4 Inhibitors (DPP-4 inhibitors) (e.g., Sitagliptin, Saxagliptin)**: • Enhance the action of incretin hormones, which increase insulin release and decrease glucagon secretion in a glucose-dependent manner. **SGLT2 Inhibitors (e.g.,**						

				Empagliflozin, Dapagliflozin): • Work by inhibiting sodium-glucose cotransporter 2 in the kidneys, leading to increased glucose excretion in the urine and lowering blood glucose levels. **GLP-1 Receptor Agonists (e.g., Exenatide, Liraglutide)**: • Increase insulin secretion in response to meals, reduce glucagon secretion, and delay gastric emptying, leading to weight loss. *4. Monitoring and Adjusting Treatment* • **Self-Monitoring of Blood Glucose (SMBG)**: Regular blood glucose testing is essential to assess treatment efficacy and guide adjustments. • **Hemoglobin A1c (HbA1c)**: A key long-term marker used to assess the effectiveness of treatment. The target for most diabetic patients is usually an A1c below 7%, but individual goals may vary. • **Renal Function**: Regularly monitor **renal function** in patients on drugs like **metformin**, **SGLT2**						

				inhibitors, or **insulin** to avoid complications, particularly in those with compromised kidney function. *5. Prevention and Management of Hypoglycemia* • **Insulin Therapy**: Hypoglycemia is a common risk, especially with **insulin** or **sulfonylureas**. Patients should be educated on recognizing early signs of hypoglycemia (e.g., sweating, dizziness) and how to correct it (e.g., consuming glucose). • **Oral Hypoglycemics**: Drugs like **SGLT2 inhibitors** and **DPP-4 inhibitors** are less likely to cause hypoglycemia compared to insulin or sulfonylureas. • **Patient Education**: Teach patients about diet, medication timing, and how exercise can affect blood sugar levels, helping them avoid hypoglycemic episodes. *6. Management of Comorbidities* • **Cardiovascular Disease**: Many diabetic patients have comorbid cardiovascular conditions. **SGLT2 inhibitors** and **GLP-1 agonists** have						

				shown cardiovascular benefits. • **Kidney Disease**: Monitor kidney function regularly, especially in patients receiving **metformin**, **SGLT2 inhibitors**, or **insulin**. *7. Long-Term Management and Lifestyle Support* • Diabetes is a chronic condition requiring long-term management. **Lifestyle support** (including diet, exercise, and weight management) should be integrated into therapy. Encourage patient engagement and regular follow-ups to ensure proper management and prevent complications. **Knowledge-Based Outcomes** 1. **Pharmacodynamics and Pharmacokinetics**: Demonstrate an understanding of the mechanisms of action, pharmacokinetics, and therapeutic use of **insulin** and **oral hypoglycemic drugs** such as **metformin**, **sulfonylureas**, **SGLT2 inhibitors**, and **GLP-1 receptor agonists**. 2. **Diabetes Classification and**						

				Pathophysiology: Understand the different types of diabetes (Type 1, Type 2) and the pathophysiological mechanisms underlying **insulin resistance** and **beta-cell dysfunction**. **Drug Safety**: Recognize the adverse effects, contraindications, and precautions of insulin and oral hypoglycemics, including the risk of **hypoglycemia** and **kidney impairment**						
Hom UG-Mod. Phar **4.5.2**	Adrenocortical and Androgenic steroids	K	Knowledge and scholarship	**Adrenocortical Steroids** *1. Differentiating Glucocorticoids and Mineralocorticoids* ***Glucocorticoids (e.g., Prednisone, Dexamethasone)**:* • Primary role: Anti-inflammatory and immunosuppressive effects. • Used for: Asthma, rheumatoid arthritis, autoimmune diseases, and allergies. • Adverse effects: Long-term use can lead to osteoporosis, diabetes, and adrenal suppression. **Mineralocorticoids (e.g., Fludrocortisone)**: • Primary role: Regulation of	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Medicine Physiology

				electrolyte and water balance via actions on renal tubules. • Used for: Addison's disease and other conditions involving adrenal insufficiency. • Adverse effects: Sodium retention, hypokalemia, and hypertension. *2. Rational Use in Therapy* Select drugs based on their **potency**, **duration of action**, and **specific indications**: • **Short-acting glucocorticoids**: Hydrocortisone. • **Intermediate-acting**: Prednisone, Methylprednisolone. • **Long-acting**: Dexamethasone, Betamethasone. *3. Managing Adverse Effects* • Monitor for **iatrogenic Cushing's syndrome** with long-term glucocorticoid therapy. • Prevent complications such as **osteoporosis** by supplementing calcium and vitamin D. • Regularly check for **hypertension**, **hyperglycemia**, and						

				infections. *4. Anti-Inflammatory and Immunosuppressive Therapy* • Glucocorticoids are used to manage inflammatory and autoimmune diseases such as **lupus**, **rheumatoid arthritis**, and **inflammatory bowel disease**. • Their use in transplantation helps prevent graft rejection through immunosuppressive effects**for Androgenic Steroid Drugs** *1. Therapeutic Indications* • **Primary or Secondary Hypogonadism**: Use testosterone or its esters to restore normal androgen levels. • **Anabolic Effects**: Promote nitrogen retention and muscle growth in catabolic states such as severe burns or chronic illnesses. ***Other Uses**: Certain androgenic steroids are used for endometriosis, hereditary angioedema, or as part of hormone therapy in transgender men.*						

				Knowledge-Based Outcomes **Pharmacology**: Understand the **mechanism of action**, **pharmacokinetics**, and **therapeutic uses** of glucocorticoids, mineralocorticoids, and androgenic steroids.						
Hom UG-Mod. Phar **4.5.3**	Estrogens, Progesterone and OCPs	K	Knowledge and scholarship	**Estrogens and Progesterone** *1. Physiological Roles* **Estrogens** • Regulate the development of female secondary sexual characteristics. • Essential for the menstrual cycle and maintaining bone density. • Common examples:**Estradiol**, **Ethinyl Estradiol**, and **Conjugated Estrogens**. **Progesterone**: • Regulates the menstrual cycle and maintains pregnancy. • Plays a role in the endometrial transformation required for implantation. • Common examples: **Progesterone**, **Medroxyprogesterone**	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Medicine Physiology

				acetate, and **Norethindrone**. *3. Therapeutic Applications* ***Estrogens**:* • Used for **hormone replacement therapy (HRT)** in menopausal women. • Management of **hypogonadism** in females. • Treatment of **osteoporosis** and certain cancers (e.g., prostate cancer in men). **Progesterone**: • Used in combination with estrogens in HRT to prevent **endometrial hyperplasia**. • Indicated for **abnormal uterine bleeding**, **amenorrhea**, and **endometriosis**. *3. Rational Use* • Combine estrogens and progestins in women with an intact uterus to prevent **endometrial carcinoma**. • Use the **lowest effective dose** for the shortest duration to minimize risks like thromboembolism or cancer. • For menopausal women, use HRT only for **vasomotor**						

				symptoms, vaginal atrophy, or osteoporosis prevention. *4. Monitoring and Adverse Effects* **Estrogens**: • Risks include **thromboembolism**, **breast cancer**, and **endometrial hyperplasia**. • Monitor liver function, lipid profile, and coagulation parameters. **Progesterone**: • Can cause **mood changes**, **weight gain**, and **irregular bleeding**. • Monitor for symptoms of depression and cardiovascular risks. **Oral Contraceptive Pills (OCPs)** *1. Types of OCPs* **Combined Oral Contraceptives (COCs)**: • Contain both estrogen (e.g., **Ethinyl Estradiol**) and a progestin (e.g., **Levonorgestrel**, **Drospirenone**). • Mechanism: Suppress						

				ovulation, thicken cervical mucus, and alter the endometrium. **Progestin-Only Pills (POPs)**: • Contain only progestins. • Mechanism: Thicken cervical mucus and inhibit ovulation. • Preferred for women who are breastfeeding or have contraindications to estrogens. *2. Therapeutic Applications* **Contraception**: • Primary use of OCPs to prevent pregnancy. **Non-Contraceptive Uses**: • Management of **menstrual disorders** like dysmenorrhea or menorrhagia. • Treatment of **endometriosis**. • Reduction in the risk of ovarian and endometrial cancers. *3. Selection of OCPs* Choose based on patient needs, medical history, and side effect profile. • **Low-dose COCs**: Preferred						

				for minimizing estrogen-related side effects. • **POPs**: Recommended for women with risk factors like thromboembolism. *4. Safety and Monitoring* Screen for contraindications to OCPs, including: • **Thromboembolic disorders**. • **Breast cancer** or other estrogen-dependent cancers. • **Uncontrolled hypertension** or **migraine with aura**. • Monitor for **breakthrough bleeding**, **mood changes**, and **weight gain**. *5. Managing Side Effects* • Adjust the estrogen or progestin dose for symptoms like **nausea**, **headaches**, or **irregular bleeding**. Educate on the importance of adherence and steps to take if a dose is missed. *Knowledge-Based Outcomes* 1. **Pharmacodynamics and Pharmacokinetics**: Understand the mechanisms of action, absorption,						

				metabolism, and elimination of estrogens, progesterone, and OCPs. **Indications and Contraindications**: Learn the therapeutic uses of these drugs, along with contraindications like a history of thromboembolism or breast cancer.						
Hom UG-Mod. Phar **4.5.4**	Vitamin D, Calcium and Drugs affecting calcium Balance	K	Knowledge and scholarship	**1.Physiological Roles** **Vitamin D**: • Regulates calcium and phosphate absorption from the gut. • Facilitates bone mineralization and remodeling. • Active forms: **Calcitriol** (1,25-dihydroxyvitamin D) and **Cholecalciferol** (Vitamin D3). **Calcium**: • Essential for bone structure, muscle contraction, nerve transmission, and blood clotting. • Daily requirement depends on age, gender, and physiological state (e.g., pregnancy, lactation).	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Medicine Physiology

				2. Therapeutic Applications **Vitamin D**: • Treats **rickets**, **osteomalacia**, **hypocalcemia**, and **secondary hyperparathyroidism**. • Used for **osteoporosis prevention and treatment**. **Calcium**: • Supplementation for **hypocalcemia**, **osteoporosis**, and dietary insufficiency. • Adjunct in **cardiac arrest** (calcium chloride or calcium gluconate). **3. Rational Use** • Ensure adequate **calcium intake** (dietary or supplemental) alongside vitamin D therapy. • Use the **active form (Calcitriol)** in cases of **renal impairment**, where vitamin D activation is impaired. • Tailor dosage to patient needs, age, and comorbidities: o Vitamin D: Typically 400–800 IU/day for adults, higher doses for deficiency. o Calcium: 1,000–1,200 mg/day for						

				adults. **4. Monitoring and Adverse Effects** • Monitor **serum calcium** and **vitamin D levels** to avoid **hypercalcemia** and **toxicity**. • Watch for symptoms of excess, such as **nausea**, **constipation**, and **renal calculi**. In high-risk populations (e.g., elderly), ensure supplements do not exceed tolerable upper intake levels. **Knowledge-Based Outcomes** 1. **Mechanisms of Action**: Understand how vitamin D, calcium, and calcium-modulating drugs affect bone remodeling and calcium homeostasis. 2. **Indications and Dosage**: Learn the appropriate indications, dosages, and formulations for conditions like **osteoporosis**, **rickets**, and **hypercalcemia**. **Adverse Effects**: Recognize common side effects, including **hypercalcemia**, **renal complications**, and **osteonecrosis**.						

HomUG-Mod.Phar– 4.6 (CVS)

Sl.No	Duration of Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom UG-Mod. Phar **4.6.1**	T/t of Hypertension	K	Knowledge and scholarship	**Hypertension Management** *1. Etiology and Pathophysiology* Identify the cause of hypertension: • **Primary (essential)** hypertension: Idiopathic but influenced by genetic and lifestyle factors. • **Secondary** hypertension: Caused by conditions such as renal artery stenosis, endocrine disorders, or	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Medicine Physiology

				medication use. • Understand the pathophysiological mechanisms: • **Increased systemic vascular resistance**, **volume overload**, and **sympathetic nervous system activation**. *2. Therapeutic Goals* • The primary goal is to reduce blood pressure to recommended targets: o **<140/90 mmHg** for most adults. o **<130/80 mmHg** for patients with diabetes, chronic kidney disease, or a history of cardiovascular disease. • Prevent complications such as stroke, myocardial infarction, and organ damage. *3. Pharmacological Treatment Options* Hypertension treatment requires patient-specific drug selection based on comorbidities, age, and ethnicity: 1. **First-Line Agents**: • **Thiazide Diuretics** (e.g.,						

				Hydrochlorothiazide, Chlorthalidone): Reduce blood volume by increasing urinary excretion of sodium and water. • **ACE Inhibitors** (e.g., Enalapril, Ramipril): Inhibit the renin-angiotensin-aldosterone system (RAAS), reducing vasoconstriction and aldosterone secretion. • **Angiotensin II Receptor Blockers (ARBs)** (e.g., Losartan, Valsartan): Block angiotensin II receptors, reducing vasoconstriction. • **Calcium Channel Blockers (CCBs)** (e.g., Amlodipine, Nifedipine): Cause vasodilation by inhibiting calcium influx in vascular smooth muscle. 2. **Second-Line and Add-On Agents**: • **Beta-Blockers** (e.g., Metoprolol, Atenolol): Reduce heart rate and cardiac output. • **Aldosterone Antagonists** (e.g., Spironolactone, Eplerenone): Effective in resistant hypertension. • **Alpha-Blockers** (e.g., Doxazosin): Relax vascular smooth muscle						

				to lower BP. 3. **Other Agents**: • **Centrally Acting Drugs** (e.g., Clonidine, Methyldopa): Reduce sympathetic outflow. • **Direct Vasodilators** (e.g., Hydralazine, Minoxidil): Reserved for severe or refractory hypertension. --- *4. Non-Pharmacological Measures* Emphasize lifestyle modifications for all patients: • **Dietary Approaches to Stop Hypertension (DASH)** diet: Rich in fruits, vegetables, and low-fat dairy. • **Salt reduction**: <2.3 grams of sodium/day. • **Regular exercise**: At least 150 minutes of moderate-intensity aerobic activity per week. • **Weight loss**: Aim for BMI <25 kg/m². • **Smoking cessation** and limiting alcohol intake. **Knowledge-Based Outcomes** 1. **Understanding**						

				Pathophysiology: Describe the mechanisms contributing to hypertension and the pharmacological targets of antihypertensive drugs. 2. **Therapeutic Principles**: Understand the indications, mechanisms, and contraindications of different antihypertensive drugs. 3. **Risk Stratification**: Learn to assess cardiovascular risk and tailor treatment to reduce complications. **Skill-Based Outcomes** **Blood Pressure Measurement**: Accurately measure and interpret blood pressure values using standard techniques.						
Hom UG-Mod. Phar **4.6.2**	Angina, MI	K	Knowledge and scholarship	**Angina** *1. Types of Angina* • **Stable Angina**: Caused by a fixed coronary artery obstruction. • **Unstable Angina**: Part of acute coronary syndrome (ACS), often due to plaque rupture. • **Prinzmetal (Variant) Angina**: Caused by coronary	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Medicine Physiology

				vasospasm. *2. Goals of Therapy* • Alleviate symptoms by improving oxygen supply-demand balance. • Prevent progression to MI or sudden cardiac death. • Improve quality of life and physical activity tolerance. *3. Drug Classes for Angina* 1. **Nitrates** (e.g., Nitroglycerin, Isosorbide Dinitrate): o Mechanism: Reduce preload and afterload by venodilation; improve coronary blood flow. o Indication: Acute relief (sublingual nitroglycerin) and long-term prophylaxis (oral or transdermal nitrates). o Adverse Effects: Headache, hypotension, reflex tachycardia. 2. **Beta-Blockers** (e.g., Metoprolol, Atenolol): o Mechanism: Reduce heart rate and contractility, lowering myocardial						

				oxygen demand. ○ Indication: First-line for stable angina; reduce mortality in post-MI patients. ○ Adverse Effects: Bradycardia, fatigue, bronchospasm. 3. **Calcium Channel Blockers (CCBs)** (e.g., Amlodipine, Verapamil): ○ Mechanism: Reduce afterload by vasodilation and decrease myocardial oxygen demand. ○ Indication: Prinzmetal angina, stable angina in patients intolerant to beta-blockers. ○ Adverse Effects: Hypotension, peripheral edema, constipation. 4. **Antiplatelet Agents** (e.g., Aspirin, Clopidogrel): ○ Mechanism: Prevent platelet aggregation and thrombus formation. ○ Indication: Prevent acute coronary syndromes. ○ Adverse Effects: Bleeding, gastrointestinal irritation. 5. **Ranolazine**:						

				○ Mechanism: Inhibits late sodium currents, reducing ischemia. ○ Indication: Chronic stable angina refractory to standard therapy. ○ Adverse Effects: QT prolongation. **Drugs Used in Myocardial Infarction (MI)** *1. Pathophysiology* • MI is caused by complete or partial coronary artery occlusion, leading to ischemia and myocardial necrosis. *2. Goals of Therapy* • Restore coronary perfusion and limit infarct size. • Prevent complications such as arrhythmias, heart failure, and reinfarction. • Reduce mortality and improve long-term outcomes. *3. Drug Classes for MI* 1. **Thrombolytics (Fibrinolytics)** (e.g., Alteplase, Streptokinase): ○ Mechanism: Dissolve thrombi by activating						

				plasminogen to plasmin. ○ Indication: STEMI when percutaneous coronary intervention (PCI) is unavailable. ○ Adverse Effects: Bleeding, intracranial hemorrhage. 2. **Antiplatelet Agents**: ○ **Aspirin**: Irreversible COX-1 inhibition reduces thromboxane A2, preventing platelet aggregation. ○ **P2Y12 Inhibitors** (e.g., Clopidogrel, Ticagrelor): Block ADP-mediated platelet activation. ○ Used in dual antiplatelet therapy (DAPT) for ACS and post-PCI. 3. **Anticoagulants** (e.g., Enoxaparin, Heparin): ○ Mechanism: Prevent clot propagation by inhibiting clotting factors. ○ Indication: Acute phase of MI to reduce thrombotic risk. ○ Adverse Effects: Bleeding, heparin-induced thrombocytopenia (HIT). 4. **Beta-Blockers**:						

				○ Reduce myocardial oxygen demand, preventing arrhythmias and infarct expansion. 5. **ACE Inhibitors/ARBs**: ○ Prevent ventricular remodeling and reduce afterload. ○ Indication: Post-MI with heart failure or reduced ejection fraction. ○ Adverse Effects: Cough (ACE inhibitors), hyperkalemia. 6. **Statins** (e.g., Atorvastatin, Rosuvastatin): ○ Mechanism: Lower LDL cholesterol and stabilize plaques. ○ Indication: All MI patients irrespective of baseline cholesterol levels. 7. **Nitrates**: ○ Relieve ischemic pain by improving coronary perfusion. 8. **Aldosterone Antagonists** (e.g., Spironolactone): Indication: Post-MI with heart failure or reduced ejection fraction. **Knowledge-Based Outcomes**						

				1. **Pathophysiology Understanding**: Describe the mechanisms underlying angina and MI, including the role of oxygen supply-demand mismatch and thrombosis. 2. **Drug Mechanisms and Indications**: Understand the mechanism of action, indications, and contraindications of drugs used in angina and MI. 3. **Guideline Awareness**: Familiarity with current guidelines for managing stable angina, unstable angina, and MI. **Skill-Based Outcomes** 4. **Drug Selection**: Select the most appropriate therapy for angina or MI based on patient-specific factors, such as comorbidities and contraindications. 5. **Acute Management Skills**: Administer appropriate acute therapies for MI (e.g., thrombolysis, dual antiplatelet therapy). 6. **Monitoring and Adjustment**: Monitor therapy effectiveness (e.g., relief of chest pain, BP control) and adjust based on patient response and side						

				effects. **Attitude-Based Outcomes** 7. **Patient-Centered Care**: Prioritize patient preferences and risk factors in designing treatment plans. 8. **Preventive Focus**: Educate patients on lifestyle changes (e.g., smoking cessation, diet, exercise) to prevent angina and recurrent MI. 9. **Ethical Prescribing**: Avoid polypharmacy and adhere to evidence-based practices for reducing cardiovascular morbidity and mortality.						
Hom UG-Mod. Phar **4.6.3**	Cardiac Glycosides and Drugs for Heart failure	K	Knowledge and scholarship	**Cardiac Glycosides** *1. Mechanism of Action* • **Digoxin**, the primary cardiac glycoside, works by: o Inhibiting the **Na^+/K^+-ATPase pump**, leading to increased intracellular sodium. o Increased sodium decreases calcium extrusion via the sodium-calcium exchanger, leading to	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Medicine Physiology

				higher intracellular calcium and stronger myocardial contractions (positive inotropy). ○ Slowing conduction through the atrioventricular (AV) node and increasing vagal tone (negative chronotropy). *2. Indications* • Symptomatic relief in **chronic heart failure** (especially in patients with reduced ejection fraction). • Management of **atrial fibrillation** with rapid ventricular rates, especially in heart failure patients. *3. Adverse Effects* • **Cardiac**: Arrhythmias (e.g., ventricular tachycardia, AV block). • **Gastrointestinal**: Nausea, vomiting, diarrhea. • **Neurological**: Visual disturbances (e.g., yellow vision), confusion. • **Toxicity**: Narrow therapeutic index necessitates careful monitoring of drug levels						

				(normal range: 0.5–2 ng/mL). *4. Monitoring* • Regular assessment of digoxin levels, renal function, and electrolytes (hypokalemia and hypomagnesemia increase toxicity risk). **Drugs Used in Heart Failure** Heart failure management varies based on the type: • **Heart Failure with Reduced Ejection Fraction (HFrEF)**: EF ≤40%. • **Heart Failure with Preserved Ejection Fraction (HFpEF)**: EF >50%. *1. Goals of Therapy* • Alleviate symptoms (e.g., dyspnea, fatigue). • Reduce hospitalizations and mortality. • Prevent disease progression and improve quality of life. *2. Drug Classes* 1. **First-Line Drugs**: **Angiotensin-Converting Enzyme**						

				(ACE) Inhibitors (e.g., Enalapril, Ramipril): • Mechanism: Reduce afterload and preload by blocking the renin-angiotensin-aldosterone system (RAAS). • Benefits: Decrease mortality and slow disease progression. • Adverse Effects: Cough, hyperkalemia, angioedema. **Angiotensin II Receptor Blockers (ARBs)** (e.g., Losartan, Valsartan): • Alternative to ACE inhibitors in patients with intolerance. • **Beta-Blockers** (e.g., Bisoprolol, Carvedilol, Metoprolol): • Mechanism: Block sympathetic overactivation. • Benefits: Reduce mortality and improve left ventricular function. • Adverse Effects: Bradycardia, fatigue, hypotension. **Mineralocorticoid Receptor Antagonists (MRAs)** (e.g., Spironolactone, Eplerenone): • Mechanism: Block aldosterone, reducing fluid retention and fibrosis. • Benefits: Mortality reduction in HFrEF.						

				• Adverse Effects: Hyperkalemia, gynecomastia (spironolactone). **2.Symptomatic Relief**: **Loop Diuretics** (e.g., Furosemide, Torsemide): • Mechanism: Increase urinary excretion of sodium and water. • Indication: Relieve fluid overload symptoms (e.g., pulmonary congestion, peripheral edema). • Adverse Effects: Hypokalemia, hypovolemia. • **Thiazide Diuretics** (e.g., Hydrochlorothiazide): • Used in mild fluid retention or combination therapy. **3.Novel Therapies**: • **Sodium-Glucose Cotransporter-2 (SGLT2) Inhibitors** (e.g., Dapagliflozin, Empagliflozin): • Benefits: Mortality reduction, symptom improvement, regardless of diabetes status. **4.Other Agents**: **Ivabradine**:						

				• Mechanism: Reduces heart rate by inhibiting the If current in the sinoatrial node. • Indication: HFrEF with resting heart rate >70 bpm despite beta-blocker use. **Hydralazine and Isosorbide Dinitrate**: • Indication: HFrEF in African-American patients or those intolerant to ACE inhibitors/ARBs. **5.Anticoagulation and Antiplatelets**: Indicated in HF patients with atrial fibrillation or thromboembolic risk. **Knowledge-Based Outcomes** 1. **Understanding Mechanisms**: Describe the pharmacological actions of cardiac glycosides and other HF drugs. 2. **Pathophysiology**: Understand the role of neurohormonal dysregulation in HF and the impact of pharmacotherapy. 3. **Evidence-Based Practices**: Learn to apply current guidelines in the pharmacological management of HF.						

				Skill-Based Outcomes 4. **Drug Selection**: Select appropriate drugs for HFrEF, HFpEF, and symptom management. 5. **Toxicity Monitoring**: Identify and manage digoxin toxicity and other drug-related adverse effects. **Patient Counseling**: Educate patients on medication adherence, recognizing symptoms of fluid overload, and dietary restrictions.						
Hom UG-Mod. Phar **4.6.4**	Hypolipidemic drugs	K	Knowledge and scholarship	**1. Classes of Hypolipidemic Drugs** *A. HMG-CoA Reductase Inhibitors (Statins)* • **Examples**: Atorvastatin, Rosuvastatin, Simvastatin. • **Mechanism**: Inhibit HMG-CoA reductase, the rate-limiting enzyme in cholesterol synthesis, reducing LDL cholesterol. • **Benefits**: o Decrease LDL by 20–60%. o Modest increase in HDL and decrease in triglycerides. o Anti-inflammatory and plaque-stabilizing effects.	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Medicine Physiology

				• **Indications**:
				  ○ Primary and secondary prevention of atherosclerotic cardiovascular disease (ASCVD).
				  ○ Hypercholesterolemia.
				
				B. Fibrates
				
				• **Examples**: Fenofibrate, Gemfibrozil.
				• **Mechanism**: Activate peroxisome proliferator-activated receptor-alpha (PPAR-α), increasing fatty acid oxidation and lipoprotein lipase activity, leading to reduced triglycerides.
				• **Benefits**:
				  ○ Decrease triglycerides by 30–50%.
				  ○ Modest increase in HDL.
				• **Indications**: Hypertriglyceridemia, prevention of pancreatitis.
				
				C. Bile Acid Sequestrants
				
				• **Examples**: Cholestyramine, Colestipol.
				• **Mechanism**: Bind bile acids in the intestine, preventing reabsorption and promoting						

				cholesterol excretion.
				• **Benefits**:
				  o Lower LDL by 10–20%.
				  o May slightly increase HDL.
				• **Indications**: Hypercholesterolemia, particularly in statin-intolerant patients.
				
				D. Cholesterol Absorption Inhibitors
				
				• **Example**: Ezetimibe.
				• **Mechanism**: Inhibits Niemann-Pick C1-Like 1 (NPC1L1) protein in the intestine, reducing dietary and biliary cholesterol absorption.
				• **Benefits**:
				  o Reduces LDL by 18–25%.
				  o Additive effect with statins.
				• **Indications**: Hypercholesterolemia, adjunct to statins.
				
				E. PCSK9 Inhibitors
				
				• **Examples**: Evolocumab, Alirocumab.
				• **Mechanism**: Monoclonal antibodies that inhibit PCSK9, increasing LDL receptor recycling and reducing LDL levels.						

				• **Benefits**:
				  ○ Lower LDL by 50–70%.
				  ○ Reduce cardiovascular events.
				• **Indications**: Severe hypercholesterolemia, familial hypercholesterolemia, and patients with ASCVD.
				
				F. Nicotinic Acid (Niacin)
				
				• **Mechanism**: Reduces hepatic synthesis of triglycerides and VLDL, increasing HDL.
				• **Benefits**:
				  ○ Reduces triglycerides and LDL.
				  ○ Significantly increases HDL.
				• **Adverse Effects**: Flushing, hyperglycemia, hepatotoxicity.
				• **Indications**: Mixed dyslipidemias.
				
				G. Omega-3 Fatty Acids
				
				• **Examples**: Eicosapentaenoic acid (EPA), Docosahexaenoic acid (DHA).
				• **Mechanism**: Reduce hepatic triglyceride synthesis.
				• **Benefits**:
				  ○ Decrease triglycerides.
				  ○ Anti-inflammatory						

				and anti-arrhythmic properties. • **Indications**: Hypertriglyceridemia. **2. Principles of Therapy** • **Lifestyle Modifications**: Emphasize diet, exercise, and smoking cessation alongside pharmacotherapy. **3. Monitoring and Safety** • **Lipid Levels**: Monitor baseline and follow-up lipid profiles to assess efficacy. • **Liver Function**: Regularly check liver enzymes, especially with statins and niacin. • **Muscle Toxicity**: Monitor for myalgia or rhabdomyolysis in statin-treated patients. • **Glycemic Control**: Be cautious of hyperglycemia in susceptible individuals on statins or niacin. **Adverse Effects of Hypolipidemic Drugs** • **Statins**: Myopathy, rhabdomyolysis, hepatotoxicity, increased diabetes risk. • **Fibrates**: Myopathy						

				(especially with statins), gallstones. • **Bile Acid Sequestrants**: Gastrointestinal discomfort, vitamin deficiencies (A, D, E, K). • **Niacin**: Flushing, pruritus, hepatotoxicity. • **PCSK9 Inhibitors**: Injection site reactions, rare hypersensitivity.						

HomUG-Mod.Phar– 4.7 (Renal System)

Sl.No	Duration of Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
HomUG-Mod.Phar 4.7.1	Diuretics and Antidiuretics	K	Knowledge and scholarship	**Diuretics: Classes and Mechanism of Action** Diuretics are classified based on their site of action in the nephron and their mechanism of action. *A. Thiazide Diuretics* • **Examples**: Hydrochlorothiazide,	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Medicine Physiology

				Chlorthalidone. • **Mechanism**: Inhibit sodium-chloride symporters in the distal convoluted tubule, promoting sodium and water excretion. • **Effects**: Decrease blood volume and lower blood pressure. • **Indications**: Hypertension, mild heart failure, edema due to kidney disease, and nephrolithiasis (calcium-containing stones). • **Adverse Effects**: Hypokalemia, hyponatremia, hyperglycemia, hyperuricemia. *B. Loop Diuretics* • **Examples**: Furosemide, Bumetanide, Torsemide. • **Mechanism**: Inhibit the sodium-potassium-chloride co-transporter in the thick ascending limb of the loop of Henle, preventing sodium reabsorption. • **Effects**: Cause significant diuresis, lowering fluid overload rapidly. • **Indications**: Acute heart failure, pulmonary edema, chronic kidney disease, severe edema. • **Adverse Effects**: Hypokalemia, dehydration,						

				hypotension, ototoxicity.
				
				C. Potassium-Sparing Diuretics
				
				• **Examples**: Spironolactone, Eplerenone, Amiloride, Triamterene.
				• **Mechanism**:
				  ○ **Aldosterone antagonists** (e.g., Spironolactone, Eplerenone) block the effects of aldosterone in the collecting ducts, preventing sodium retention and potassium excretion.
				  ○ **Epithelial sodium channel blockers** (e.g., Amiloride, Triamterene) inhibit sodium reabsorption in the collecting tubules.
				• **Effects**: Reduce sodium retention without causing significant potassium loss.
				• **Indications**: Hyperaldosteronism, heart failure (as adjunct), hypertension, and cirrhosis with ascites.
				• **Adverse Effects**: Hyperkalemia, gynecomastia (with spironolactone), metabolic acidosis.						

				D. Carbonic Anhydrase Inhibitors • **Examples**: Acetazolamide. • **Mechanism**: Inhibit carbonic anhydrase in the proximal convoluted tubule, preventing bicarbonate reabsorption and increasing urine output. • **Effects**: Mild diuresis, alkalinization of urine. • **Indications**: Glaucoma, metabolic alkalosis, altitude sickness. • **Adverse Effects**: Metabolic acidosis, kidney stones, hypokalemia. *E. Osmotic Diuretics* • **Examples**: Mannitol. • **Mechanism**: Increase osmolarity of the filtrate, preventing water reabsorption in the proximal tubule and descending loop of Henle. • **Effects**: Draw water into the renal tubules, promoting diuresis. • **Indications**: Cerebral edema, increased intraocular pressure, acute renal failure. • **Adverse Effects**: Dehydration, hyperkalemia, electrolyte imbalances. **2. Antidiuretics: Mechanism and Use**						

				Antidiuretics, or **diuretic inhibitors**, are used to reduce urine output, typically by increasing water reabsorption in the kidneys. *A. Antidiuretic Hormone (ADH) Analogs* • **Examples**: Desmopressin, Vasopressin. • **Mechanism**: Mimic the action of endogenous ADH, promoting water reabsorption in the collecting ducts by activating V2 receptors. • **Indications**: Diabetes insipidus, nocturnal enuresis. • **Adverse Effects**: Hyponatremia, water retention, hypertension. *B. Vasopressin Receptor Antagonists* • **Examples**: Tolvaptan, Conivaptan. • **Mechanism**: Block the V2 receptors, inhibiting water reabsorption and promoting diuresis. • **Indications**: Syndrome of inappropriate antidiuretic hormone (SIADH), hypervolemic hyponatremia. **Adverse Effects**: Hypernatremia, thirst, dehydration.						

HomUG-Mod.Phar– 4.8 (Blood)

Sl.No	Duration of Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom UG-Mod. Phar 4.8.1	Hematinics	K	Knowledge and scholarship	T/t of Iron deficiency anemia and Megaloblastic anemia	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Physiology

HomUG-Mod.Phar– 4.9 (GIT)

Sl.No	Duration of Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom UG-	Drugs for Peptic Ulcer and GERD	K	Knowledge and	**Peptic Ulcer Disease (PUD)** Peptic ulcers are lesions in the mucosal	C1	MK	Lecture, Group discussio	Quiz, Written	SAQ, MCQ	Gastro Depratment

Mod. Phar **4.9.1**			scholarship	lining of the stomach, duodenum, or esophagus caused by an imbalance between aggressive factors (e.g., gastric acid, pepsin) and protective factors (e.g., mucus, bicarbonate). Common causes include Helicobacter pylori infection, long-term NSAID use, and excess gastric acid production. **A. Drug Classes Used for PUD** 1. **Proton Pump Inhibitors (PPIs)** ○ **Examples**: Omeprazole, Lansoprazole, Esomeprazole, Pantoprazole, Rabeprazole. ○ **Mechanism**: PPIs irreversibly inhibit the H+/K+ ATPase (proton pump) in parietal cells, which reduces gastric acid secretion. ○ **Indications**: First-line therapy for peptic ulcers, H. pylori eradication (as part of combination therapy), GERD, Zollinger-Ellison syndrome. ○ **Adverse Effects**: Long-term use may lead to vitamin B12 deficiency,			n	test, MCQ		Medicine Physiology

				hypomagnesemia, osteoporosis, and increased susceptibility to Clostridium difficile infections. 2. **H2-Receptor Antagonists (H2RAs)** ○ **Examples**: Ranitidine, Famotidine, Cimetidine, Nizatidine. ○ **Mechanism**: H2RAs block histamine receptors (H2 receptors) on parietal cells, reducing gastric acid secretion. ○ **Indications**: Used in the treatment of mild to moderate PUD, GERD, and Zollinger-Ellison syndrome. They are also used in the prevention of stress ulcers in critically ill patients. ○ **Adverse Effects**: Headache, dizziness, fatigue, and gastrointestinal symptoms. Cimetidine has significant drug interactions due to its inhibition of cytochrome P450						

				enzymes. 3. **Antacids** ○ **Examples**: Magnesium hydroxide, Aluminum hydroxide, Calcium carbonate, Sodium bicarbonate. ○ **Mechanism**: Antacids neutralize gastric acid, increasing gastric pH and providing symptomatic relief. ○ **Indications**: Short-term relief of symptoms in PUD and GERD, as adjunctive therapy in combination with other agents. ○ **Adverse Effects**: Constipation (aluminum-based), diarrhea (magnesium-based), and metabolic alkalosis with overuse of sodium bicarbonate. 4. **Mucosal Protective Agents** ○ **Examples**: Sucralfate, Misoprostol. ○ **Mechanism**: Sucralfate forms a protective barrier over the ulcer, while Misoprostol, a						

				prostaglandin analog, increases mucus and bicarbonate secretion to protect the gastric mucosa. ○ **Indications**: Used in the healing of ulcers, particularly NSAID-induced ulcers (Misoprostol), and in combination with other drugs for H. pylori eradication. ○ **Adverse Effects**: Sucralfate can cause constipation and nausea, while Misoprostol may cause diarrhea, abdominal cramping, and is contraindicated in pregnancy due to its abortifacient effects. 5. **Antibiotics (for H. pylori infection)** ○ **Examples**: Amoxicillin, Clarithromycin, Metronidazole, Tetracycline. ○ **Mechanism**: Antibiotics target and eradicate Helicobacter pylori, which is a primary cause of peptic ulcers. ○ **Indications**: Used in						

				combination therapy with PPIs for the eradication of H. pylori in PUD. ○ **Adverse Effects**: Nausea, vomiting, diarrhea, and the risk of developing antibiotic resistance. **2. Gastroesophageal Reflux Disease (GERD)** GERD is a chronic condition where gastric contents, including acid, reflux into the esophagus, causing symptoms such as heartburn, regurgitation, and potential esophageal damage (e.g., esophagitis, Barrett's esophagus). **A. Drug Classes Used for GERD** 1. **Proton Pump Inhibitors (PPIs)** ○ **Indications**: First-line therapy for GERD to heal esophagitis, provide symptomatic relief, and prevent complications like strictures or Barrett's esophagus. ○ **Adverse Effects**: Similar to those seen in PUD therapy, including risk of long-term						

				complications like vitamin B12 deficiency and osteoporosis. 2. **H2-Receptor Antagonists (H2RAs)** ○ **Indications**: Used for mild GERD symptoms or in patients who do not require more potent acid suppression (PPIs). ○ **Adverse Effects**: As noted above, particularly with cimetidine due to its interaction with cytochrome P450 enzymes. 3. **Antacids** ○ **Indications**: Provide short-term relief from heartburn symptoms in GERD. ○ **Adverse Effects**: As noted in PUD treatment, particularly with overuse leading to metabolic alkalosis, constipation, or diarrhea. 4. **Prokinetic Agents** ○ **Examples**: Metoclopramide, Domperidone. ○ **Mechanism**: These drugs increase lower						

				esophageal sphincter tone and enhance gastric emptying, reducing acid reflux. ○ **Indications**: Used in GERD with delayed gastric emptying or in patients with esophageal motility issues. ○ **Adverse Effects**: Metoclopramide can cause extrapyramidal symptoms, tardive dyskinesia, and sedation. 5. **Alginate-based Products** ○ **Examples**: Gaviscon. ○ **Mechanism**: Alginate forms a gel-like barrier that floats on the stomach contents, preventing acid from refluxing into the esophagus. ○ **Indications**: Used for mild to moderate GERD and in combination with other agents. **Adverse Effects**: Typically well-tolerated but may cause bloating or discomfort. **Knowledge-Based Outcomes** 1. **Mechanisms of Action**:						

				Understand how PPIs, H2RAs, and other drugs reduce gastric acid secretion, promote ulcer healing, and protect the gastrointestinal mucosa. 2. **Indications and Contraindications**: Identify when to use PPIs, H2RAs, antacids, and mucosal protectants based on the underlying etiology of PUD or GERD. 3. **Adverse Effects and Drug Interactions**: Recognize the potential side effects of each class of drug (e.g., bleeding risks with mucosal protectants, infection risks with PPIs, or drug interactions with cimetidine). **Skill-Based Outcomes** 4. **Therapeutic Decision Making**: Select appropriate drug therapy based on the clinical scenario, balancing the severity of the condition with the potential for adverse effects and long-term complications. 5. **Monitoring and Adjustment**: Monitor patient progress, adjust therapy as needed based on symptom control, adverse effects, and response to treatment (e.g., for H. pylori						

				eradication or healing of ulcers). 6. **Patient Education**: Educate patients on the importance of adherence to therapy, lifestyle modifications (e.g., diet, weight management), and potential side effects. **Attitude-Based Outcomes** 7. **Patient-Centered Care**: Address patient concerns regarding long-term treatment (e.g., PPI use) and emphasize the importance of managing GERD and PUD to prevent complications. 8. **Rational Prescribing**: Prescribe drugs for PUD and GERD based on current guidelines, considering the risk of complications, especially with long-term therapy. 9. **Preventive Approach**: Advocate for preventive measures such as H. pylori screening and eradication, lifestyle modifications, and careful monitoring of patients at risk for complications.						
Hom UG-Mod.	Drugs for constipation and diarrhoea	K	Knowledge and scholarship	**Drugs for Constipation** Constipation is characterized by	C1	MK	Lecture, Group discussio	Quiz, Written test, MCQ	SAQ, MCQ	Medicine Physiology

Phar **4.9.2**				infrequent, difficult, or painful bowel movements, often associated with hard stools. Treatment typically involves dietary and lifestyle changes, but pharmacotherapy is used in more severe or chronic cases. *A. Drug Classes Used for Constipation* 1. **Bulk-Forming Laxatives** ○ **Examples**: Psyllium, Methylcellulose, Polycarbophil. ○ **Mechanism**: These drugs increase stool volume by absorbing water, which softens the stool and promotes peristalsis. ○ **Indications**: First-line therapy for chronic constipation, especially in patients with low fiber intake. ○ **Adverse Effects**: Bloating, flatulence, and abdominal discomfort. Rarely, they can cause obstruction if not taken with adequate water. 2. **Stool Softeners** ○ **Examples**: Docusate sodium, Docusate calcium. ○ **Mechanism**: These agents increase the			n			

				water content of the stool, making it softer and easier to pass. ○ **Indications**: Used for mild constipation, particularly in patients with hemorrhoids or post-operative patients who should avoid straining. ○ **Adverse Effects**: Generally well tolerated but may cause mild abdominal cramping. 3. **Osmotic Laxatives** ○ **Examples**: Lactulose, Polyethylene glycol (PEG), Magnesium hydroxide. ○ **Mechanism**: These agents draw water into the colon through osmosis, softening the stool and promoting bowel movement. ○ **Indications**: Used in chronic constipation, fecal impaction, and in patients with hepatic encephalopathy (lactulose). ○ **Adverse Effects**: Bloating, flatulence, diarrhea, and						

				electrolyte imbalances (especially with magnesium-based agents). 4. **Stimulant Laxatives** ○ **Examples**: Bisacodyl, Senna, Castor oil. ○ **Mechanism**: These drugs stimulate the smooth muscle of the colon, enhancing peristalsis and accelerating bowel movements. ○ **Indications**: Used in cases of acute constipation or as a second-line treatment for chronic constipation. ○ **Adverse Effects**: Cramping, dehydration, and long-term use may lead to dependence or bowel atony. 5. **Chloride Channel Activators** ○ **Examples**: Lubiprostone, Linaclotide. ○ **Mechanism**: These agents increase chloride secretion into the intestinal lumen, enhancing water secretion and improving stool						

				consistency. ○ **Indications**: Used for chronic idiopathic constipation (CIC) and constipation-predominant irritable bowel syndrome (IBS-C). ○ **Adverse Effects**: Nausea, diarrhea, bloating, and abdominal discomfort. 6. **Guanylate Cyclase-C Agonists** ○ **Examples**: Plecanatide, Linaclotide. ○ **Mechanism**: These drugs increase cyclic GMP levels in the intestines, stimulating fluid secretion and promoting bowel motility. ○ **Indications**: Used for chronic constipation and IBS-C. ○ **Adverse Effects**: Diarrhea, flatulence, and abdominal pain. **2. Drugs for Diarrhea** Diarrhea is defined as the passage of loose or watery stools more than three times a day and can be caused by infections, medications, or						

				gastrointestinal disorders. The goal of treatment is to restore fluid balance, relieve symptoms, and treat the underlying cause. *A. Drug Classes Used for Diarrhea* 1. **Antidiarrheal Agents** ○ **Examples**: Loperamide, Diphenoxylate with atropine (Lomotil). ○ **Mechanism**: These drugs work by slowing intestinal motility, allowing more time for fluid absorption in the colon. ○ **Indications**: Used for acute diarrhea (including traveler's diarrhea), chronic diarrhea (e.g., in IBS), and to reduce the frequency of stool in conditions like inflammatory bowel disease (IBD). ○ **Adverse Effects**: Constipation, bloating, and abdominal cramps. Loperamide should be avoided in cases of dysentery or bacterial infections involving the gut.						

				2. **Adsorbents** ○ **Examples**: Activated charcoal, Kaolin, Pectin. ○ **Mechanism**: Adsorbents bind to toxins or pathogens in the gut, preventing them from causing diarrhea. ○ **Indications**: Used for mild diarrhea and toxin-related diarrhea (e.g., from bacterial infections). ○ **Adverse Effects**: Constipation, bloating, and reduced effectiveness of other medications if used concurrently. 3. **Bismuth Subsalicylate** ○ **Examples**: Pepto-Bismol. ○ **Mechanism**: It has antimicrobial, anti-inflammatory, and antacid properties, which help reduce diarrhea, nausea, and abdominal discomfort. ○ **Indications**: Used for acute diarrhea (including traveler's diarrhea), indigestion, and nausea. ○ **Adverse Effects**: Blackened stools,						

				tongue discoloration, and in large doses, salicylate toxicity. 4. **Probiotics** ○ **Examples**: Lactobacillus, Saccharomyces boulardii. ○ **Mechanism**: Probiotics restore the natural balance of gut flora, which can be disrupted in diarrhea. ○ **Indications**: Used for antibiotic-associated diarrhea, gastroenteritis, and inflammatory bowel disease (IBD). ○ **Adverse Effects**: Generally well tolerated but may cause bloating and gas in some individuals. 5. **Octreotide** ○ **Mechanism**: Octreotide is a somatostatin analog that inhibits the secretion of various gastrointestinal hormones, slowing motility and reducing secretions. ○ **Indications**: Used for diarrhea caused by neuroendocrine tumors,						

				chemotherapy, and certain gastrointestinal disorders. ○ **Adverse Effects**: Nausea, abdominal cramps, and flatulence. 6. **Antibiotics (for Infectious Diarrhea)** ○ **Examples**: Ciprofloxacin, Metronidazole, Rifaximin. ○ **Mechanism**: These drugs treat bacterial infections causing diarrhea by targeting the pathogen directly. ○ **Indications**: Used for diarrhea caused by specific bacterial infections, such as Salmonella, Shigella, or Clostridium difficile. ○ **Adverse Effects**: Diarrhea, nausea, and potential development of antibiotic resistance. **3. Monitoring and Safety** • **Constipation**: Regular monitoring for adverse effects with long-term laxative use, especially stimulant laxatives,						

				to avoid dependency and bowel atony. **Diarrhea**: Close monitoring of hydration status, especially in children and elderly patients, to prevent complications like electrolyte imbalances and dehydration. **Knowledge-Based Outcomes** 1. **Mechanisms of Action**: Understand how each class of drug for constipation and diarrhea works to alleviate symptoms and restore normal bowel function. 2. **Indications and Contraindications**: Recognize the appropriate use of bulk-forming agents, laxatives, antidiarrheals, and probiotics based on the underlying cause and clinical scenario. 3. **Adverse Effects and Drug Interactions**: Identify potential side effects and interactions of these drugs (e.g., electrolyte imbalances with osmotic laxatives, constipation with antidiarrheals). **Skill-Based Outcomes** 4. **Therapeutic Decision**						

				Making: Be able to select the appropriate pharmacotherapy based on the type of constipation or diarrhea and its underlying cause (e.g., osmotic laxatives for chronic constipation, loperamide for acute diarrhea). 5. **Monitoring and Adjustment**: Monitor patients for adverse effects, treatment response, and the resolution of underlying causes (e.g., adjusting therapy based on stool frequency and consistency). 6. **Patient Education**: Provide guidance on proper use of medications, potential side effects, and lifestyle modifications (e.g., increasing fluid and fiber intake for constipation). **Attitude-Based Outcomes** 7. **Patient-Centered Care**: Ensure that treatment decisions are tailored to the individual patient, taking into account their preferences, lifestyle, and specific medical conditions. 8. **Rational Prescribing**: Prescribe drugs for constipation and diarrhea based on the clinical severity,						

				while minimizing risks of adverse effects, especially in vulnerable populations (e.g., the elderly). 9. **Preventive Approach**: Advocate for preventive measures like diet modification (increasing fiber intake), hydration, and regular exercise for constipation, and proper sanitation to prevent infections that cause diarrhea.						
Hom UG-Mod. Phar **4.9.3**	Antiemetics	K	Knowledge and scholarship	**Mechanisms of Nausea and Vomiting** Nausea and vomiting are complex physiological processes that involve multiple pathways and brain regions, including: • **Central mechanisms**: Activation of the **vomiting center** in the medulla oblongata via signals from the chemoreceptor trigger zone (CTZ), vestibular system, and higher brain centers. • **Peripheral mechanisms**: Inflammation or irritation of the gastrointestinal tract, involving neurotransmitters like serotonin (5-HT), dopamine, and substance P. *Key Neurotransmitters Involved:* 1. **Serotonin (5-HT)**: Plays a central role in chemotherapy-	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Medicine Physiology

				induced nausea and vomiting (CINV) and post-operative nausea. 2. **Dopamine (D2 receptors)**: Involved in motion sickness, CINV, and gastroparesis. 3. **Histamine (H1 receptors)**: Responsible for motion sickness and vestibular nausea. 4. **Substance P (NK1 receptors)**: Involved in chemotherapy-induced and post-operative nausea. **2. Drug Classes Used for Nausea and Vomiting (Antiemetics)** 1. **Serotonin (5-HT3) Antagonists** ○ **Examples**: Ondansetron, Granisetron, Dolasetron, Palonosetron. ○ **Mechanism**: These drugs block serotonin receptors in the central and peripheral nervous system, specifically 5-HT3 receptors, which are involved in triggering nausea and vomiting. ○ **Indications**: Primarily used for **chemotherapy-induced nausea and vomiting (CINV)**,						

				postoperative nausea, and **radiation therapy-induced nausea**. ○ **Adverse Effects**: Headache, constipation, dizziness, and potential QT prolongation. 2. **Dopamine (D2) Antagonists** ○ **Examples**: Metoclopramide, Prochlorperazine, Domperidone. ○ **Mechanism**: These drugs block dopamine receptors in the CTZ and gastrointestinal tract, which helps control nausea and vomiting. ○ **Indications**: Used for **gastrointestinal disorders** (e.g., gastroparesis), **postoperative nausea**, **motion sickness**, and **CINV**. ○ **Adverse Effects**: Extrapyramidal symptoms (EPS) like dystonia, parkinsonism, and tardive dyskinesia, sedation, and increased prolactin levels (domperidone is less likely to cause						

				EPS). 3. **Histamine (H1) Antagonists** ○ **Examples**: Diphenhydramine, Meclizine, Promethazine. ○ **Mechanism**: These drugs block histamine receptors in the vestibular system, helping prevent nausea related to motion sickness and vertigo. ○ **Indications**: Used for **motion sickness**, **vertigo**, **postoperative nausea**, and as adjunct therapy in **CINV**. ○ **Adverse Effects**: Sedation, dry mouth, blurred vision, and urinary retention. 4. **Neurokinin (NK1) Receptor Antagonists** ○ **Examples**: Aprepitant, Fosaprepitant, Rolapitant. ○ **Mechanism**: These drugs block substance P at the NK1 receptors in the brain, reducing the signal that triggers vomiting. ○ **Indications**: Mainly						

				used in combination with 5-HT3 antagonists and corticosteroids for **CINV**, especially for highly emetogenic chemotherapy regimens. ○ **Adverse Effects**: Fatigue, dizziness, diarrhea, and liver enzyme elevation. 5. **Corticosteroids** ○ **Examples**: Dexamethasone. ○ **Mechanism**: The exact mechanism of action is unclear, but corticosteroids may reduce inflammation and affect the central nervous system's response to nausea. ○ **Indications**: Used in combination with 5-HT3 antagonists and NK1 receptor antagonists for **CINV** and **postoperative nausea**. ○ **Adverse Effects**: Increased appetite, weight gain, insomnia, and elevated blood glucose levels. 6. **Cannabinoids** ○ **Examples**: Dronabinol,						

				Nabilone. ○ **Mechanism**: These agents act on the cannabinoid receptors in the brain, which play a role in the regulation of nausea and vomiting. ○ **Indications**: Used for **CINV** in patients who do not respond to standard antiemetics or in cases of **appetite stimulation** in patients with cancer or HIV/AIDS. ○ **Adverse Effects**: Euphoria, sedation, dizziness, dry mouth, and psychosis in susceptible individuals. 7. **Anticholinergic Agents** ○ **Examples**: Scopolamine. ○ **Mechanism**: These drugs block acetylcholine receptors in the vestibular system and gastrointestinal tract, helping prevent nausea and vomiting caused by motion sickness. ○ **Indications**: Used for **motion sickness** and **postoperative**						

				nausea. **Adverse Effects**: Dry mouth, blurred vision, urinary retention, and confusion. **Knowledge-Based Outcomes** 1. **Mechanism of Action**: Understand how different classes of antiemetic drugs act on the various pathways involved in nausea and vomiting, such as serotonin, dopamine, histamine, and substance P. 2. **Clinical Indications**: Recognize the appropriate indications for the use of specific antiemetic drugs, including **CINV**, **PONV**, **motion sickness**, and **gastrointestinal disorders**. 3. **Adverse Effects**: Identify the potential adverse effects and safety concerns associated with antiemetic drugs, such as sedation, extrapyramidal symptoms, and electrolyte imbalances. **Skill-Based Outcomes** 4. **Therapeutic Decision-Making**: Be able to select the most appropriate antiemetic						

				treatment based on the type of nausea/vomiting (e.g., **CINV**, **motion sickness**) and the patient's clinical condition. 5. **Combination Therapy**: Develop the ability to combine antiemetics (e.g., **5-HT3 antagonists** with **NK1 antagonists** and **corticosteroids**) to provide effective control of nausea and vomiting in complex conditions like **CINV**. 6. **Monitoring and Adjustment**: Monitor patients for adverse effects, especially in chemotherapy and postoperative settings, and adjust treatment based on the patient's response and side effects. **Attitude-Based Outcomes** 7. **Patient-Centered Care**: Ensure that antiemetic therapy is tailored to the individual patient's needs, considering factors such as chemotherapy regimens, comorbidities, and personal preferences. 8. **Rational Prescribing**: Prescribe antiemetics based on the severity and cause of nausea and vomiting, while minimizing side effects and drug interactions, especially in vulnerable populations.						

				9. **Patient Education**: Provide thorough education to patients about the appropriate use of antiemetics, potential side effects, and when to seek medical attention for any adverse reactions.						

HomUG-Mod.Phar– 4.10 (Chemotherapy)

Sl.No	Duration of Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom UG-Mod. Phar 4.10.1	Sulfonamides + Cotrimoxazole	K	Knowledge and scholarship	**Sulfonamides** *Definition* Sulfonamides are bacteriostatic agents that inhibit the synthesis of dihydropteroic acid, an essential precursor in the folate pathway of bacteria. *Mechanism of Action* • Sulfonamides act as **competitive inhibitors** of the enzyme **dihydropteroate synthase**. • They block the incorporation of para-aminobenzoic acid	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Medicine Physiology

				(PABA) into folic acid, preventing bacterial replication. *Examples* 1. **Short-acting sulfonamides**: Sulfisoxazole. 2. **Intermediate-acting sulfonamides**: Sulfamethoxazole. 3. **Long-acting sulfonamides**: Sulfadoxine. 4. **Topical sulfonamides**: Sulfacetamide (eye infections), Silver sulfadiazine (burn infections). *Clinical Uses* • Urinary tract infections (UTIs). • Nocardiosis. • Trachoma. • Toxoplasmosis (in combination with pyrimethamine). • Burn wound infections (topical silver sulfadiazine). *Adverse Effects* • **Hypersensitivity reactions**: Rash, Stevens-Johnson syndrome. • **Hematologic effects**:						

				Hemolytic anemia (especially in G6PD-deficient patients). • **Kernicterus** in neonates due to bilirubin displacement. • **Crystalluria**: Formation of crystals in urine leading to renal damage. **2. Cotrimoxazole** *Definition* Cotrimoxazole is a combination of **sulfamethoxazole (SMX)** and **trimethoprim (TMP)** in a 5:1 ratio. The combination provides synergistic bactericidal activity. *Mechanism of Action* • **Sulfamethoxazole**: Inhibits dihydropteroate synthase, blocking folic acid synthesis. • **Trimethoprim**: Inhibits **dihydrofolate reductase**, further blocking folate metabolism. • Together, they inhibit two consecutive steps in folate synthesis, leading to bacterial cell death. *Clinical Uses* • **Respiratory infections**: Pneumocystis jirovecii pneumonia (PCP).						

				• **Urinary tract infections (UTIs)**: First-line treatment. • **Gastrointestinal infections**: Shigellosis, Traveler's diarrhea (caused by *E. coli*). • **Nocardiosis** and toxoplasmosis (alternative to sulfonamides and pyrimethamine). *Adverse Effects* • Same as sulfonamides (hypersensitivity, hematologic effects, crystalluria). • **Trimethoprim-specific effects**: Hyperkalemia (due to potassium-sparing effects), megaloblastic anemia, leukopenia (due to folate deficiency). **Knowledge-Based Outcomes** 1. **Mechanisms of Action**: o Understand how sulfonamides and trimethoprim target bacterial folate synthesis. 2. **Spectrum of Activity**: o Recognize the broad spectrum of sulfonamides and the synergistic effects of Cotrimoxazole. 3. **Therapeutic Applications**:						

				○ Know the specific indications for sulfonamides and Cotrimoxazole, including bacterial, parasitic, and opportunistic infections. 4. **Adverse Effects**: ○ Identify common side effects and contraindications, including their use in neonates, pregnant women, and G6PD-deficient individuals. **Skill-Based Outcomes** 5. **Rational Drug Selection**: ○ Select appropriate sulfonamide or Cotrimoxazole therapy based on infection type, organism susceptibility, and patient factors. 6. **Therapeutic Monitoring**: ○ Monitor for clinical efficacy and adverse effects, including renal function, electrolyte levels, and signs of hypersensitivity. 7. **Drug Interactions**: ○ Manage potential						

				interactions, such as the displacement of warfarin or methotrexate by sulfonamides, increasing their toxicity. **Attitude-Based Outcomes** 8. **Patient Education**: o Counsel patients on the importance of hydration to prevent crystalluria and adherence to therapy to avoid resistance. 9. **Antimicrobial Stewardship**: o Avoid unnecessary use to reduce the development of resistance, particularly with Cotrimoxazole in Pneumocystis infections. 10. **Holistic Care**: • Consider patient comorbidities (e.g., renal impairment, G6PD deficiency) and adjust therapy accordingly.						
Hom UG-Mod.	Quinolones	K	Knowledge and scholarship	**Quinolones** *Definition*	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Medicine Physiology

Phar **4.10.2**				Quinolones are synthetic antibiotics that inhibit bacterial DNA replication by targeting DNA gyrase (topoisomerase II) and topoisomerase IV. **2. Mechanism of Action** 1. **DNA Gyrase Inhibition**: o Primarily in gram-negative bacteria, it prevents the unwinding of supercoiled DNA, which is essential for replication. 2. **Topoisomerase IV Inhibition**: o Predominantly in gram-positive bacteria, it interferes with the separation of replicated DNA strands during cell division. **3. Classification and Examples** *First-Generation Quinolones* • **Examples**: Nalidixic acid. • **Spectrum**: Limited to gram-negative bacteria. • **Use**: Uncomplicated urinary tract infections (UTIs).						

				Second-Generation Fluoroquinolones • **Examples**: Ciprofloxacin, Norfloxacin, Ofloxacin. • **Spectrum**: Broad spectrum, effective against gram-negative bacteria and some gram-positive organisms. • **Use**: UTIs, gastroenteritis, prostatitis, bone/joint infections. *Third-Generation Fluoroquinolones* • **Examples**: Levofloxacin. • **Spectrum**: Improved activity against gram-positive bacteria (e.g., Streptococcus pneumoniae). • **Use**: Respiratory tract infections (e.g., community-acquired pneumonia, bronchitis). *Fourth-Generation Fluoroquinolones* • **Examples**: Moxifloxacin, Gemifloxacin. • **Spectrum**: Broad spectrum, effective against anaerobes and atypical pathogens. • **Use**: Respiratory tract infections, intra-abdominal infections. **4. Adverse Effects**						

				1. **Gastrointestinal**: o Nausea, vomiting, diarrhea. 2. **Central Nervous System (CNS)**: o Headache, dizziness, insomnia, seizures (rare). 3. **Tendinopathy**: o Risk of tendonitis and Achilles tendon rupture, especially in older adults or those on corticosteroids. 4. **QT Prolongation**: o Particularly with moxifloxacin, leading to arrhythmias. 5. **Photosensitivity**: o Increased sensitivity to sunlight. 6. **Resistance Development**: o Widespread use has led to significant bacterial resistance. **6. Contraindications and Precautions** 1. **Pregnancy and Breastfeeding**: o Contraindicated due to potential cartilage damage in the fetus or neonate. 2. **Children (<18 years)**: o Avoid unless benefits outweigh risks (e.g.,						

				severe infections like anthrax). 3. **Drug Interactions**: o Antacids, iron, and calcium reduce absorption. Increased risk of seizures with NSAIDs or theophylline. *Knowledge-Based Outcomes* 1. **Mechanisms of Action**: o Explain how quinolones inhibit bacterial DNA synthesis by targeting DNA gyrase and topoisomerase IV. 2. **Spectrum of Activity**: o Differentiate between generations and their bacterial targets (e.g., gram-negative, gram-positive, atypicals). 3. **Therapeutic Uses**: o Identify clinical conditions where quinolones are first-line or alternative treatments. 4. **Adverse Effects**: o Recognize side effects and the patient populations at higher risk. *Skill-Based Outcomes*						

				5. **Rational Drug Selection**: o Prescribe appropriate quinolones based on infection type, bacterial susceptibility, and patient factors. 6. **Therapeutic Monitoring**: o Monitor for adverse effects such as tendinopathy, QT prolongation, or photosensitivity. 7. **Resistance Management**: o Avoid overuse or inappropriate prescribing to minimize antimicrobial resistance. *Attitude-Based Outcomes* 8. **Patient Counseling**: o Educate patients on proper usage, adherence, and the need to avoid direct sunlight. 9. **Ethical Prescribing**: o Limit use to infections where quinolones are clearly indicated, reducing unnecessary exposure.						

				10. **Safety Awareness**: • Prioritize patient safety by considering contraindications and drug interactions. **8. Clinical Pearls** • Ciprofloxacin is highly effective for UTIs and gastrointestinal infections but has limited activity against gram-positive cocci. • Levofloxacin and moxifloxacin are preferred for respiratory infections due to better activity against *S. pneumoniae*. • Resistance is a growing concern; restrict use to confirmed or strongly suspected bacterial infections.						
Hom UG-Mod. Phar **4.10.3**	Beta Lactam Antibiotics	K	Knowledge and scholarship	*Penicillins* • **Natural Penicillins**: Penicillin G, Penicillin V. ○ Spectrum: Gram-positive bacteria (*Streptococcus spp.*, *Treponema pallidum*). • **Penicillinase-Resistant Penicillins**: Methicillin, Nafcillin, Oxacillin. ○ Spectrum:	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Medicine Physiology

				Penicillinase-producing *Staphylococcus aureus*. • **Aminopenicillins**: Amoxicillin, Ampicillin. o Spectrum: Broader gram-negative activity (e.g., *E. coli*, *H. influenzae*). • **Extended-Spectrum Penicillins**: Piperacillin, Ticarcillin. o Spectrum: Includes *Pseudomonas aeruginosa*. *2. Cephalosporins* • Classified into five generations: o **1st Generation**: Cefazolin, Cephalexin (Gram-positive activity). o **2nd Generation**: Cefuroxime (Broader gram-negative coverage). o **3rd Generation**: Ceftriaxone, Ceftazidime (Expanded gram-negative activity, some penetrate CNS). o **4th Generation**: Cefepime						

				(*Pseudomonas* coverage). ○ **5th Generation**: Ceftaroline (*MRSA* coverage). *3. Carbapenems* • Examples: Imipenem, Meropenem, Ertapenem. • Spectrum: Broadest among beta-lactams, covering gram-positive, gram-negative, and anaerobes. *4. Monobactams* • Example: Aztreonam. • Spectrum: Gram-negative aerobes, including *Pseudomonas*. *5. Beta-Lactamase Inhibitors* • Examples: Clavulanic acid, Sulbactam, Tazobactam. • Used in combination with beta-lactams to inhibit bacterial beta-lactamase enzymes. **4. Clinical Applications** *Gram-Positive Infections* • Penicillin: *Streptococcus*,						

				Enterococcus, *Listeria*. • Cephalosporins (1st generation): Skin infections caused by *Staphylococcus aureus*. *Gram-Negative Infections* • Aminopenicillins: *H. influenzae*, *E. coli*. • Cephalosporins (3rd and 4th generations): Severe gram-negative infections. • Carbapenems: ESBL-producing organisms. *Anaerobic Infections* • Carbapenems and penicillins with beta-lactamase inhibitors. *Special Cases* • Meningitis: Ceftriaxone or Cefotaxime (good CNS penetration). • *Pseudomonas* infections: Piperacillin-tazobactam, Ceftazidime, Cefepime. MRSA: Ceftaroline. *Knowledge-Based Outcomes*						

				1. **Mechanism of Action**: o Understand how beta-lactams inhibit bacterial cell wall synthesis. 2. **Spectrum of Activity**: o Differentiate between various classes and their antibacterial coverage. 3. **Resistance Mechanisms**: o Recognize common mechanisms of resistance and strategies to overcome them. 4. **Adverse Effects**: o Identify common and serious side effects associated with beta-lactams. *Skill-Based Outcomes* 5. **Rational Drug Selection**: o Prescribe appropriate beta-lactams based on infection type, organism susceptibility, and patient-specific factors. 6. **Therapeutic Monitoring**: o Monitor for signs of efficacy and toxicity, including hypersensitivity and						

				GI disturbances. 7. **Combination Therapy**: o Use beta-lactamase inhibitors appropriately to enhance the efficacy of beta-lactam antibiotics. *Attitude-Based Outcomes* 8. **Antimicrobial Stewardship**: o Avoid unnecessary or prolonged use to reduce resistance development. 9. **Patient Education**: o Counsel patients on completing the course of antibiotics and recognizing signs of adverse effects. 10. **Ethical Prescribing**: • Balance effective treatment with the need to minimize resistance and preserve antibiotics for future use. **8. Clinical Pearls** • Cephalosporins have a **generation-specific spectrum**, with newer generations covering more gram-negative organisms. • Carbapenems are **last-resort**						

				antibiotics, reserved for multidrug-resistant infections. • Avoid beta-lactams in patients with a history of **severe hypersensitivity** reactions. • Combining beta-lactams with beta-lactamase inhibitors significantly broadens their spectrum against resistant bacteria.						
Hom UG-Mod. Phar **4.10.4**	Tetracyclines, Chloramphenicol	K	Knowledge and scholarship	**Tetracyclines** **Mechanism of Action** Tetracyclines inhibit bacterial protein synthesis by binding to the **30S ribosomal subunit**, preventing the attachment of aminoacyl-tRNA to the mRNA-ribosome complex. This action halts bacterial growth, making them bacteriostatic. **Classification and Examples** 1. **Short-acting**: Tetracycline. 2. **Intermediate-acting**: Demeclocycline. 3. **Long acting**: Doxycycline, Minocycline. **Clinical Uses** 1. **Respiratory Infections**: o Atypical pathogens (*Mycoplasma*						

				pneumoniae, *Chlamydia pneumoniae*). 2. **Zoonotic Infections**: o Rickettsial diseases (e.g., Rocky Mountain spotted fever), Lyme disease (*Borrelia burgdorferi*). 3. **Sexually Transmitted Infections**: o Chlamydia, syphilis (alternative to penicillin). 4. **Acne**: o Long-term therapy for severe acne. 5. **Malaria Prophylaxis**: o Doxycycline. **Adverse Effects** 1. **Gastrointestinal**: o Nausea, vomiting, diarrhea. 2. **Photosensitivity**: o Increased sensitivity to sunlight. 3. **Teeth Discoloration**: o Avoid in children <8 years and pregnant women. 4. **Hepatotoxicity**: o Rare but severe in high doses. 5. **Fanconi Syndrome**: o Result of using						

				expired tetracycline. **Resistance Mechanisms** 1. **Efflux Pumps**: o Actively expel tetracyclines from bacterial cells. 2. **Ribosomal Protection Proteins**: o Prevent tetracycline binding. **2. Chloramphenicol** **Mechanism of Action** Chloramphenicol inhibits bacterial protein synthesis by binding to the **50S ribosomal subunit**, preventing peptide bond formation during translation. This action is primarily bacteriostatic but may be bactericidal at high concentrations against certain pathogens. **Clinical Uses** 1. **Serious Infections**: o Meningitis (*Haemophilus influenzae*, *Neisseria meningitidis*). o Typhoid fever (*Salmonella typhi*). 2. **Rickettsial Infections**: o Alternative for						

				tetracyclines in pregnant women or children. 3. **Topical Use**: o Eye infections (conjunctivitis). **Adverse Effects** 1. **Bone Marrow Suppression**: o Reversible suppression (dose-dependent). o Aplastic anemia (idiosyncratic and potentially fatal). 2. **Gray Baby Syndrome**: o In neonates due to immature liver enzymes, leading to toxicity. 3. **Gastrointestinal**: o Nausea, vomiting, diarrhea. **Resistance Mechanisms** 1. **Chloramphenicol Acetyltransferase**: o Inactivates the drug via acetylation. 2. **Efflux Pumps**: *Reduce intracellular drug concentration.* *Knowledge-Based Outcomes*						

				1. **Mechanisms of Action**: o Explain how tetracyclines target the 30S ribosome and chloramphenicol targets the 50S ribosome to inhibit protein synthesis. 2. **Spectrum of Activity**: o Recognize their broad-spectrum activity, covering gram-positive, gram-negative, atypical, and intracellular pathogens. 3. **Clinical Applications**: o Identify appropriate conditions for their use, such as rickettsial infections, typhoid fever, and acne. 4. **Adverse Effects**: o Understand the risks of bone marrow suppression, gray baby syndrome, and photosensitivity. *Skill-Based Outcomes* 5. **Rational Drug Selection**: o Select tetracyclines or chloramphenicol based on the infection type, pathogen						

				susceptibility, and patient factors. 6. **Therapeutic Monitoring**: o Monitor for toxicity, such as hepatotoxicity (tetracyclines) or bone marrow suppression (chloramphenicol). 7. **Resistance Management**: o Prescribe only when indicated to avoid resistance development. *Attitude-Based Outcomes* 8. **Antimicrobial Stewardship**: o Promote responsible use to prevent resistance. 9. **Patient Counseling**: o Educate patients on completing therapy, avoiding sunlight exposure (tetracyclines), and recognizing signs of adverse effects. 10. **Safety Considerations**: • Avoid use in vulnerable populations (e.g., pregnant women, neonates, and children) unless absolutely necessary.						

Hom UG-Mod. Phar **4.10.5**	Aminoglycosides	K		**Aminoglycosides Overview** **Mechanism of Action** • Aminoglycosides irreversibly bind to the **30S ribosomal subunit**, leading to: 1. Misreading of mRNA. 2. Production of defective proteins. 3. Disruption of bacterial cell membrane integrity, resulting in bactericidal activity. **Unique Feature** • Aminoglycosides exhibit a **concentration-dependent killing effect** and **post-antibiotic effect (PAE)**, meaning bacterial suppression continues even after drug levels drop below the minimum inhibitory concentration (MIC). Common Aminoglycosides **3. Clinical Applications** **1. Gram-Negative Infections** • Effective against						

				Enterobacteriaceae (e.g., *E. coli*, *Klebsiella*), *Pseudomonas aeruginosa*, and other gram-negative aerobes. **2. Combination Therapy** • Used synergistically with beta-lactams or glycopeptides for: 1. **Endocarditis**(*Enterococcus* spp., *Staphylococcus* spp.). 2. **Serious gram-positive infections** (e.g., MRSA). **3. Tuberculosis** • Streptomycin as a second-line agent. **4. Topical/Local Use** • Neomycin for skin infections. • Gentamicin in ophthalmic or otic preparations. **4. Adverse Effects** 1. **Ototoxicity** (Cochlear and Vestibular): o Irreversible damage to auditory and vestibular function. o Risk increases with prolonged therapy,						

				high doses, and renal impairment. 2. **Nephrotoxicity**: o Reversible renal tubular damage. o Risk factors include high trough levels, prolonged therapy, and co-administration with other nephrotoxic drugs. 3. **Neuromuscular Blockade**: Rare but can cause respiratory paralysis, especially in patients with myasthenia gravis. **Knowledge-Based Outcomes** 1. **Mechanism of Action**: o Explain how aminoglycosides disrupt bacterial protein synthesis by binding to the 30S ribosomal subunit. 2. **Spectrum of Activity**: o Recognize their primary activity against aerobic gram-negative bacteria and synergistic potential with other antibiotics. 3. **Pharmacokinetics**: o Understand their poor oral bioavailability, renal elimination, and concentration-						

				dependent killing. 4. **Adverse Effects**: o Identify key toxicities (ototoxicity, nephrotoxicity) and their risk factors. **Skill-Based Outcomes** 5. **Rational Prescribing**: o Select appropriate aminoglycosides based on infection type, pathogen susceptibility, and patient-specific factors. 6. **Therapeutic Monitoring**: o Use therapeutic drug monitoring (TDM) to maintain effective peak levels while minimizing toxic trough levels. 7. **Resistance Management**: o Apply appropriate combination therapy to minimize resistance. **Attitude-Based Outcomes** 8. **Patient-Centered Care**: o Educate patients on potential toxicities and monitor closely for early signs of adverse effects.						

				9. **Antimicrobial Stewardship**: o Avoid overuse or misuse of aminoglycosides aminoglycosides to prevent resistance and toxicity. 10. **Ethical Use**: • Reserve aminoglycosides for serious infections to preserve their efficacy. **Clinical Pearls** • Monitor renal function (serum creatinine, urine output) and auditory/vestibular function during therapy. • Avoid aminoglycosides in patients with pre-existing renal or auditory impairment unless absolutely necessary. • Use combination therapy for gram-positive infections to enhance efficacy and reduce resistance.						
Hom UG-Mod. Phar 4.10.6	Antitubercular drugs and Antileprosy drugs	K	Knowledge and scholarship	**Antitubercular Drugs** **Mechanism of Action and Classification** Antitubercular drugs are classified into **first-line** and **second-line agents** based on their efficacy, safety, and	C1	MK	Lecture, Group discussion	Quiz, Written test, MCQ	SAQ, MCQ	Medicine Physiology

				tolerability. *Second-Line Drugs* Used for multidrug-resistant TB (MDR-TB): • Fluoroquinolones (e.g., Levofloxacin, Moxifloxacin). • Aminoglycosides (e.g., Amikacin, Kanamycin). • Linezolid, Bedaquiline, Delamanid. **Clinical Uses** 1. **Active TB**: o Initial phase: Combination of 4 drugs (INH, RIF, PZA, EMB) for 2 months. o Continuation phase: Combination of 2 drugs (INH and RIF) for 4-7 months. 2. **Latent TB**: o Monotherapy (e.g., INH for 6-9 months) or combination (RIF + INH for 3 months). 3. **Drug-Resistant TB**: o Individualized regimens with second-line drugs. **Adverse Effects**						

				1. **Isoniazid**: Peripheral neuropathy (prevented with pyridoxine), hepatotoxicity. 2. **Rifampin**: Hepatotoxicity, red-orange body fluids, drug interactions (CYP inducer). 3. **Pyrazinamide**: Hyperuricemia, hepatotoxicity. 4. **Ethambutol**: Optic neuritis, reversible with discontinuation. 5. **Streptomycin**: Ototoxicity, nephrotoxicity. **Resistance Mechanisms** 1. Mutations in drug targets (e.g., katG for INH, rpoB for RIF). 2. Efflux pumps. 3. Enzymatic inactivation of drugs. **2. Antileprosy Drugs** **Mechanism of Action and Classification** Antileprosy drugs are used in combination therapy to prevent resistance and ensure effective eradication of *Mycobacterium leprae*. **Clinical Uses** 1. **Multibacillary Leprosy**						

				(MB): o Dapsone + Rifampin + Clofazimine for 12 months. 2. **Paucibacillary Leprosy (PB)**: o Dapsone + Rifampin for 6 months. 3. **Reactions in Leprosy**: o **Type I Reaction**: Use corticosteroids. o **Type II Reaction (Erythema Nodosum Leprosum)**: Use thalidomide or corticosteroids. **Adverse Effects** 1. **Dapsone**: Hemolysis (especially in G6PD deficiency), methemoglobinemia. 2. **Rifampin**: Hepatotoxicity, red-orange body fluids. **Clofazimine**: Skin pigmentation (reddish-brown), gastrointestinal symptoms. **Knowledge-Based Outcomes** 1. **Mechanisms of Action**: o Describe how antitubercular and antileprosy drugs target bacterial cell walls, protein						

				synthesis, and metabolic pathways. 2. **Drug Regimens**: o Understand standard treatment regimens for TB (e.g., DOTS strategy) and leprosy. 3. **Adverse Effects**: o Recognize potential toxicities and their prevention (e.g., pyridoxine for INH-induced neuropathy). 4. **Drug Resistance**: o Explain the mechanisms and management of drug-resistant TB. **Skill-Based Outcomes** 5. **Rational Prescribing**: o Prescribe appropriate combinations of drugs to avoid resistance and ensure efficacy. 6. **Monitoring**: o Monitor liver function (for hepatotoxicity), vision (ethambutol), and other toxicities during therapy. 7. **Public Health Implementation**: o Apply national TB control program						

				guidelines and strategies for leprosy eradication. **Attitude-Based Outcomes** 8. **Patient Education**: o Educate patients on the importance of adherence to long-term therapy to prevent resistance. 9. **Antimicrobial Stewardship**: o Promote the rational use of drugs in TB and leprosy management. 10. **Community Engagement**: Advocate for early diagnosis and treatment in endemic regions to reduce transmission.						
Hom UG-Mod. Phar **4.10.7**	Antimalarial drugs	K	Knowledge and scholarship	Classification of Antimalarial Drugs • Based on Mechanism of Action Blood Schizonticides Tissue Schizonticides Gametocides Sporontocides • Key Antimalarial Agents Chloroquine Artemisinin Derivatives Quinine/Quinidine						

				Mefloquine Primaquine Proguanil and Pyrimethamine Atovaquone **Clinical Applications** **Treatment of Malaria** 1. **Uncomplicated Malaria**: o *P. vivax* and *P. ovale*: Chloroquine + Primaquine. o *P. falciparum* (chloroquine-resistant): Artemisinin-based Combination Therapy (ACT). 2. **Severe Malaria**: o IV Artesunate is the drug of choice. o Alternatives: IV Quinine or Quinidine. 3. **Radical Cure**: o Primaquine or Tafenoquine to eradicate hypnozoites in relapsing malaria (*P. vivax* and *P. ovale*). **Prophylaxis of Malaria** 1. **Casual Prophylaxis** (prevents hepatic infection): Atovaquone-Proguanil.						

				2. **Suppressive Prophylaxis** (prevents blood-stage infection): Mefloquine, Doxycycline. **Drug-Resistant Malaria** • ACTs (e.g., Artemether-Lumefantrine, Artesunate-Mefloquine). **Mechanisms of Resistance** 1. **Chloroquine**: Mutations in the *PfCRT* (Plasmodium falciparum chloroquine resistance transporter) gene. 2. **Artemisinin**: Delayed parasite clearance due to mutations in the *K13* gene. 3. **Pyrimethamine/Proguanil**: Mutations in the dihydrofolate reductase (DHFR) enzyme Adverse Effects **Standard Learning Outcomes (SLO)** **Knowledge-Based Outcomes** 1. **Mechanisms of Action**: o Explain how antimalarial drugs target specific stages of the parasite lifecycle.						

				2. **Drug Selection**: o Describe first-line and alternative therapies for uncomplicated, severe, and relapsing malaria. 3. **Resistance Patterns**: o Understand mechanisms of resistance and how they influence therapy. 4. **Adverse Effects**: o Recognize common toxicities and preventive measures (e.g., testing for G6PD deficiency). **Skill-Based Outcomes** 5. **Rational Prescribing**: o Prescribe appropriate antimalarials based on species, resistance patterns, and patient factors. 6. **Monitoring and Safety**: o Monitor for adverse effects, such as QT prolongation and hemolysis. 7. **Preventive Strategies**: o Develop prophylactic regimens tailored to travel destinations						

				and patient risks. **Attitude-Based Outcomes** 8. **Patient Education**: o Counsel patients on the importance of adherence to treatment to prevent resistance. 9. **Global Health Awareness**: o Advocate for malaria prevention and treatment programs in endemic regions. 10. **Antimicrobial Stewardship**: Use antimalarials judiciously to avoid resistance development						

HomUG-Mod.Phar– 4.11 (Miscellaneous)

Sl.No	Duration of Competency	Miller	Content	Specific Learning Objectives	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom UG-Mod.	Disinfectants,	K	Knowledge and scholarship	**Classification of Disinfectants** **Based on Chemical Composition**						

Phar **4.11.1**				Ethanol/Isopropanol Sodium Hypochlorite Glutaraldehyde Hydrogen Peroxide Quaternary Ammonium Compounds **Mechanism of Action** • **Targeting Microbial Structures**: Disinfectants act on cell walls, membranes, or intracellular components to inhibit or kill microbes. • **Broad-Spectrum Activity**: Effective against bacteria, viruses, fungi, and spores (depending on the type and concentration). Commonly Used Disinfectants and Applications **Principles of Disinfectant Use** **Selection Based on Purpose** 1. **High-Level Disinfection**: Required for medical instruments that contact mucous membranes (e.g., glutaraldehyde, peracetic acid). 2. **Intermediate-Level Disinfection**: For surfaces that come in						

				contact with intact skin (e.g., alcohols, chlorine compounds). 3. **Low-Level Disinfection**: Suitable for general cleaning of floors, walls, and furniture (e.g., QACs). **Concentration and Contact Time** • **Alcohols**: Effective at 60–90%, with optimal contact time of 10–15 minutes. • **Sodium Hypochlorite**: Typically used in 0.1–0.5% solutions for surface disinfection. • **Hydrogen Peroxide**: Usually applied in 3% solutions for general use. Adverse Effects and Precautions **Standard Learning Outcomes (SLO)** **Knowledge-Based Outcomes** 1. **Classification**: o Categorize disinfectants based on chemical composition and use. 2. **Mechanism of Action**: o Explain how disinfectants kill or inhibit microbes. 3. **Application**:						

				- Recognize the appropriate disinfectant for specific situations (e.g., surgical instruments vs. general surfaces).
				
				Skill-Based Outcomes
				
				4. **Preparation**:
				  - Demonstrate correct preparation and dilution of disinfectants.
				5. **Application Techniques**:
				  - Apply disinfectants effectively to achieve optimal microbial control.
				6. **Monitoring**:
				  - Evaluate the effectiveness of disinfection and identify potential failures.
				
				Attitude-Based Outcomes
				
				7. **Judicious Use**:
				  - Encourage responsible use of disinfectantsdisinfectants to prevent resistance and environmental harm.						

				8. **Safety Practices**: Adhere to safety guidelines to protect users and patients.						
Hom UG-Mod. Phar **4.11.2**	Vitamins	K	Knowledge and scholarship	Vitamins Classification and Sources Fat-Soluble 1. Deficiency Disorders Vitamin A Vitamin D Vitamin E Vitamin K Vitamin C B-complex **Supplementation Principles** • **Deficiency-Based**: Supplementation is used to address deficiencies. • **Therapeutic Use**: High-dose vitamins for specific conditions (e.g., Vitamin D for osteoporosis). **Safety Considerations**: Avoid hypervitaminosis, particularly for fat-soluble vitamins.						

				Knowledge-Based Outcomes 1. Understand the role of vitamins in metabolism and disease prevention. 2. Identify deficiency disorders and their management. **Skill-Based Outcomes** 1. Prescribe appropriate vitamin supplements for specific needs. 2. Educate patients about dietary sources of vitamins. **Attitude-Based Outcomes** 1. Promote balanced nutrition to prevent deficiencies. Encourage responsible use of vitamin supplements.						

6.Teaching Learning Methods

- Lectures (including AV aid), Small group discussion, Integrated lectures, Library reference, Self directed learning etc.
- While lectures can provide a foundation, they shouldn't be the sole method Incorporate active learning strategies such as engage students through case studies, problem-based learning (PBL). PBL challenges students to solve real-world scenarios.
- Utilize online resources, explore online learning modules, simulations, and interactive quizzes to reinforce concepts at the student's pace.

7. Details of assessment

7.1. Overall Scheme of Assessment (Summative)

Sr. No	Professional Course	Term I (1-6 Months)		Term II(7-12 Months)		
1	Third Professional BHMS	PA I (end of 3 months)	TT I (end of 6 months)	PA II (end of 9 months)	FUE (end of 12 months)	
		05 Marks Viva	25 Marks Viva voce	05 Marks Viva	50 marks theory	50 marks (Viva+ IA)

PA: Periodical Assessment; TT: Term Test; FUE: Final University Examinations; IA: Internal Assessment

7.2.Number of papers and Marks Distribution for Final University Examination (FUE)

Sr. No.	Course Code	Papers	Theory	Viva Voce	Internal Assessment*	Grand Total
1	Hom.UG-Mod. Phar-I	01	50 marks	40 marks	10 marks (Marks of PA I + TT I + PA II)	100 marks

***Method of Calculation of Internal Assessment Marks for Final University Examination:**

Marks of IA- **(**Marks of PA-1 + Marks of TT + Marks of PA-2) / 35 X 10

7.3.Paper Layout
Summative assessment (FUE):
Theory- 50 marks

MCQ	**5 marks (5 questions each of 1mark)**
SAQ	**15 marks (3 questions each of 5 marks)**
LAQ	**30marks (3 questions each of 10 marks)**

7.4.Theme-wise distribution of questions for theory paper:

Theme	Topics	Marks	MCQ's	SAQ's	LAQ's
A	Introduction to Pharmacology	2	02	0	0
B	Pharmacokinetics	5	0	01	0
	Pharmacodynamics				
C	ANS and Autacoids	10	0	0	01
D	NSAID	2	02		
	CNS	10	0	0	01
	Respiratory system				
F	Renal system	1	01	0	0
G	Blood	5		01	
H	GIT	10	0	0	01
I	Hormones	5	0	01	0
	CVS				
	Chemotherapy				
	Miscellaneous				
	Total	50	05	03	03

7.5.Question paper blueprint

A Question Serial Number	B Type of Question	Question Paper Format (Refer Table 2 for themes)
Q.1	Multiple choice Questions (MCQ) 5 Questions 1 mark each All compulsory	Theme A Theme D Theme F
Q.2	Short Answer Questions (SAQ) 3 Questions 5 marks each All compulsory	Theme B Theme G Theme I
Q.3	Long Answer Questions (LAQ) 3 Questions 10 marks each All compulsory	Theme C Theme E Theme H

8. List of recommended Books

- Rang & Dale's Pharmacology
- Goodman & Gilman's The Pharmacological Basis of Therapeutics
- K.D. Tripathi – Essentials of Medical Pharmacology
- Katzung's Basic & Clinical Pharmacology

9. List of contributors :

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COMPETENCY BASED DYNAMIC CURRICULUM FOR

THIRD BHMS PROFESSIONAL COURSE

(Applicable from Batch 2022-2023 onwards for 5 years or until further notification by National Commission for Homoeopathy whichever is earlier)

(Surgery)

HOMOEOPATHY EDUCATION BOARD

NATIONAL COMMISSION FOR HOMOEOPATHY

MINISTRY OF AYUSH, GOVERNMENT OF INDIA

JAWAHAR LAL NEHRU BHARTIYA CHIKITSA AVUM HOMOEOPATHY ANUSANDHAN BHAVAN

No.61-65, Institutional Area, opp. 'D' block, Janak Puri, New Delhi-110 058

Subject name – Surgery

Subject code – HomUG-Sur-II

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1. Preamble

Surgery addresses acute and chronic injuries, deformities, and diseases that require physical intervention through the removal, repair, or reconstruction of specific organs or tissues. Specialties such as ENT, Ophthalmology, Dentistry, and Orthopaedics have gained prominence, alongside super specialties like Cardiac Surgery, Neurosurgery, and Oncosurgery. While homeopathic physicians are limited in performing surgical procedures, they must possess foundational knowledge of surgery to appropriately identify surgical cases, determine their scope, and understand their limitations. This knowledge equips the physician to diagnose surgical diseases accurately, identify early complications, and refer patients to higher centres when necessary. Moreover, this understanding aids in administering effective first aid and providing comprehensive care.

Experience demonstrates that Homeopathy can play a significant role in preventing certain surgical procedures when evolving conditions are diagnosed early and the similimum is administered at the appropriate time. Homeopathic physicians can utilize their training to manage early stages of conditions conservatively, thereby potentially avoiding invasive interventions. Additionally, they can judiciously use homeopathic medicines to alleviate symptoms, enhance recovery, and prevent complications. Ancillary management strategies, including proper hygiene, dietary advice, and physical support, further improve patient outcomes.

A thorough understanding of pathology is essential to accurately evaluate the state and stage of a disease. Knowledge of pathological processes enables homeopathic students to identify critical symptoms and signs, aiding in the early detection of complications and timely referrals to specialists. Incorporating the Hahnemannian classification of disease in the curriculum bridges surgical conditions with the fundamental tenets of homeopathic philosophy. Concepts such as chronic disease and susceptibility guide the application of correct posology and individualized treatment plans, ensuring effective and safe management. By understanding these principles, students learn to balance modern medical diagnostics with homeopathic therapeutic approaches.

The education and training of homeopathic students must include the management of surgical cases, integrating both modern medical approaches and the principles outlined in the Organon of Medicine. Training in surgical conditions enhances the physician’s ability to provide first aid effectively in emergencies, such as controlling bleeding, stabilizing fractures, and managing wounds. Homeopathic principles can also complement modern medicine by promoting natural healing, reducing inflammation, and improving post-surgical recovery. Additionally, students should be trained to advise on accessory measures such as physiotherapy, wound care, and dietary modifications, ensuring holistic management.

Advanced knowledge of homeopathic principles and a precise understanding of the Materia Medica can expand the application of homeopathy to a range of acute and chronic surgical conditions previously considered beyond its scope. This includes managing post-surgical complications, alleviating pain, and enhancing recovery. The integration of homeopathic therapeutics with modern surgical knowledge fosters a comprehensive approach, allowing the physician to play a supportive role in multidisciplinary care teams.

In conclusion, the integration of homeopathic philosophy with surgical knowledge equips the homeopathic physician to address surgical cases comprehensively. This training enhances their ability to diagnose and manage surgical conditions effectively, refer cases promptly when necessary, provide first aid, and utilize homeopathy judiciously. Such an approach ultimately contributes to delivering effective and holistic patient care.

2. Course outcomes (CO)–

At the end of III BHMS students shall able to

i) Understand the Management of Complex Surgical Cases

ii) Integrate Surgical Specialties with Pathological Principles

iii) Synthesize Homoeopathic and Surgical Concepts of Causation and Disease Expression

iv) Apply miasmatic Understanding to Surgical Cases. Analyse surgical cases through a miasmatic framework, utilizing homoeopathic philosophy to provide a comprehensive understanding and management of the disease process.

v) Correlate Patient Susceptibility with Posology in Surgical Management. Evaluate the relationship between a patient's susceptibility and the dosage (posology) of homoeopathic remedies, ensuring individualized and precise therapeutic interventions.

vi) Differentiate Remedies Based on Pathogenesis. Develop advanced skills in studying and differentiating homoeopathic remedies based on their pathogenesis to enhance treatment outcomes in surgical cases.

vii) Promote ancillary Measures and Patient Education for Improved Outcomes. Recognize the role of supportive measures and patient education in improving clinical outcomes, including post-operative recovery and long-term health maintenance.

viii) Address post-surgical complaints, complications, and their sequelae using Homoeopathic principles to support holistic recovery, alleviate post-operative issues, and improve the quality of life through comprehensive and integrative care.

ix) Evaluate and Manage Surgical Complications and Sequelae. Assess and address surgical complications and their sequelae through homoeopathic interventions, ensuring comprehensive and integrative patient care.

x) Provide Preventive Counselling and Emphasize Regular Screenings. Counsel patients on preventive strategies, the importance of regular health screenings, and appropriate management pathways to promote early detection and prevent disease progression.

xi) Deliver empathetic and comprehensible education to patients, enhancing their understanding of diagnoses, therapeutic options, and the importance of follow-up care for sustained health outcomes.

3. **Learning objectives (LO)-**

i. Understand the fundamental principles of diagnostic and therapeutic approaches for surgical and medical conditions.

ii. Demonstrate the ability to integrate knowledge of anatomy, pathology, surgery, and medicine to analyse complex clinical scenarios.

iii. Identify clinical signs and symptoms of surgical diseases through comprehensive history-taking and physical examination.

iv. Differentiate between conditions based on clinical findings, imaging results, and laboratory investigations with accuracy.

v. Conduct systematic and focused examinations for specific conditions such as breast lumps, abdominal masses, or dysphagia.

vi. Analyse patient presentations and correlate clinical findings to formulate accurate differential diagnoses.

vii. Interpret diagnostic results, including imaging studies, endoscopic findings, and biopsy reports, to guide clinical decision-making.

viii. Evaluate the effectiveness of treatment strategies and make necessary modifications to optimize patient outcomes.

ix. Effectively communicate examination findings and management plans to peers, the healthcare team, and patients.

x. Counsel patients on preventive measures, regular screening, and appropriate management strategies for various conditions.

xi. Educate patients about their diagnosis, treatment options, and follow-up care in an empathetic and comprehensible manner.

xii. Uphold ethical principles in patient interactions, ensuring respect, confidentiality, informed consent, and professionalism.

xiii. Apply theoretical concepts to practical situations, enhancing diagnostic and therapeutic decision-making in clinical practice.

xiv. Recognize the role of Homoeopathy in managing surgical cases and its integration with conventional medical approaches.

xv. Prescribe homoeopathic remedies based on a comprehensive understanding of pathogenesis and differentiation of remedies.

xvi. Identify red flag signs and symptoms and ensure timely referral of patients to specialized centres for advanced management.

xvii. Apply first aid principles effectively in emergency situations requiring immediate intervention.

xviii. Utilize homoeopathic medicines appropriately in pre-surgical preparation and post-surgical recovery phases.

xix. Use of Repertories and Materia Medica tools to identify the similimum in surgical cases, whenever indicated

xx. Incorporate the miasmatic background of surgical conditions through the integration of homoeopathic philosophy, enhancing the overall management of surgical pathologies

4. Course content and its term-wise distribution

Sl. No.	Topic
	Term I
1.	Diseases of Blood vessels and nerves – Arteries. Veins, Lymphatics & Peripheral nerves
2.	Diseases of Alimentary tract – Palate, cheek, Tongue, Floor of mouth, Oesophagus, Peritoneum, Retroperitoneal space, stomach and Duodenum, Small intestine, large intestine, Rectum and Anal canal
3.	Diseases of Liver, Gallbladder, Bile duct, Pancreas and Spleen
4.	Orthopedics
	Term II
5.	Diseases of Thorax, Heart and Pericardium
6.	Diseases of Urogenital system – Kidney, Urinary Bladder, Prostate, Urethra, Penis, Scrotum, Testes
7.	ENT, Thyroid and other Neck swellings
8.	Diseases of Breast
9.	Ophthalmology

10.	Dentistry

5. Teaching hours

5.1. Gross division of teaching hours

Surgery		
Year	**Teaching hours- Lectures**	**Teaching hours- Non-lectures**
III BHMS	120	100

5.2. Teaching hours theory

Sl. No.	**Topic**	**Teaching hours**
1.	Diseases of Blood vessels and nerves – Arteries. Veins, Lymphatics & Peripheral nerves	10
2.	Diseases of Alimentary tract – Palate, cheek, Tongue, Floor of mouth, Oesophagus, Peritoneum, Retroperitoneal space, stomach and Duodenum, Small intestine, large intestine, Rectum and Anal canal	20
3.	Diseases of Liver, Gallbladder, Bile duct, Pancreas and Spleen	7
4.	Diseases of Thorax, Heart and Pericardium, Breast	10
5.	Diseases of Urogenital system – Kidney, Urinary Bladder, Prostate, Urethra, Penis, Scrotum, Testes	20
6.	ENT, Thyroid and other Neck swellings	16
7.	Orthopedics	22

8.	Ophthalmology	10
9.	Dentistry	5
Total		**120**

5.3. Teaching hours Non-lecture

Sl. No	**Non-Lecture Activity -Clinical /Practical** **Total Time Allotted: 70 hours**	**Term**
1	Clinical examination of Gangrene	I
2	Clinical examination of the varicose vein	I
3	Clinical examination of the Lymphatic system	I
4	Clinical examination of the lesion of peripheral nerves.	I
5	Clinical examination of the Oral cavity/Tongue/Salivary Glands	I
6	Examination of a case of Dysphagia	I
7	Counselling patients with peptic ulcer on lifestyle modifications	I
8	Clinical examinations to identify signs of appendicitis	I
9	Clinical examination – Acute Abdomen /Chronic abdomen	I
10	Examination of Rectal case	I
11	Examination of abdominal lump	I
12	Examination of liver & Gall Bladder	I

13	Clinical Examination of spleen	I
14	Clinical examination of a case of low back pain	I
15	Clinical examination for shoulder injuries, and assess for humerus fractures	I
16	Clinical examination for upper limb injuries	I
17	Clinical examination to assess for pelvic fracture, including inspection, palpation, and stability tests	I
18	Clinical examination to assess for fracture of the neck of femur	I
19	Clinical examination of the knee joint	I
20	Clinical examination of the leg, ankle, and foot	I
21	Clinical examination of the spine	I
22	Clinical examination for traumatic paraplegia	I
23	Observe/ Perform emergency care of fractures, including immobilization techniques (e.g., splinting), managing open fractures (e.g., wound dressing), and assessing for neurovascular injury	I
24	Clinical examination to assess for pelvic fracture, including inspection, palpation, and stability tests	I
25	Clinical examination to assess for fracture of the neck of femur	I
26	Patient education and counselling on BOO management, including lifestyle modifications	II
27	Examination of urinary case	II
28	Urethral catheterisation	II
29	Examination of inguinoscrotal swelling	II
30	Examination of groin swelling	II

31	Examination of scrotal swelling	II
32	Examination of penis	II
33	Examination of disease of chest	II
34	Ear examination	II
35	Examination of case of Deafness	II
36	Examination of the case of Vertigo	II
37	Examination of Nose: Anterior Rhinoscopy & Posterior Rhinoscopy & paranasal sinus	II
38	Examination of Pharynx	II
39	Examination of Larynx	II
40	Examination of the thyroid gland	II
41	Examination of Neck swelling	II
42	Breast examination	II
43	Examination of Teeth and Gums	II
44	Examination of Eye/Vision – Visual acuity and Colour vision	II
Sl. No	**Non-Lecture Activity** **Demonstrative- Skill lab/Simulation training/Role play/ Seminar/Tutorial/Assignment** **Total Time Allotted: 30 hours**	**Term**
1	Case-based/problem based discussions	I/II

2	Observe/Perform ICD on a mannequin	II
3	Perform /Observe pericardiocentesis under supervision	II
4	X- ray, Instruments and Surgical items for demonstration	II
5	Seminars	I/II
6	Tutorials	I/II
7	Assignments	II
10	Role play	I /II

6. Content mapping (competencies tables)

.

Topic: Hom UG-Sur II – 1. Diseases of Transporting channels – Arteries, Veins, Lymphatics and Peripheral nerves -

Arterial System

Sl No	Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-II-1.1	**KS**	**K**	**Disease of Arteries**	Describe Cause, Effects, pathology, symptoms and signs of lower limb arterial stenosis or occlusion	**C/2**	MK	Lecture Audiovisual mode	Viva	MCQ SAQ	**Pathology**
	PBL	**KH**		Discuss the investigations indicated in arterial stenosis – doppler ultrasound, angiography	C/1	DK	Audiovisual Skill lab Simulation			

	KS	**K**		Discuss management of arterial occlusion – transluminal angioplasty & stenting & Bypass	C/1	NK				
Hom UG-Sur-II-1.2	**KS** **PBL** **HO**	**K** **KH** **KH**	Gangrene	Define Gangrene Describe types of gangrene Discuss management of gangrene Demonstrate clinical examination of Gangrene Discuss homoeopathic treatment for Gangrene	C/2 C/2 C/1 P/2 C/2	MK MK DK MK MK	Lecture Audiovisual mode Skill lab Simulation Case based clinical discussion OSCE	Viva	MCQ SAQ LAQ OSCE	**Pathology** **Materia Medica Repertory**
Hom UG-Sur-II-1.3	**KS**	**K**	Acute arterial occlusion	Discuss Types and causes of acute arterial occlusion Describe management of acute arterial occlusion Discuss homoeopathic treatment for acute arterial occlusion	C/1 C/1 C/1	DK DK DK	Lecture Audiovisual mode	Viva	MCQ SAQ	**Pathology**
Hom	**KS**	**K**	Amputation	Discuss types and	C/1	DK	Lecture	Viva	MCQ	**Anatomy**

UG-Sur-II-1.4				indication of amputation			Audiovisual mode		SAQ	
Hom UG-Sur-II-1.5	**KS** **HO**	**K** **KH**	Aneurysm	Define Aneurysm Discuss Classification, types, investigations in Aneurysm Discuss management for Aneurysm Discuss homoeopathic treatment for Aneurysm	C/2 C/2 C/1	MK NK MK	Lecture Audiovisual mode	Viva	MCQ SAQ	**Pathology**
Hom UG-Sur-II-1.6	**KS**	**K**	Arteritis &Vasospastic condition	Describe Cause, symptoms, investigation in Thrombo-angiitis obliterans (Buerger's disease), Raynaud's disease Discuss management of Burger's disease & Raynaud's disease	C/2 C/2	MK NK	Lecture Audiovisual mode	Viva	MCQ SAQ	
Hom UG-Sur-II-1.7	**KS** **HO**	**K** **KH**	Embolism	Discuss definition, aetiology, types, clinical sign and symptoms, investigation of Embolism Describe management of embolism Discuss homoeopathic	C/2 C/1 C/2	MK NK MK	Lecture Audiovisual mode	Viva	MCQ SAQ	**Pathology** **Materia**

				treatment of the Embolism						**Medica Repertory**
Hom UG-Sur-II-1.8	**KS** **HO**	**K** **KH**	Thrombosis	Discuss definition, Aetiology, types, symptoms, investigation of thrombosis Describe management of Thrombosis Discuss homoeopathic treatment of the thrombosis.	C/2 C/1 C/2	MK MK MK	Lecture Audiovisual mode	Viva	MCQ SAQ	**Pathology** **Materia Medica Repertory**

Venous system

Sl No	Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-II-1.9	**KS** **PBL**	**K** **SH**	**Disease of Veins** **Varicose Vein**	Describe Anatomy of veins Discuss pathophysiology of venous disease Describe Epidemiology, classification, clinical features of varicose vein Demonstrate the physical examination of the varicose vein	**C/2** C/1 P/1	**MK** MK MK	Lecture Audiovisual mode Skill lab Simulation Cased based clinical discussion and demonstration OSCE Integrated teaching	Viva	MCQ SAQ OSCE	**Pathology**

	PBL **HO**	**KH** **K**		Discuss the investigations indicated in varicose vein disease – ultrasound Discuss management of Varicose vein Discuss homoeopathic treatment for the varicose vein	C/2 C/1 C/2	MK NK MK				**Repertory** **Materia Medica**
Hom UG-Sur-II-1.10	**KS** **PBL** **KS** **K** **HO** **KH**	**K** **KH**	**Venous thrombosis, DVT**	Describe aetiology, pathology, clinical features and diagnosis of Venous Thrombosis, DVT Describe Investigations indicated for the venous thrombosis, DVT Discuss management of Venous thrombosis, DVT Discuss homoeopathic treatment for the venous thrombosis, DVT	C/2 C/2 **C/2** **C/2**	MK NK NK MK	Lecture Audiovisual mode	Viva	MCQ SAQ	**Pathology** **Materia Medica** **Repertory**
Hom	**KS**	**K**	**Leg Ulcer**	Describe aetiology,	C/2	MK	Lecture	Viva	MCQ	**Pathology**

UG-Sur-II-1.11				pathology, clinical features and diagnosis of Leg Ulceration			Audiovisual mode		SAQ	
	PBL	**KH**		Describe Investigations indicated for the Leg Ulceration	C/2	NK				
	KS	**K**		Discuss management of Leg Ulceration	**C/2**	NK				
	HO	**KH**		Discuss homoeopathic treatment for the Leg Ulceration	**C/2**	MK				**Materia Medica Repertory**

Lymphatic system

Sl No	**Competency**	**Miller**	**Content**	**SLO**	**Bloom/ Guilbert**	**Priority**	**TL MM**	**Assessment**		**Integration**
								F	**S**	
Hom UG-Sur-II-1.12	**KS**	**K**	**Disease of Lymphatics**	Describe Anatomy of Lymphatics and lymph node Discuss pathophysiology of Lymphatics Describe Epidemiology, classification, clinical features, management of acute lymphangitis	**C/2** C/1	MK MK	Lecture Audiovisual mode Skill lab Simulation OSCE Cased based clinical discussion and demonstration Integrated teaching	Viva	MCQ SAQ	**Pathology**

		K		Describe definition, aetiology, types, pathology, clinical sign and symptoms of Lymphoedema	C/2	MK				
	KS	**SH**		Demonstrate the physical examination of the Lymphatic system	P/1	MK			OSCE	
		KH		Discuss the investigations indicated in Lymphoedema: USG, CT, MRI, Lymphangiography	C/2	NK				
		K		Discuss management of Lymphoedema	C/1	NK				**Repertory Materia Medica**
		KH		Discuss homoeopathic treatment for the Lymphoedema	C/2	MK				
		K		Describe Cause, clinical features and diagnosis of	C/1	NK				

				Filariasis						
		KH		Discuss Management of Filariasis	C/1	NK				**Repertory Materia Medica**
	HO			Describe homoeopathic medicines of filariasis	C/1	MK				
Hom UG-Sur-II-1.13	**KS**	**K**		Discuss various types of acute and chronic lymphadenitis	**C/1**	**MK**	Lecture Audiovisual mode	Viva	MCQ SAQ	
	HO	**KH**		Discuss homoeopathic treatment of acute and chronic lymphadenitis						**Repertory Materia Medica**
Hom UG-Sur-II-1.14	**KS**	**K**		Describe definition, types of reticuloses	**C/1**	**DK**	Lecture Audiovisual mode	Viva	MCQ SAQ	
Hom UG-Sur-II-1.15	**KS**	**K**		Describe pathology, clinical features, staging, investigations in Hodgkin's disease	**C/1**	**DK**	Lecture Audiovisual mode	Viva	MCQ SAQ LAQ	
	KS	**K**		Describe pathology, clinical features, investigation in Non hodgkin's lymphoma	**C/1**	**DK**				
	KS	**K**		Discuss pathology and clinical features for the Burkitt tumor	**C/1**	**NK**				

	HO	**KH**		Discuss homoeopathic treatment for the Reticulosis, Hodgkin's lymphoma and non Hodgkin's lymphoma, Burkitt tumor	**C/2**	**DK**				**Repertory Materia Medica**
	KS	**K**		Discuss clinical features, pathology, investigation and diagnosis of Sarcoidosis	**C/1**	**NK**				
	HO	**KH**		Discuss homoeopathic treatment for the Sarcoidosis	**C/2**	**NK**				

Peripheral nerves

Sl No	**Competency**	**Miller**	**Content**	**SLO**	**Bloom/ Guilbert**	**Priority**	**TL MM**	**Assessment**		**Integration**
								F	**S**	
Hom UG-Sur-II 1.16	**KS**	**K**	**Disease of Nerves**	Discuss the types, pathology, clinical features of nerve injury.	**C/2**	**MK**	Lecture Audiovisual mode Skill lab Simulation OSCE	Viva	MCQ SAQ	**Pathology**
	KS	**K**		Discuss management of the nerve injury: medical, suturing of nerves	C/1	**DK**				
	KS	**K**		Discuss injuries of	C/1	MK				

				brachial plexus, radial nerve, ulnar nerve, median nerve injuries.						
	KS	**K**		Discuss claw hand, foot drop, sciatic nerve injury, Carpel tunnel syndrome	C/1	MK				
	PBL	**SH**		Describe examination of the lesion of peripheral nerves.	P/1	MK			OSCE	
	HO	**KH**		Describe homoeopathic treatment for the peripheral nerve injury	C/2	MK				**Materia Medica Repertory**

Topic: Hom UG-Sur II – 2. Diseases of Alimentary Canal –

<u>Palate, Cheek, Tongue & Floor of the mouth</u>

Sl No	**Competency**	**Miller**	**Content**	**SLO**	**Bloom/ Guilbert**	**Priority**	**TL MM**	**Assessment**		**Integration**
								F	**S**	
Hom UG-Sur-II-2.1	**KS**	**K**	**Disease of Mouth**	Describe classification, symptoms and signs of cleft lip	**C/1**	**DK**	Lecture Audiovisual mode	Viva	MCQ SAQ	**Pathology**
				Describe classification, clinical features of cleft palate	C/1	DK				

				Discuss management of cleft lip and cleft palate	C/1	NK				
				Discuss types, clinical features, investigation of stomatitis	C/2	MK				
	HO	**K**		Describe homoeopathic treatment for the stomatitis	C/1	MK				
	KS	**K**		Describe causes, clinical examination, investigations in ulcer of tongue, Ca tongue	C/2	MK				**Materia Medica Repertory**
	KS	**K**		Discuss homoeopathic medicines for the ulcer of tongue	C/1	MK	Lecture, Audiovisual Integrated Teaching Audiovisual Demonstration Clinical case discussion and demonstration			
	PBL	**SH**		Describe physical examination of the Oral cavity	P/2	MK				
	KS	**K**		Describe Ranula	C/1	DK				

Salivary Glands

Sl No	Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-II- 2.2	**KS**	**K**	Disease of Salivary Glands	Discuss anatomy and physiological aspects of Salivary glands	C/1	DK	Lecture Audiovisual mode	Viva	MCQ SAQ	**Pathology**
	KS	**K**		Describe investigations used for investigation of Salivary gland – USG, FNAC, PET, CT, MRI, Biopsy	C/1	DK				
	KS	**K**		Describe cause, types, Clinical features, diagnosis of cyst, tumor of salivary gland	C/1	MK				
	HO	**KH**		Discuss cause, clinical features, diagnosis of Sublingual gland & submandibular glands.	C/2	MK				
	KS	**K**		Discuss homoeopathic medicines for the salivary gland disease,	C/1	MK				**Materia Medica Repertory**

				sublingual glands & submandibular glands.						
Hom UG-Sur-II- 2.3	**KS** **KS** **KS** **KS** **HO** **PBL**	**K** **KH** **K** **K** **KH** **KH**	**Disease of parotid gland**	Discuss anatomical and physiological aspects of parotid gland. Describe investigations used for investigation of Parotid gland – USG, FNAC, PET, CT, MRI, Biopsy Describe cause, clinical features, investigation of parotitis Discuss cause, clinical features, investigation and diagnosis of Parotid gland tumor Discuss homoeopathic treatment for the parotitis and tumor of parotid gland Demonstrate physical examination of parotid gland and other salivary glands	C/1 C/2 C/2 C/1 C/2 P/1	MK DK DK NK MK MK	Lecture Audiovisual mode Clinical case discussion and demonstration	Viva	MCQ SAQ	Pathology Materia Medica Repertory **Materia Medica Repertory**

Oesophagus

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-II-2.4	KS	K	Oesophagus	Review the concepts of applied anatomy of Oesophagus	C/2	MK	Lecture Audiovisual mode	Viva	MCQ SAQ	Anatomy
Hom UG-Sur-II-2.5	KS	K	Oesophagus	Review the concepts of functions of Oesophagus	C/2	MK	Lecture Audiovisual mode			Physiology
Hom UG-Sur-II-2.5	PC	SH	Oesophagus	Discuss various investigations used in disease of Oesophagus: X-ray, Barium Swallow, CT- Scan, Oesophagoscopy	P/1	DK	Observation, small group discussion	DOPS	--	
Hom UG-Sur-II-2.6	KS	K	Oesophagus	Describe aetiology, types, sign& symptoms, differential diagnosis, investigations in case of Dysphagia	C/1	MK	Lecture Audiovisual mode	Viva	MCQ SAQ	Anatomy

Hom UG-Sur-II-2.7	KS HO	K K	Oesophagus	Discuss aetiology, clinical features, investigations & treatment of stricture of Oesophagus, plummer vinson syndrome, achalasia cardia, carcinoma of oesophagus Describe homoeopathic treatment for the dysphagia, stricture of oesophagus	C/1 C/1	MK MK	Lecture Audiovisual mode	Viva	MCQ SAQ	Anatomy
Hom UG-Sur-II-2.8	KS	K K KH	GERD-Gastroesophageal reflux disease	Define GERD Describe the mechanisms of GERD, including lower oesophageal sphincter dysfunction, delayed gastric emptying, and oesophageal mucosal damage. Discuss the	C/1 C/1 C/2	MK DK MK	Lecture Audiovisual aids	Viva	SAQ	Practice of Medicine

				manifestations of GERD						
		KH		Explain indications, procedures, and findings of investigations like endoscopy, oesophageal pH monitoring, and manometry.	C/2	MK				
		KH		Recognize complications such as oesophageal stricture, Barrett's oesophagus, and oesophageal adenocarcinoma.	C/2	MK				
	HO	K		Discuss the Homoeopathic therapeutics for GERD	C/1	MK				
Hom UG-Sur-II-2.9	KS	K	Hiatus Hernia	Describe Hiatus Henia, types, Clinical presentations and management	C/2	MK	Lecture	Viva	SAQ	
Hom UG-Sur-II-2.10	KS/PBL	K	Examination of a case of Dysphagia	Define dysphagia and classify its causes	C/1	MK	Lecture Small group discussion	Viva	MCQ SAQ OSCE	

		KH		Identify the clinical features and history suggestive of dysphagia	C/1	MK	Case based learning DOPS			
		SH		Perform a systematic clinical examination for dysphagia	P/2	MK				
		KH		Differentiate between oropharyngeal and oesophageal dysphagia based on clinical findings	C/2	MK				
		KH		Discuss the red flag signs in dysphagia requiring urgent intervention	C/3	MK				

Diseases of Peritoneum

Sl No	Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-II- 2.11	**KS**	**K**	Peritoneum - Peritonitis	Define peritonitis and classify its types (primary, secondary, tertiary)	C/1	MK	Lecture Audiovisual aids Case based discussion Case studies	Viva	MCQ SAQ LAQ	
		K		Explain the pathophysiology of peritonitis	C/2	MK				
		KH		Identify the clinical features of peritonitis, such as abdominal pain, tenderness, guarding, and systemic signs like fever and tachycardia	C/2	MK				
		KH		Discuss diagnostic investigations, including complete blood count (CBC), serum lactate,	C/2	DK				

				blood cultures, and imaging techniques like X-ray, ultrasound, and CT scan						
		KH		Describe the role of paracentesis in diagnosing peritonitis, including analysis of ascitic fluid	C/3	NK				
		KH		Discuss surgical management, including indications for laparotomy and source control of infection	C/2	NK				
		KH		Recognize complications of peritonitis, such as sepsis, abscess formation, and multi-organ failure	C/2	MK				
	HO	**K**		Discuss the homoeopathic therapeutics for peritonitis	C/1	MK				
Hom UG-Sur-	**KS**	**K**	Pelvic abscess	Define pelvic abscess and	C/1	MK	Lecture Audiovisual	Viva	SAQ	

II- 2.12				describe its etiological factors			aids Small group discussion			
		KH		Describe the clinical features of pelvic abscess	C/2	MK				
		KH		Discuss the diagnostic investigations, including blood tests (CBC, CRP), imaging techniques (ultrasound, CT, and MRI), and aspiration for culture	C/2	DK				
		KH		Recognize complications of pelvic abscess	C/2	NK				
Hom UG-Sur-II- 2.13	**KS**	**K**	Subphrenic abscess	Define subphrenic abscess and describe its etiological factors	C/1	MK	Lecture Audiovisual aids	Viva	MCQ SAQ	
		KH		List and recognize the clinical features of subphrenic abscess, such as fever, referred	C/2	MK				

				shoulder pain, and restricted diaphragm movement						
		KH		Discuss diagnostic investigations, including CBC, inflammatory markers, and imaging techniques such as ultrasound, CT, and X-rays	C/3	NK				
		KH		Explain the imaging findings typical of subphrenic abscess on X-ray, ultrasound, and CT scans	C/2	NK				
		KH		Discuss the indications for surgical drainage in cases of subphrenic abscess	C/2	DK				
		KH		Recognize potential	C/2	DK				

				complications of untreated or poorly managed subphrenic abscess						
Hom UG-Sur-II- 2.14	**KS**	**K**	Mesenteric cyst	Describe mesenteric cyst	C/1	DK	Lecture Audiovisual aid	Viva	SAQ	
Hom UG-Sur-II- 2.15	**KS**	**K** <

		KH		Discuss diagnostic investigations, including blood tests (CBC, ESR, CRP), imaging techniques (ultrasound, CT, MRI), and aspiration for culture	C/2	DK				
		KH		Explain the findings of imaging modalities such as CT and MRI in identifying psoas abscess	C/2	DK				
		KH		Explain the indications and surgical approaches for abscess drainage in case of psoas abscess	C/2	NK				
		KH		Identify complications of untreated or poorly managed psoas abscess,	C/2	NK				

				such as sepsis, deep vein thrombosis, or vertebral osteomyelitis						
Hom UG-Sur-II- 2.16	**KS**	**K** **K** **K** **KH**	Diseases of stomach and duodenum-Gastritis	Define gastritis and classify it into acute and chronic types Explain the pathophysiology of gastritis, including the role of H. pylori, NSAIDs, and autoimmune processes Enumerate the etiological factors for gastritis, such as infections, medications, alcohol, and stress Recognize the clinical features of gastritis, including epigastric pain, nausea, vomiting, and loss of appetite	C/1 C/1 C/1 C/2	MK MK MK MK	Lecture Audiovisual aids Small group discussion Case discussion	Viva	MCQ SAQ LAQ	Practice of medicine Materia Medica

		KH		Discuss diagnostic investigations, including endoscopy, biopsy, and tests for H. pylori	C/2	DK				
		KH		Explain the findings of endoscopy in acute and chronic gastritis	C/2	NK				
		KH		Explain complications of chronic gastritis, such as gastric ulcers, atrophic gastritis, and increased risk of gastric carcinoma	C/2	MK				
	HO	**K**		Discuss the homoeopathic therapeutics for gastritis	C/1	MK				
Hom	**KS**	**K**	Peptic ulcer	Define peptic	C/1	MK	Lecture	Viva	MCQ	Practice of

UG-Sur-II- 2.17			– Gastric and Duodenal ulcer	ulcer and differentiate between gastric and duodenal ulcers			Audiovisual aids Clinical case discussion Radiological image interpretation Sessions Role play patient counselling session	Image interpretation session	SAQ LAQ OSCE on diagnosis and management planning	Medicine Materia Medica Repertory
		K		Explain the pathophysiology of peptic ulcer disease, including the role of acid, pepsin, and protective mechanisms	C/2	MK				
		K		Enumerate the etiological factors, including H. pylori infection, NSAID use, stress, and smoking	C/1	MK				
		KH		Describe the clinical features and its complications of peptic ulcer	C/2	MK				
		KH		Discuss diagnostic investigations for peptic ulcer such as upper GI endoscopy,	C/2	DK				

				biopsy, and tests for H. pylori						
		KH		Explain the endoscopic findings of gastric and duodenal ulcers	C/2	NK				
		KH		Discuss indications for surgical intervention in peptic ulcer complications	C/2	NK				
	PC	**S**		Explain preventive strategies, including lifestyle modifications, avoidance of NSAIDs, and prophylactic measures in high risk patients	A/2	NK				
	PC	**S**		Counsel patients on symptoms, treatment options, and dietary modifications for peptic ulcer disease	A/3	NK				

	HO	**K**		Discuss the Homoeopathic therapeutics for peptic ulcer	C/1	MK				
Hom UG-Sur-II- 2.18	**KS**	**K**	Pyloric stenosis	Define pyloric stenosis and differentiate between congenital and acquired forms	C/1	MK	Lecture Audiovisual aids Small groups discussion	Viva	MCQ SAQ	
		K		Explain the pathophysiology of pyloric stenosis, including hypertrophy and obstruction	C/2	MK				
		K		List the clinical features of pyloric stenosis, such as projectile vomiting and dehydration	C/2	MK				
		KH		Explain the complications such as metabolic alkalosis,	C/2	MK				

				dehydration, and malnutrition in pyloric stenosis						
		KH		Discuss diagnostic tools like ultrasound, upper GI contrast studies, and lab investigations for pyloric stenosis	C/3	DK				
		KH		Correlate clinical findings with imaging and lab results to confirm the diagnosis of pyloric stenosis	C/3	NK				
		KH		Describe surgical management of pyloric stenosis	C/3	NK				
Hom UG-Sur-II- 2.19	**KS**	**K**	Gastric outlet obstruction	Define gastric outlet obstruction and list its common causes	C/1	MK	Lecture Audiovisual aids Small group discussion	Viva	MCQ SAQ LAQ	
		K		Discuss the clinical features of Gastric outlet obstruction	C/2	MK	Radiology image interpretation sessions			
		K		Enumerate	C/1	MK				

				complications of Gastric outlet obstruction						
		KH		Discuss diagnostic tools, including upper GI endoscopy, barium meal, ultrasound, and CT in case of gastric outlet obstruction	C/2	MK				
		KH		Differentiate benign causes (peptic ulcer disease, pyloric stenosis) from malignant causes (gastric cancer, pancreatic tumours)	C/3	MK				
		KH		Describe surgical options, for Gastric outlet obstruction management	C/2	DK				
	HO	**K**		Discuss the scope of Homoeopathy along with relevant homoeopathic	C/2	MK				

				therapeutics in the management of gastric outlet obstruction						
Hom UG-Sur-II- 2.20	**KS**	**K**	Hematemesis	Define hematemesis	C/1	MK	Lecture Small group discussion	Viva	SAQ LAQ	Materia Medica Repertory
		K		List the common causes of hematemesis	C/1	MK				
		KH		Recognize the clinical features and associated symptoms	C/2	MK				
		KH		Explain the management of acute hematemesis	C/2	MK				
		KH		Describe the endoscopic techniques for managing hematemesis	C/3	NK				
	HO	**K**		Discuss the homoeopathic therapeutics for Haematemesis	C/2	MK				
Hom UG-Sur-	**KS**	**K**	Carcinoma of stomach (CA	Explain the epidemiology and	C/1	MK	Lecture Small group	Viva	MCQ SAQ	

II- 2.21			Stomach)/Gastric Carcinoma	risk factors of CA stomach			discussion Audiovisual aids		LAQ	
		K		List the etiological factors of gastric carcinoma	C/1	MK	Case discussion			
		K		Describe the pathological types of gastric carcinoma	C/1	DK				
		KH		Recognize the clinical features of gastric carcinoma, such as weight loss, anaemia, and epigastric pain	C/2	MK				
		KH		Explain diagnostic approaches, including endoscopy, biopsy, imaging (CT/MRI), and tumour markers	C/2	DK				
		KH		Outline the TNM staging of gastric carcinoma and its clinical significance	C/2	DK				

		KH		Recognize complications of gastric carcinoma, such as obstruction, perforation, and bleeding	C/3	DK				
		KH		Describe treatment options for Carcinoma of stomach	C/2	NK				
	HO	**K**		Discuss the homoeopathic therapeutics for Carcinoma of stomach	C/1	MK				
Hom UG-Sur-II- 2.22	**KS**	**K**	Ulcerative colitis	Define ulcerative colitis and differentiate it from other inflammatory bowel diseases (IBD)	C/1	MK	Lecture Small group discussion Audiovisual aid Case based discussion	Viva	MCQ SAQ LAQ	Practice of Medicine Materia Medica
		K		Describe the aetiology and risk factors of ulcerative colitis	C/1	MK				
		K		Explain the pathogenesis and pathology of	C/2	MK				

				ulcerative colitis						
		KH		Identify the clinical features of ulcerative colitis, such as diarrhoea, rectal bleeding, and abdominal pain	C/2	MK				
		KH		Discuss extra-intestinal manifestations of ulcerative colitis	C/2	MK				
		KH		Discuss the complications of ulcerative colitis, such as toxic megacolon, perforation, and colorectal cancer	C/2	MK				
		KH		Explain the role of diagnostic tools, including colonoscopy, histopathology, and imaging studies in ulcerative colitis	C/2	DK				
	HO	**K**		Discuss the homoeopathic therapeutics for	C/2	MK				

				ulcerative colitis						
Hom UG-Sur-II- 2.23	**KS**	**K**	Ischemic colitis	Define ischemic colitis	C/1	MK	Lecture Audiovisual aids Small group discussion	Viva	MCQ SAQ	
		K		Describe the etiological factors and risk factors for ischemic colitis	C/1	MK				
		KH		Recognize the clinical features of ischemic colitis	C/2	MK				
		KH		Discuss the classification of ischemic colitis, including transient, chronic, and gangrenous forms	C/2	MK				
		KH		Describe the differential diagnosis of ischemic colitis	C/2	DK				
		KH		Discuss complications of ischemic colitis	C/2	DK				

		KH		Outline diagnostic approaches in cases of ischemic colitis	C/2	DK				
Hom UG-Sur-II- 2.24	**KS**	**K** **K** **K** **KH** **KH** **KH**	Crohn’s disease	Define Crohn's disease and describe its epidemiology Explain the aetiology and risk factors for Crohn's disease Describe the pathophysiology of Crohn's disease Discuss the clinical manifestations of crohn’s disease Discuss extra-intestinal manifestations of crohn’s disease Outline the diagnostic methods for	C/1 C/1 C/2 C/2 C/2 C/2	MK MK DK MK MK DK	Lecture Small group discussion Audiovisual aid Case based discussion	Viva	MCQ SAQ LAQ	Practice of Medicine Materia Medica

				Crohn’s disease						
		KH		Differentiate Crohn's disease from ulcerative colitis and other causes of chronic diarrhoea	C/2	DK				
		KH		Recognize complications, such as abscess formation, obstruction, and increased colorectal cancer risk in Crohn’s disease	C/3	DK				
	HO	**K**		Discuss the Homoeopathic therapeutics for Crohn’s disease	C/1	MK				
Hom UG-Sur-II- 2.25	**KS**	**K**	Intussusception	Define intussusception and explain its epidemiology, including common age groups affected	C/1	MK	Lecture Small group discussion Audiovisual aid Case based discussion	Viva	MCQ SAQ	Materia Medica Repertory
		K		Explain the pathophysiology of intussusception	C/1	MK				

		KH		Identify the clinical features of intussusception, including intermittent abdominal pain, bloody stools, and palpable mass	C/2	MK				
		KH		Discuss the diagnostic approaches, including ultrasonography and other imaging studies	C/2	DK				
		KH		Explain complications of intussusception	C/2	DK				
	HO	**K**		Discuss the homoeopathic therapeutics for intussusception	C/1	MK				
Hom UG-Sur-II- 2.26	**KS**	**K**	Peutz-Jeghers syndrome	Describe Peutz-Jeghers syndrome	C/2	DK	Lecture	Viva	SAQ	
Hom UG-Sur-II- 2.27	**KS**	**K**	Carcinoid tumour	Describe Carcinoid tumour	C/2	DK	Lecture	Viva	SAQ	
Hom UG-Sur-	**KS**	**K**	Small bowel malignancy	Classify small intestinal	C/1	MK	Lecture Small group	Viva	MCQ SAQ	

II- 2.28				malignancies			discussion Audiovisual		LAQ	
		K		Describe the epidemiology, including incidence and risk factors	C/1	MK	aid Case based discussion			
		K		Explain the pathophysiology of malignant tumours in the small intestine including tumour progression and metastasis	C/1	MK				
		KH		Discuss the clinical features of small intestine malignancies	C/2	MK				
		KH		Discuss diagnostic approaches, including imaging (CT, MRI, PET), endoscopy, and biopsy in small bowel malignancies	C/2	DK				
		KH		Describe complications	C/2	DK				

				associated with malignant tumours of the small intestine						
		KH		Discuss prognostic factors in small bowel malignancies	C/2	DK				
		KH		Outline the treatment options, including surgery in small bowel malignancies	C/2	NK				
Hom UG-Sur-II- 2.29	**KS**	**K**	Intestinal polyposis	Define intestinal polyposis and classify its types (Inflammatory, Metaplastic, Hamartomatous, Neoplastic)	C/1	MK	Lecture Small group discussion Audiovisual aid Case based discussion	Viva	MCQ SAQ LAQ OSCE on history-taking and symptom analysis	Practice of medicine Materia Medica
		K		Describe the epidemiology and risk factors of intestinal polyposis, including genetic conditions	C/1	MK				
				Describe the	C/2	MK				

		KH		clinical features of intestinal polyposis						
		KH		Discuss the diagnostic approaches, including colonoscopy, biopsy, and imaging techniques in intestinal polyposis	C/2	DK				
		KH		Outline the management strategies in intestinal polyposis	C/2	NK				
		KH		Describe the complications of untreated intestinal polyposis	C/2	NK				
	HO	**K**		Discuss the therapeutics for intestinal polyposis	C/2	MK				
Hom UG-Sur-II- 2.30	**KS**	**K**	Large intestinal malignancy	Describe the epidemiology and risk factors of	C/1	MK	Lecture Small group discussion	Viva	MCQ SAQ LAQ	Practice of medicine Materia

				large intestinal malignancies			Audiovisual aid Case based discussion		OSCE on history-taking and symptom analysis, patient education and screening	Medica
		K		Explain the pathology of large intestinal malignancy	C/1	MK				
		KH		Discuss the clinical features such as altered bowel habits, rectal bleeding, abdominal pain, and anaemia in colon cancer	C/2	MK				
		KH		Discuss diagnostic approaches of colon cancer including imaging studies and biopsy	C/2	DK				
		KH		Describe the staging systems (e.g., TNM) and their importance in prognosis and management large intestinal malignancy	C/3	NK				
		KH		Discuss complications of	C/2	NK				

				large intestinal malignancy such as obstruction, perforation, and metastasis						
		KH		Outline treatment modalities, including surgery for malignancies of large intestine	C/2	NK				
		KH		Explain preventive measures, including screening protocols (e.g., colonoscopy, faecal occult blood testing) for malignancies of large intestine	C/2	NK				
	HO	**K**		Discuss the homoeopathic therapeutics for large intestinal malignancies	C/1	MK				
Hom UG-Sur-II- 2.31	**KS**	**K**	Intestinal diverticula	Define intestinal diverticula and classify them	C/1	MK	Lecture Small group discussion	Viva	MCQ SAQ LAQ	Practice of medicine

		K		Describe the epidemiology and risk factors for diverticula	C/2	MK	Audiovisual aid Case based discussion		OSCE on history-taking and symptom analysis, patient education and diagnostic interpretations	
		KH		Explain the pathophysiology of diverticula formation and complications like diverticulitis and perforation	C/2	DK				
		KH		Discuss the clinical presentation and complications of diverticulitis, including abscess, fistula, and obstruction	C/2	MK				
		KH		Explain diagnostic approaches, including CT scan, colonoscopy, and contrast studies in detecting diverticula	C/2	DK				
		KH		Outline	C/2	NK				

				management of uncomplicated diverticula						
		KH		Describe surgical management of complicated diverticulitis	C/2	NK				
		KH		Discuss preventive strategies for diverticular disease, including lifestyle modifications and dietary recommendations	C/2	NK				
Hom UG-Sur-II- 2.32	**KS**	**K**	Meckel's diverticulum	Describe Meckel's diverticulum	C/1	DK	Lecture Audiovisual aid	Viva	SAQ	
Hom UG-Sur-II- 2.33	**KS**	**K**	Colostomy /Ileostomy	Define colostomy and describe its types (e.g., loop, end, and double-barrel colostomy)	C/1	DK	Lecture Audiovisual aids Small group discussion Clinical case scenarios and demonstration Skill lab simulation	Viva	SAQ	
		K		Explain indications for colostomy	C/2	NK				
		KH		Describe the surgical techniques for creating	C/2	NK				

				colostomy and stomas						
		KH		Discuss the complications of colostomy and stomas	C/3	NK				
	PC/KS	**KH**		Discuss the role of follow-up care and rehabilitation in colostomy patients	C/2	NK				
	PC/KS	**KH**		Outline post-operative care, including stoma care, appliance management, and infection prevention	C/3	NK				
Hom UG-Sur-II- 2.34	**PC/KS**	**K**	Barium enema	Understand the indications for performing a barium enema in gastrointestinal (GI) disorders	C/1	MK	Small group discussion Lecture Image interpretations Audiovisual aids	Spot test image interpretation	SAQ OSCE	Radiology
		K		Explain the	C/1	MK	Case based			

				contraindications, risks, and complications of a barium enema			learning			
		KH		Demonstrate knowledge of preparation protocols for patients undergoing a barium enema	C/2	DK				
		KH		Describe the step-by-step procedure of a barium enema, including equipment and contrast medium used	C/2	DK				
		KH		Identify normal and abnormal findings on a barium enema, including strictures, polyps, diverticula, volvulus, and malignancies	C/2	MK				
Hom UG-Sur-II- 2.35	**KS**	**K**	Intestinal obstruction	Define intestinal obstruction and classify it (e.g., mechanical vs. functional	C/1	MK	Lecture Audiovisual aids Small group discussion	Viva	MCQ SAQ LAQ OSCE on diagnostic	

				obstruction)			Clinical case scenarios		interpretation	
		K		Describe the common causes of intestinal obstruction (e.g., adhesions, hernias, tumours, volvulus, intussusception)	C/2	MK	Image interpretation sessions			
		K		Explain the pathophysiology of intestinal obstruction, including the consequences of bowel ischemia and perforation	C/2	MK				
		KH		Discuss the clinical features of intestinal obstruction	C/2	MK				
		KH		Describe the signs of strangulated obstruction and its urgency	C/2	MK				
		KH		Discuss the role of imaging (e.g.,	C/2	DK				

				X-ray, ultrasound, CT scan) in diagnosing intestinal obstruction						
		KH		Outline the initial management of intestinal obstruction, including resuscitation and decompression	C/2	MK				
		KH		Describe the indications for surgical intervention in intestinal obstruction	C/3	NK				
	HO	**K**		Discuss the homoeopathic treatment for intestinal obstruction	C/2	MK				
Hom UG-Sur-II- 2.36	**KS**	**K**	Volvulus	Define Volvulus and classify its types (Volvulus of small intestine, Caecal Volvulus, Sigmoid volvulus)	C/1	MK	Lecture Small group discussion	Viva	MCQ SAQ	
		KH		Describe the	C/2	MK				

				clinical features of volvulus						
		KH		Discuss the role of imaging techniques (e.g., abdominal X-ray, CT scan, contrast enema) in diagnosing volvulus	C/2	DK				
		KH		Explain the management of volvulus	C/2	Nice to know				
Hom UG-Sur-II- 2.37	**KS**	**K**	Paralytic ileus	Describe paralytic ileus, its causes clinical features and management	C/2	MK	Lecture Audiovisual aids	Viva	MCQ SAQ	
Hom UG-Sur-II-2.38	**KS**	**K**	Hirschsprung ’s disease	Describe Hirschsprung’s disease	C/2	DK	Lecture	Viva	SAQ	
Hom UG-Sur-II- 2.39	**KS**	**K**	Abdominal tuberculosis	Describe the pathophysiology of abdominal TB, including its spread and effects on various organs	C/2	MK	Lecture Small group discussion Audiovisual aids	Viva	MCQ SAQ	Practice of Medicine Pathology Materia Medica Repertory
		KH		Explain the clinical features of abdominal tuberculosis	C/2	MK				
				Discuss the role						

		KH		of laboratory investigations in diagnosing abdominal TB	C/2	DK				
		KH		Explain the imaging modalities used in abdominal TB diagnosis and management	C/2	NK				
	HO	**K**		Discuss the homoeopathic therapeutics for abdominal tuberculosis	C/1	MK				
Hom UG-Sur-II- 2.40	**KS**	**K**	Appendicitis	Describe the epidemiology and aetiology of appendicitis	C/1	MK	Lecture Audiovisual aids Small group discussion	Viva	MCQ SAQ LAQ OSCE on clinical examination skills	Materia Medica Repertory
		K		Explain the pathology of appendicitis, including inflammation, infection, and perforation	C/2	MK	Clinical case scenarios Bedside demonstration DOPS			
		KH		Describe the clinical features of appendicitis	C/2	MK				
		KH		Describe the	C/2	MK				

				clinical examination findings in appendicitis and signs to elicit in appendicitis (Pointing sign, Rovsing's sign, Psoas sign, Obturator sign)						
		SH		Perform clinical examinations to identify signs of appendicitis	P/2	MK				
		KH		Discuss the role of laboratory tests and imaging (ultrasound) in diagnosing appendicitis	C/2	MK				
		KH		Discuss the differential diagnoses for right iliac fossa pain	C/3	MK				
		KH		Describe the indications and techniques for surgical intervention in appendicitis	C/3	NK				

		KH		Recognize complications of appendicitis	C/2	MK				
	HO	**KH**		Discuss the scope of homoeopathic treatment in appendicitis with relevant therapeutics	C/2	MK				
Hom UG-Sur-II- 2.41	**KS/PC**	**K**	Clinical examination - Acute abdomen	Define acute abdomen and describe its causes	C/1	MK	Small group discussion Bedside teaching and demonstration DOPS session Case based discussion Image interpretation sessions	Viva Clinical examination skills	SAQ LAQ OSCE on abdominal examination	
		K		Understand the pathophysiology of pain in acute abdomen, including visceral and somatic pain	C/2	MK				
		KH		Take a detailed history, focusing on pain characteristics, associated symptoms, and relevant medical history	P/1	MK				
		SH		Perform a thorough physical	P/2	MK				

				examination, including inspection, palpation, percussion, and auscultation of the abdomen						
		SH		Recognize key clinical signs, including rebound tenderness, guarding, Murphy's sign, and Rovsing's sign	P/3	MK				
		KH		Formulate a differential diagnosis for acute abdomen based on clinical findings	C/3	MK				
		KH		Discuss the role of laboratory tests in evaluating acute abdomen	C/3	DK				
		KH		Describe the indications and interpretation of imaging studies (e.g., X-ray, ultrasound, CT	C/3	DK				

				scan) in acute abdomen						
		KH		Recognize red flags and indications for surgical intervention in cases of acute abdomen	C/3	NK				
Hom UG-Sur-II-2.42	**KS/PC**	**K**	Examination of chronic abdomen	Define chronic abdominal conditions and describe their common causes	C/1	MK	Lecture Bedside teaching and demonstration DOPS Case discussions Audiovisual aids Image interpretations	Viva Clinical examination feedback	MCQ OSCE on abdominal examination Bedside viva	
		KH		Obtain a comprehensive history for chronic abdominal conditions, including pain characteristics, duration, and associated symptoms	C/2	MK				
		SH		Perform a detailed abdominal examination, including inspection, palpation,	P/2	MK				

				percussion, and auscultation with a focus on chronic conditions						
		SH		Identify and interpret specific signs associated with chronic abdominal conditions (e.g., organomegaly, abdominal masses, ascites)	P/3	MK				
		KH		Formulate differential diagnoses for chronic abdominal pain based on clinical findings	C/3	MK				
		KH		Discuss the role of laboratory investigations (e.g., liver function tests, kidney function tests, haematological parameters) in chronic abdominal	C/2	DK				

				conditions						
		KH		Describe imaging modalities (e.g., ultrasound, CT scan, MRI) used in evaluating chronic abdominal conditions and their indications	C/2	DK				
		KH		Explain the importance of endoscopic evaluations (e.g., upper GI endoscopy, colonoscopy) in chronic abdominal conditions	C/2	NK				
Hom UG-Sur-II- 2.43	**PC/KS**	**K**	Examination of abdominal lump	List common causes of abdominal lumps	C/1	MK	Lecture Bedside teaching and demonstration	Viva Clinical examination feedback	MCQ OSCE on abdominal examination	
		K		Describe the anatomy relevant to abdominal lump examination (e.g., quadrants, planes, landmarks)	C/1	MK	DOPS Case discussions Audiovisual aids Image interpretations		Bedside viva	

		K		Classify abdominal lumps based on location and underlying pathology	C/2	MK				
		SH		Perform a systematic clinical examination of an abdominal lump	P/2	MK				
		KH		Distinguish between intra-abdominal and abdominal wall lumps	C/2	MK				
		KH		Identify features suggestive of malignancy in abdominal lump	C/2	MK				
		KH		Discuss the role of imaging modalities in evaluating abdominal lumps	C/2	DK				
		KH		Explain the laboratory investigations for abdominal lumps	C/2	DK				
		KH		Formulate a differential	C/2	MK				

				diagnosis of abdominal lumps based on their location in specific quadrants of abdomen and other clinical findings						
Hom UG-Sur-II- 2.44	KS	K K	Diseases of rectum & Anal Canal-Anatomy of rectum and anal canal-Structural components and vascular supply	Describe vascular and lymphatic supply of rectum and anal canal Explain anatomical relationships with surrounding structures	C/1 C/1	MK MK	Lecture, Diagrams, Audiovisual aids	Viva	MCQ	Anatomy
Hom UG-Sur-II- 2.45	KS	KH KH	Diseases of rectum & Anal Canal-Investigation : Proctoscopy, biopsy	Identify methods for rectal examination (e.g., DRE, proctoscopy). Explain examination techniques such as proctoscopy and anoscopy.	C/1 C/2	MK MK	Lecture, Demonstration , Simulation	OSCE, Clinical Case Study	OSCE	
Hom UG-Sur-II- 2.46	KS	KH	Diseases of rectum & Anal Canal-Investigation -Proctoscopy	Discuss the indications and contraindications Proctoscopy	C/2	MK	Demonstration , Simulation	OSCE, Clinical Case Study	OSCE	

Hom UG-Sur-II- 2.47	PBL/PC	SH K	Examination: Rectum and anal canal	Conduct thorough examination of rectum and anal canal Relate findings to rectal diseases	P/2 C/2	MK MK	Case-Based Learning Case Demonstration DOPS	Viva, OSCE	SAQ, OSCE	
Hom UG-Sur-II- 2.48	HO	K	Homeopathic therapeutics-Ano-rectal diseases	Homeopathic therapeutics for presenting conditions of common Ano-rectal diseases	C/1	MK	Lectures, case studies	Viva	MCQs, SAQ, LAQ	
Hom UG-Sur-II- 2.49	KS	K KH	Fissure in Ano	Discuss etiopathogenesis and clinical features Explain non-surgical and surgical treatments.	C/2 C/2	MK NK	Problem-Based Learning	Viva	SAQ, LAQ	
Hom UG-Sur-II- 2.50	KS	K K	Piles/ Haemorrhoids	Explain vascular anatomy of hemorrhoidal plexus Differentiate internal vs external haemorrhoids	C/1 C/2	MK MK	Lectures, Diagrams, Audiovisual aids	Viva	MCQ, SAQ	

		KH		Describe the etiopathogenesis, clinical features & management.	C/2	MK				
Hom UG-Sur-II- 2.51	PC/KS	K	Piles/ Haemorrhoids	Discuss interventions (banding, sclerotherapy)	C/2	NK	Lectures, Diagrams, Audiovisual aids	Viva	MCQ, SAQ	
Hom UG-Sur-II- 2.52	KS	K	Pruritus Ani	Identify causes such as infections, irritants, or systemic diseases	C/2	DK	Small Group Discussion	Viva	SAQ	
Hom UG-Sur-II- 2.53	PC	K	Pruritus Ani	- Explain diagnostic approaches and management strategies	C/2	DK	Small Group Discussion	Viva	SAQ	
Hom UG-Sur-II- 2.54	KS	K	Prolapse of Rectum	Classify rectal prolapse (partial vs complete)	C/2	MK	Lectures, Audio-visual aids	Viva	MCQ, SAQ	Anatomy
Hom UG-Sur-II- 2.55	PC	K	Prolapse of Rectum	Discuss surgical and non-surgical management options	C/2	DK	Lectures, Case Discussions	Viva	SAQ, Clinical Case Study	
Hom UG-Sur-II- 2.56	KS	K	Fistula in Ano	Discuss causes and clinical features of fistula in ano	C/2	MK	Lectures, Case discussions	Viva,	MCQ, SAQ	
Hom UG-Sur-II- 2.57	KS	K	Fistula in Ano	Explain diagnostic approaches and management strategies	C/2	MK	Problem-Based Learning	Viva	SAQ	Radiology
Hom	KS	K	Ano-rectal	Discuss	C/1	MK	Lecture, Case-	Viva	SAQ	

UG-Sur-II- 2.58			Abscess	etiopathogenesis and clinical features Relate lymphatic drainage to abscess spread	C/2	DK	Based Learning			
Hom UG-Sur-II- 2.59	PC	KH	Ano-rectal Abscess	Describe surgical drainage and post-operative care	C/2	DK	Simulation, Case-Based Learning	Viva	SAQ	

Topic: Hom UG-Sur-II-3. Diseases of Liver, Gallbladder, Bile duct, Pancreas, Spleen

Sl No	**Competency**	**Miller**	**Content**	**SLO**	**Bloom/ Guilbert**	**Priority**	**TL MM**	**Assessment**		**Integration**
								F	**S**	
Hom UG-Sur-II-3.1	**KS**	**K**	Anatomy of liver	Describe the gross anatomy of the liver, including its lobes, surfaces, and segments	C/1	MK	Audiovisual aids Small group discussion	Viva	MCQ	Anatomy
Hom UG-Sur-II-3.2	**KS**	**K**	Anatomy of liver	Explain the blood supply to the liver, including the hepatic artery, portal vein, and hepatic veins	C/1	MK	Audiovisual aids Small group discussion	Viva	MCQ	Anatomy
Hom UG-Sur-II-3.3	**KS**	**K**	Anatomy of liver	interpret anatomical relationships of the liver with surrounding structures (e.g., diaphragm, gallbladder, stomach, pancreas)	C/1	MK	Audiovisual aids Small group discussion Anatomical model demonstration	Viva	MCQ	Anatomy

Hom UG-Sur-II-3.4	**KS**	**K**	Acute and Chronic live insufficiency / Acute liver failure & Chronic liver failure	Define liver insufficiency and distinguish between acute and chronic liver insufficiency	C/2	MK	Lecture Audiovisual aids Small group discussion Assignments	Viva	MCQ SAQ LAQ	
		KH		Describe the pathophysiology of Liver insufficiency	C/2	MK				
		KH		Interpret diagnostic tests (e.g., liver function tests, coagulation profile, imaging) used to assess liver insufficiency	C/3	DK				
		KH		Discuss complications of liver insufficiency, such as hepatic encephalopathy, variceal bleeding, and hepatorenal syndrome	C/2	DK				
	HO	**KH**		Discuss the Homoeopathic therapeutics for liver insufficiency	C/1	MK				
Hom UG-Sur-	**KS**	**KH**	Diseases of liver – imaging of	Explain the role of ultrasound in liver diseases, particularly for	C/2	DK	Lecture Small group discussion	Viva	MCQ SAQ OSCE	Radiology

II-3.5			the liver	detecting liver masses, fatty liver, and ascites Explain the role of CT and MRI in diagnosing liver pathologies, such as tumours, cirrhosis, and vascular abnormalities Interpret imaging findings from liver CT and MRI scans, including tumours, cysts, and vascular structures Explain the technique, indications, and complications of ERCP (Endoscopic Retrograde Cholangiopancreatography) and PTC (Percutaneous Transhepatic Cholangiography) Describe the role of angiography in liver diseases, particularly in assessing and managing hepatic artery and portal vein disorders	 C/2 P/1 C/2 C/2	 NK DK DK NK	Audiovisual aids Case based imaging studies			
Hom UG-Sur-II-3.6	**KS**	**K**	Diseases of liver – liver trauma	Understand the types of liver trauma, including blunt and penetrating injuries, and their	C/1	MK	Lecture Small group discussion Simulation	Viva Clinical skill assessment	MCQ SAQ OSCE	

				common causes (e.g., motor vehicle accidents, stab wounds)			based learning Case based discussions	using trauma scenarios		
		KH		Explain the clinical signs and symptoms of liver trauma	C/2	MK				
		KH		Interpret imaging modalities used in liver trauma, including Focused Assessment with Sonography for Trauma, CT scan, and angiography	C/3	NK				
		KH		Discuss the management of liver trauma	C/2	NK				
Hom UG-Sur-II-3.7	**KS**	**K**	Diseases of Liver- Portal hypertension and oesophageal varices	Define portal hypertension and oesophageal varices, and describe their common aetiologies	C/1	MK	Lecture Small group discussion Audiovisual aids	Viva	MCQ SAQ LAQ	
		KH		Explain the pathophysiology of portal hypertension and how it leads to oesophageal varices formation	C/2	DK				
		KH		Describe the clinical signs and symptoms related to	C/2	MK				

				portal hypertension						
		KH		Explain the role of diagnostic modalities in detecting oesophageal varices, including endoscopy, Doppler ultrasound, and cross-sectional imaging	C/2	DK				
		KH		Describe the management of variceal bleeding	C/2	NK				
Hom UG-Sur-II-3.8	**KS**	**K**	Diseases of Liver-Budd-Chiari Syndrome	Describe Budd-chiari syndrome	C/1	DK	Lecture	Viva	SAQ	
Hom UG-Sur-II-3.9	**KS**	**K**	Diseases of Liver-Caroli's disease	Describe Caroli's disease	C/1	NK	Lecture	Viva	SAQ	
HOM UG-SUR-II-3.**10**	**KS**	**K**	Diseases of Liver- Benign liver tumours	Understand the classification of benign liver tumours (e.g., haemangioma, focal nodular hyperplasia [FNH], hepatic adenoma)	C/1	MK	Lecture Audiovisual aids Small group discussion Hands-on imaging interpretation Case based discussions	Viva	MCQ SAQ LAQ OSCE	
		KH		Recognize the clinical features of benign liver tumours, including asymptomatic	C/2	MK				

				presentations, right upper quadrant pain, hepatomegaly etc						
		KH		Interpret imaging findings (ultrasound, CT, MRI) and differentiate benign liver tumours based on radiological characteristics (e.g., haemangioma with peripheral enhancement)	C/2	DK				
Hom UG-Sur-II-3.11	**KS**	**K**	Diseases of liver-Hepatocellular carcinoma (HCC)	Define hepatocellular carcinoma (Primary liver cancer)	C/1	MK	Lecture Audiovisual aid Small group discussion Clinical case presentations	Viva	MCQ SAQ LAQ	
		KH		Explain the risk factors for HCC, such as chronic hepatitis B and C infections, cirrhosis, alcohol use, aflatoxin exposure, and non-alcoholic fatty liver disease (NAFLD)	C/2	MK				
		KH		Explain the clinical features of HCC	C/2	MK				
		KH		Interpret diagnostic investigations for HCC, including liver function tests, alpha-fetoprotein	C/3	DK				

				(AFP), ultrasound, CT, MRI, and liver biopsy findings						
Hom UG-Sur-II-3.12	**KS**	**K**	Diseases of liver- Sclerosing Cholangitis	Describe primary sclerosing cholangitis	C/1	DK	Lecture	Viva	MCQ SAQ	
Hom UG-Sur-II-3.13	**KS**	**K**	Diseases of liver- Pyogenic liver abscess	Explain the pathophysiology of pyogenic liver abscess, including the routes of bacterial spread	C/1	MK	Lecture Audiovisual aids Bedside teaching	Viva	MCQ SAQ	
		KH		Discuss the clinical presentation of pyogenic liver abscess	C/2	MK				
		KH		Explain the diagnostic approach for pyogenic liver abscess including imaging techniques and laboratory tests	C/1	DK				
		KH		Explain the indications for percutaneous drainage, surgical intervention, and conservative management in the treatment of pyogenic liver abscess	C/2	NK				
		KH		Discuss the potential complications of pyogenic	C/2	DK				

				liver abscess						
	HO	**K**		Discuss the homoeopathic therapeutics for liver abscess	C/1	MK				
Hom UG-Sur-II-3.14	**KS**	**K**	Diseases of liver- Amoebic liver abscess	Discuss the epidemiology of amoebic liver abscess, including geographic distribution, transmission routes, and risk factors	C/2	MK	Lecture Audiovisual aids Small group discussion Integrated seminar	Viva	MCQ SAQ	Pathology
		KH		Describe the clinical features of amoebic liver abscess	C/2	MK				
		KH		Explain the diagnostic criteria for amoebic liver abscess, including laboratory investigations and imaging techniques	C/2	DK				
		KH		Compare the differential diagnosis of amoebic liver abscess with other liver diseases (e.g., pyogenic liver abscess, hydatid cyst)	C/2	MK				
		KH		Explain the role of drainage procedures in the management of amoebic liver	C/2	NK				

		KH		Discuss potential complications of untreated amoebic liver abscess, such as rupture, peritonitis, and pleuropulmonary involvement	C/2	DK				
Hom UG-Sur-II-3.15	**KS**	**KH**	Diseases of liver- Hydatid liver disease	Describe Hydatid liver disease	C/2	DK	Lecture Audiovisual aids	Viva	MCQ SAQ	
Hom UG-Sur-II-3.16	**KS**	**K** **KH**	Diseases of liver- Hepatomegaly	List the common causes of hepatomegaly Compare and contrast benign causes of hepatomegaly (e.g., simple hepatic cysts) with malignant causes (e.g., hepatocellular carcinoma, metastases)	C/1 C/2	MK MK	Lecture Small group discussion Case based learning	Viva	SAQ	
Hom UG-Sur-II-3.17	**PBL**	**K** **KH**	Examination of liver	Identify the anatomical location of the liver and its surface markings Describe the steps in the physical examination of the liver, including inspection, palpation,	C/1 C/2	MK MK	Lecture Demonstration Bedside clinical examination DOPS	Bedside clinical examination and feedback	Evaluation of bedside clinical skills	

				percussion, and auscultation						
		SH		Perform palpation of the liver to assess for liver size, tenderness, and surface texture	P/2	MK				
		KH		Correlate liver examination findings with potential liver diseases	C/3	MK				
Hom UG-Sur-II-3.18	**KS**	**KH**	Diseases of liver- Hydatid liver disease	Describe Hydatid live disease	C/2	DK	Lecture Audiovisual aids	Viva	MCQ SAQ	
Hom UG-Sur-II-3.19	**KS**	**K**	Diseases of Gallbladder and bile duct- Investigations for Gallbladder and biliary system diseases	Describe the basic anatomy and physiology of the gallbladder and biliary system	C/1	MK	Lecture Audiovisual aids Radiology workshop Case based discussion	Viva	SAQ Image interpretation	Radiology
		K		Explain the indications for imaging studies in suspected gallbladder and biliary disease	C/1	MK				
		K		Explain the role of liver function tests (LFTs) in assessing biliary obstruction and	C/1	DK				

				differentiating between hepatic and post-hepatic causes of jaundice						
		K		Explain the role of ERCP (Endoscopic Retrograde Cholangiopancreatography) and MRCP (Magnetic Resonance Cholangiopancreatography) in diagnosing and managing biliary obstruction	C/2	NK				
Hom UG-Sur-II-3.20	**KS**	**K**	Gallbladder and biliary system diseases-Gallstone	Define gallstones and describe the types (cholesterol stones, pigment stones, mixed stones) and their composition	C/1	MK	Lecture Audiovisual aids	Viva		
		K		Describe the risk factors for gallstone formation	C/1	MK				
		KH		Identify the clinical features of gallstones, such as biliary colic, jaundice, and nausea	C/2	MK				
Hom UG-Sur-II-3.21	**KS**	**KH**	Gallbladder and biliary system diseases-Cholecystitis	Describe the aetiology of cholecystitis, including gallstone-related and acalculous	C/2	MK	Lecture Audiovisual aids Demonstration Simulation-	Viva Feedback on counseling skills	MCQ SAQ	Materia medica Repertory

		K		Identify and describe clinical features of acute and chronic cholecystitis, including right hypochondrium pain, fever, jaundice, and Murphy’s sign	C/2	MK	based learning			
	PBL	**SH**		Perform a clinical examination in suspected cholecystitis, focusing on abdominal examination and assessing Murphy's sign	P/2	MK				
		KH		Describe the diagnostic approach in cholecystitis, including lab tests (CBC, LFTs) and imaging (ultrasound as first-line modality)	C/1	DK				
	KS	**KH**		Outline the management of chronic cholecystitis, including elective cholecystectomy and lifestyle modifications	C/2	NK				
		KH		Describe potential complications of cholecystitis, such as gangrene, perforation, and biliary peritonitis	C/2	DK				

	HO	**KH** **K**		Counsel patients on lifestyle modifications and postoperative care following cholecystectomy for chronic cholecystitis Discuss the Homoeopathic therapeutics for Cholecystitis	C/2 C/1	NK MK				
Hom UG-Sur-II-3.22	**KS**	**K** **K** **KH**	Diseases of gallbladder and bile duct	Define choledocholithiasis and describe its types (primary vs. secondary stones) and composition Explain the aetiology and risk factors for choledocholithiasis, including gallstones, infections, and bile stasis Identify the clinical manifestations of bile duct stones, such as biliary	C/1 C/1 C/2	MK MK MK	Lecture Audiovisual aids Small group discussion	Viva	MCQ SAQ	

				colic, jaundice, and fever (Charcot's triad)						
		K		Explain the diagnostic approach in choledocholithiasis, including laboratory tests (LFTs) and initial imaging (ultrasound)	C/2	DK				
		K		Describe advanced imaging options like MRCP and ERCP for choledocholithiasis, and their indications in complex cases	C/3	NK				
		K		Describe the complications of choledocholithiasis	C/2	DK				
Hom UG-Sur-II-3.23	**KS**	**K**	Diseases of Gallbladder and bile duct	Describe the causes and risk factors for biliary strictures	C/1	MK	Lecture Audiovisual aid	Viva	MCQ SAQ	
		K		Explain the pathophysiology of biliary strictures and their effect on bile flow and liver function	C/2	DK				
		KH		Describe the clinical	C/2	MK				

				manifestations of biliary strictures						
		K		Explain the role of advanced imaging modalities like MRCP and ERCP in evaluating and diagnosing biliary strictures	C/2	DK				
		K		Discuss the therapeutic role of ERCP in biliary strictures, including stricture dilation and stent placement	C/2	NK				
		KH		Describe complications of untreated biliary strictures, such as cholangitis, liver abscess, and secondary biliary cirrhosis	C/2	DK				
Hom UG-Sur-II-3.24	**KS**	**K**	Diseases of gallbladder and bile duct – Surgical jaundice	Define surgical jaundice	C/1	MK	Lecture Audiovisual aids Small group discussion Clinical discussion	Viva	MCQ SAQ LAQ	
		K		Describe the causes of surgical jaundice	C/1	MK				
		K		Explain the pathophysiology of surgical jaundice, focusing on obstruction and cholestasis	C/1	MK				

		KH		Identify the clinical manifestations of surgical jaundice, including jaundice, pruritus, abdominal pain, and fever (in cases of cholangitis)	C/2	MK				
		KH		Describe **Courvoisier's Law** and explain its significance in differentiating causes of surgical jaundice, specifically between malignant and benign causes of bile duct obstruction	C/2	MK				
		KH		Describe the diagnostic workup, including liver function tests and basic imaging (ultrasound), and explain the role of advanced imaging like MRCP and CT in assessing biliary strictures and tumours in surgical jaundice	C/2	DK				
		KH		Describe complications of untreated surgical jaundice	C/2	DK				
Hom UG-Sur-II-	**KS**	**K**	Diseases of gallbladder and bile duct – Carcinoma	Describe the risk factors for gallbladder cancer, including gallstones, chronic inflammation, and	C/1	MK	Lecture Audiovisual aids Small group	Viva	MCQ SAQ LAQ	

3.25			of gallbladder	lifestyle factors			discussion			
		K		Explain the pathophysiology of gallbladder carcinoma and the stages of progression	C/2	MK				
		K		Describe the clinical manifestations of CA gallbladder	C/2	MK				
		KH		Describe initial diagnostic workup, including liver function tests and tumour markers	C/2	DK				
		KH		Explain the role of advanced imaging (USG,CT, MRI, MRCP, PET) in assessing tumour stage, spread, of the Gallbladder carcinoma	C/2	NK				
		K		Outline the TNM staging system for gallbladder carcinoma and its clinical significance	C/2	DK				
		KH		Recognize the complications and prognosis of gallbladder carcinoma	C/2	NK				

	HO	**K**		Discuss the Homoeopathic therapeutics for Carcinoma of gallbladder	C/1	MK				
Hom UG-Sur-II-3.26	**KS**	**K**	Surgical diseases of spleen – Splenomegaly	Describe the anatomy and physiology of the spleen relevant to splenomegaly	C/1	MK	Lecture Audiovisual aids Small group discussion Demonstration Simulation-based learning	Viva	LAQ	Practice of Medicine
		K		List the causes of splenomegaly	C/1	MK				
		KH		Discuss the clinical manifestations and symptoms associated with splenomegaly, such as fullness, pain, and hypersplenism signs	C/2	MK				
		KH		Describe the initial diagnostic workup, including CBC, liver function tests, and imaging (ultrasound, CT)	C/2	DK				
		KH		Explain the role of advanced diagnostic tools like bone marrow biopsy, splenic biopsy, and MRI for further evaluation	C/2	NK				
				Perform a physical						

	PBL **HO**	**SH** **K**		examination of the abdomen, focusing on palpating and percussing an enlarged spleen Discuss the therapeutics for Splenomegaly	P/2 C/1	MK MK				
Hom UG-Sur-II-3.27	**KS**	**K** **K** **KH** **KH**	Diseases of spleen-Splenic artery aneurysm	List risk factors for splenic artery aneurysms Describe common clinical manifestations of splenic artery aneurysms Explain the diagnostic approach for splenic artery aneurysms Discuss the surgical and non-surgical management of splenic artery aneurysm	C/1 C/1 C/2 C/2	DK DK NK NK	Lecture Audiovisual aids	Viva	MCQ SAQ	
Hom UG-Sur-II-3.28	**KS**	**K** **K** **KH**	Diseases of spleen-Splenic infarction	List common causes and risk factors of splenic infarction Describe the clinical signs and symptoms associated with splenic infarction Describe diagnostic	C/1 C/2 C/2	DK DK NK	Lecture Audiovisual aids	Viva	MCQ SAQ	

				approaches, including lab tests and imaging techniques in splenic infarction						
		KH		Discuss the surgical indications in splenic infarction	C/1	NK				
Hom UG-Sur-II-3.29	**KS**	**K**	Diseases of spleen – splenic abscess	List the common causes and risk factors for splenic abscess, including infections, trauma, and immunocompromised states	C/1	MK	Lecture Audiovisual aids Small group discussion	Viva	MCQ SAQ	
		K		Describe the pathophysiology of abscess formation in the spleen	C/2	DK				
		KH		Identify clinical manifestations of splenic abscess, including fever, left upper quadrant pain, and systemic symptoms	C/2	MK				
		KH		Discuss the role of laboratory investigations and imaging modalities used in the diagnosis of splenic abscess	C/2	DK				

		KH **KH**		Discuss the management of splenic abscess including indications of surgical indications Identify complications of splenic abscess, including rupture, sepsis, and fistula formation	C/2 C/2	NK NK				
Hom UG-Sur-II-3.30	**HO**	**K**	Diseases of spleen – Homoeopathic therapeutics for diseases of spleen	Discuss the homoeopathic therapeutics for various affections of spleen	C/2	MK	Lecture Small group discussion Seminar	Viva	MCQ	Materia Medica Repertory
Hom UG-Sur-II-3.31	**KS**	**K** **K** **K**	Diseases of pancreas – investigations for pancreatic pathologies	Describe the anatomical and physiological aspects of the pancreas relevant to its diseases List common pancreatic diseases, including acute and chronic pancreatitis, pancreatic cysts, and neoplasms Explain the role of blood tests, including serum amylase, lipase, glucose, and tumour markers (e.g., CA 19-9), in diagnosing	C/1 C/1 C/2	MK MK DK	Lecture Small group discussion Audiovisual aids	Viva	MCQ	Radiology

				pancreatic diseases						
		K		Discuss the indications and limitations of imaging modalities like ultrasound (USG), CT scan, MRI, and endoscopic ultrasound (EUS) for pancreatic diseases	C/2	DK				
		K		Explain the utility of advanced techniques such as MRCP (Magnetic Resonance Cholangiopancreatography) and ERCP (Endoscopic Retrograde Cholangiopancreatography) in diagnosing pancreatic pathologies	C/2	NK				
Hom UG-Sur-II-3.32	**KS**	**K**	Diseases of pancreas – Acute pancreatitis	Define acute pancreatitis and describe its incidence, aetiology, and risk factors	C/1	MK	Lecture Small group discussion Audiovisual aids	Viva	MCQ SAQ LAQ	Materia medica Repertory
		K		Explain the pathophysiology of acute pancreatitis, including enzymatic autodigestion and inflammatory responses	C/2	MK	Clinical discussions			
		KH		Identify clinical features	C/2	MK				

				of acute pancreatitis, such as abdominal pain, nausea, vomiting, and systemic symptom						
		KH		Discuss laboratory investigations, including serum amylase, lipase, and inflammatory markers, in diagnosing acute pancreatitis	C/2	MK				
		KH		Describe the role of imaging modalities (e.g., USG, CT, MRI) in diagnosing and assessing complications of acute pancreatitis	C/2	MK				
		KH		Discuss the complications of acute pancreatitis, such as necrosis, pseudocyst formation, and organ failure	C/3	MK				
		KH		Describe indications for endoscopic interventions (ERCP), and surgical approaches in acute pancreatitis	C/3	DK				

Hom UG-Sur-II-3.33	**KS**	**K**	Diseases of pancreas – chronic pancreatitis	Define chronic pancreatitis and describe its epidemiology and risk factors	C/1	MK	Lecture Small group discussion Audiovisual aids	Viva	MCQ SAQ LAQ	Radiology Practice of Medicine
		K		Explain the pathophysiology of chronic pancreatitis, including recurrent inflammation, fibrosis, and loss of pancreatic function	C/1	MK	Clinical discussions Image interpreting sessions Case based learning			
		K		Explain the clinical features, including recurrent abdominal pain, malabsorption, and diabetes	C/2	MK				
		KH		Discuss laboratory investigations, such as serum amylase, lipase, faecal elastase, and blood glucose levels, in diagnosing chronic pancreatitis	C/2	DK				
		KH		Describe the role of imaging modalities, such as ultrasound, CT, MRI, and MRCP, in diagnosing structural changes in chronic pancreatitis	C/3	DK				

		KH **KH** **KH**		Explain the importance of endoscopic ultrasound (EUS) and ERCP in identifying ductal changes and complications of chronic pancreatitis Discuss the indications and techniques for endoscopic or surgical interventions, such as pancreatic duct stenting Recognize complications of chronic pancreatitis, including pseudocysts, biliary obstruction, and pancreatic cancer	C/3 C/3 C/3	NK NK MK				
Hom UG-Sur-II-3.34	**KS**	**K** **KH** **KH**	Diseases of pancreas – Carcinoma of pancreas	Describe its epidemiology, risk factors, pathology and progression of Carcinoma of pancreas Identify clinical features, including abdominal pain, jaundice, weight loss, and diabetes onset Discuss laboratory investigations, including tumour markers like CA 19-9, liver function tests, and blood glucose levels Describe imaging	C/1 C/2 C/2	MK MK DK	Lecture Small group discussion Audiovisual aids Clinical discussions Image interpreting sessions Case based learning	Viva	MCQ SAQ LAQ	Radiology Practice of Medicine

		KH		modalities such as ultrasound, CT, MRI, and PET-CT in diagnosing and staging pancreatic carcinoma	C/2	DK				
		KH		Outline the TNM staging system and its importance in pancreatic cancer prognosis	C/2	DK				
		KH		Describe surgical approaches, including the Whipple procedure and distal pancreatectomy, and their indications	C/2	NK				
		KH		Recognize complications of pancreatic carcinoma, such as biliary obstruction, duodenal obstruction, and metastasis	C/2	DK				

Hom UG-Sur-II-3.35	**HO**	**K**	Diseases of pancreas – Homoeopathic therapeutics for pancreatic diseases	Discuss the Homoeopathic therapeutics for Pancreatitis and Carcinoma of pancreas	C/1	MK	Lecture Small group discussion Inter departmental seminar	Viva	SAQ	Materia Medica Repertory

Topic: Hom UG-Sur-II-4. Diseases of the thorax

Sl No	Domain of Competency	Miller Level	Content	SLO	Bloom /Guilbert Level	Priority	Teaching-Learning Methods (TL)	Assessment		Integration
								F	S	
Hom UG-Sur-II-4.1	KS	K	Pleural effusion and pleural tapping	Describe the anatomy of the pleural cavity and its relevance	C/1	MK	Lectures, anatomical model demo Small group discussions Case discussions	Viva	MCQ, SAQ LAQ	Radiology Pathology
		K		Discuss the cause of pleural effusion	C/2	MK				
		KH		Explain indications, contraindications, and complications pleural tapping	C/2	DK				

	HO	KH K		Interpret pleural fluid findings for diagnosis Discuss the homoeopathic management of pleural effusion	C/3 C/1	NK MK				
Hom UG-Sur-II-4.2	KS	KH K	Bronchoscopy	Describe bronchial anatomy and its relevance Explain indications and contraindications	C/1 C/2	MK MK	Lecture Model demonstrations Case discussions	Viva	MCQ SAQ	Radiology
Hom UG-Sur-II-4.3	KS	KH K KH	Flail chest and stove-in chest	Define and describe flail chest Explain biomechanics of paradoxical movement Plan stabilization techniques	C/1 C2/ C/2	MK MK DK	Lecture Audiovisual aids Simulation labs	Viva	MCQ SAQ OSCE	Radiology
Hom UG-Sur-II-4.4	KS	K KH KH	Manage pneumothorax and tension pneumothorax	Define pneumothorax and its types Explain pathophysiology of tension pneumothorax Discuss the management of tension pneumothorax	C/1 C/2 C/2	MK MK MK	Lecture Case discussions Audiovisual aids Skill-based training	Viva OSCE	MCQ SAQ LAQ OSCE	Radiology Practice of medicine

Hom UG-Sur-II-4.5	KS	KH KH	Investigate and manage haemothorax	Describe pathophysiology and clinical presentation Plan treatment including intercostal drainage	C/1 C/3	MK DK	Lecture, imaging-based learning	Viva	MCQ SAQ SAQ	Radiology
Hom UG-Sur-II-4.6	KS	KH KH	Investigate and treat empyema thoracis	Explain stages of empyema development Discuss the management of empyema	C/1 C/2	MK DK	Interactive lecture Case-based learning	Viva	MCQ SAQ OSCE	
Hom UG-Sur-II-4.7	KS	KH K	Investigate and manage lung abscess	Explain pathogenesis and radiologic features Discuss indications for surgical drainage	C/2 C/2	MK DK	Lecture, Imaging workshops Case studies	Viva	MCQ SAQ	Radiology
Hom UG-Sur-II-4.8	KS	KH SH	Intercostal tube drainage (ICD)	Explain indications and steps of ICD Observe/Perform ICD on a mannequin	C/1 P/2	DK NK	Lecture Simulation training	Viva OSCE	MCQ SAQ OSCE	
Hom UG-Sur-II-4.9	KS	K K	ARDS	Define ARDS and its aetiology Explain ventilatory management strategies	C/1 C/2	MK DK	Lecture Case-based learning	Viva	MCQSAQ	Practice of Medicine-Critical Care Radiology

Hom UG-Sur-II-4.10	KS	K KH	Pulmonary embolism	Explain causes pathophysiology and clinical features Explain diagnostic modalities	C/1 C/2	MK MK	Lecture Imaging workshops	Viva	MCQ SAQ LAQ	Practice of Medicine-Critical Care Radiology
Hom UG-Sur-II-4.11	KS	KH KH	Surgical emphysema	Explain causes and imaging features Discuss the management of surgical emphysema	C/2 C/2	MK MK	Lecture Case discussions	Viva Case Studies	SAQ	Radiology
Hom UG-Sur-II-4.12	KS	KH KH	Lung cysts	Define types and explain radiologic features Discuss indications for resection	C/2 C/2	MK DK	Imaging-based learning Case discussions	Viva	MCQ SAQ	
Hom UG-Sur-II-4.13	KS	K KH KH	Classify and manage mediastinal tumours	Classify mediastinal tumours (thymoma, lymphoma, etc.) Describe diagnostic modalities & differential diagnosis (CT, biopsy) Outline treatment, including indications of surgery and chemotherapy	C/1 C/2 C/3	MK DK NK	Interactive lecture, audiovisual aids Imaging workshops Case discussions	Viva	MCQ, SAQ, LAQ Imaging Assessment	Radiology

Hom UG-Sur-II-4.14	KS	K KH KH	Pancoast tumours	Define Pancoast tumours and list clinical features Explain superior vena cava syndrome and its management Explain indications of surgical management	C/1 C/2 C/3	MK DK NK	Lecture, case discussions Audiovisual aids Skill-based learning	Viva Group Discussions	MCQ, SAQ	Radiology
Hom UG-Sur-II-4.15	KS	KH K	Classify and manage chest wall tumours	Classify chest wall tumours and describe clinical features Discuss indications of surgical management	C/1 C/2	MK NK	Interactive teaching Problem-based learning	Viva Group Case Discussions	MCQ, SAQ LAQ	Radiology
Hom UG-Sur-II-4.16	KS	K KH HO	Acute and chronic pericarditis	Define pericarditis and its types Explain complications &management Discuss the homoeopathic therapeutics for pericarditis	C/1 C/2 C/2	MK DK MK	Lecture Case discussions	Viva Case Studies	MCQ, SAQ	

Hom UG-Sur-II-4.17	KS/PC	KH	Cardiac tamponade	Describe pathophysiology and clinical features	C/2	MK	Lecture, audiovisual aids	Viva OSCE	SAQ, MCQ OSCE	Practice of Medicine-Critical Care
		SH		Perform /Observe pericardiocentesis under supervision	P/2	NK	Skill-based simulation			
Hom UG-Sur-II-4.18	KS	KH	Identify congenital cardiac anomalies	Explain ASD, VSD, PDA, Coarctation of Aorta and Tetralogy of Fallot	C/2	MK	Audiovisual learning Case-based teaching	Viva Group Discussion	MCQ, SAQ Case Analysis	Radiology
		KH		Discuss the complications, diagnostic and therapeutic approaches.	C/2	DK				
Hom UG-Sur-II-4.19	KS	KH	Valvular heart diseases	List common valvular disorders and their aetiology, pathophysiology, clinical features, & complications	C/2	MK	Lecture Audiovisual aids	Viva Group Discussion	MCQ SAQ LAQ	
		KH		Explain management including surgical interventions	C/2	DK				
	HO	K		Discuss the role of homoeopathy in the management of Valvular heart diseases	C/2	C/2				

Hom UG-Sur-II-4.20	KS	KH K	Diaphragmatic hernias	Describe congenital and acquired hernias Discuss the indications for surgical repair	C/2 C/3	MK MK	Lecture, case studies Problem-based discussions	Viva OSCE	MCQ SAQ	Radiology
Hom UG-Sur-II-4.21	KS/PBL/PC	K KH SH KH KH KH	Examination of disease of chest	Define and classify diseases of the chest Identify symptoms and clinical presentations associated with chest diseases Perform a systematic clinical examination of the chest, including inspection, palpation, percussion, and auscultation Correlate clinical findings with specific chest diseases Identify red flag signs in chest diseases requiring urgent intervention Propose an initial diagnostic and management plan for chest diseases	C/1 C/2 P/2 C/3 C/2 C/2	MK MK MK MK DK NK	Lecture Case demonstration DOPS	Viva	OSCE Case presentation	Practice of Medicine

Topic: Hom UG-Sur-II-5. Diseases of urogenital system.

Sl No	Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-II-5.1	KS	K	Diseases of Urogenital system – investigations in urology	Define the indications of urine examination	C/1	MK	Lecture Small group discussion	Viva	MCQ SAQ	Pathology Biochemistry
		KH		Discuss urine examination – Microscopic, cytological, bacteriological, and biochemical examination	C/2	DK				
		KH		Discuss the clinical significance of abnormal urine findings	C/2	MK				
Hom UG-Sur-II-5.2	KS	K	Diseases of Urogenital system – investigations in urology	Describe the common renal function tests including creatinine, blood urea nitrogen	C/2	DK	Small group discussion Lecture	Viva	MCQ	Pathology Biochemistry
		KH		Interpret the creatinine and blood urea nitrogen	C/2	MK				

				levels and their clinical significance						
Hom UG-Sur-II-5.3	KS	K KH KH	Diseases of Urogenital system – investigations in urology	Define the purpose and indications of plain X-ray KUB examination Discuss the normal and abnormal findings on a plain X-ray KUB including identifying renal calculi, bowel gas pattern and organ size etc Interpret Plain X-ray KUB findings in clinical context such as renal calculi, urinary tract obstruction	C/2 C/2 C/2	MK MK MK	Small group discussion Lecture X-ray image interpretations Case based discussions	Viva OSCE	MCQ SAQ OSCE	Radiology
Hom UG-Sur-II-5.4	K	K KH KH	Diseases of Urogenital system – investigations in urology	Define the indications of intravenous urography Describe the procedure of intravenous urography Discuss the normal and abnormal radiological findings on a Intravenous urography examination	C/1 C/2 C/2	MK MK MK	Small group discussion Lecture Identification and interpretation of Intravenous urogram X-rays	Viva	SAQ	Radiology

Hom UG-Sur-II-5.5	KS <

UG-Sur-II-5.8		K KH	Urogenital system – Kidney & Ureter	kidney Explain the clinical significance of horseshoe kidney Discuss the radiological modalities used in diagnosis of horseshoe kidney and radiological findings in horseshoe kidney	C/2 C/2	DK NK	Small group discussion Audiovisual aids			
Hom UG-Sur-II-5.9	KS	K K K KH K	Diseases of Urogenital system – Kidney & Ureter	Define polycystic kidney disease (PKD) Describe the pathophysiology of polycystic kidney disease Discuss the clinical features of polycystic kidney disease Discuss the diagnostic modalities for Polycystic kidney disease Discuss the management of Polycystic kidney disease	C/1 C/2 C/2 C/2 C/2	MK DK MK MK DK	Lecture Small group discussion	Viva	SAQ	

Hom UG-Sur-II-5.10	KS	K K KH KH KH KH	Diseases of Urogenital system – Kidney & Ureter	Describe the causes and risk factors of renal calculi Enumerate different type of renal stones Discuss the clinical manifestations of renal stones including symptoms and complications Explain the diagnostic approach to renal calculi including imaging studies, laboratory tests and urine analysis Discuss the management of renal stores including conservative measures and surgical interventions Discuss the long-term outcome of renal stones including stone passage, stone recurrence and impact on renal function	C/2 C/1 C/2 C/2 C/2 C/2	MK MK MK DK DK NC	Lecture Audiovisual aid Small group discussion Clinical case demonstration	Viva OSCE	MCQ SAQ LAQ	Materia Medica Repertory

	HO	KH		Discuss the homoeopathic therapeutics for Renal Calculi	C/2	MK				
Hom UG-Sur-II-5.11	KS	K K K K KH KH	Diseases of Urogenital system – Kidney & Ureter	Define Hydronephrosis Enumerate the causes of hydronephrosis Describe the pathology of hydronephrosis Explain the clinical features of hydronephrosis Discuss the diagnostic approach to hydronephrosis including imaging studies Discuss the management strategies for hydronephrosis	C/1 C/1 C/2 C/2 C/2 C/2	MK MK MK MK DK DK	Lecture Audiovisual aids Small group discussion Image interpretation session	Viva	MCQ SAQ LAQ	Radiology
Hom UG-Sur-II-5.12	KS	K	Diseases of Urogenital system – Kidney & Ureter	Discuss the pathophysiology of ureteric calculi Explain the clinical	C/2 C/2	MK MK	Lecture Small group discussion	Viva	MCQ SAQ LAQ	Radiology

		K KH KH		features of ureteric calculi Discuss the diagnostic approach to ureteric calculi including imaging studies Discuss the management of ureteric calculi	 C/2 C/2	 DK DK				

	KS	K	Diseases of Urogenital system – Kidney & Ureter	Define acute pyelonephritis	C/1	MK	Lecture Small group discussion	Viva	SAQ	Practice of Medicine Materia Medica
		KH		Discuss the etiology and pathology of acute pyelonephritis	C/2	MK				
				Explain the clinical features of acute pyelonephritis including symptoms, signs and complications						
		KH		Discuss the diagnostic approach to acute pyelonephritis including laboratory tests, imaging studies and diagnostic criteria	C/2	MK				
	HO	K		Discuss the homoeopathic therapeutics for pyelonephritis	C/2	DK				
Hom UG-Sur-II-	KS	K	Diseases of Urogenital system – Kidney & Ureter	Describe the clinical features of chronic pyelonephritis	C/2	MK	Lecture Small group discussion	Viva	SAQ	Practice of Medicine

5.13		KH		Discuss the diagnosis and management of chronic pyelonephritis	C/2	DK				
Hom UG-Sur-II-5.14	KS	K K KH	Diseases of Urogenital system – Kidney & Ureter	Define pyonephrosis Discuss the clinical features of pyonephrosis Explain the diagnosis and management of pyonephrosis	C/1 C/2 C/2	DK MK DK	Lecture Audiovisual aids	Viva	SAQ	
Hom UG-Sur-II-5.15	KS	K K KH	Diseases of Urogenital system – Kidney & Ureter	Define renal carbuncle Discuss the clinical features of renal carbuncle Explain the diagnosis and management of renal carbuncle	C/1 C/2 C/2	DK DK NK	Lecture	Viva	SAQ	
Hom UG-Sur-II-5.16	KS	K K KH	Diseases of Urogenital system – Kidney & Ureter	Define Wilm's tumour Explain the pathology of Wilm's tumour Describe the clinical manifestation of Wilm's tumour including symptoms, and diagnostic findings Discuss the	C/1 C/2 C/2 C/2	MK DK MK DK	Lecture Audiovisual aid	Viva	SAQ	

		K		management of Wilm's tumour						
Hom UG-Sur-II-5.17	KS	K K KH KH	Diseases of Urogenital system – Kidney & Ureter	Define Grawitz's tumour Explain the pathology of Grawitz's tumour Describe the clinical manifestation of Grawitz's tumour including symptoms, and diagnostic findings Discuss the management of Grawitz's tumour	C/1 C/2 C/2 C/2	MK DK MK NK	Lecture	Viva	SAQ	
Hom UG-Sur-II-5.18	KS	K K K	Diseases of Urogenital system – Kidney & Ureter	Describe the etiology and risk factors of Renal cell carcinoma Explain the histopathological features of renal cell carcinoma Discuss the clinical presentation of renal cell carcinoma	C/1 C/2 C/2	MK DK MK	Lecture Audiovisual aid	Viva	MCQ SAQ LAQ	

		KH KH KH		Outline the diagnostic modalities used in Renal cell carcinoma Evaluate the treatment options for renal cell carcinoma Discuss the prognosis and long-term outcome of Renal cell carcinoma	C/2 C/2 C/2	DK DK NK				
Hom UG-Sur-II-5.19	HO	K	Diseases of Urogenital system – Kidney & Ureter	Discuss the Homoeopathic therapeutics for Ranal tumours	C/2	MK	Lecture Small group discussion	viva	SAQ	Materia Medica Repertory
Hom UG-Sur-II-5.20	KS	K K KH	Diseases of Urogenital system –Urinary bladder	Enumerate the causes of acute retention of urine Explain the clinical presentation of acute retention of urine Explain and interpret the diagnostic modalities and tests used to confirm acute urinary retention, including physical examinations	C/1 C/2 C/2	MK MK DK	Lecture Small group discussion Audiovisual aid	viva	MCQ SAQ LAQ	

				and imaging studies						
		KH		Discuss the management strategies for acute retention of urine, including catheterization, and surgical interventions	C/2	DK				

Hom UG-Sur-II-5.21	KS PBL/PC KS	K SH K	Diseases of Urogenital system –Urethral catheterization	Discuss the indications of urethral catheterization Observe the correct technique of urethral catheterization Describe Foley's catheter, its size, uses in clinical practice	C/1 P/2 C/2	MK DK NK	Small group discussion Audiovisual aid DOPS Skill lab simulation	Viva	SAQ	
Hom UG-Sur-II-5.22	KS	KH K KH	Diseases of Urogenital system –Urinary incontinence	Explain the various types of urinary incontinence like stress incontinence, over active bladder, overflow incontinence, neurogenic bladder dysfunction etc Discuss the causes of incontinence of urine Interpret and analyse diagnostic tests	C/2 C/2 C/2	MK MK DK	Lecture Audiovisual aid Small group discussion	Viva	MCQ SAQ LAQ	Materia Medica

				commonly used in assessing urinary incontinence, such as urodynamic studies, cystoscopy, ultrasound, and pelvic floor electromyography (EMG).						
		KH		Discuss the management plan for urinary incontinence, including lifestyle modifications, behavioural therapies, and surgical options if necessary.	C/2	DK				
	HO	K		Discuss the homoeopathic therapeutics for urinary incontinence	C/2	MK				
Hom UG-Sur-II-5.23	KS	KH	Diseases of Urogenital system –Bladder stones	Describe the composition, formation process, and etiological factors of bladder stones	C/2	MK	Lecture Audiovisual aid Small group discussion	Viva	MCQ SAQ LAQ	

		K		Describe the clinical features and symptoms associated with bladder stones and its possible complications	C/2	MK				
		KH		Interpret and analyse diagnostic tests commonly used in assessing bladder stones, such as urinalysis, abdominal ultrasound, and cystoscopy findings	C/2	DK				
		KH		Discuss a management plan for bladder stones, including conservative measures medical therapy, and surgical interventions	C/2	NK				
	HO	K		Discuss the Homeopathic therapeutics for bladder stones	C/2	MK				
Hom UG-Sur-II-5.24	KS	K K	Diseases of Urogenital system – diverticulum of the bladder	Define bladder diverticulum Describe the pathology of bladder diverticulum	C/1 C/2	MK DK	Lecture	Viva	MCQ SAQ	

		KH		Discuss the clinical features and complications of bladder diverticulum	C/2	DK				
Hom UG-Sur-II-5.25	KS	K K	Diseases of Urogenital system – Urinary fistulae	Describe Vesicovaginal fistulae Describe congenital urinary fistulae	C/2 C/2	MK NK	Lecture	Viva	SAQ	Gynecology
Hom UG-Sur-II-5.26	KS HO KS	K K K K	Diseases of Urogenital system – urinary tract infection	Explain the predisposing factors of urinary tract infection Describe the clinical features of lower urinary tract infection Discuss the Homoeopathic therapeutics for Lower urinary tract infection Describe Interstitial cystitis (Hunner's ulcer)	C/1 C/2 C/2 C/2	MK MK MK NK	Lecture Audiovisual aid	Viva	MCQ SAQ	Gynecology Practice of Medicine Materia Medica
Hom UG-Sur-II-5.27	KS	K K	Diseases of Urogenital system – Carcinoma of bladder	Discuss the aetiology of carcinoma of bladder Enumerate the different histological types of carcinomas of bladder	C/2 C/2	MK MK	Lecture Audiovisual aid Small group discussion Image	Viva	MCQ SAQ LAQ	

							interpretation sessions			
		K		Describe clinical features and TNM classification of Carcinoma of bladder	C/2	MK				
		KH		Interpret diagnostic tests commonly used in assessing bladder carcinoma, such as urinalysis, urine cytology, imaging studies (CT, MRI), cystoscopy findings (tumour location, appearance), and biopsy results (histopathology, immunohistochemistry).	C/2	DK				
		KH		Discuss the management of Carcinoma of bladder	C/2	NK				
	HO	K		Discuss the Homoeopathic therapeutics for Carcinoma of bladder	C/2	MK				

Hom UG-Sur-II-5.28	KS	K K K	Diseases of Urogenital system- Prostate and PSA	Explain the surgical anatomy of prostate gland Define PSA (Prostate Specific Antigen) Describe the physiological role of PSA and its significance as a biomarker for prostate health and disease.	C/1 C/1 C/2	DK DK NK	Lecture Audiovisual aid	Viva	MCQ SAQ	
Hom UG-Sur-II-5.29	KS	K K K KH	Diseases of Urogenital system- Benign Hypertrophy of Prostate- BHP / Benign Prostatic Hyperplasia -BPH	Discuss the pathophysiology of Benign Prostatic Hyperplasia Explain the clinical features of Benign Prostatic Hyperplasia Describe the digital rectal examination findings in BHP Interpret diagnostic tests commonly used in assessing BPH such as urinary flow rate measurements, urine analysis, and imaging	C/2 C/2 C/2 C/2	MK MK MK DK	Lecture Audiovisual aids Small group discussion	Viva	MCQ SAQ LAQ	Materia Medica Repertory

				studies (ultrasound)						
		K		Discuss the surgical management of BHP	C/2	NK				
	HO	K		Discuss the Homoeopathic therapeutics of BHP	C/2	MK				
Hom UG-Sur-II-5.30	KS	K	Diseases of Urogenital system-Carcinoma of prostate d	Describe the pathology and histological grading of carcinoma of prostate (Gleason Score)	C/2	MK	Lecture Audiovisual aid	Viva	MCQ SAQ LAQ	Materia medica Repertory
		KH		Describe the clinical features including digital rectal examination findings of Carcinoma of prostate.	C/2	MK				
		KH		Discuss the TNM staging for prostate cancer	C/2	DK				
		KH		Interpret diagnostic tests commonly used in assessing patients with suspected prostate cancer, such as PSA levels, imaging studies (MRI, CT), biopsy results, bone scans, and lymph node assessments	C/2	DK				

		KH		Discuss the management of carcinoma of prostate	C/2	NK				
	HO	K		Discuss the homoeopathic therapeutics for carcinoma of prostate	C/1	MK				
Hom UG-Sur-II-5.31	KS	K	Diseases of Urogenital system-Prostatitis	Discuss the aetiology of acute prostatitis	C/2	MK	Lecture	Viva	SAQ	Materia Medica Repertory
		K		Explain the clinical features of prostatitis	C/2	MK				
		K		Discuss the clinical features of chronic prostatitis	C/2	MK				
		K		Discuss the common diagnostic tests for prostatitis and their interpretations	C/2	DK				
	HO	K		Discuss the homoeopathic therapeutics for	C/2	MK				

				prostatitis						
Hom UG-Sur-II-5.32	KS	K K K KH KH PC	Diseases of Urogenital system-BOO (Bladder outflow obstruction)	Define BOO Enumerate the causes of BOO Explain the symptoms associated with BOO Interpret diagnostic tests commonly used in assessing patients with BOO, such as urinalysis, urine culture, post-void residual (PVR) volume measurement, uroflowmetry, cystoscopy, ultrasound, CT/MRI scans, and urodynamic studies Discuss the management plan for patients with BOO including conservative measures and surgical interventions Provide patient	C/1 C/2 C/2 C/2 C/2 A/2	MK MK MK DK DK DK	Lecture Audiovisual aid Small group discussion Case based discussion Role play	Viva OSCE	MCQ SAQ LAQ	Radiology

				education and counselling on BOO management, including lifestyle modifications (bladder training, pelvic floor exercises), importance of follow-up care (urodynamic studies, imaging), recognizing and managing complications (UTIs, urinary retention), and when to seek medical attention (red flags)						
Hom UG-Sur-II-5.33	KS PBL	K SH	Diseases of Urogenital system-Examination of urinary case	Define the purpose and importance of physical examination in renal cases, including the assessment of renal function, detection of abnormalities, identification of relevant signs and symptoms, and contribution to differential diagnosis. Demonstrate proficiency in performing an abdominal examination with a focus on kidney	C/1 P/2	MK MK	Lecture Audiovisual aid Small group discussion Skill lab simulation Bedside case demonstration DOAP session	Viva OSCE	SAQ	

				palpation, including techniques for assessing kidney size, tenderness, and presence of masses						
Hom UG-Sur-II-5.34	KS	K K K K	Diseases of Urogenital system- Diseases of Male Urethra and Penis – Congenital disorders	Describe posterior urethral valve Describe Hypospadias Describe Epispadias Describe Urethral diverticulum	C/1 C/1 C/1 C/1	DK DK DK NK	Lecture Audiovisual aids	Viva	SAQ	
Hom UG-Sur-II-5.35	KS	K K	Diseases of Urogenital system- Diseases of Male Urethra and Penis – Rupture of urethra	Discuss the aetiology and pathophysiology of rupture of bulbar urethra and membranous urethra Explain the clinical features and complications of rupture of bulbar urethra and membranous urethra	C/2 C/2	MK MK	Lecture Audiovisual aid	Viva	MCQ SAQ LAQ	

		KH K		Interpret diagnostic tests and imaging studies for urethral rupture diagnosis Discuss the management for urethral rupture	C/2 C/2	DK NK				
Hom UG-Sur-II-5.36	KS HO	K K KH K	Diseases of Urogenital system- Diseases of Male Urethra and Penis – Urethritis	Enumerate the aetiological factors for urethritis Explain the clinical features and complications of urethritis Interpret the diagnostic tests and laboratory findings used in the evaluation of urethritis Discuss the homoeopathic therapeutics for urethritis	C/2 C/2 C/2 C/2	MK MK DK MK	Lecture	Viva	MCQ SAQ	Materia Medica

Hom UG-Sur-II-5.37	KS	K	Diseases of Urogenital system- Diseases of Male Urethra and Penis –Peri urethral abscess	Describe the types and clinical features of periurethral abscess	C/2	DK	Lecture	Viva	SAQ	
Hom UG-Sur-II-5.38	KS	K K K KH KH	Diseases of Urogenital system- Diseases of Male Urethra and Penis – Urethral stricture	Enumerate the cause of stricture urethra Explain the pathophysiology of urethral stricture Describe the clinical features of stricture urethra Interpret the diagnostic tests and imaging studies used in the evaluation of stricture urethra, including urethroscopy, cystoscopy, retrograde urethrography, uroflowmetry, imaging studies like CT scan and MRI scan Discuss the management of urethral stricture Discuss the	C/1 C/2 C/2 C/2 C/2	MK MK MK DK NK	Lecture Audiovisual aid Small group discussion	Viva	MCQ SAQ LAQ	Radiology Materia Medica

	HO	K		homoeopathic therapeutics for urethral stricture	C/1	MK				
Hom UG-Sur-II-5.39	KS	K	Diseases of Urogenital system- Diseases of Male Urethra and Penis – Urethral calculi	Explain the clinical features and treatment of urethral calculi	C/2	MK	Lecture	Viva	SAQ	
Hom UG-Sur-II-5.40	KS HO	K K K KH K	Diseases of Urogenital system- Diseases of Male Urethra and Penis – Phimosis	Define phimosis Discuss the aetiology and pathophysiology of phimosis Explain the clinical features and complications of phimosis Discuss the management of phimosis Discuss the homoeopathic therapeutics for phimosis	C/1 C/2 C/2 C/2 C/2	MK MK MK DK MK	Lecture Audiovisual aid	Viva	MCQ SAQ	Materia Medica Repertory

Hom UG-Sur-II-5.41	KS	K	Diseases of Urogenital system- Diseases of Male Urethra and Penis – Paraphimosis	Describe paraphimosis, its clinical features and management	C/2	MK	Lecture	Viva	SAQ	
Hom UG-Sur-II-5.42	KS	K	Diseases of Urogenital system- Diseases of Male Urethra and Penis – Balanoposthitis	Describe Balanoposthitis and its clinical features	C/2	MK	Lecture	Viva	SAQ	Materia Medica Repertory
	HO	K		Discuss the Homoeopathic therapeutics for Balanoposthitis	C/2	MK				
Hom UG-Sur-II-5.43	KS	K	Diseases of Urogenital system- Diseases of Male Urethra and Penis – Peyronie's disease	Define Peyronie's disease	C/1	DK	Lecture	Viva	MCQ SAQ	
		K		Explain the clinical features and diagnosis of Peyronie's disease	C/2	DK				
		KH		Discuss the management of Peyronie's disease	C/2	DK				

Hom UG-Sur-II-5.44	KS	KH K KH	Diseases of Urogenital system- Diseases of Male Urethra and Penis – Priapism	Define priapism Discuss the aetiology and clinical features of priapism Discuss the treatment plan for priapism	C/1 C/2 C/2	DK DK NK	Lecture	Viva	MCQ SAQ	
Hom UG-Sur-II-5.45	KS	K K K KH	Diseases of Urogenital system- Diseases of Male Urethra and Penis – Carcinoma of Penis	Enumerate the causes of carcinoma of penis Explain the pathology and TNM staging of carcinoma of penis Discuss the clinical presentation of carcinoma of penis including precancerous , Bowen's disease and erythroplasia of Queyrat Discuss the treatment of carcinoma of penis	C/2 C/2 C/2 C/2	MK MK MK DK	Lecture Audiovisual aid	Viva	MCQ SAQ LAQ	

Hom UG-Sur-II-5.46	KS	K K	Diseases of Urogenital system-Diseases of Scrotum and Testes – Embryology and Anatomy	Describe the embryological development of testes Recognize the external anatomy of the testes and scrotum, including the position of the testes within the scrotal sac, the structure of the scrotal skin, cremaster muscle, dartos muscle, and spermatic cord	C/1 C/1	DK NK	Lecture Small group discussion	Viva	SAQ	Anatomy
Hom UG-Sur-II-5.47	KS	K K K KH	Diseases of Urogenital system-Diseases of Scrotum and Testes-undescended testes	Define undescended testes Explain the pathology of undescended testes Discuss the clinical features and consequence of undescended testes Discuss the surgical management of	C/1 C/2 C/2 C/2	MK MK MK NK	Lecture Audiovisual aid	Viva	MCQ SAQ	

				undescended testes						
Hom UG-Sur-II-5.48	KS	K	Diseases of Urogenital system-Diseases of Scrotum and Testes- Retractile testes	Describe Retractile testes	C/1	NK	Lecture	Viva	SAQ	
Hom UG-Sur-II-5.49	KS	K K KH KH	Diseases of Urogenital system-Diseases of Scrotum and Testes- Torsion of Testes	Describe the pathophysiology of torsion of testes Explain the signs and symptoms of torsion of testes Discuss the differential diagnosis of torsion of testes Describe the management of torsion of testes	C/2 C/2 C/2 C/2	MK MK DK NK	Lecture Audiovisual aids	Viva	MCQ SAQ	

Hom UG-Sur-II-5.50	KS	K K KH KH	Diseases of Urogenital system-Diseases of Scrotum and Testes- Varicocele	Define varicocele Discuss the aetiology and clinical features of varicocele Discuss the effect of Varicocele in spermatogenesis Enumerate the treatment options for varicocele	C/1 C/2 C/2 C/2	MK MK DK DK	Lecture Audiovisual aid	Viva	MCQ SAQ	
Hom UG-Sur-II-5.51	KS	K KH KH	Diseases of Urogenital system-Diseases of Scrotum and Testes- Hydrocele	Define hydrocele Describe the causes, types, clinical presentation and clinical examination findings of hydrocele Discuss the management options specific to each type of hydrocele	C/2 C/2 C/2	MK MK DK	Lecture Audiovisual aids Clinical case discussion	Viva	SAQ LAQ	

Hom UG-Sur-II-5.52	KS	K	Diseases of Urogenital system-Diseases of Scrotum and Testes- Fournier’s gangrene	Define Fournier’s gangrene	C/1	MK	Lecture Audiovisual aids	Viva	SAQ	
		K		Describe the etiology pathophysiology and rapid progression of Fournier's gangrene	C/2	MK				
		K		Recognize the clinical signs, and symptoms, of Fournier's gangrene	C/2	MK				
		KH		Evaluate the management strategies for Fournier's gangrene	C/2	DK				
Hom UG-Sur-II-5.53	KS	K	Diseases of Urogenital system-Diseases of Scrotum and Testes-Epididymo-orchitis	Define Epididymo-orchitis	C/1	MK	Lecture Audiovisual aids	Viva	MCQ SAQ	Materia medica Repertory
		KH		Enumerate the clinical signs, symptoms, and risk factors associated with epididymo-orchitis	C/2	MK				

	HO	K		Discuss the Homoeopathic therapeutics for Epididymo-orchitis	C/2	MK				
Hom UG-Sur.-II-5.54	KS	K	Diseases of Urogenital system-Diseases of Scrotum and Testes-Tumours of testes	Classify the testicular tumours according to their cellular type	C/1	MK	Lecture Audiovisual aids	Viva	MCQ SAQ LAQ	Materia medica Repertory
		K		Describe the pathophysiology and risk factors associated with testicular tumours	C/2	MK				
		K		Discuss the clinical features and differential diagnosis of testicular tumours	C/2	MK				
		KH		Interpret diagnostic tests (e.g., tumor markers, ultrasound, CT scans) for testicular tumours	C/3	DK				
		KH		Discuss the prognosis, follow-up care, and potential complications in patients with	C/2	NK				

				testicular tumours						
	HO	K		Discuss the homoeopathic therapeutics for testicular tumours	C/2	MK				
Hom UG-Sur-II-5.55	PC/KS	K	Examination of inguinoscrotal swelling	Understand the anatomy of the inguinal canal and scrotum	C/1	MK	Small group discussion Clinical skill assessment with simulated patients	Viva Skill assessment with simulated patients	LAQ OSCE	
		SH		Explain the common causes of inguinoscrotal swelling	C/2	MK				
		KH		Perform a systematic clinical examination of inguinoscrotal swelling, including inspection, palpation, and transillumination	P/2	MK	Case based clinical examination and demonstration			
		KH		Differentiate between types of inguinoscrotal swellings based on clinical examination findings	C/3	MK	Case discussion on imaging studies DOPS			
		KH		Interpret relevant diagnostic tests (e.g., ultrasound, Doppler studies) in the assessment of inguinoscrotal swelling	C/3	DK				

Hom UG-Sur-II-5.56	PC/KS	K K SH KH	Examination of groin swelling	Understand the anatomy of the groin region, including the inguinal canal, femoral triangle, and lymph nodes List and discuss the causes of groin swelling Perform a systematic clinical examination of a groin swelling, including inspection, palpation and specific manoeuvre Differentiate between the types of groin swellings (e.g., inguinal vs. femoral hernia, cysts, or masses) based on clinical examination findings	C/1 C/2 P/2 C/3	MK MK MK MK	Small group discussion Audiovisual aid Case based discussion DOPS	Viva Skill assessment with simulated patients	LAQ OSCE	

Hom UG-Sur-II-5.57	PC/KS	K	Examination of scrotal swelling	Understand the anatomy of the scrotum and its contents, including the testes, epididymis, and spermatic cord	`C/1	MK	Small group discussion Audiovisual aids Case based discussion Case discussion on diagnostic imaging DOPS	Viva Skill assessment with simulated patients	LAQ OSCE Interpretation of image findings	
		KH		List and explain common causes of scrotal swelling (e.g., hydrocele, varicocele, epididymo-orchitis, testicular torsion, tumors)	C/2	MK				
		SH		Perform a systematic clinical examination of scrotal swelling, including inspection, palpation, and transillumination	P/1	MK				
		SH		Differentiate between types of scrotal swelling (e.g., hydrocele vs. varicocele, testicular torsion, and tumours) based on clinical examination findings	P/2	MK				
		KH		Interpret relevant diagnostic tests (e.g., ultrasound, Doppler	C/3	NK				

				studies) in the assessment of scrotal swelling						
Hom UG-Sur-II-5.58	PC/KS	K KH SH KH	Examination of penis	Understand the anatomy of the penis, including the corpora cavernosa, corpus spongiosum, urethra, and associated vasculature Identify and explain common causes of penile conditions (e.g., phimosis, paraphimosis, Peyronie's disease, balanitis, trauma, STIs) Perform a comprehensive clinical examination of the penis, including inspection and palpation, assessing for lesions, deformities, and discharge Differentiate between conditions affecting the penis based on clinical examination findings	C/1 C/2 P/1 C/2	MK MK MK MK	Small group discussion Audiovisual aids Case based discussion DOPS	Viva Skill assessment with simulated patients	SAQ OSCE Interpretation of image findings	

				(e.g., Peyronie's disease, balanitis, penile cancer)						

Topic: Hom UG-Sur-II-6. Orthopedics

Sl No	Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-II-6.1	KS	K	Infections of bones and joints – Acute osteomyelitis	Define osteomyelitis	C/1	MK	Lecture Audio video aids Small group discussion Case based discussion	Viva	MCQ SAQ LAQ	
		K		Discuss the etiopathogenesis of osteomyelitis	C/2	MK				
		K		Describe the clinical features of osteomyelitis	C/2	MK				
		KH		Explain the diagnostic workup for osteomyelitis	C/2	MK				
		KH		Discuss the principles of management of osteomyelitis	C/2	MK				
Hom	KS	K	Infections of	Discuss the	C/2	MK	Lecture	Viva		Materia

UG-Sur-II-6.2			bones and joints – chronic osteomyelitis	pathology and clinical features of chronic osteomyelitis			Audio video aids Small group discussion		MCQ SAQ LAQ	Medica Repertory
		K		Describe the diagnostic workup specific to chronic osteomyelitis	C/2	DK				
		K		Discuss the management of chronic osteomyelitis	C/2	DK				
	HO	K		Discuss the homoeopathic therapeutics for osteomyelitis	C/1	MK				
Hom UG-Sur-II-6.3		K	Infections of bones and joints	Define Garre's osteomyelitis	C/1	DK	Lecture Audiovisual aid	Viva	SAQ	
		K		Describe the clinical features and diagnosis of Garre's osteomyelitis	C/2	DK				
Hom UG-Sur-II-6.4	KS	K	Infections of bones and joints	Describe Brodies abscess	C/1	DK	Lecture	Viva	SAQ	
Hom	KS	K	Infections of	Explain the	C/2	MK	Lecture	Viva		

UG-Sur-II-6.5		K KH	bones and joints	etiopathology of septic arthritis Discuss the clinical features and diagnosis of septic arthritis Discuss the management of septic arthritis	 C/2 C/2	 MK DK			SAQ	
Hom UG-Sur-II-6.6	KS	K	Infections of bones and joints	Describe Tom Smith arthritis	C/1	NK	Lecture	Viva	SAQ	
Hom UG-Sur-II-6.7	KS	K K K KH	Infections of bones and joints	Define Pott's disease Describe the pathology of Pott's disease Discuss the clinical features of Pott's disease Identify radiological findings specific to Pott's disease in imaging studies like X-ray, MRI and CT scan	C/1 C/2 C/2 C/2	MK MK MK DK	Lecture Audiovisual aid Small group discussion	Viva	MCQ SAQ LAQ	Practice of Medicine Radiology

		KH		Discuss the management of tuberculosis of spine (Potts disease)	C/2	DK				
Hom UG-Sur-II-6.8	KS	K	Infections of bones and joints	Describe Pott's paraplegia	C/1	DK	Lecture	Viva	SAQ	
Hom UG-Sur-II-6.9	KS	K K K KH	Infections of bones and joints	Describe the pathology of Tb of hip joint Enumerate the stages of hip joint TB Explain the clinical features, diagnosis of TB of Hip joint Discuss the management of TB of Hip joint	C/2 C/2 C/2 C/2	MK MK MK DK	Lecture Audiovisual aid	Viva	SAQ LAQ	
Hom UG-Sur-II-6.10	HO	K	Infections of bones and joints	Discuss the Homoeopathic therapeutics for infections of bones and joints	C/2	MK	Lecture Small group discussion	Viva	SAQ	Materia Medica Repertory
Hom UG-Sur-II-	KS	K	Bone tumors	Describe osteomas	C/1	MK	Lecture	Viva	SAQ	

6.11										
Hom UG-Sur-II-6.12	KS	K	Bone tumors	Describe Osteoid osteoma	C/1	DK	Lecture	Viva	SAQ	
Hom UG-Sur-II-6.13	KS	K	Bone tumors	Describe osteoblstoma, chondroblastoma, adamantinoma and chordoma	C/1	NK	Lecture Small group discussion	Viva	SAQ MCQ	
Hom UG-Sur-II-6.14	KS	K	Bone tumors	Describe the clinical features and diagnosis of Osteoclastoma (Giant cell tumor)	C/1	DK	Lecture	Viva	SAQ	
Hom UG-Sur-II-6.15	KS	K	Bone tumors	Discuss the pathology, clinical features, diagnosis and management of osteosarcoma	C/1	MK	Lecture	Viva	SAQ LAQ	
Hom UG-Sur-II-6.16	KS	K	Bone tumors	Describe Ewing's sarcoma	C/1	DK	Lecture	Viva	SAQ	
Hom UG-Sur-II-6.17	KS	K	Bone tumors	Discuss the pathology and clinical features of multiple myeloma	C/1	DK	Lecture	Viva	SAQ	
Hom UG-Sur-	KS	K	Bone tumors	Describe Osteochondroma	C/1	NK	Lecture	Viva	SAQ	

II-6.18										
Hom UG-Sur-II-6.19	KS	K	Bone tumors	Describe Enchondromas	C/1	NK	Lecture	Viva	SAQ	
Hom UG-Sur-II-6.20	HO	KH	Bone tumors	Discuss the therapeutics of bone tumors	C/1	MK	Lecture	Viva	SAQ	Materia Medica Repertory
Hom UG-Sur-II-6.21	KS	K	Diseases of bones	Describe Paget's disease of bone	C/1	NK	Lecture	Viva	SAQ	
Hom UG-Sur-II-6.22	KS	K	Diseases of bones	Describe Osteopetrosis	C/1	NK	Lecture	Viva	SAQ	
Hom UG-Sur-II-6.23	KS	K	Diseases of bones	Describe Perthe's disease	C/1	NK	Lecture	Viva	SAQ	
Hom UG-Sur-II-6.24	KS	K KH	Diseases of bones	Explain the Causes of avascular necrosis bone. How to diagnosis of Avascular necrosis	C/1 C/2	DK DK	Lecture	Viva	SAQ	

Hom UG-Sur-II-6.25	KS	K	Miscellaneous regional orthopedic conditions	Define Torticollis (Wry neck). Discuss the causes of Torticollis	C/1	DK	Lecture	Viva	SAQ	
Hom UG-Sur-II-6.26	KS	K	Miscellaneous regional orthopedic conditions	Describe Cervical rib. Discuss the clinical features and differential diagnosis of cervical rib	C/2	NK	Lecture	Viva	SAQ	
Hom UG-Sur-II-6.27	KS	K K K KH	Miscellaneous regional orthopedic conditions	Describe the relevant anatomy of arch of foot. Describe flat foot Discuss the causes of flat foot Discuss the management of Flat foot	C/1 C/1 C/1 C/2	NK NK NK NK	Small group discussion A V mode	Viva	SAQ	
Hom UG-Sur-II-6.28	KS	K KH	Miscellaneous regional orthopedic conditions	Define Knock knee (Genu Valgum) Discuss the causes and treatment of Genu Valgum	C/1 C/2	NK NK	Lecture	Viva	SAQ	

Hom UG-Sur-II-6.29	KS	K KH	Miscellaneous regional orthopedic conditions	Define Genu Varum Discuss the causes and treatment of Genu Varum	C/1 C/2	NK	Lecture	Viva	SAQ	
Hom UG-Sur-II-6.30	KS	K	Miscellaneous regional orthopedic conditions	Describe Hallux Valgus	C/1	NK	Lecture	Viva	SAQ	
Hom UG-Sur-II-6.31	KS	K	Miscellaneous regional orthopedic conditions	Disrobe Osteogenesis imperfecta	C/1	NK	Lecture	Viva	SAQ	
Hom UG-Sur-II-6.32	KS	K KH	Prolapsed intervertebral disc	Describe relevant Anatomy of Intervertebral disc Discuss the changes in the spine, clinical features and diagnosis of intervertebral disc prolapse	C/1 C/2	MK MK	Lecture Audiovisual aid	Viva	SAQ MCQ	
Hom UG-Sur-II-	KS	K KH	Spinal deformities	Define scoliosis Discuss the	C/1 C/2	MK MK	Lecture	Viva	MCQ SAQ LAQ	

6.33				causes, diagnosis and principles of management of Scoliosis						
Hom UG-Sur-II-6.34	KS	K KH	Spinal deformities	Define Kyphosis Discuss the causes, diagnosis and principles of management of Kyphosis	C/1 C/2	MK	Lecture	Viva	LAQ	
Hom UG-Sur-II-6.35	KS	K	Spinal deformities	Describe spondylolisthesis	C/1	MK	Lecture	Viva	SAQ	
Hom UG-Sur-II-6.36	KS	K	Spinal deformities - Low back pain	Discuss the various causes of low back pain	C/1	MK	Lecture Small group discussion	Viva	MCQ LAQ	
Hom UG-Sur-II-6.37	PBL	SH	Spinal deformities Low back pain	Examination of Spine Clinical examination of a case of low back pain	P/2	MK	Clinical demonstration Small group discussion Simulation	Viva Observation Demonstration	Clinical demonstration OSCE	

							based learning DOPS			
Hom UG-Sur-II-6.38	KS HO	K K K	Low back pain-Sciatica	Define Sciatica Discuss the causes of sciatica Discuss the therapeutics of sciatica	C/1 C/1 C/1	MK MK MK	Lecture Audiovisual aids Small group discussion	Viva	SAQ	Materia Medica Repertory
Hom UG-Sur-II-6.39	KS	Kh	Diseases of joints - Arthritis and related diseases	Discuss the etiopathology, stages, clinical features, diagnosis and management of Rheumatoid arthritis	C/2	DK	Lecture Small group discussion	Viva	SAQ	Practice of medicine
Hom UG-Sur-II-6.40	KS HO	KH K	Diseases of joints - Arthritis and related diseases	Discuss the etiology, pathology, clinical features investigation and management of Ankylosing Spondylitis Discuss the Homoeopathic therapeutics for Ankylosing spondylitis	C/2 C/1	MK	Lecture Small group discussion	Viva	MCQ SAQ LAQ	Practice of medicine Materia Medica
Hom UG-	KS	KH	Diseases of joints Arthritis	Describe the types, pathology,	C/2	MK	Lecture AV mode	Viva	MCQ SAQ	Materia Medica

Sur-II-6.41	HO	K	and related diseases	clinical features, diagnosis and management of Osteoarthritis Discuss the Homoeopathic therapeutics for osteoarthritis	C/1		Small group discussion		LAQ	
Hom UG-Sur-II-6.42	PBL/PC	S	Knee joint examination	Demonstrate the clinical examination of knee joint	P/2	MK	Clinical demonstration. AV mode	Clinical demonstration	Clinical demonstration	
Hom UG-Sur-II-6.43	KS HO	K K	Diseases of joints – spine	Discuss the pathology, clinical features, diagnosis and management of Cervical spondylosis Discuss the Homoeopathic therapeutics for cervical spondylosis	C/2 C/1	MK MK	Lecture A V mode Small group discussion	Viva	MCQ SAQ LAQ	
Hom UG-Sur-II-6.44	KS	K	Diseases of joints- spine	Discuss the pathology, clinical features, diagnosis and management of lumbar spondylosis	C/2	MK	Lecture A V mode Small group discussion	Viva	MCQ SAQ	Materia Medica

	HO	K		Discuss the Homoeopathic therapeutics for Lumbar spondylosis	C/1	MK				
Hom UG-Sur-II-6.45	KS	K	Affections of soft tissues – Tendons, fascia, muscles etc	Describe Dupuytren's contracture	C/1	DK	Lecture	Viva	SAQ	
Hom UG-Sur-II-6.46	KS HO	K K	Affections of soft tissues – Tendons, fascia, muscles etc	Describe Tennis elbow Discuss the homoeopathic therapeutics for tennis elbow	C/1 C/1	MK MK	Lecture Small group discussion	Viva	SAQ	Materia Medica
Hom UG-Sur-II-6.47	KS	K	Affections of soft tissues – Tendons, fascia, muscles etc	Describe Golfer's elbow	C/1	DK	Lecture	Viva	SAQ	
Hom UG-Sur-II-6.48	KS	K	Affections of soft tissues – Tendons, fascia, muscles etc	Describe De Quervain's Tenosynovitis	C/1	DK	Lecture	Viva	SAQ	
Hom UG-	KS	K	Affections of soft tissues –	Describe Trigger finger	C/1	DK	Lecture	Viva	SAQ	

Sur-II-6.49			Tendons, fascia, muscles etc							
Hom UG-Sur-II-6.50	KS HO	K K	Affections of soft tissues – Tendons, fascia, muscles etc	Define ganglion Discuss the Homoeopathic therapeutics for ganglion	C/1 C/1	DK DK	Lecture	Viva	SAQ	
Hom UG-Sur-II-6.51	KS	K	Affections of soft tissues – Tendons, fascia, muscles etc	Describe Carpel tunnel syndrome	C/1	DK	Lecture	Viva	SAQ	
Hom UG-Sur-II-6.52	KS HO	K KH	Affections of soft tissues – Tendons, fascia, muscles etc	Describe Frozen shoulder Discuss the clinical features and management of Frozen shoulder Discuss the Homoeopathic therapeutics for Frozen shoulder	C/1 C/2 C/1	DK MK MK	Lecture	Viva	SAQ	
Hom UG-Sur-	KS	K	Affections of soft tissues – Tendons,	Describe Plantar fasciitis	C/1	DK	Lecture	Viva	SAQ	

II-6.53	HO	K	fascia, muscles etc	Discuss the homoeopathic therapeutics for plantar fasciitis	C/1					
Hom UG-Sur-II-6.54	KS	K	Affections of soft tissues – Tendons, fascia, muscles etc	Describe painful arc syndrome	C/1	DK	Lecture	Viva	SAQ	

Hom UG-Sur-II-6.55	KS	K	Fracture	Define fracture	C/1	MK	Lecture Audiovisual aids	Viva	MCQ SAQ LAQ	Radiology Materia Medica
		KS		Discuss the various stages of fracture healing	C/2	MK	Small group discussion			
		KS		Enumerate the factors affecting fracture healing	C/2	MK				
		KS		Describe the types of fractures (e.g., simple, compound, comminuted) and the basic principles of fracture management	C/1	MK				
		KS		Identify the signs and symptoms of a fracture (e.g., pain, swelling, deformity, loss of function)	C/2	MK				
	PBL	SH		Observe / Perform emergency care of fractures,	P/2	MK	Hands-on clinical simulation (skill lab)	OSCE on emergency management techniques	OSCE station on emergency fracture care	

				including immobilization techniques (e.g., splinting), managing open fractures (e.g., wound dressing), and assessing for neurovascular injury			Practical demonstrations			
		KH		Interpret imaging techniques (e.g., X-rays, CT scans) to diagnose fractures, assess fracture type	C/2	MK	Hands-on imaging interpretation			
	KS	KH		Explain various treatment plan for fractures, including conservative management (e.g., casting, traction) and surgical options (e.g., internal fixation,	C/2	MK	Lecture Small group discussion Clinical workshop			

				external fixation)						
	KS	KH		Describe the pathophysiology of immediate complications of fractures, such as haemorrhage, compartment syndrome, and fat embolism	C/1	MK	Lecture Audiovisual aids Small group discussion			
	PBL/KS	KH/S		Explain/Recognise early complications of fractures, including infection, DVT (deep vein thrombosis), and acute respiratory distress syndrome (ARDS), and understand their clinical features	C/1	MK	Lecture Audiovisual aids Hands-on clinical simulation, Case demonstrations			
	KS	KH		Discuss the management plans for immediate complications,	C/2	MK				

				such as compartment syndrome (fasciotomy), haemorrhage control, and fat embolism syndrome (supportive care)						
	KS	KH		Explain the late complications of fracture	C/2	MK	Lecture Audiovisual aids			
	HO	KH		Discuss the scope of Homoeopathy in fracture cases along with the indications Homoeopathic medicines for fracture	C/2	MK	Lecture Small group discussion			

Hom UG-Sur-II-6.56	KS	K	Fracture -	Describe compartment syndrome	C/1	DK	Lecture	Viva	SAQ	
Hom UG-Sur-II-6.57	KS	K	Fracture	Describe Sudeck's dystrophy	C/1	NK	Lecture	Viva	SAQ	
Hom UG-Sur-II-6.58	KS	K	Fracture	Describe Myositis ossificans (Post traumatic ossificans)	C/1	DK	Lecture	Viva	SAQ	
Hom UG-Sur-II-6.59	KS	K KH	Joint injury	Define dislocation and subluxation of joints Explain the clinical features of joint dislocation	C/1 C/2	MK MK	Lecture Audiovisual aid	Viva	SAQ	
UG-Sur-II-6.60	KS	K	Fracture of Clavicle	Recall the anatomy of the clavicle, including its ossification, vascular, and neurological relations.	MK	C/1	Lecture Audiovisual aid X-ray image interpretations	Viva	MCQ SAQ	

		K		Describe the mechanism of injury leading to clavicular fractures (direct trauma, fall on outstretched hand, etc.)	MK	C/1				
		K		Classify clavicular fractures based on anatomical location	MK	C/1				
		KH		Identify clinical features of clavicular fractures, including swelling, deformity, pain, and restricted shoulder movement.	MK	C/2				
		KH		Assess for complications such as brachial plexus injury, subclavian vessel injury, and non-union.	DK	C/2				

		KH KH		Interpret radiographic findings of clavicular fractures using standard X-ray views Describe the management of clavicular fracture	NK NK	C/3 C/3				
Hom UG-Sur-II-6.61	KS	K KH	Injury around shoulder and fracture of Humerus	Describe the anatomy of the shoulder joint and humerus, including the glenohumeral joint, rotator cuff, and neurovascular structures Classify different types of shoulder injuries (e.g., dislocations, rotator cuff tears, labral tears) and humeral fractures (e.g., proximal, mid-shaft, distal)	C/1 C/2	MK MK	Lecture Audiovisual aid Hands-on clinical simulation, Patient examinations Practical demonstrations, Simulation-based learning	Viva OSCE	MCQ SAQ LAQ OSCE	

		KH		Identify clinical signs and symptoms of shoulder injuries (e.g., limited range of motion, deformity) and humerus fractures (e.g., swelling, pain, deformity)	C/2	MK				
		KH		Outline the emergency management of shoulder dislocations (e.g., reduction techniques) and humeral fractures (e.g., splinting)	C/2	MK				
		KH		Explain the complications of shoulder injuries (e.g., recurrent dislocation, rotator cuff tear) and humerus fractures (e.g., malunion, nerve injury)	C/2	MK				

	PBL	SH		Perform a clinical examination for shoulder injuries, and assess for humerus fractures	P/2	MK				
Hom UG-Sur-II-6.62	KS	K	Injuries around the elbow	Describe the anatomy of the elbow joint, including bony structures (humerus, radius, ulna), ligaments (collateral ligaments), and neurovascular structures	C/1	MK	Lecture Audiovisual aid Hands-on clinical simulation, Patient examinations Practical demonstration Simulation-based learning Imaging interpretation sessions	Viva OSCE	MCQ SAQ LAQ OSCE	
		KH		Classify common elbow injuries, including fractures (e.g., supracondylar, radial head	C/2	MK				

				fractures, olecranon fracture), dislocations and soft tissue injuries						
		KH		Explain the mechanisms of injury for common elbow conditions (e.g., fall on an outstretched hand leading to supracondylar fracture, elbow hyperextension causing dislocation)	C/2	DK				
		KH		Identify the clinical signs and symptoms of elbow fractures	C/2	MK				
		KH		Interpret imaging studies, including X-rays	C/2	DK				
		KH		Describe the emergency management of elbow	C/2	DK				

		KH		dislocations and fractures, including immobilization, neurovascular assessment Recognize the complications of elbow injuries, such as stiffness, malunion, non-union, compartment syndrome, and nerve palsies	C/2	DK				
Hom UG-Sur-II-6.63	KS	K	Injuries around elbow	Describe pulled elbow	C/1	DK	Lecture	Viva	SAQ	
Hom UG-Sur-II-6.64	KS	K	Injuries of the forearm and wrist	Describe the anatomy of the forearm and wrist, including bones (radius, ulna, carpal bones), ligaments, muscles, tendons, and neurovascular structures	C/1	MK	Lecture Audiovisual aid Hands-on clinical simulation, Patient examinations Practical demonstrations, Simulation-based learning Imaging interpretation	Viva OSCE	MCQ SAQ LAQ OSCE	

		KH		Explain the common forearm and wrist injuries, including fractures (e.g, Colles' fracture, Monteggia fracture dislocation, Galeazzi fracture, Smith's fracture)	C/2	MK	sessions			
		KH		Interpret imaging studies (e.g., X-rays for fractures) to diagnose forearm and wrist injuries and assess the severity	C/2	DK				
		KH		Describe the emergency management of forearm and wrist injuries, including immobilization (splints or casts)	C/2	MK				

Hom UG-Sur-II-6.65	KS	KH	Injuries of hand	Explain Bennett's fracture dislocation, Rolando's fracture, fracture of metacarpals, and fracture of phalanges	C/2	DK	Lecture Audiovisual aid Hands-on clinical simulation, Patient examinations Practical demonstrations, Simulation-based learning Imaging interpretation sessions	Viva OSCE	MCQ SAQ LAQ OSCE	
		KH		Interpret imaging studies (e.g., X-rays for fractures) to diagnose hand injuries to assess the severity	C/2	NK				
		KH		Describe the management of hand injuries, including immobilization (splints or casts)	C/2	NK				

Hom UG-Sur-II-6.66	KS/PBL	K	Examination of Injuries of upper limb	Recall the anatomy of upper limb bones, including the shoulder girdle, humerus, radius, ulna, and hand bones	C/1	MK	Audiovisual aids Case based discussion and demonstration Small group discussion Simulated case scenarios	Viva	MCQ SAQ OSCE	
		K		Describe the mechanism of injury and types of fractures involving the upper limb (e.g., clavicle fractures, humeral fractures, forearm fractures, hand fractures)	C/1	MK	DOPS X-ray Interpretations OSCE			
		KH		Identify clinical features and signs of fractures, including swelling, deformity, pain, abnormal mobility, and functional impairment.	C/2	MK				

		SH		Perform a systematic examination of suspected fractures, including inspection, palpation, and range of motion assessment. Assess neurovascular status (e.g., brachial plexus, radial, ulnar, and median nerve function; vascular assessment). Interpret radiographic findings of fractures involving the upper limb.	P/1 P/2 P/2	MK MK DK				

Hom UG-Sur-II-6.67	KS	K	Pelvic fracture	Describe the anatomy of the pelvis, including its bones, ligaments, and major blood vessels	C/1	MK	Lecture Audiovisual aid Hands-on clinical simulation, Patient examinations	Viva OSCE	MCQ SAQ LAQ OSCE	
		KH		Understand the mechanism of injury in pelvic fractures (e.g., high-energy trauma, falls) and their classification (e.g., stable vs. unstable, Type A, Type B and Type C)	C/2	MK	Practical demonstrations, Simulation-based learning Imaging interpretation sessions			
		KH		Identify the clinical features of pelvic fractures, including pain, inability to bear weight, and associated injuries (e.g., genitourinary and vascular injuries)	C/2	MK				
	PBL	SH		Perform a clinical examination to assess for pelvic fracture, including inspection, palpation, and stability tests	P/2	MK				
	KS	KH		Interpret imaging studies	C/2	DK				

Hom UG-Sur-II-6.68	KS	K	Dislocation of Hip	Describe the anatomy of the hip joint, including bones, ligaments, muscles, and blood supply	C/1	MK	Lecture Audiovisual aid Hands-on clinical simulation, Patient examinations	Viva OSCE	MCQ SAQ LAQ OSCE	
		KH		Understand the mechanism of injury leading to hip dislocation and fracture, including trauma from high-energy impacts (e.g., road traffic accidents, falls)	C/2	MK	Practical demonstrations, Simulation-based learning Imaging interpretation sessions			
		KH		Recognize the clinical features of hip fracture dislocation, including pain, deformity, and inability to move the limb	C/2	MK				
		KH		Interpret imaging studies (X-rays, CT scans, MRIs) for the diagnosis of hip fracture	C/2	DK				

				dislocation						
		KH		Discuss the initial emergency and different treatment options for hip fracture dislocation	C/2	DK				
		KH		Discuss potential complications of hip fracture dislocation, such as avascular necrosis (AVN), nerve injury, osteoarthritis, and thromboembolism	C/2	MK				

Hom UG-Sur-II-6.69	KS	K	Fracture of neck of femur	Describe the anatomy of the femoral neck and its blood supply, including the role of the medial circumflex femoral artery	C/1	MK	Lecture Audiovisual aid Hands-on clinical simulation, Patient examinations Practical demonstrations, Simulation-based learning Imaging interpretation sessions	Viva OSCE	MCQ SAQ LAQ OSCE	
		K		Understand the mechanism of injury leading to femoral neck fractures, particularly in elderly patients with osteoporosis and in high-impact trauma	C/2	MK				
		K		Recognize the clinical features of femoral neck fractures, including hip pain, shortened leg, and external rotation of the limb	C/2	MK				
		KH		Interpret imaging studies,	C/2	DK				

				including X-rays and CT scans, for the diagnosis of femoral neck fractures						
		KH		Discuss the emergency management and different treatment options for femoral neck fracture	C/2	NK				
	PBL	SH		Perform a clinical examination to assess for fracture of the neck of femur, including inspection, palpation, and assessment of limb shortening	P/2	MK				

Hom UG-Sur-II-6.70	KS	K	Fracture shaft of femur	Describe the anatomy of the femur, focusing on the structure of the shaft, muscles, and blood supply	C/1	MK	Lecture Audiovisual aid Hands-on clinical simulation, Patient examinations Practical demonstration, Simulation-based learning Imaging interpretation sessions	Viva OSCE	MCQ SAQ LAQ OSCE	
		K		Understand the mechanisms of injury leading to femoral shaft fractures, including high-energy trauma like road traffic accidents and falls	C/2	MK				
		K		Recognize the clinical presentation of femoral shaft	C/2	MK				
		KH		Interpret imaging studies (X-rays, CT scans) for diagnosis and classification of femoral shaft fractures	C/2	DK				
		KH		Discuss the	C/2					

		KH		initial emergency management and treatment options for femoral shaft fracture Discuss potential complications of femoral shaft fractures, including fat embolism syndrome, compartment syndrome, and delayed union/non-union	C/2				
Hom UG-Sur-II-6.71	KS	K K	Injuries around the knee	Describe the anatomy of the knee joint, including bones, ligaments, menisci, and cartilage Understand the mechanisms of common knee injuries, including ligament tears, meniscal	C/1 C/2	MK MK	Lecture Audiovisual aid Hands-on clinical simulation, Patient examinations Practical demonstration, Simulation-based learning Imaging interpretation sessions	Viva OSCE	MCQ SAQ LAQ OSCE	

				injuries, fractures, and dislocations			DOPS			
		K		Recognize clinical features of knee injuries such as swelling, pain, instability, locking, and reduced range of motion	C/2	MK				
		KH		Interpret imaging studies (X-rays, MRI, and CT scans) for diagnosing knee injuries, including fractures, ligament tears, and meniscal injuries	C/2	DK				
		KH		Discuss the initial emergency management of knee injuries and treatment options for knee injuries	C/2	NK				

		K		Discuss common complications of knee injuries, such as stiffness, chronic instability, post-traumatic arthritis, and ligament failure	C/2	DK				
	PBL	SH		Perform a clinical examination of the knee, including inspection, palpation, range of motion assessment, and special tests (e.g., Lachman's test, McMurray's test, Drawer test)	P/2	MK				
Hom UG-Sur-II-6.72	KS	K	Injuries to the Leg, Ankle and Foot	Describe the anatomy of the leg, ankle, and foot, including bones (tibia, fibula, tarsals, metatarsals, phalanges),	C/1	MK	Lecture Audiovisual aid Hands-on clinical simulation, Patient examinations	Viva OSCE	MCQ SAQ LAQ OSCE	

				ligaments, and muscles			Practical demonstration, Simulation-based learning Imaging interpretation sessions			
		K		Understand the mechanisms of common leg, ankle, and foot injuries, including fractures (e.g., tibia, fibula, calcaneum, talus, Metatarsal and Phalanges of toes), ligament sprains (e.g., ankle sprains), tendon injuries, and dislocations	C/2	MK				
		K		Recognize the clinical features of leg, ankle, and foot injuries, such as pain, deformity, swelling, instability, and difficulty bearing weight	C/2	MK				
		KH		Interpret imaging studies	C/2	DK				

				(X-rays, MRI, CT scans) for diagnosing fractures, ligament injuries, and dislocations in the leg, ankle, and foot						
		KH		Discuss the initial emergency management and treatment options of leg, ankle, and foot injuries	C/2	NK				
	PBL	SH		Perform a clinical examination of the leg, ankle, and foot, including inspection, palpation, range of motion, and special tests	P/2	MK				

Hom UG-Sur-II-6.73	KS	K	Spinal injuries	Describe the anatomy of the spine, including vertebrae, intervertebral discs, spinal cord, nerve roots, and ligaments	C/1	MK	Lecture Audiovisual aid Hands-on clinical simulation, Patient examinations Practical demonstrations, Simulation-based learning Imaging interpretation sessions DOPS	Viva OSCE	MCQ SAQ LAQ OSCE	
		K		Understand the mechanisms of spinal injuries, including trauma (e.g., road traffic accidents, falls), sports injuries, and pathologic fractures	C/2	MK				
		K		Recognize the clinical features of spinal injuries, such as neck or back pain, paralysis, sensory loss, and neurogenic shock	C/2	MK				
		KH		Interpret imaging studies (X-rays, MRI, CT scans) for	C/2	DK				

				diagnosing spinal fractures, dislocations, and cord injuries						
		KH		Discuss the initial emergency management including spinal immobilization, neuroprotection and treatment options for spinal injuries	C/2	DK				
		KH		Discuss common complications of spinal injuries, including spinal cord injury complications (e.g., paralysis), pressure sores, deep vein thrombosis (DVT), and respiratory issues	C/2	DK				
	PBL	SH		Perform a clinical examination of the spine,	P/2	MK				

				including inspection, palpation, neurological assessment, and special tests (e.g., straight-leg raise test)						
Hom UG-Sur-II-6.74	KS	K K	Traumatic paraplegia	Define traumatic paraplegia and describe its common causes, such as spinal cord injury due to trauma (e.g., road traffic accidents, falls, sports injuries) Recognize the clinical features of traumatic paraplegia, including motor and sensory deficits, autonomic dysfunction (e.g., bladder, bowel control),	C/1 C/2	MK MK	Lecture Audiovisual aids Small group discussion Case based discussion and demonstration Simulation based learning			

				and secondary complications						
		KH		Discuss the initial emergency management of traumatic paraplegia, including spinal immobilization, airway management, and prevention of secondary injury	C/2	MK				
		KH		Explain the definitive treatment options for traumatic paraplegia	C/2	NK				
		KH		Discuss the long-term complications of traumatic paraplegia, including	C/2	DK				
	PBL	SH		Perform a clinical	P/2	MK				

				examination for traumatic paraplegia, including neurological assessment (motor and sensory testing), deep tendon reflexes, and autonomic function assessment						
	HO	K		Discuss the Homoeopathic therapeutics for traumatic paraplegia	C/1	MK				

Topic: Hom UG-Sur-II.7. Diseases of Ear, Nose and Paranasal Sinuses, Throat (External/Internal) & Neck

Ear

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-II.7.1	KS	K	Ear	Review the concepts of applied anatomy of Ear- External, middle, inner ear	C/2	MK	Lecture Audiovisual mode	Viva	MCQ SAQ	Anatomy
Hom UG-Sur-II.7.2	KS	K		Review the concepts of physiology of Ear: Hearing & Equilibrium	C/2	MK	Lecture Audiovisual mode	Viva	MCQ SAQ	Physiology
Hom UG-Sur-II.7.3	KS	K		Discuss the steps of case taking of Ear Case	C/2	MK	Lecture, small group discussion	Viva	--	Organon Repertory and case taking
Hom UG-Sur-II.7.4	PC	SH		Observe Ear examination	P/1	MK	Observation, small group discussion	DOPS	--	

Hom UG-Sur-II.7.5	KS	K	Disease of External Ear	Discuss Congenital defects, trauma & infections of external ear Management of Trauma of Ear Discuss Wax, Foreign bodies, Neoplasm Management of Wax & Foreign body removal	C/2 C/2 C/2 C/2	MK	Lecture, small group discussion Audiovisual aids		MCQ SAQ	Anatomy
Hom UG-Sur-II.7.6	HO	KH	Homoeopathic therapeutics of external ear	Describe the homeopathic remedies for diseases of external ear	C/1	MK	Lecture Small group discussion Inter departmental seminar		SAQ	Materia medica Repertory
Hom UG-Sur-II.7.7	KS	K	Disease of Middle ear	Discuss aetiology of ASOM Discuss Pathology of	C/1 C/1	MK MK	Lecture, small group discussion Audiovisual aids	Viva	MCQ SAQ LAQ	Anatomy

				ASOM Describe Clinical features of ASOM Discuss investigations in ASOM Describe the treatment of ASOM – procedure: Aural toilet & Surgical: myringotomy	 C/2 C/1 C/1	 MK MK NK				
Hom UG-Sur-II.7.8	HO	KH	Homoeopathic therapeutics of ASOM	Describe the homeopathic remedies for ASOM	C/1	MK	Lecture Small group discussion Inter departmental seminar	Viva	SAQ	Materia Medica Repertory
Hom UG-Sur-II.7.9	KS	K	Disease of Middle ear: Chronic suppurative otitis media	Describe the types of CSOM Discuss the etiology of CSOM Describe the pathology of CSOM	C/1 C/2 C/1	MK MK MK	Lecture Small group discussion Inter departmental seminar	Viva	MCQ SAQ LAQ	

				Describe the clinical features of CSOM Discuss investigations in CSOM	C/2	MK				
				Discuss the differential diagnosis CSOM	C/1	MK				
				Describe the management of CSOM: conservative and surgical – tympanoplasty, mastoidectomy	C/1	NK				
				Describe the complications of Otitis media: Mastoid infection, intracranial infection, extracranial infection	C/2	MK				
Hom UG-Sur-II.7.10	HO	KH	Homoeopathic therapeutics of CSOM	Describe homeopathic remedies for CSOM	C/1	MK	Lecture Small group discussion Inter departmental seminar	Viva	SAQ	Materia Medica Repertory
Hom UG-Sur-II.7.11	KS	K	Disease of middle ear: Chronic Non suppurative	Describe Eustachian catarrh, Serous otitis media, atelectasis of the tympanum, tympanosclerosis	C/2	DK	Lecture Small group discussion	Viva	SAQ	Anatomy

			otitis Media							
Hom UG-Sur-II.7.12	KS	K	Earache	Define Aetiology, investigation of Otalgia	C/2	MK	Lecture Small group discussion	Viva	SAQ	
Hom UG-Sur-II.7.13	HO	KH	Homeopathic Therapeutics of Earache	Describe homoeopathic remedies for earache	C/2	MK	Lecture Small group discussion Inter departmental seminar	Viva	SAQ	Materia Medica Repertory
Hom UG-Sur-II.7.14	KS	K	Otorrhea	Describe Aetiology, Features, Investigation and management of Otorrhea	C/2	MK	Lecture Small group discussion	Viva	SAQ	
Hom UG-Sur-II.7.15	HO	KH	Homeopathic Therapeutics Otorrhea	Describe homoeopathic remedies for Otorrhea	C/2	MK	Lecture Small group discussion Inter departmental seminar	Viva	SAQ	Materia Medica Repertory
Hom UG.Sur-II.7.16	KS	K	Deafness	Describe Types of Deafness Discuss Causes of Deafness Discuss Management of Deafness	C/2 C/2	MK MK	Lecture Small group discussion	Viva	SAQ	

				Hearing aids & Implants	C/2	NK				
Hom UG-Sur-II.7.17	PBL	SH		Demonstrate examination of case of Deafness – hearing test	P/2	MK	Clinical demonstration. AV mode	Clinical demonstration	Clinical demonstration	
Hom UG-Sur-II.7.18	HO	KH	Homeopathic Therapeutics Deafness	Describe homoeopathic remedies for Deafness	C/2	MK	Lecture Small group discussion Inter departmental seminar	Viva	SAQ	Materia Medica Repertory
Hom UG-Sur-II.7.19	KS	K	Tinnitus	Describe Types of Tinnitus Discuss Causes of Tinnitus Discuss Investigations and Management of Tinnitus	C/2 C/2 C/2	MK MK NK	Lecture Small group discussion	Viva	SAQ	
Hom UG-Sur-II.7.20	HO	KH	Homeopathic Therapeutics Tinnitus	Describe homoeopathic remedies for Tinnitus	C/2	MK	Lecture Small group discussion Inter departmental seminar	Viva	SAQ	Materia Medica Repertory
Hom UG-	KS	K	Vertigo	Describe Causes of Vertigo	C/2	MK	Lecture Small group	Viva	SAQ	

Sur-II.7.21				Discuss Investigations and Management of Vertigo	C/2	NK	discussion			
Hom UG-Sur-II.7.22	PBL	SH		Demonstrate examination of the case of Vertigo	P/2	MK	Clinical demonstration. AV mode	Clinical demonstration	Clinical demonstration	
Hom UG-Sur-II.7.23	HO	K	Homeopathic Therapeutics Vertigo	Describe homoeopathic remedies for Vertigo	C/2	MK	Lecture Small group discussion Inter departmental seminar	Viva	SAQ	Materia Medica Repertory
Hom UG-Sur-II.7.24	KS HO	K K		Discuss aetiology, pathology, clinical features, investigation, management of Menier's disease Discuss homoeopathic therapeutics of Menier's disease	C/2 C/1	MK MK	Lecture Small group discussion AV mode	Viva	MCQ SAQ	
Hom UG-Sur-II.7.25	KS	K		Discuss aetiology, pathology, clinical features, investigation, management of Benign positional vertigo, acoustic neuroma	C/2	MK	Lecture Small group discussion	Viva	MCQ SAQ	

	HO	K		Discuss homoeopathic therapeutics of Benign positional vertigo, acoustic neuroma	C/1	MK	AV mode			Materia Medica Repertory
Hom UG-Sur-II.7.26	KS HO	K K		Discuss aetiology, pathology, clinical features, investigation, management of Facial paralysis, Bell's Palsy Discuss homoeopathic therapeutics of Facial paralysis, Bell's Palsy	C/2 C/1	MK MK	Lecture Small group discussion AV mode	Viva	MCQ SAQ	Materia Medica Repertory

Nose and Paranasal sinuses

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-II.7.27	KS	K	Nose & paranasal sinus	Review the concepts of applied anatomy of Nose and paranasal sinus	C/2	MK	Lecture Audiovisual mode	Viva	MCQ SAQ	**Anatomy, Physiology**
Hom UG-Sur-II.7.26	KS	K		Review the concepts of functions of Nose and paranasal sinus	C/2	MK	Lecture Audiovisual mode			
Hom UG-Sur-II.7.28	KS	K	Case Taking	Discuss the steps of case taking of Case of Nose and Paranasal sinus	C/2	MK	Lecture, small group discussion	Viva	--	Organon Repertory and case taking
Hom UG-Sur-II.7.29	PC	SH	Examination of Nose and Paranasal sinus	Observe examination of Nose: Anterior Rhinoscopy & Posterior Rhinoscopy & paranasal sinus	P/1	MK	Observation, small group discussion	DOPS	--	
Hom UG-Sur-	KS	K	Disease of external nose	Discuss Deformity, fracture of nose, vestibulitis,	C/1	NK	Lecture Audiovisual mode	Viva	MCQ/SAQ/LAQ	

II.7.30										
Hom UG-Sur-II.7.31	KS	K	Deviated Nasal Septum	Describe Etiology of DNS	C/1	MK	Lecture Audiovisual mode	Viva	MCQ/SAQ	
				Discuss Pathology of the DNS	C/1	MK				
				Discuss the symptoms, complication, Differential diagnosis of DNS	C/1	MK				
				Discuss management of DNS	C/1	NK				
	HO	K		Discuss homoeopathic therapeutics of DNS	C/1	DK				**Materia Medica Repertory**
Hom UG-Sur-II.7.32	KS	K	Rhinitis	Discuss Types of Rhinitis	C/1	MK	Lecture Audiovisual mode	Viva	MCQ/SAQ	
Hom UG-Sur-II.7.33	KS	K	Rhinitis	Describe aetiology, clinical feature, D/D, Complications, treatment of Common cold	C/1	MK	Lecture Audiovisual mode	Viva	MCQ/SAQ/LAQ	
	HO	K		Discuss homoeopathic therapeutics of common cold	C/2	MK				**Materia Medica Repertory**

	KS	K		Describe different types of Chronic rhinitis e.g Chronic simple rhinitis, chronic hypertrophic rhinitis, Atrophic rhinitis, Rhinitis sciaa, Rhinosporidiosis, Rhinoscleroderma	C/2	NK				
Hom UG-Sur-II.7.34	KS	K	Allergic rhinitis	Discuss etiology of Allergic rhinitis Describe mechanism and pathology of Allergic rhinitis Discuss clinical types and symptoms of allergic rhinitis Describe diagnosis and treatment of allergic rhinitis	C/1 C/1 C/1 C/1	MK MK MK DK	Lecture Audiovisual mode Small group discussion	Viva	MCQ/SAQ/LAQ	
Hom UG-Sur-II.7.35	KS	K	Vasomotor Rhinitis	Describe aetiology, pathology, clinical features, treatment of Vasomotor rhinitis	C/1	DK	Lecture	Viva	MCQ/SAQ	
Hom UG-	HO	KH	Therapeutics of Rhinitis	Describe homoeopathic treatment of rhinitis	C/2	MK	Lecture AV	Viva	MCQ/SAQ/LAQ	**Materia Medica Repertory**

Sur-II.7.36							Small group discussion			
Hom UG-Sur-II.7.37	KS	K	Nasal Polyp	Define Nasal Polyp Describe types, etiology, pathology, clinical features, investigation of Nasal Polyp Describe management of nasal polyp	C/1 C/2 C/1	MK MK DK	Lecture Audiovisual mode	Viva	MCQ/SAQ/LAQ	
Hom UG-Sur-II.7.38	HO	KH	Therapeutics of Nasal polyp	Describe homoeopathic treatment for nasal polyp	C/2	MK	Lecture AV Small group discussion	Viva	MCQ/SAQ/LAQ	**Materia Medica Repertory**
Hom UG-Sur-II.7.39	KS	K	Miscellaneous disease of Nose and sinus	Discuss Cerebrospinal rhinorrhoea, Foreign body, rhinolith, choanal atresia, oroantral fistula, proptosis	C/1	NK	Lecture Audiovisual mode	Viva	MCQ/SAQ	
Hom UG-Sur-II.7.40	KS	K	Epistaxis	Describe Causes, site, clinical features, investigation and management of Epistaxis	C/1	MK	Lecture Audiovisual mode	Viva	MCQ/SAQ	
Hom UG-Sur-II.7.41	HO	KH		Describe homoeopathic treatment for epistaxis	C/2	MK	Lecture AV Small group discussion	Viva	MCQ/SAQ/LAQ	**Materia Medica Repertory**
Hom UG-Sur-	KS	K	Sinusitis	Describe cause, pathology, clinical features, investigation,	C/1	MK	Lecture Audiovisual mode	Viva	MCQ/SAQ/LAQ	

II.7.42				differential diagnosis, complication of Acute Maxillary sinusitis Discuss management of Acute Maxillary sinusitis	C/1	NK				
Hom UG-Sur-II.7.43	KS	K		Describe cause, pathology, clinical features, investigation, differential diagnosis, complication of Acute frontal sinusitis Discuss management of Acute frontal sinusitis	C/1 C/1	MK NK	Lecture Audiovisual mode	Viva	MCQ/SAQ/LAQ	
Hom UG-Sur-II.7.44	KS	K		Discuss Management of chronic maxillary sinusitis & chronic frontal sinusitis	C/1	NK	Lecture Audiovisual mode	Viva	MCQ/SAQ	
Hom UG-Sur-II.7.45	KS	K	Tumor, cyst of Nose and Sinus	Discuss benign tumor & Cyst & Malignant tumor of Nose & Sinus	C/1	NK	Lecture Audiovisual mode	Viva	MCQ/SAQ	
Hom UG-Sur-II.7.46	HO	KH	Therapeutics of Nose and paranasal sinus diseases	Describe homoeopathic treatment for Sinusitis Discuss homoeopathic treatment for the cyst and tumour of nose and sinus	C/2 C/2	MK NK	Lecture AV Small group discussion	Viva	MCQ/SAQ/LAQ	**Materia Medica** **Repertory**

Pharynx

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-II.7.47	KS	K	Pharynx	Review the concepts of applied anatomy of pharynx	C/2	MK	Lecture Audiovisual mode	Viva	MCQ SAQ	**Anatomy**
Hom UG-Sur-II.7.48	KS	K		Review the concepts of functions of Pharynx	C/2	MK	Lecture Audiovisual mode			**Physiology**
Hom UG-Sur-II.7.49	PC	SH	Examination of Pharynx	Observe examination of Pharynx	P/1	MK	Observation, small group discussion	DOPS	--	
Hom UG-Sur-II.7.50	KS	K	Tonsillits	Describe aetiology, types, sign& symptoms, differential diagnosis complication of acute and chronic tonsilitis Management of acute and chronic tonsilitis, tonsillectomy	C/1 C/1	MK NK	Lecture Audiovisual mode	Viva	MCQ SAQ	**Anatomy**

Hom UG-Sur-II.7.51	KS	K	Adenoids	Describe aetiology, clinical features, diagnosis, differential diagnosis of adenoids Management of adenoids, adenoidectomy	C/2 C/2	MK NK	Lecture Audiovisual mode	Viva	MCQ SAQ	**Anatomy**
Hom UG-Sur-II.7.52	HO	KH	Therapeutics of tonsilitis & Adenoids	Describe homoeopathic treatment for Acute and chronic tonsillitis and adenoids	C/2	MK	Lecture AV Small group discussion	Viva	MCQ/SAQ/LAQ	**Materia Medica** **Repertory**
Hom UG-Sur-II.7.53	KS	K	Diseases of pharynx	Describe aetiology, pathology, clinical features, differential diagnosis of acute and chronic pharyngitis Discuss Vincent's angina, diphtheritic pharyngitis, Thrush, Discuss Pharyngeal Abscess: Quinsy, acute & chronic retropharyngeal abscess, parapharyngeal abscess Discuss pharyngeal	C/2 C/2 C/2	MK NK NK	Lecture Audiovisual mode	Viva	MCQ SAQ	**Anatomy** **Pathology**

				diverticulum, stylohyoid syndrome, Globus hystericus Describe types, aetiology, symptoms, diagnosis and treatment of pharyngeal tumours	C/2 C/1	NK NK				
Hom UG-Sur-II.7.54	HO	KH	Homoeopathic therapeutics for Pharynx	Describe homeopathic treatment for Acute & chronic pharyngitis Describe homoeopathic treatment for pharyngeal abscess, tumours other diseases	C/1 C/1	MK NK	Lecture AV Small group discussion	Viva	MCQ/SAQ/LAQ	**Materia Medica Repertory**

Larynx and Trachea

Sl. No.	Domain of Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-	KS	K	Larynx	Review the concepts of applied anatomy of	**C/2**	MK	Lecture Audiovisual	Viva	MCQ SAQ	**Anatomy**

II.7.55				Larynx			mode			
Hom UG-Sur-II.7.56	KS	K		Review the concepts of functions of Larynx	**C/2**	MK	Lecture Audiovisual mode			**Physiology**
Hom UG-Sur-II.7.57	PC	SH	Examination of Larynx	Observe examination of Larynx	P/1	MK	Observation, small group discussion	DOPS	--	
Hom UG-Sur-II.7.58	KS HO	K KH	Laryngitis	Describe aetiology, types, sign& symptoms, differential diagnosis complication of acute and chronic Laryngitis Management of acute and chronic Laryngitis Homoeopathic treatment for acute & chronic Laryngitis	C/1 C/1 C/2	MK NK MK	Lecture Audiovisual mode	Viva	MCQ SAQ	**Anatomy**
Hom UG-Sur-II.7.59	KS HO	K KH	Disease of Larynx	Describe aetiology, types, sign& symptoms, differential diagnosis complication of Laryngeal Paralysis Discuss Homoeopathic treatment for the laryngeal paralysis	C/1 C/1	DK NK	Lecture Audiovisual mode	Viva	MCQ SAQ	**Anatomy**

	KS	K		Discuss aetiology, symptoms, investigation & management of Laryngeal web, singer's nodes, Laryngocele, stridor	C/2	NK				
	KS	K		Discuss aetiology, symptoms, types, investigation & management of Laryngeal tumors	C/2	MK				
	HO	KH		Discuss Homoeopathic treatment for stridor, laryngeal web, tumors	C/1	NK				
	KS	KH		Discuss aetiology, mechanism, investigation & treatment of Hoarseness of voice & Disorder of voice	C/1	MK				
	HO	K		Discuss homoeopathic treatment for hoarseness of voice	C/1	MK	Hands-on imaging interpretation			
	PBL	KH		Interpret imaging techniques (e.g., X-rays, CT scans, MRI,) to diagnose Laryngeal	C/1	DK				

				disease						
Hom UG-Sur-II.7.60	KS PBL	K KH	Trachea	Describe classification, functions, indication, contraindication, complication and sequelae of tracheostomy Procedure of tracheostomy	C/1 C/2	MK NK	Lecture Audiovisual mode DOPS	Viva	MCQ SAQ	

Thyroid

Sl No	Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-II.7.61	**KS** **KS**	**K** **K**	**Disease of Thyroid**	Discuss anatomy and physiological aspects of Thyroid Gland Describe investigations used for investigation of thyroid gland – USG, FNAC, PET, CT, MRI, Isotope scanning	**C/1** C/1	**DK** DK	Lecture Audiovisual mode	Viva	MCQ SAQ	**Pathology**

	KS	**K**		Describe cause, types, Clinical features, diagnosis of thyroid swelling (Goiter)	C/1	MK				
	HO	**KH**		Discuss homoeopathic medicines for the Goitre	C/2	MK				**Materia Medica Repertory**
	KS	**K**		Describe cause, clinical features, investigation of Hypothyroidism	C/1	MK				
	HO	**KH**		Discuss homoeopathic treatment for the hypothyroidism	C/2	MK				**Materia Medica Repertory**
	KS	**K**		Describe cause, clinical features, investigation of Hyperthyroidism, thyrotoxicosis	C/2	MK				
	HO	**KH**		Discuss homoeopathic treatment for the hyperthyroidism, thyrotoxicosis	C/2	MK				**Materia Medica Repertory**

	KS **HO** **PBL**	**K** **KH** **SH**		Describe aetiology, types, clinical features, investigation of Cancer of Thyroid Discuss homoeopathic treatment for the cancer of thyroid Describe the physical examination of the thyroid gland	C/1 C/2 P/2	NK DK DK	Lecture, Audiovisual Integrated Teaching Audiovisual Demonstration			**Materia Medica Repertory**
Hom UG-Sur-II.7.62	KS PBL/PC	K K S SH	Examination of Neck swelling	Describe the boundaries, triangles, and important anatomical landmarks of the neck. Classify neck swellings based on their location (Midline and lateral swellings) and pathology Obtain a detailed history focusing on onset, duration, progression, associated symptoms, and systemic Demonstrate thorough physical examination	C/1 C/1 P/1 P/2	MK MK MK MK	Lecture Audiovisual aids Simulated patients Case based discussion and demonstration DOPS	Viva Observation of Clinical demonstration	LAQ OSCE	

				of neck swelling including, inspection, palpation and auscultation						
		SH		Examine the lymph nodes, thyroid gland, and other structures to identify associated findings.	P/2	MK				
		KH		Correlate clinical findings with likely causes, including inflammatory lymphadenopathy, thyroid swellings, and neoplastic lesions.	C/3	MK				

Topic: Hom UG-Sur-II.8. Diseases of breast-

Sl No	Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-II.8.1	KS	K	Describe the anatomy of the breast	Identify lobes, ducts, and connective tissue of the breast	C/1	MK	Lecture, Diagrams, Models, Audiovisual aids	Viva	MCQ, SAQ	Anatomy
Hom UG-Sur-II.8.2	KS	K	Anatomy: Vascular and lymphatic supply	Describe vascular and lymphatic supply	C/1	MK	Lecture, Diagrams, Models	Viva	MCQ, SAQ	Anatomy
Hom	KS	KH	Anatomy: Clinical	Relate anatomy to	C/2	MK	Lecture,	Viva	MCQ, SAQ	Anatomy

UG-Sur-II.8.3			relevance	common breast diseases			Diagrams, Models			
Hom UG-Sur-II.8.4	KS	K	Mammography: Diagnostic and screening utility	Interpret mammography findings	C/3	MK	Case-Based Learning	Viva	SAQ	Radiology
Hom UG-Sur-II.8.5	PC	KH	Mammography: Diagnostic and screening utility	Discuss indications and limitations of mammography Differentiate between screening and diagnostic mammography	C/3	DK	Case-Based Learning	Viva	SAQ	Radiology
Hom UG-Sur-II.8.6	KS KH	K KH	Aberration of Normal Development and Involution (ANDI) Pathophysiology, clinical features, and imaging	Define ANDI and its subtypes	C/1 C/2	MK MK	Lecture, Case Studies	Viva,	MCQ, SAQ	
Hom UG-Sur-II.8.7	PC	K	Aberration of Normal Development and Involution (ANDI) Clinical features and diagnostic tools including Imaging	Discuss clinical presentations and diagnostic tools	C/3	MK	Lecture, Case Studies	Viva,	MCQ, SAQ, LAQ	
Hom UG-Sur-II.8.8	HO	K	Aberration of Normal Development and Involution (ANDI)	ExplainHomeopathic therapeutics for ANDI	C/1	MK	Lecture, Case Studies	Viva,	MCQ, SAQ, LAQ	

			Homoeopathic management							
Hom UG-Sur-II.8.9	KS	K	Fibroadenosis and Fibrocystic Disease Etiopathogenesis	Define &Differentiate between fibroadenosis and fibrocystadenosis	C/2	MK	Lecture, Case Studies	Viva,	MCQ, SAQ, LAQ	
Hom UG-Sur-II.8.10	KS	K KH	Fibroadenosis and Fibrocystic Disease Clinical features& Investigations	Describe clinical features of Fibroadenosis and Fibrocystic Disease Describe investigations for Fibroadenosis and Fibrocystic Disease	C/2 C/2	MK	Lecture, Case Studies	Viva,	MCQ, SAQ, LAQ	
Hom UG-Sur-II.8.11	HO	K	Fibroadenosis and Fibrocystic Disease Homeopathic Therapeutics	Discuss management strategies, including homeopathy	C/2	MK	Lecture, Case Studies	Viva,	MCQ, SAQ, LAQ	
Hom UG-Sur-II.8.12	KS	K	Phyllodes Tumour -Tumour classification	Define &Classify phyllodes tumour	C/1	MK	Lecture	Viva	MCQ SAQ	
Hom UG-Sur-II.8.13	PC	K	Phyllodes Tumour - Clinical features& Investigations	Describe clinical features & investigations	C/1	MK	Lecture, Case Studies	Viva,	MCQ, SAQ, LAQ	
Hom UG-Sur-II.8.14	HO	K	Phyllodes Tumour Homeopathic Therapeutics	Discuss management strategies, including homeopathy	C/1	MK	Lecture, Case Studies	Viva,	MCQ, SAQ, LAQ	
Hom UG-	KS	K	Mastalgia: Types and	- Identify types of mastalgia (cyclical,	C/1	MK	Lecture, Case-Based	Viva,	MCQ, SAQ, LAQ	

Sur-II.8.15			pathophysiology	non-cyclical)			Learning			
Hom UG-Sur-II.8.16	PC	K KH	Mastalgia: Diagnosis and treatment	Correlate mastalgia with hormonal changes Explain treatment approaches	C/1 C/2	MK DK	Lecture, Small Group Discussion	Viva,	MCQ, SAQ, LAQ	
Hom UG-Sur-II.8.17	HO	K	Mastalgia: Homeopathic therapeutics	- Discuss homeopathic management for cyclical mastalgia	C/1	MK	Lecture	Viva,	MCQ, SAQ, LAQ	
Hom UG-Sur-II.8.18	KS	K	Traumatic Fat Necrosis: Aetiopathogenesis	Explain causes and clinical findings of fat necrosis	C/2	MK	Lecture, Small Group Discussion	Viva,	MCQ, SAQ	
Hom UG-Sur-II.8.19	PC	KH KH	Traumatic Fat Necrosis: Diagnosis and treatment	Discuss imaging findings and differential diagnoses Outline management strategies	C/2 C/2	DK DK	Case-Based Learning	Viva,	MCQ, SAQ	
Hom UG-Sur-II.8.20	HO		Traumatic Fat Necrosis: Homeopathic therapeutics	- Discuss homeopathic management for cyclical mastalgia	C/1	MK	Lecture, Case-Based Learning	Viva,	MCQ, SAQ	
Hom UG-Sur-II.8.21	KS	K KH	Galactocele: Etiology and imaging	Define galactocele Discuss clinical and imaging findings	C/1 C/2	MK MK	Lecture, Case-Based Learning	Viva,	MCQ, SAQ	
Hom UG-Sur-II.8.22	HO	K	Galactocele: Homeopathic therapeutics	Discuss the homeopathic treatments for galactocele	C/1	MK	Lecture, Case-Based Learning	Viva,	MCQ, SAQ	
Hom	KS	K	Mastitis&	Differentiate between	C/1	MK	Lecture, Case-	Viva,	MCQ, SAQ	

UG-Sur-II.8.23			Antibioma: Pathogenesis and classification	infective and non-infective mastitis Describe Antibioma	C/1	MK	Based Learning			
Hom UG-Sur-II.8.24	PC	KH	Mastitis: Diagnosis and treatment	Discuss diagnostic methods - Explain medical and surgical management options	C/2	MK	Lecture, Case-Based Learning	Viva,	MCQ, SAQ	
Hom UG-Sur-II.8.25	HO	K	Mastitis: Homeopathic therapeutics	- Discuss homeopathic options for mastitis management	C/1	MK	Lecture, Case-Based Learning	Viva,	MCQ, SAQ	
Hom UG-Sur-II.8.26	KS	K	Duct Ectasia: Pathogenesis and diagnosis	Identify clinical presentations and imaging findings	C/3	DK	Small Group Discussion	Viva,	MCQ, SAQ	
Hom UG-Sur-II.8.27	PC	K	Mondor's Disease: Clinical and management	Explain the management of superficial thrombophlebitis (Mondor's disease)	C/3	NK	Lecture, Case-Based Learning	Viva,	MCQ, SAQ	
Hom UG-Sur-II.8.28	KS	KH	Breast Cysts: Pathogenesis and classification	Differentiate simple and complex cysts	C/1	MK	Lecture, Case-Based Learning	Viva	MCQ, SAQ	
Hom UG-Sur-II.8.29	KS	K	Breast Cysts: Diagnosis and treatment	Explain imaging and aspiration techniques	C/2	MK	Case-Based Learning	Viva	MCQ, SAQ	
Hom UG-Sur-II.8.30	HO	K	Breast Cysts: Homeopathy	Discuss homeopathic treatments for breast cysts	C/1	MK	Lecture, Small Group Discussion	Viva	MCQ, SAQ	
Hom	KS	K	Galactorrhoea:	Explain hormonal	C/2	MK	Lecture, Small	Viva	MCQ, SAQ	

UG-Sur-II.8.31			Pathogenesis and endocrinology	and systemic causes of galactorrhoea			Group Discussion			
Hom UG-Sur-II.8.32	KS	K K KH	Gynaecomastia:	Define Gynaecomastia Enumerate the causes of Gynaecomastia Discuss surgical and medical treatment options	C/1 C/2	MK MK DK	Lecture, Case-Based Learning	Viva	MCQ, SAQ	
Hom UG-Sur-II.8.33	HO	K	Homeopathic management of Gynaecomastia	Outline homeopathic approaches to treating gynaecomastia	C/1	MK	Lecture	Viva	MCQ, SAQ	
Hom UG-Sur-II.8.34	KS	K	Mammary Fistula: Etiology and pathogenesis	Explain causes and clinical presentation of mammary fistula	C/3	DK	Lecture, Case-Based Learning	Viva	MCQ, SAQ	
Hom UG-Sur-II.8.35	KS	K K KH KH	Carcinoma Breast	Classify carcinoma of the breast Explain the risk factors and etiopathogenesis of breast cancer Identify the clinical features of breast cancer, including symptoms and signs Outline the role of	C/1 C/2 C/2 C/2	MK MK MK DK	Lecture Audiovisual aids	Viva	MCQ, SAQ, LAQ	Materia Medica Repertory

		KH KH KH		diagnostic tools such as Mammogram, Ultrasound and biopsy Explain the staging of breast cancer based on TNM classification Discuss the treatment options Discuss the complications of breast cancer and its treatments	C/2 C/2 C/3	MK DK NK				
Hom UG-Sur-II.8.36	HO	K	Carcinoma Breast: Homeopathic therapeutics	- Discuss homeopathic remedies for carcinoma breast	C/1	Must Know	Case-Based Learning	Viva	MCQ, SAQ, LAQ	
Hom UG-Sur-II.8.37	KS	K	Male Breast Carcinoma: Clinical presentation	Recognize symptoms and diagnostic signs	C/1	DK	Lecture, Small Group Discussion	Viva	MCQ, SAQ	
Hom UG-Sur-II.8.38	KS	K	Nipple Retraction: Diagnosis and treatment	Discuss causes, diagnostic techniques, and management	C/2	MK	Case-Based Learning	Viva	MCQ, SAQ	
Hom UG-Sur-	HO	K	Homeopathy: Male Breast Carcinoma	Outline homeopathic approaches to male breast carcinoma	C/1	MK	Lecture	Viva	MCQ, SAQ	

II.8.39										
Hom UG-Sur-II.8.40	KS/PBL	K K K S SH S KH	Breast examination	List common conditions affecting the breast both benign and malignant lesions Describe the clinical features of breast diseases Explain the indications and techniques of breast examination Observe breast examination. Examine the axillary, supraclavicular, and infraclavicular lymph nodes Identify clinical findings suggestive of malignancy Correlate examination findings with imaging studies and biopsy results	C/1 C/1 C/2 P/1 P/2 P/3 C/3	MK MK MK MK MK	Lecture Clinical demonstrations Audiovisual aids DOPS Case based learning Image interpretations Integrated case discussion and examination with Gynaecology department	Viva	SAQ OSCE (Examination skills, Case presentation)	Gynecology

Topic: HOM UG-SUR-II.9. Ophthalmology -

Sl No	Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-II.9.1	**KS**	**K**	Describe the anatomy and physiology of vision	Identify the anatomy of the eye, including cornea, lens, retina, and optic nerve, orbit	C/1	MK	Lecture, Audiovisual aids	Viva	MCQ, SAQ	**Anatomy Physiology**
		K		Describe the physiology of vision, including accommodation, color vision, and adaptation Visual pathway	C/1					
		K		Explain reflex arcs like pupillary and corneal reflexes	C/1					
Hom UG-Sur-II.9.2	**KS**	**K**	Optics: Basics of refraction	Explain the principles of refraction, accommodation, and visual acuity	C/2	MK	Lecture, Audiovisual aids	Viva	MCQ, SAQ	**Physiology**
Hom UG-Sur-II.9.3	**KS**	**K**	Define, classify and describe the management of refractive errors.	Definition of myopia, hypermetropia and astigmatism	C/1	MK	Lecture, Audiovisual aids	Viva	MCQ, SAQ, LAQ	
		KH		Describe the etiopathogenesis, Types, Clinical	C/2	MK				

		KH		features, investigations & management of myopia, hypermetropia, astigmatism. Describe the indications and advantages, complications of contact lenses	C/2	DK				
Hom UG-Sur-II.9.4	**PC**	**SH**	Demonstrate the steps in performing the visual acuity assessment and colour vision	Assess visual acuity using Snellen's chart, pin hole testing and interpret the findings Assess near vision using Times new Roman charts. Assess color vision using Ishihara's color plates	P/2	MK	DOAP, Case study	Viva, DOAP	DOAP	
Hom UG-Sur-II.9.5	**HO**	**K**	Homeopathic management of refractive errors.	Discuss the Homeopathic management of refractive errors.	C/1	MK	Lecture	Viva	MCQ, SAQ, LAQ	
Hom UG-Sur-II.9.6	**KS**	**K**	Diseases of Conjunctiva	Discuss causes and clinical features of conjunctivitis	C/2	MK	Lecture, Small Group Discussion	Viva	MCQ, SAQ, LAQ	
Hom UG-Sur-II.9.7	**PC**	**K**	Diseases of Conjunctiva	Explain diagnostic and therapeutic approaches for bacterial, viral, and	C/2	DK	Lectures, Case-Based Learning	Viva	MCQ, SAQ, LAQ	

				allergic conjunctivitis						
Hom UG-Sur-II.9.8	**HO**	**K**	Homeopathic management of Diseases of Conjunctiva.	Discuss the Homeopathic management of Diseases of Conjunctiva.	C/1	MK	Lecture	Viva	MCQ, SAQ, LAQ	**Materia Medica Repertory**
Hom UG-Sur-II.9.9	**KS**	**K**	Diseases Of Cornea	Describe corneal anatomy and its role in refractive power	C/1	MK	Lecture, Audiovisual aids, Models	Viva	MCQ, SAQ	**Anatomy**
Hom UG-Sur-II.9.10	**KS** **KH**	**K**	Diseases Of Cornea	Discuss the aetiology, and clinical features of Keratitis, Corneal ulcers and Corneal abrasions Discuss management of keratitis, ulcers, and corneal abrasions	C/2 C/2	MK DK	Lecture, Small Group Discussion	Viva	MCQ, SAQ, LAQ	
1 Hom UG-Sur-II.9.11	**HO**	**K**	Homeopathic management of Diseases of Cornea.	Discuss the Homeopathic management of Diseases of Cornea.	C/1	MK	Lecture	Viva	MCQ, SAQ, LAQ	
Hom UG-Sur-II.9.12	**KS** **K**	**K**	Glaucoma	Define Glaucoma Differentiate types of glaucoma (open-angle, angle-closure)	C/1 C/2	MK MK	Lecture, Models, Case studies	Viva	MCQ, SAQ, LAQ	
Hom UG-Sur-II.9.13	**PC**	**KH**	Glaucoma: Clinical features, Diagnostic tools and treatment	Describe the clinical features of Glaucoma. Explain the use of	C/2	MK	Lectures, Simulation, Case Studies	Viva	MCQ, SAQ, LAQ	

				tonometry, perimetry, and OCT in diagnosis						
Hom UG-Sur-II.9.14	**HO**	**K**	Homeopathic management of Glaucoma	Discuss the Homeopathic management of Glaucoma.	C/1	MK	Lecture	Viva	MCQ, SAQ, LAQ	
Hom UG-Sur-II.9.15	**KS**	**K**	Retina: Structural and functional aspects	Explain retinal anatomy, including layers and blood supply	C/1	MK	Lecture, Models	Viva	MCQ, SAQ	**Anatomy**
Hom UG-Sur-II.9.16	**PC**	**K**	Retinal diseases	Recognize common retinal diseases (e.g., diabetic retinopathy, retinal detachment, ARMD)	C/1	MK	Lecture, Problem-Based Learning	Viva	MCQ, SAQ	
		K		Describe the clinical features and pathophysiology of retinal diseases.	C/2	MK				
		KH		Discuss management of common retinal diseases (diabetic retinopathy, AMD)	C/2	DK				
Hom UG-Sur-II.9.17	**HO**	**K**	Homeopathic management of Retinal diseases	Discuss the Homeopathic management of Retinal diseases	C/1	MK	Lecture	Viva	MCQ, SAQ, LAQ	
Hom UG-Sur-II.9.18	**KS**	**K**	Diseases of Sclera	Identify structural features and common disorders of the sclera	C/1	MK	Lecture, Models	Viva	MCQ, SAQ	

Hom UG-Sur-II.9.19	**PC**	**K**	Diseases of Sclera	Discuss scleritis and episcleritis and their management	C/2	MK	Lecture, Small Group Discussion	Viva	MCQ, SAQ	
Hom UG-Sur-II.9.20	**HO**	**K**	Homeopathic management of Diseases of Sclera	Discuss the Homeopathic management of Diseases of Sclera	C/1	MK	Lecture	Viva	MCQ, SAQ	
Hom UG-Sur-II.9.21	**KS**	**K**	Diseases of the uveal tract	Explain the structure and role of the uveal tract	C/1	MK	Lecture, Models	Viva	MCQ, SAQ	
Hom UG-Sur-II.9.22	**KS**	**K**	Diseases of the uveal tract	Discuss types of uveitis	C/2	MK	Lecture, Small Group Discussion	Viva	MCQ, SAQ, LAQ	
Hom UG-Sur-II.9.23	**HO**	**K**	Diseases of the uveal tract	Discuss the Homeopathic management of Diseases of the uveal tract	C/1	MK	Lecture	Viva	MCQ, SAQ, LAQ	
Hom UG-Sur-II.9.24	**KS**	**K**	Diseases of the lens	Explain lens structure and its role in focusing	C/1	MK	Lecture, Models	Viva	MCQ, SAQ, LAQ	**Anatomy**
Hom UG-Sur-II.9.25	**KS**	**K**	Diseases of the lens	Discuss types of cataract and surgical options	C/2	MK	Lecture, Small Group Discussion, Case based Learning	Viva	MCQ, SAQ, LAQ	
Hom UG-Sur-II.9.26	**HO**	**K**	Diseases of the lens	Discuss the Homeopathic management of Diseases of the lens	C/1	MK	Lecture	Viva	MCQ, SAQ, LAQ	
Hom	**KS**	**K**	Neuro-	Explain the	C/3	DK	Lecture, Small	Viva	MCQ,	**Physiology,**

UG-Sur-II.9.27			ophthalmological disorders	relationship between visual pathways and neurological disorders			Group Discussion,		SAQ,	**Practice of Medicine**
2 Hom UG-Sur-II.9.28	**PC**	**K**	Neuro-ophthalmological disorders	Discuss optic neuritis, papilledema, and cranial nerve palsies affecting vision	C/2	MK	Lecture, Small Group Discussion, Case based Learning	Viva	MCQ, SAQ,	**Practice of Medicine**
Hom UG-Sur-II.9.29	**HO**	**K**	Neuro-ophthalmological disorders	Discuss the Homeopathic management of Neuro-ophthalmological disorders	C/1	MK	Lecture	Viva	MCQ, SAQ, LAQ	
Hom UG-Sur-II.9.30	**KS**	**K** **K**	Strabismus and Nystagmus	Define Strabismus Explain types of strabismus (esotropia, exotropia)	C/1 C/2	MK MK	Lecture, Small Group Discussion,	Viva	MCQ, SAQ,	
Hom UG-Sur-II.9.31	**PC**	**K** **K**	Strabismus and Nystagmus	Define Nystagmus Discuss types of nystagmus and their clinical relevance	C/1 C/2	MK MK	Lecture, Small Group Discussion, Case based Learning	Viva	MCQ, SAQ,	
Hom UG-Sur-II.9.32	**HO**	**K**	Strabismus and Nystagmus	Discuss the Homeopathic management of Strabismus and Nystagmus	C/1	MK	Lecture	Viva	MCQ, SAQ, LAQ	
Hom UG-	**KS**	**K**	Diseases of the eyelids	Describe the anatomy of the	C/1	MK	Lecture, Diagrams	Viva	MCQ, SAQ	

Sur-II.9.33				eyelids and common disorders						
Hom UG-Sur-II.9.34	**PC**	**K**	Diseases of the eyelids	Discuss blepharitis, chalazion, and eyelid tumors and their management	C/2	MK	Lecture, Small Group Discussion, Case based Learning	Viva	MCQ, SAQ,	
Hom UG-Sur-II.9.35	**HO**	**K**	Diseases of the eyelids	Discuss the Homeopathic management of Diseases of the eyelids	C/1	MK	Lecture	Viva	MCQ, SAQ, LAQ	
Hom UG-Sur-II.9.36	**KS**	**K**	Diseases of the lacrimal apparatus	Explain the anatomy of the lacrimal glands and ducts	C/1	MK	Lecture, Diagrams, Models	Viva	MCQ, SAQ	
Hom UG-Sur-II.9.37	**PC**	**K**	Diseases of the lacrimal apparatus	Discuss acute & Chronic Dacryocystitis, dry eye syndrome, and their treatments	C/2	MK	Lecture, Small Group Discussion, Case based Learning	Viva	MCQ, SAQ, LAQ	
Hom UG-Sur-II.9.38	**HO**	**K**	Diseases of the lacrimal apparatus	Discuss the Homeopathic management of Diseases of the lacrimal apparatus	C/1	MK	Lecture	Viva	MCQ, SAQ, LAQ	
Hom UG-Sur-II.9.39	**KS**	**K**	Ocular injuries	Describe types of ocular injuries and their mechanisms	C/2	MK	Lecture, Simulation	Viva	MCQ, SAQ,	
Hom UG-Sur-II.9.40	**KS/PB**	**KH**	Ocular injuries	Discuss and understand emergency management of chemical burns, blunt	C/3	DK	Problem-Based Learning	Viva	MCQ, SAQ	**Emergency Medicine**

				trauma, and penetrating injuries						
Hom UG-Sur-II.9.41	**HO**	**KH**	Ocular injuries	Discuss the Homeopathic management of Ocular injuries	C/1	MK	Lecture	Viva	MCQ, SAQ, LAQ	
Hom UG-Sur-II.9.42	**KS**	**K**	Examination of the eye and vision	Describe techniques like visual acuity testing, fundoscopy, and slit-lamp examination	C/3	DK	Demonstration, Simulation	Viva	OSCE	
Hom UG-Sur-II.9.43	**KS/PC**	**KH**	Examination of the eye and vision-Diagnostic relevance	Interpret examination findings for various ocular conditions	C/3	MK	Simulation, Small Group Discussion	Viva	OSCE	

Topic: Hom UG-Sur-II.10. Dentistry-

Sl No	Competency	Miller	Content	SLO	Bloom/ Guilbert	Priority	TL MM	Assessment		Integration
								F	S	
Hom UG-Sur-II.10.1	KS	K	Describe dental anatomy Structural and functional aspects	Identify the anatomy of teeth, including enamel, dentin, pulp, and periodontal structures	C/1	MK	Lecture, Models, Audiovisual aids	Viva	MCQ, SAQ	Anatomy
Hom UG-Sur-II.10.2	KS	K	Dental Anatomy: Occlusion and alignment	Explain occlusal surfaces, alignment, and their functional relevance	C/1	MK	Lecture, Models, Audiovisual aids	Viva	MCQ, SAQ	Anatomy

Hom UG-Sur-II.10.3	KS	K	Jaw Tumours: Types and pathogenesis	Classify jaw tumours (benign and malignant)	C/2	MK	Lecture, Case-Based Learning	Viva	MCQ, SAQ, LAQ	
Hom UG-Sur-II.10.4	KH	KH KH	Jaw Tumours: Diagnosis and treatment	Explain clinical and radiographic features Discuss surgical and non-surgical options	C/2 C/2	MK NK	Lecture, Case-Based Learning Image interpretation session	Viva	MCQ, SAQ	
Hom UG-Sur-II.10.5	HO	K	Homeopathic therapeutics for Jaw tumors	Outline homeopathic remedies for managing jaw tumours	C/1	MK	Lecture, Case-Based Learning	Viva	MCQ, SAQ, LAQ	
Hom UG-Sur-II.10.6	KS	K	Epulis: Types and pathophysiology	Classify epulis (fibrous, granulomatous, giant cell)	C/1	MK	Lecture, Small Group Discussion	Viva	MCQ, SAQ	
Hom UG-Sur-II.10.7	KS	K	Epulis: Diagnosis and treatment	Discuss clinical presentations and histological findings	C/2	MK	Lecture Audiovisual aids Problem-Based Learning	Viva	MCQ, SAQ	
Hom UG-Sur-II.10.8	HO	K	Epulis: Homeopathy	Explain homeopathic approaches to epulis treatment	C/1	MK	Lecture	Viva	MCQ, SAQ	
Hom UG-Sur-II.10.9	KS	KH	Ameloblastoma: Pathogenesis and classification	Classify ameloblastoma subtypes (unicystic,	C/2	DK	Lecture, Case-Based Learning	Viva	MCQ, SAQ	

				multicystic)						
Hom UG-Sur-II.10.10	KS	K	Ameloblastoma: Surgical and non-surgical options	Explain treatment approaches, including enucleation and resection	C/2	NK	Small Group Discussion	Viva	MCQ, SAQ	
Hom UG-Sur-II.10.11	HO	K	Homeopathic therapeutics for ameloblastoma	Discuss homeopathic therapeutics for ameloblastoma	C/1	MK	Lecture	Viva	MCQ, SAQ	
Hom UG-Sur-II.10.12	KS	K	Dentigerous Cysts: Pathogenesis and diagnosis	Identify radiological and clinical findings of dentigerous cysts	C/2	MK	Lecture, Simulation	Viva	MCQ, SAQ	Radiology
Hom UG-Sur-II.10.13	KS	K	Dentigerous Cysts: Surgical management	Explain surgical enucleation and follow-up protocols	C/2	MK	Lecture Problem-Based Learning	Viva	MCQ, SAQ	
Hom UG-Sur-II.10.14	KS	KH	Dental Cysts: Pathogenesis and types	Classify dental cysts (radicular, residual, odontogenic keratocyst)	C/1	MK	Lecture, Small Group Discussion	Viva	MCQ, SAQ	
Hom UG-Sur-II.10.15	KS	K	Dental Cysts: Diagnosis and treatment	Discuss clinical presentations and radiological findings	C/2	MK	Problem-Based Learning	Viva	MCQ, SAQ	Radiology
Hom UG-Sur-II.10.16	KS	K	Alveolar Abscess: Etiology and diagnosis	Explain causes and clinical features of alveolar abscess	C/1	MK	Lecture, Small Group Discussion	Viva	MCQ, SAQ	
Hom UG-Sur-	KS	KH	Alveolar Abscess: Management	Discuss drainage techniques	C/2	DK	Lecture Case-Based Learning	Viva	MCQ, SAQ	

II.10.17										
Hom UG-Sur-II.10.18	HO	K	Homeopathic therapeutics for Alveolar Abscess	Outline homeopathic management for dental abscesses	C/1	MK	Lecture	Viva	MCQ, SAQ	
Hom UG-Sur-II.10.19	KS/PBL/PC	K	Examination of teeth and gums	Recall the anatomy of teeth and gums, including structure, types, and functions	C/1	MK	Lecture Case based learning Clinical demonstration DOPS Role play	Viva	MCQ SAQ OSCE	
		K		Identify normal dentition and gum appearance	C/1	MK	Small group discussion			
		K		Recognize common dental and gum conditions (e.g., caries, gingivitis, periodontitis)	C/2	MK				
		S		Perform inspection of the teeth for alignment, caries, discoloration, or damage	P/1	MK				
		S		Assess the gums for signs of inflammation, bleeding, recession, or any lesions	P/1	MK				

		S		Examine for malocclusion and jaw alignment abnormalities	P/1	MK				
		SH		Document and communicate findings effectively to the patient	P/2	MK				
		SH		Counsel the patient on oral hygiene practices and the importance of dental care	P/2	NK				

Topic: Hom UG-Sur-II.11.1. Instruments for demonstration-

Sl No	Domain of Competency	Miller Level	Content	SLO	Bloom/ Guilbert Level	Priority	Teaching-Learning Methods (TL)	Assessment		Integration
								F	S	
Hom UG-Sur-II.11.1	KS	SH/KH	*List of instruments: Allis tissueforceps	Identify the surgical instruments	P/1	MK	Lectures Small group discussions Demonstration	Viva	OSCE	
		KH	Curved allis Mosquito forceps Tooth forceps Chittal forceps	Describe the function of various surgical instruments	C/2	MK				
		SH	Needle holder Sponge holding	Handle basic surgical instruments appropriately	P/2	MK				

			forceps Simple forceps							
		KH	Rubber catheter Folley's catheter Cannula Tracheal tube Straight scissor	Identify the situations to select the appropriate instrument for specific procedures	C/3	DK				
		KH	Artery forceps Scissors Proctoscope Suture material Dressing material Ryle's tube Catheter Dressing tray Kidney tray Tray Dressing drum Auroscope Stethoscope Measuring tape Hammer Ophthalmoscope Tonometer Dental instruments ENT instruments Infant feeding tube Laryngoscope Retractor Sim's speculum *List of instruments and	Explain the maintenance and sterilization process for surgical instruments	C/2	NK				

			surgical items as per “The National Commission for Homoeopathy Minimum Essential Standards for Homoeopathic Medical Colleges and Attached Hospitals Regulation – 2024”							

For X-rays and Procedures please refer the Competency table under relevant sections

7. Teaching learning methods

Lectures (Theory)	**Non-lectures (Practical/Demonstrative)***
Lectures	Clinical demonstration- DOAP, DOPS
Audio visual aid	Problem based discussion, small group discussions, seminar, tutorials
Integrated lectures	Case based learning
	OSCE, Skill lab
	Radiology workshops
	Assignments
	Library reference
	Self-learning

***Training- Practical – Lab work – Field – Clinical Hospital work**

a.) Students should undergo clinical postings in General Surgery outpatient departments (OPDs) and surgery wards. Additionally, rotations should be arranged in ENT, Ophthalmology, Orthopedics, Dental Surgery units and Casualty, either within the collegiate hospital or in affiliated hospitals with which a Memorandum of Understanding (MOU) has been established for such training.

b.) OPD/ IPD posting of students: All students should have their clinical register.

CLINICAL REGISTER – 3RD BHMS

Name Of Student:_____ **Roll No:**_____ **Batch:**_____

<table>
<tr><td rowspan="3">Sr. No.</td><td rowspan="3">Date</td><td rowspan="3">Reg No.</td><td rowspan="3">Name of patient</td><td rowspan="3">Age/ Sex</td><td rowspan="3">Clinical Diagnosis</td><td>Treatment</td><td>OPD/ Rural</td><td>Department</td><td rowspan="3">Work advised</td><td>Working done</td><td rowspan="3">Sign of Teacher</td></tr>
<tr><td>Operation</td><td>IPD</td><td rowspan="2">Physician</td><td>Working checked</td></tr>
<tr><td>Procedure</td><td>Casualty</td><td>Feedback received</td></tr>
</table>

c.) The clinical register should be checked by teaching faculty.

d.) The topics already taught in the classroom should be demonstrated to students through clinical teaching.

e.) Students should be trained in proper history taking, clinical examination, advising relevant investigations, interpreting the results, and applying Homoeopathic management effectively.

f.) Journal/Record: Students should document 10 cases from General Surgery/Systemic surgery and 10 cases from each of the special surgery units, including Ophthalmology, ENT, Dental, and Orthopaedics, during the third year. It should be integrating the Surgery, Organon, Materia medica and repertory.

g.) Students should be posted in surgery wards of collegiate hospital and tie-up hospitals for exposure of minor surgical procedures.

8. Details of assessment

8.1 Overall Scheme of Assessment (Summative)

Sr. No	Professional Course	Term I (1-6 Months)		Term II (7-12 Months)		
1	Third Professional BHMS	PA I (end of 3 months)	TT I (end of 6 months)	PA II (end of 9 months)	FUE (end of 12 months)	
		20 Marks Viva	100 Marks Practical/ Viva Viva voce -50 marks Practical – 50 marks a) Surgical case taking, analysis and evaluation-30 marks. b) OSCE- 20 marks	20 Marks Viva	200 marks theory	200 marks (refer table 8.8) Practical+ Viva+ IA

PA: Periodical Assessment; TT: Term Test; FUE: Final University Examinations; IA: Internal Assessment

8.2 Number of papers and mark distribution for Final University Examination (FUE)

Sr. No.	Course Code	Papers	Theory	Practical/ Clinical**	Viva Voce	Internal Assessment*	Grand Total
1	Hom-UG Sur-II	02	200 marks	100 marks	80 marks	20 marks (Marks of PA I + TT I + PA II)	400 marks

***Method of Calculation of Internal Assessment Marks for Final University Examination:**

Marks of IA (M) = S + T /2

S = Marks of IA in II BHMS

T = Marks of IA in III BHMS = (Marks of PA-1 + Marks of TT + Marks of PA-2) / 140 X 20

****Refer to the table 7.8 for the details of practical/clinical exam and marks distribution in FUE**

8.3 Paper Layout

Summative assessment (FUE):

Theory- 200 marks

Paper-1 **(100 marks)** General Surgery-with therapeutics ENT, Ophthalmic, dentistry and Orthopaedic with therapeutics		
1	LAQ	50 marks
2	SAQ	40 marks
3	MCQ	10 marks

Paper-2 (100 marks) Systemic Surgery (Peripheral vascular, Lymphatics, Nerve, GIT, GUT, Thorax, abdominal wall, umbilicus, breast, hernias, heart and pericardium along with therapeutics		
1	LAQ	50 marks
2	SAQ	40 marks
3	MCQ	10 marks

8.4 Theme-wise distribution of questions for theory exam paper I

Theme	Topics	Term	LAQ	SAQ	MCQ	Marks
A **Trauma /Injury**	Introduction to surgery, Scope and limitations of Homoeopathy in surgical conditions	I	NO	YES	No	20
	Injury – types Head injury; Road traffic accident; injury to chest, abdomen **Wound & wound healing** Scar, keloid Ulcers, Sinus and fistula Haemorrhage Blood transfusion Shock Fluid, electrolytes and acid-base balance Nutrition Burn, skin grafting **Homoeopathic Therapeutics** for – Injuries, Scar, Keloid, Ulcers, Sinus & Fistula, Haemorrhage, Shock, Burns	I	YES	YES	YES	
B-	**Common surgical infections** Boil, Carbuncle, Abscess, Cellulitis, and erysipelas,	I	NO	YES	YES	5

Concept of Infectious Disease and Host Response	Hidradenitis suppurativa, septicaemia, pyaemia **Homoeopathic Therapeutics**					
	Special infections- Tuberculosis, syphilis, acquired immunodeficiency syndrome, actinomycosis, leprosy, tetanus, infective gangrene **Homoeopathic therapeutics**	I	NO	YES	YES	
C- Concept of Swelling	Tumours: Benign, malignant; Carcinoma, sarcoma, fibrosarcoma; naevus, melanoma Lipoma, fibroma, adenoma, neuroma, Neurilemmoma, Neurofibroma, Haemangioma Cysts **Homoeopathic therapeutics**	I	YES	YES	YES	15
D- Orthopedics	Diseases of the bones, cranium, vertebral column, fractures and dislocations Diseases of the joints. Diseases of the muscles, tendons and fascia **Homoeopathic therapeutics** for orthopaedic conditions	II	YES	YES	YES	15
E- Ophthalmology	Applied Anatomy, Physiology of eye Examination of eye Identification of bitot spots, pallor, conjunctival injection, pupillary reactions, to identify systemic and eye conditions. Diseases of eyelids, eyelashes and lachrymal drainage system. Diseases of Eyes including injury related problems. Acuity of vision, visual field and vision defects Accommodation defects **Homoeopathic therapeutics** for diseases of Eyes	II	YES	YES	YES	15

F- ENT, Thyroid, Neck	Applied anatomy and applied physiology of ear Examination of ear Diseases of external, middle and inner ear Applied anatomy and physiology of nose and paranasal sinuses. Examination of nose and paranasal sinuses Diseases of nose and paranasal sinuses Applied Anatomy and applied Physiology of pharynx, larynx, tracheobronchial tree, Examination of pharynx, larynx, tracheobronchial tree, oesophagus Diseases of the Throat External/ and Internal, Thyroid **Homoeopathic therapeutics for Diseases** of Nose and Paranasal sinuses, Ear and Throat (External and Internal)	II	YES	YES	YES	20
G- Dentistry and diseases of oral cavity	Applied anatomy, physiology of teeth and gums; Milestones related to teething. Examination of Oral cavity Diseases of gums Diseases of teeth Problems of dentition Oral malignancies Oral hygiene Oral health in systemic disorders **Homoeopathic therapeutics** for diseases of Teeth and Gums	II	YES	YES	YES	10

8.5 Distribution of questions for theory exam paper II

Theme	Topics	Term	LAQ	SAQ	MCQ	Marks
A- Diseases of transporting channels	Diseases of blood vessels: **A. Arteries:** Arterial occlusion; Ischemic disease of arteries, Injury, Aneurysm, Embolism, Thrombosis, Atherosclerosis, Gangrene, Thrombo-angiitis obliterans (Burger's Disease), Raynaud's disease, **B. Veins:** Thrombosis: Thrombophlebitis, Deep Vein Thrombosis, Varicose veins, Venous ulcer **C. Lymphatics and lymph nodes:** - lymphangiography, lymphoedema, lymphomas, Hodgkin's lymphoma, non-Hodgkin's lymphoma, Burkitt's lymphoma, cutaneous T cell lymphoma, chylous ascites, chylothorax, sarcoidosis Acute lymphangitis, Acute lymphadenitis, chronic lymphadenitis **D. Diseases nerves** **E. Nerves: Peripheral nerves -** injury of Brachial plexus, Median nerve, Ulnar nerve, Radial nerve, axillary, common perineal, long thoracic, medial Popliteal, Carpal tunnel syndrome, claw hand, foot drop **F. Homoeopathic therapeutics** for diseases of Arteries, Veins, Lymphatics and Nerves	I & II	YES	YES	YES	20
B- Diseases of the alimentary	a. Diseases of palate, Cheek, Tongue, Floor of the mouth & Salivary Glands	I & II	YES	YES	YES	25

tract	b. Oesophagus: Esophagitis, investigations, Congenital abnormalities, Perforation, Injuries, GERD, Hiatus hernia, tumours c. Peritoneum: Peritonitis - Acute, Biliary, Postoperative; Pelvic abscess, Subphrenic abscesses, Mesenteric cysts d. Retroperitoneal Spaces: Fibrosis, Swelling, Tumours, Psoas Abscess e. Stomach & Duodenum: Test for gastric secretion, Gastritis, Peptic ulcer, gastric & duodenal ulcer, Hematemesis, Gastric outlet Obstruction, Pyloric stenosis, Neoplasm, duodenum diverticula, fistula f. Small intestine & Large intestine: Congenital, Diverticulum, ulcerative colitis, Ischemic colitis, Faecal fistula, Tumours, Barium enema, Intestinal obstruction, Intussusception, Adhesion and Bands g. Appendix: Appendicitis h. Abdominal Tuberculosis i. Rectum & anal canal: Investigation, examination, fissure in ano, piles, pruritus ani, prolapse of rectum, fistula in ano, ano-rectal abscess j. Abdominal hernias k. **Homoeopathic therapeutics** for diseases of alimentary tract , Hernias					
C- Diseases of liver, spleen, gall bladder	A) Liver: Liver Tumours: Benign, Primary malignant; Portal HTN - oesophageal varices, Ascites, Hepatic failure, Hepatic encephalopathy	I & II	YES	YES	YES	20

and bile duct	B) Liver: Liver insufficiency, investigations, injuries, Hepatomegaly, Infection of liver - Amoebic liver abscess, Hydatid cyst, Actinomycosis, Pyogenic C) Gall bladder & bile duct: Investigations, injuries, gall stone, Acute and chronic cholecystitis, stone in common bile duct, Biliary stricture, biliary fistula, Surgical jaundice, CA D) Spleen: Investigation, Injury, Splenomegaly, splenic artery aneurysm infarct & rupture, Cyst of spleen, TB, Abscess, Neoplasm E) Pancreas: investigations, Anomalies, Pancreatitis, Abscess, Calculus, Trauma, Fistula, Cyst, Tumours F) **Homoeopathic therapeutics** for diseases of Liver, Gallbladder, Pancreas and Spleen					
D. Thorax, heart and pericardium	Pleural tap, Bronchoscopy, Flail Chest and Stove in chest, Pneumothorax, Tension Pneumothorax, Haemothorax, Emphysema, Lung Abscess, Intercostal tube drainage, Shock lung (Stiff lung) Pulmonary embolism, Surgical emphysema, Lung cysts, Mediastinal tumour, Pancoast tumours, Chest wall tumours, , Diaphragmatic hernia, Pericardium & Heart: Cardiac tamponade, Congenital cardiac disease, valvular disease, Pericarditis **Homoeopathic therapeutics** for diseases of Thorax, Heart and Pericardium Diseases of Breast with Homoeopathic therapeutics	I & II	YES	YES	YES	10
E. Diseases of	A. Urology: Investigation- Urine, renal	II	YES	YES	YES	25

urogenital system.	function, urography, pyelography, cystography, USG B. **Kidney:** Haematuria, PCKD, Injuries to Kidney, Renal TB, Hydronephrosis, Pyonephrosis, Perinephric abscess, Renal calculus, Ureteric calculi, Wilm's tumour, Renal cell carcinoma, C. **Urinary Bladder:** Anomalies, Vesical calculus, Cystitis, Recurrent cystitis, Bladder tumour, Bladder injury, Neurogenic bladder, Vesicoureteric reflux, Urinary fistula D. **Prostrate:** BPH, Prostatitis, Ca prostrate E. **Urethra:** Injury, Stricture, Hypospadias, Urethral calculi, Urethritis, Retention of urine F. **Penis:** Phimosis, paraphimosis, Circumcision, Ca of Penis G. **Scrotum:** Hydrocele, Haematocele, Pyocele, Cyst of Epididymis, varicocele H. **Testis:** Undescended testis, Ectopic testis, Torsion of testis, Orchitis, epididymis I. **Homoeopathic therapeutics** for diseases Genitourinary system					

8.6 Question paper blue print Paper I

Question serial No	Type of Question	Theme Table for Framing Question paper - Refer Theme Table No 8.4 for themes
Q. 1	Multiple choice Question (MCQ) Total 10 questions – 1 Mark each Attempt all questions	Theme – A Theme – B Theme – C Theme – D Theme – E Theme – F Theme – G
Q.2	Short answer questions (SAQ) Total - 8 questions - 5 marks each Attempt all questions	Theme – A Theme – B Theme – C Theme – D Theme – E Theme – F Theme – G
Q.3	Long answer questions (LAQ) Total – 5 questions – 10 marks each Attempt all questions	Theme – A Theme – C Theme – D Theme – E Theme – F

8.7 Question paper blue print Paper I

Question serial No	Type of Question	Theme Table for Framing Question paper - Refer Theme Table No II: for themes
Q. 1	Multiple choice Question (MCQ) Total 10 questions – 1 Mark each Attempt all questions	Theme – A Theme – B Theme – C Theme – D Theme – E
Q.2	Short answer questions (SAQ) Total - 8 questions - 5 marks each Attempt all questions	Theme – A Theme – B Theme – C Theme – D Theme – E
Q.3	Long answer questions (LAQ) Total – 5 questions – 10 marks each Attempt all questions	Theme – A Theme – B Theme – C Theme – E

8.8 Details of practical assessment

Sl.no.	Practical/clinical activity	Marks
	Clinical	
A.	**Surgical case-taking**	
a.	One Surgical case taking – bedside case taking with case analysis	15 marks

b.	Demonstration of clinical examination of the surgical case- OSCE	15 marks
c.	Provisional diagnosis and differential diagnosis	10 marks
d.	Management General. Accessory, Surgical and Homoeopathic Therapeutics.	10 marks
	Practical	
B.	Identification of Instruments	15 marks
C.	X-ray interpretation	10 marks
D.	Journal/ Surgical case record	20 marks
E.	Clinical register maintenance	05 marks
F.	**Viva Voce -Clinical and therapeutics (Theory)**	**80 marks**
G.	**Internal assessment**	**20 marks**
	Total	**200 marks**

9. Recommended books

Text books

1. P. Ronan O'Connell, McCaskie, A. W., & Williams, N. S. (2018). *Bailey & Love's Short Practice of Surgery, 27th Edition*. CRC Press.
2. Somen Das. (2008). *A concise textbook of surgery*. Dr S. Das.
3. Chatterjee B.M, & Agarwal, L. P. (2008). *Handbook of Ophthalmology*
4. Dhingra, P. L., & Shruti Dhingra. (2017). *Diseases of ear, nose and throat*. Elsevier India.
5. J Maheshwari, & Mhaskar, V. A. (2019). *Essential orthopaedics: including clinical methods*. Jaypee Brothers Medical Publishers.

Clinical Examination skill books

1. Das, S. (2022). *A Manual on Clinical Surgery*. Jaypee Brothers Medical Publishers Pvt Limited.
2. Bailey, H., & Clain, A. *Hamilton Bailey's Demonstrations of Physical Signs in Clinical Surgery*.

Therapeutics books

1. Kulkarni, S. (2002). *Surgery Therapeutics*. B. Jain Publishers.
2. Lilienthal, S. *Homoeopathic Therapeutics*.
3. Dewey, W. A. (1997). *Practical homeopathic therapeutics*. B. Jain.

Reference books

1. *Sriram Bhat. (2019). SRB's manual of surgery. Jaypee Brothers.*
2. *Khurana, A., Khurana, A. K., & Khurana, B. P. (2023). Comprehensive Ophthalmology. Jaypee Brothers Medical Publishers Pvt Limited.*
3. *Sriram, B. M. (2019). SRB's clinical methods in surgery. Jaypee Brothers Medical Publishers.*
4. *Tandon, R. (2019). Parsons' Diseases of the Eye. Elsevier India.*
5. *Makhan Lal Saha. (2018). Bedside clinics in surgery : long and short cases, surgical problems, x-rays, surgical pathology, preoperative preparations, minor surgical procedures, instruments, operative surgery and surgical anatomy. Jaypee Brothers Medical Publishers.*

10. List of Contributors

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COMPETENCY BASED DYNAMIC CURRICULUM FOR

THIRD BHMS PROFESSIONAL COURSE

(Applicable from Batch 2022-2023 onwards for 5 years or until further notification by National Commission for Homoeopathy whichever is earlier)

(Gynecology and Obstetrics)

HOMOEOPATHY EDUCATION BOARD

NATIONAL COMMISSION FOR HOMOEOPATHY

MINISTRY OF AYUSH, GOVERNMENT OF INDIA

JAWAHAR LAL NEHRU BHARTIYA CHIKITSA AVUM HOMOEOPATHY ANUSANDHAN BHAVAN

No.61-65, Institutional Area, opp. 'D' block, Janak Puri, New Delhi-110 058

Subject Name: Gynecology and Obstetrics

Subject Code: HomUG-ObGy-II

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1. Course outcomes (CO):

At the end of the III BHMS course the student shall able to:

i. Acquire knowledge and skill in applied anatomy, endocrinology and physiology including abnormality of female reproductive system during puberty, menstruation, and menopause and in different stages womanhood, integrate the knowledge with Anatomy, Physiology, Organon of medicine, Practice of medicine and Homoeopathic material medica to get a holistic understanding of disease evolution and approach to disease diagnosis and management.

ii. Acquire knowledge in the Developmental anomalies, Uterine displacements and Sex and intersexuality to understand the Predisposition including fundamental miasm, personality type known to develop particular disease, causation and modifying factors like exciting and maintaining factors.

iii. Acquire skill in case taking, clinical examination and common diagnostic modalities in Gynaecology and Obstetrics.

iv. Acquire knowledge in anatomical, physiological, endocrinological changes and minor ailments during pregnancy and skill in diagnosis of normal pregnancy, prenatal, antenatal, postnatal maternal and fetal surveillance, care of newborn, care of puerperium and integrate the knowledge with Organon of medicine and Homoeopathic Materia medica for eradicating genetic dyscrasias in the mother and fetus.

v. Acquire Knowledge in identification of causes related with male and female Infertility, their diagnosis, Artificial Reproductive Techniques and skill in Homoeopathic management along with population dynamics and control of Conception.

vi. Develop Knowledge in identifying the indications of surgical procedures, its complications, after effects and to refer for surgical intervention either as a life saving measure or for removing mechanical obstacles.

vii. Develop skill in identifying common problems during abnormal pregnancy and labour to manage it in Homoeopathic perspective including scope, limitations and timely referral.

viii. Acquire Knowledge and develop skill in postnatal, puerperal care, diseases of fetus, and newborn and medico legal aspects with Homoeopathic perspective.

ix. Acquire skill in General and Homoeopathic Management for the related conditions in this subject and to formulate the reportorial rubrics for repertorization to arrive at the common indicated remedies for the available clinical condition.

2. Learning Objectives (LO)-

At the end of the III BHMS course the student shall be able to:

i. Learning skills in case taking, physical examination, diagnostic procedures and managements of benign and malignant conditions, trauma, infections and inflammations related with female genitalia, and pre-malignancy screening procedures.

ii. Understanding the causes related with male and female Infertility, their diagnosis, Artificial Reproductive Techniques and skill in Homoeopathic management along with population dynamics and control of Conception.

iii. Comprehending the indications of surgical procedures, their complications, after effects and indications for surgical intervention either as a life saving measure or for removing mechanical obstacles.

iv. Understanding common problems during abnormal pregnancy and labour to manage it through Homoeopathic perspective including scope, limitations and timely referral.

v. Comprehending postnatal, puerperal care, diseases of fetus, newborn and medico legal aspects with Homoeopathic perspective.

vi. Acquire skill in case taking, clinical examination and common diagnostic modalities in Gynaecology and Obstetrics.

vii. Learning general and homoeopathic management of common Gynecological and Obstetric conditions.

viii. Integrate the knowledge with Anatomy, Physiology, Organon of medicine, Practice of medicine and Homoeopathic materia medica to get a holistic understanding of disease evolution and approach to disease diagnosis and management.

3. Course content and its term-wise distribution:

3.1. Unit 1: Gynaecology and Homoeopathic Therapeutics

Sl. No.	List of topics	Term
1.a	Introduction to abnormal disease conditions in Gynaecology with Homoeopathic management related to causation, Clinico-pathological and miasmatic correlations with pathological end result. Review of the Homoeopathic literature, Therapeutics and Repertory source books	I
1.b	Infections & Ulcerations of the female genital organs, their Causation and modifying factors: exciting-maintaining causes from micro-organisms to environmental to climacteric to occupational etc. Psychosomatic aspect, Pathogenesis, Pathology, Clinico-pathological and miasmatic correlations with pathological end result including Homoeopathic management	I
1.c	Injuries of the genital tract, Homoeopathic management - scope and limitations.	I
1.d	Disorders of Female genital tract - Abnormal vaginal discharge, Pelvic pain, Low backache, Vaginismus, Dyspareunia, Abdomino-pelvic lump, with Homoeopathic management	I
1.e	Urinary problems in gynaecology – Incontinence, retention, urinary tract infection, dysuria and urethral carbuncle with Homoeopathic management	I
1.f	Diseases of breasts with Homoeopathic management	I
1.g	Sexually transmitted diseases including Homoeopathic management	I
1.h	Endometriosis and Adenomyosis - scope and limitation of management in Homoeopathy	II
1.i	Etiological factors related with male and female Infertility, their diagnosis, Artificial Reproductive Techniques, scope and limitation of Homoeopathic management along with population dynamics and control of Conception	II
1.j	Genital non-malignant growths - scope and limitation of management in Homoeopathy	II
1.k	Genital malignancy with scope of Homoeopathic treatment and its limitations	II
1.l	Identifying the indications of surgical procedures in Gynaecology, its complications, after effects and to refer for surgical intervention either as a life saving measure or for removing	II

	mechanical obstacles.	
1.m	Radiotherapy, Chemotherapy, Immunotherapy, Gene therapy, Tumour markers - utility and its complications	II
1.n **3.2 .**	General and Homoeopathic Management, repertorization, therapeutics, posology, Formulation of prognostic criteria, Prognosis and future advances of related topics in Gynaecology.	II

Unit 2: Obstetrics, new born care & Homoeopathic therapeutics

Sl. No.	List of topics	Term
2.a	Introduction to Abnormal pregnancy and labour with its scope and limitation in Homoeopathy Review of literature, Therapeutics and Repertory source books.	I
2.b	High risk labour,Dystocia Mal-positions and mal-presentation, Prolapse of cord and limbs, Abnormalities in the action of the uterus, Abnormal conditions of soft parts, Contracted pelvis, Obstructed labour, Complications of 3rd stage of labour, Preterm labour, Post maturity, Injuries of birth canal, Scope and limitation in Homoeopathy	I
2.c	Abnormal pregnancies:Haemorrhages during Antepartum, postpartum and early pregnancy, Multiple pregnancy, Hypertensive disorders, in identifying common problems during Abnormal pregnancy and to manage it in Homoeopathic perspective including scope, limitations and timely referral.	I
2.d	Common disorders and systemic diseases associated with pregnancy. A holistic understanding of disease evolution and approach to diagnosis, prognosis, Homoeopathic management, scope and limitations	I
2.e	Understanding Pre- natal diagnostic Techniques (Regulation and Prevention of Misuse) Act 1994	II
2.f	Knowledge about the indication of common obstetrical operations, Medical termination of pregnancy, Criminal abortion, Caesarean section, Induction of labour, Episiotomy. etc and its complications, after effects and to refer for surgical intervention either as a life saving measure	II

	or for removing mechanical obstacles.	
2.g	Emergency obstetric care	II
2.h	Infant care : Neonatal hygiene, Common disorders of new-born, Breast feeding, Artificial feeding, Management of premature child, Asphyxia & Ophthalmia Neonatorum, Birth injuries, Neonatal infections, Congenital malformations of new-born Intrauterine growth retardation, Foetal anomalies including scope and limitation in Homoeopathy and timely referral.	II
2.i	Knowledge about Reproductive and child health care.(a) Safe motherhood and child survival (b) Risk approach – MCH care (c) Maternal mortality and morbidity (d) Perinatal mortality and morbidity (e)Diseases of foetus and new born.	II
2.j	Medico legal aspects in obstetrics	II
2.k	General and Homoeopathic Management, repertorization, Therapeutics, Posology, Formulation of prognostic criteria, Prognosis and future advances in Obstetrics and new-born care.	II

4. Teaching hours:

4.1 Gross division of teaching hours:

Total Teaching hours: 189 hours

Gynaecology and Obstetrics		
Year	**Teaching hours- Lectures**	**Teaching hours- Non-lectures**
III BHMS	110	79

4.2 Teaching hours theory:

4.2.1 Unit 1: Gynaecology and Homoeopathic Therapeutics

Sl. No.	List of topics	Lecture hours
1.a	• Introduction to abnormal disease conditions in Gynaecology with Homoeopathic management related to causation, • Clinico-pathological and miasmatic correlations with pathological end result. • Review of the Homoeopathic literature, • Therapeutics and Repertory source books	03 hrs
1.b	• Infections & Ulcerations of the female genital organs, their Causation and modifying factors: exciting-maintaining causes from micro-organisms to environmental to climacteric to occupational etc. • Psychosomatic aspect, Pathogenesis, Pathology, Clinico-pathological and miasmatic correlations with pathological end result including Homoeopathic management	05 hrs
1.c	• Injuries of the genital tract, Homoeopathic management - scope and limitations.	02 hrs
1.d	• Disorders of Female genital tract - Abnormal vaginal discharge, Pelvic pain, Low backache, Veganismus, Dyspareunia, Abdomino-pelvic lump, with Homoeopathic management	03 hrs

1.e	• Urinary problems in gynaecology – Incontinence, retention, urinary tract infection, dysuria and urethral carbuncle with Homoeopathic management	03 hrs
1.f	• Diseases of breasts with Homoeopathic management	02 hrs
1.g	• Sexually transmitted diseases including Homoeopathic management	02 hrs
1.h	• Endometriosis and Adenomyosis - scope and limitation of management in Homoeopathy	04 hrs
1.i	• Etiological factors related with male and female Infertility, their diagnosis, • Artificial Reproductive Techniques, scope and limitation of Homoeopathic management along with population dynamics and control of Conception	03 hrs
1.j	• Genital non-malignant growths - scope and limitation of management in Homoeopathy	04 hrs
1.k	• Genital malignancy with scope of Homoeopathic treatment and its limitations	04 hrs
1.l	• Identifying the indications of surgical procedures in Gynaecology, its complications, after effects and to refer for surgical intervention either as a life saving measure or for removing mechanical obstacles.	02 hrs
1.m	• Radiotherapy, Chemotherapy, Immunotherapy, Gene therapy, Tumour markers - utility and its complications	02 hrs
1.n	• General and Homoeopathic management • Repertorization, • Therapeutics, posology. • Formulation of prognostic criteria and • Prognosis of related topics in GYNAECOLOGY care	03 hrs. 03 hrs. 02 hrs. 02 hrs. 01 hr.
Total		**50 hrs**

4.2.2. Unit 2: Obstetrics, new born care & Homoeopathic therapeutics

Sl. No.	List of topics	Lecture hours
2.a	• Introduction to Abnormal pregnancy and labour with its scope and limitation in Homoeopathy Review of literature, Therapeutics and Repertory source books.	02 hrs
2.b	High risk labour, • Dystocia • Mal-positions and mal-presentation, Prolapse of cord and limbs, Abnormalities in the action of the uterus, Abnormal conditions of soft parts, Contracted pelvis, • Obstructed labour, • Complications of 3rd state of labour, Preterm labour, • Post maturity, • Injuries of birth canal, • Scope and limitation in Homoeopathy	10 hrs
2.c	Abnormal pregnancies: • Haemorrhages during Antepartum, postpartum and early pregnancy, Multiple pregnancy, • Hypertensive disorders, in identifying common problems during abnormal pregnancy and to manage it in Homoeopathic perspective including scope, limitations and timely referral.	06 hrs
2.d	• Common disorders and systemic diseases associated with pregnancy. • A holistic understanding of disease evolution and approach to diagnosis, prognosis, Homoeopathic management, scope and limitations	04 hrs
2.e	• Understanding Pre- natal diagnostic Techniques (Regulation and Prevention of Misuse) Act 1994	03 hrs
2.f	• Knowledge about the indication of common obstetrical operations, • Medical termination of pregnancy, Criminal abortion, • Caesarean section, • Induction of labour, Episiotomy. etc and its complications, after effects and to refer for	04 hrs

	surgical intervention either as a life saving measure or for removing mechanical obstacles.	
2.g	• Emergency obstetric care	03 hrs
2.h	Infant care : • Neonatal hygiene, • Common disorders of new-born, • Breast feeding, • Artificial feeding, • Management of premature child, • Asphyxia & Ophthalmia Neonatorum • Birth injuries, • Neonatal infections, • Congenital malformations of new-born Intrauterine growth retardation, • Foetal anomalies including scope and limitation in Homoeopathy and timely referral.	10 hrs
2.i	• Knowledge about Reproductive and child health care. • Safe motherhood and child survival (b) Risk approach – MCH care • Maternal mortality and morbidity • Perinatal mortality and morbidity • (e) Diseases of foetus and new born.	02 hrs
2.j	• Medico legal aspects in obstetrics	02 hrs
2.k	• General and Homoeopathic management • Repertorization, • Therapeutics, posology. • Formulation of prognostic criteria and • Prognosis of related topics in OBSTETRICS AND NEW BORN care	03 hrs. 03 hrs. 03 hrs. 02 hrs. 03 hrs.
Total		**60 hrs**

4.3 Teaching hours Non-lecture:

S. NO.	Non lecture activity	Hours

1.	**CLINICAL / PRACTICAL**	**55 hrs**
A	Homoeopathic OPD postings	25 hrs
B	Homoeopathic case taking	
C	Homoeopathic management: • Repertorization • Potency and dose • Different remedies • Prescription, • General and auxiliary management	
D	Bedside IPD clinics	30 hrs
E	Gynaecological Case taking	
F	Gynaecological Examination- OSCE	
G	Obstetrical Case taking	
H	Obstetrical Examination- OSCE	
2.	**DEMONSTRATIVE -24 hours**	**24 hrs**
A	Small group teaching/seminars/tutorials/field visits/Problem based / Case based learning/ skill lab training /integrated learning/group discussion/ assignments	18 hrs.
B	Investigations, Diagnosis , D/D	02 hrs.
C	Instruments - demonstration	02 hrs
D	Models , charts & specimens	02 hrs
	TOTAL	**79 HRS**

5. **Content mapping (competencies tables)**

Unit 1: Gynaecology & Homoeopathic therapeutics

5.1. Introduction to abnormal disease conditions in Gynaecology with Homoeopathic management related to causation, Clinico-pathological and miasmatic correlations with pathological end result. Review of the Homoeopathic literature, Therapeutics and Repertory source books

Sl. No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom-UG ObGy-II 1.1	K & S	K	Case taking & construction of portrait of disease	Construct the portrait of disease in gynaecological conditions with relevance to Hahnmeannian case taking	C1 A1	MK	Case based learning OSCE Small group learning	MCQ, Viva	MCQ, SAQ	Organon of medicine
Hom-UG ObGy-II 1.2	K & S	K	Miasmatic background	Derive at the miasmatic background of gynaecological conditions with help of clinico-pathological findings	C1 P1	MK	Case based learning OSCE Small group learning	MCQ, Viva	MCQ, SAQ	Organon of medicine
Hom-UG ObGy-II 1.3	K & S	K	Causation in Hahnemannian point of view	Identify the exciting causes in gynaecological conditions	C1 P1	MK	Case based learning OSCE Small group learning	MCQ, Viva	MCQ, SAQ	Organon of medicine
Hom-	K & S	K		Identify the maintaining causes in	C1	MK	Case based	MCQ,	MCQ,	Organon of

UGObGy-II 1.4				gynaecological conditions	P1		learning OSCE Small group learning	Viva	SAQ	medicine
Hom-UG ObGy-II 1.5	K & S	K	Selection of repertory and rubrics	Identify the clinical rubrics for the gynaecological symptoms.	C1 P1	MK	Case based learning OSCE Small group learning	MCQ, Viva	MCQ, SAQ	Repertory
Hom-UG ObGy-II 1.6	K & S	K		Perceive the symptomatology and derive the rubrics	C1 P1	MK	Case based learning OSCE Small group learning	MCQ, Viva	MCQ, SAQ	Repertory
Hom-UG ObGy-II 1.7	K & S	K		Explain the importance of clinical repertories including Minton's uterine therapeutics in gynaecological practice	C1	MK	Case based learning Small group learning	MCQ, Viva	MCQ, SAQ	Repertory
Hom-UG ObGy-II 1.8	K & S	K	Therapeutics	Distinguish the remedies having predominant action on female genital tract	C1	MK	Case based learning Small group learning	MCQ, Viva	MCQ, SAQ	Materia medica
Hom-UG ObGy-II 1.9	K & S	K	Therapeutics	Establish the physiological action of remedies indicated in gynaecological conditions	C1	MK	Case based learning Small group learning	MCQ, Viva	MCQ, SAQ	Materia medica

5.2 Infections & Ulcerations of the female genital organs, their Causation and modifying factors: exciting-maintaining causes from micro-organisms to environmental to climacteric to occupational etc. Psychosomatic aspect, Pathogenesis, Pathology, Clinico-pathological and miasmatic correlations with pathological end result including Homoeopathic management

Sl. No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom-UG ObGy-II 2.1	K & S	K	Infectious diseases of female genital tract	List the infectious diseases of female genital tract	C1	MK	Lecture, Small group discussions	MCQ, Viva	SAQ	
Hom-UG ObGy-II 2.2	K & S	K		Classify vulvitis due to specific infection	C1	MK	Lecture, Small group discussions	MCQ, Viva	SAQ	
Hom-UG ObGy-II 2.3	K & S	K		Describe the vulvo-vaginitis in childhood, C/F & investigation	C1	MK	Lecture, Small group discussions	MCQ, Viva	SAQ	
Hom-UG ObGy-II 2.4	K & S	K		Describe the infections of Bartholin's gland	C1	MK	Lecture, Small group discussions	MCQ, Viva	SAQ	
Hom-UG ObGy-II 2.5	K & S	K		Explain the vaginitis of childhood	C1	MK	Lecture, Small group discussions	MCQ, Viva	SAQ	

Hom-UG ObGy-II 2.6	K & S	K		Describe the diagnostic features of trichomonas vaginitis	C1	MK	Lecture, Small group discussions	MCQ, Viva	SAQ	
Hom-UG ObGy-II 2.7	K & S	K		Elaborate the predisposing factors and diagnostic features of Moniliasis	C1	MK	Lecture, Small group discussions	MCQ, Viva	SAQ	
Hom-UG ObGy-II 2.8	K & S	K		Describe the clinical features of atrophic vaginitis	C1	MK	Lecture, Small group discussions	MCQ, Viva	SAQ	
Hom-UG ObGy-II 2.9	K & S	K		Explain the diagnostic features of Toxic shock syndrome	C1	MK	Lecture, Small group discussions	MCQ, Viva	SAQ	
Hom-UG ObGy-II 2.10	K & S	K		Differentiate acute and chronic cervicitis	C1	MK	Lecture, Small group discussions	MCQ, Viva	SAQ	
Hom-UG ObGy-II 2.11	K & S	K		Describe the various types of endometritis	C1	MK	Lecture, Small group discussions	MCQ, Viva	SAQ	
Hom-UG ObGy-II 2.12	K & S	K		Mention the causes of pyometra	C1	MK	Lecture, Small group discussions	MCQ, Viva	SAQ	
Hom-UG ObGy-II 2.13	K & S	K		Compare the features of gonococcal and pyogenic salpingitis	C1	MK	Lecture, Small group discussions	MCQ, Viva	SAQ	
Hom-	K & S	K		Define parametritis	C1	MK	Lecture, Small group discussions	MCQ, Viva	SAQ	

UGObGy-II 2.14										
Hom-UG ObGy-II 2.15	K & S	K		Describe the etio-pathogenesis and diagnostic features of pelvic abscess	C1	MK	Lecture, Small group discussions	MCQ, Viva	SAQ	
Hom-UG ObGy-II 2. 16	K & S	K	Ulcerative lesions of female genital tract	List the causes of vulval ulcers	C1	DK	Lecture, small group discussions	MCQ, Viva	SAQ	Surgery
Hom-UG ObGy-II 2.17	K & S	K		Describe the management of Bartholin's abscess	C1	DK	Lecture, small group discussions	MCQ, Viva	SAQ	
Hom-UG ObGy-II 2.18	P A	K H	Management of infectious diseases of female genital tract	Explain the management of monilial vaginitis	C1	DK	Lecture, small group discussions	MCQ Viva	SAQ	
Hom-UG ObGy-II 2.19	H O	K H	Homeopathic therapeutics	List the remedies indicated in infectious diseases of female genital tract	C2	MK	Lecture, seminar, case based learning	MCQ Viva	SAQ	Materia medica
Hom-UG ObGy-II 2.20	H O	K H		Compare and contrast the remedies indicated in infectious diseases of female genital tract	C1	MK	Lecture, Small group discussions	MCQ, Viva	SAQ	
Hom-UG ObGy-II 2.21	H O	K	Exciting & maintaining causes	Discuss the exciting causes for infectious diseases female genital tract	C2	MK	Lecture, small group discussions, case-based learning	MCQ Viva	SAQ	Organon of medicine
Hom-UG ObG	H O	K		Discuss the maintaining causes for infectious diseases female genital tract	C2	MK	Lecture, small group discussions, case-based	MCQ Viva	SAQ	Organon of medicine

y-II 2.22							learning			
Hom-UG ObGy-II 2.23	H O	K	Miasmatic background	Derive at the miasm based on the clinico- pathological features and pathological end results of the disease.	C2	MK	Lecture, small group discussions, case-based learning	MCQ Viva	SAQ	Organon of medicine

5.3 Injuries of the genital tract, Homoeopathic management - scope and limitations.

Sl. No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom-UG ObGy-II 3.1	K S	K	Perineal tear	Define perineal tear	C1	MK	Lecture Small group learning	MCQ VIVA	SAQ	
Hom-UG ObGy-II 3.2	K S	K		Describe the classification of perineal tear	C1	MK	Lecture Small group learning	MCQ VIVA	SAQ	
Hom-UG ObGy-II 3.3	K S	K		Elaborate the risk factors and clinical features of perineal tear	C1	MK	Lecture Small group learning	MCQ VIVA	SAQ	
Hom-UG ObGy-II	P C	K	Management of perineal tear	Describe the prevention and management of perineal tear	C1	DK	Lecture, small group learning	MCQ		

3.4										
Hom-UG ObGy-II 3.5	K S	K	Coital injuries	Explain coital Injuries	C1	NK	Lecture , small group learning	MCQ		Forensic medicine
Hom-UG ObGy-II 3.6	K S	K		Describe the forensic considerations in management of rape victims	C1	NK	Lecture , small group learning	MCQ		Forensic medicine
Hom-UG ObGy-II 3.7	K S	K	Instrumental injuries	Describe the Instrumental injuries, types & management	C1	DK	Lecture, small group learning	MCQ		Surgery
Hom-UG ObGy-II 3.8	Patient care	K	Foreign bodies	Discuss the effect of foreign bodies in female genital tract	C1	NK	Lecture, small group learning	MCQ		
Hom-UG ObGy-II 3.9	H O	K H	Scope and limitations	Determine the scope and limitations of homeopathy in management of complete perineal tear	C1	MK	Lecture, small group learning	Viva		Organon of medicine
Hom-UG ObGy-II 3.10	H O	K H	Homeopathic therapeutics	List the remedies indicated in injuries of genital tract	C1	MK	Lecture, small group learning	Viva, MCQ	SAQ	Materia medica
Hom-UG ObGy-II 3.11	H O	K H		Differentiate the remedies indicated in genital tract injuries	C1	MK	Lecture, small group learning	Viva, MCQ	SAQ	Materia Medica

5.4 Disorders of Female genital tract - Abnormal vaginal discharge, Pelvic pain, Low backache, Veganism's, Dyspareunia, Abdomino-pelvic lump, with Homoeopathic management

Sl. No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom-UG ObGy-II 4.1	K S	K	Abnormal vaginal discharge	List the causes of abnormal vaginal discharge	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 4.2	K S	K		Define leucorrhea and mention its causes	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 4.3	K S	K		Define Pruritus vulva	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 4.4	K S	K		List the causes of pruritus vulva	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 4.5	K S	K	Pelvic pain &low backache	List causes of pelvic pain	C1	MK	Lecture Small group learning	MCQ, Viva		Surgery
Hom-UG ObG	K S	K		Mention the etiology of low back pain	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	Surgery

y-II 4.6										
Hom-UG ObGy-II 4.7	K S	K	Vaginismus & dyspareunia	Define vaginismus	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 4.8	K S	K		Explain the etiology and management of vaginismus	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 4.9	K S	K		Define dyspareunia	C1	MK	Lecture Small group learning	MCQ, Viva		
Hom-UG ObGy-II 4.10	K S	K		Mention the causes of dyspareunia	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 4.11	K S	K		Outline the diagnosis and management of postmenopausal bleeding	C1	MK	Lecture Small group learning	MCQ, Viva		
Hom-UG ObGy-II 4.12	K S	K	Abdomino-pelvic pain	Differentiate the causes of abdomino - pelvic lump	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	Surgery
Hom-UG ObGy-II 4.13	H O	K H	Homeopathic therapeutics	List the remedies indicated in leucorrhea	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	Materia medica
Hom-UG ObGy-II	H O	K H		Compare the remedies indicated in leucorrhea	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	Materia medica

4.14										
Hom-UG ObGy-II 4.15	H O	K H		Describe the indications of remedies in dyspareunia	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	Materia medica
Hom-UG ObGy-II 4.16	H O	K H		Discuss the remedies indicated in pelvic pain	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	Materia medica

5.5 Urinary problems in Gynaecology – Incontinence, retention, urinary tract infection, dysuria and urethral carbuncle with Homoeopathic management

Sl. No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom-UG ObGy-II 5.1	K S	K	Urinary incontinence	Mention the anatomy of vesico urethral unit.	C1	MK	Lecture Small group learning	MCQ, Viva		Anatomy
Hom-UG ObGy-II 5.2	K S	K		Physiology of micturition storage & voiding of urine	C1	MK	Lecture Small group learning	MCQ, Viva		Physiology
Hom-UG ObGy-II	K S	K		Classify urinary incontinence	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	Surgery

5.3										
Hom-UG ObGy-II 5.4	K S	K		Define genuine stress incontinence	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 5.5	K S	K		Differentiate between the clinical features of stress incontinence, urge incontinence and detrusor instability	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 5.6	K S	K		Classify genito-urinary fistula	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	Surgery
Hom-UG ObGy-II 5.7	K S	K		List the causes of vesicovaginal fistula	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 5.8	K S	K		Explain the diagnosis and management of vesico-vaginal fistula	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 5.9	K S	K	Urinary retention	List the causes of retention of urine	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 5.10	K S	K	Urinary tract infection	Explain the etio-pathogenesis and clinical features of urinary tract infection	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	Practice of medicine,Surgery
Hom-UG ObGy-II 5.11	K S	K		Define dysuria	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	

Hom-UG ObGy-II 5.12	K S	K		Mention causes of dysuria	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 5.13	K S	K		Explain urethral caruncle	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	Surgery
Hom-UG ObGy-II 5.14	H O	K	Homeopathic therapeutics	List the remedies indicated in urinary tract infection	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	Materia medica
Hom-UG ObGy-II 5.15	H O	K		Compare the indication of remedies in UTI	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	Materia medica

5.6 Diseases of breasts with Homoeopathic management

Sl. No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom-UG ObGy-II 6.1	K S	K	Mastalgia	List the causes of mastalgia	C1	DK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-	K S	K	Fibrocystic diseases of breast & fibro-adenoma	Describe the fibrocystic breast disease	C1	MK	Lecture Small group	MCQ, Viva	SAQ	

UGObGy-II 6.2							learning			
Hom-UG ObGy-II 6.3	K S	K		Explain the clinical features and diagnosis of fibro-adenoma of breast	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 6.4	K S	K	Breast cancer	Discuss the etio -pathology of breast cancer	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 6.5	K S	K		Mention the common causes of nipple discharge	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 6.6	K S	K		Explain the procedure of breast self-examination	C1 A1	MK	Lecture Small group learning OSCE	MCQ, Viva Demonstration		
Hom-UG ObGy-II 6.7	P C	S	Examination of breast	Demonstrate steps of clinical breast examination	P1	MK	Lecture Small group learning, bedside case based learning, DOPS, OSCE	MCQ, Viva Demonstration	SAQ	
Hom-UG ObGy-II 6.8	H O	K H	Scope & limitation	Describe the scope and limitation of Homeopathy in management of breast disorders	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	Organon of medicine
Hom-UG ObGy-II 6.9	H O	K H	Miasmatic background	Formulate the miasmatic background of breast disorders from the clinico-pathological findings	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	Organon of medicine
Hom-	H O	K H	Homoeopathy therapeutics	List the remedies indicated in breast	CI	MK	Lecture	MCQ,	SAQ	Materia

UGObGy-II 6.10				disorders			Small group learning	Viva		medica
Hom-UG ObGy-II 6.11	H O	K H		Differentiate the remedies indicated in carcinoma breast	C1	MK	Lecture Small group learning	MCQ, Viva	SAQ	Materia medica

5.7 Sexually transmitted diseases including Homoeopathic management

Sl. No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom-UG ObGy-II 7.1	K S	K	Gonorrhoea	Describe the Clinical features diagnosis & treatment of Acute & chronic gonorrhoea	C1	MK	Lecture Small group learning	MCQ VIVA	SAQ	Materia Medica
Hom-UG ObGy-II 7.2	K S	K	Syphilis	Explain C/F & diagnosis of syphilis	C1	MK	Lecture Small group learning	MCQ VIVA	SAQ	Practice of medicine
Hom-UG ObGy-II 7.3	K S	K	HIV	Discuss clinical Features,causative organisms, diagnosis & prevention of HIV	C1	MK	Lecture Small group learning	MCQ VIVA	SAQ	Microbiology
Hom-UG ObG	K S	K	Chlamydial infection	Describe clinical features & diagnosis of Chlamydial Infections	C1	DK	Lecture Small group learning	MCQ VIVA	SAQ	

y-II 7.4										
Hom-UG ObGy-II 7.5	K S	K	Bacterial vaginitis	Describe C/F & diagnosis of Bacterial vaginitis	C1	DK	Lecture Small group learning	MCQ VIVA	SAQ	
Hom-UG ObGy-II 7.6	K S	K	STD's	Explain causes & clinical Features of Chancroid & Granuloma inguinale	C1	DK	Lecture Small group learning	MCQ VIVA	SAQ	
Hom-UG ObGy-II 7.7	K S	K		Discuss clinical features & diagnosis Herpes genitalia	C1	DK	Lecture Small group learning	MCQ VIVA	SAQ	
Hom-UG ObGy-II 7.8	K S	K	Molluscum contagiosum& scabies	Explain clinical features of Molluscum Contagiosum & scabies	C1	DK	Lecture Small group learning	MCQ VIVA	SAQ	
Hom-UG ObGy-II 7.9	H O	K H	Therapeutics	List the remedies indicated in gonorrhoea	C2	MK	Lecture Small group learning	MCQ VIVA	SAQ	Materia Medica
Hom-UG ObGy-II 7.10	H O	K H	Therapeutics	Explain the remedies indicated in syphilis	C2	MK	Lecture Small group learning	MCQ VIVA	SAQ	Materia Medica

5.8 Endometriosis and Adenomyosis - scope and limitation of management in Homoeopathy

Sl. No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom-UG ObGy-II 8.1	K S	K	Endometriosis	Define Endometriosis	C1	MK	Lecture Small group learning Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 8.2	K S	K		Describe the common sites of development of endometriosis	C1	MK	Lecture Small group learning	MCQ VIVA	SAQ	
Hom-UG ObGy-II 8.3	K S	K		Discuss the rarest sites for development of endometriosis	C1	MK	Lecture Small group learning	MCQ VIVA	SAQ	
Hom-UG ObGy-II 8.4	K S	K		Discuss the pathogenesis & theories of Endometriosis	C1	MK	Lecture Small group learning	MCQ VIVA	SAQ	
Hom-UG ObGy-II 8.5	K S	K		Describe the chocolate cyst of the ovary	C1	MK	Lecture Small group learning	MCQ VIVA	SAQ	
Hom-UG ObGy-	K S	K		Describe the etio-pathology of chocolate cyst of the ovary	C1	MK	Lecture Small group	MCQ VIVA	LA SAQ	

II 8.6							learning			
Hom-UG ObGy-II 8.7	K S	K		Describe the clinical features of endometriosis	C1	MK	Lecture Small group learning	MCQ VIVA	LA SAQ	
Hom-UG ObGy-II 8.8	K S	K		Discuss the diagnosis of Endometriosis.	C1	MK	Lecture Small group learning	MCQ VIVA	LA SAQ	
Hom-UG ObGy-II 8.9	K S	K		Discuss the complications of Endometriosis	C1	MK	Lecture Small group learning	MCQ VIVA	SAQ	
Hom-UG ObGy-II 8.10	K S	K		List the D/D of Endometriosis	C1	MK	Lecture Small group learning	MCQ VIVA	SAQ	
Hom-UG ObGy-II 8.11	K S	K	Adenomyosis	Define Adenomyosis	C1	MK	Lecture Small group learning	MCQ VIVA	SAQ	
Hom-UG ObGy-II 8.12	K S	K		Discuss the pathology of Adenomyosis	C1	MK	Lecture Small group learning	MCQ VIVA	SAQ	
Hom-UG ObGy-II 8.13	K S	K		Differentiate Adenomyosis & Fibroid uterus	C1	MK	Lecture Small group learning	MCQ VIVA	SAQ	
Hom-UG ObGy-II	K S	K		Discuss the differential diagnosis of swelling in hypo gastric region	C1	MK	Lecture Small group learning	MCQ VIVA	SAQ	Surgery

8.14										
Hom-UG ObGy-II 8.15	K S	K		Discuss the clinical features of Adenomyosis	C1	MK	Lecture Small group learning	MCQ VIVA	SAQ	
Hom-UG ObGy-II 8.16	K S	K		Explain the investigations in Adenomyosis	C1	MK	Lecture Small group learning	MCQ VIVA	SAQ	
Hom-UG ObGy-II 8.17	P C	K	Homoeopathic Therapeutics	List the indications of homoeopathic remedies in endometriosis	C1	MK	Lecture Small group learning	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 8.18	H O	K		Discuss the characteristic features of indicated remedies in Adenomyosis	C1	MK	Lecture Small group learning	MCQ VIVA	SAQ	Materia medica

5.9 Etiological factors related with male & female Infertility, their diagnosis, Artificial Reproductive Techniques, scope and limitation of homoeopathic management along with population dynamics and control of Conception.

Sl. No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom-UG ObGy-II	K S	K	Infertility	Define Infertility	CI	MK	Lecture Small group learning	MCQ VIVA	SAQ	

9.1										
Hom-UG ObGy-II 9.2	K S	K	Sterility	Define Sterility	CI	MK	Lecture Small group learning	MCQ VIVA	SAQ	
Hom-UG ObGy-II 9.3	K S	K	Primary Infertility	Define Primary infertility	CI	MK	Lecture Small group learning	MCQ VIVA	SAQ	
Hom-UG ObGy-II 9.4	K S	K	Secondary infertility	Define Secondary infertility	CI	MK	Lecture Small group learning	MCQ VIVA	SAQ	
Hom-UG ObGy-II 9.5	K S	K	Safe period	Define safe period	CI	MK	Lecture Small group learning	MCQ VIVA	SAQ	Physio
Hom-UG ObGy-II 9.6	K S	K	Factors responsible for fertility	Discuss the factors responsible for fertility	CI	MK	Lecture Small group learning	MCQ VIVA	SAQ	Physio
Hom-UG ObGy-II 9.7	K S	K	Female infertility causes	Describe the female causes of infertility	CI	MK	Lecture Small group learning	MCQ VIVA	LA SAQ	
Hom-UG ObGy-II 9.8	K S	K	Mate infertility causes	Describe the male causes of infertility	CI	MK	Lecture Small group learning	MCQ VIVA	LA SAQ	
Hom-UG ObGy-II 9.9	K S	K	Combined factors	Discuss the combined factors of infertility	CI	MK	Lecture Small group learning	MCQ VIVA	SAQ	

Hom-UG ObGy-II 9.10	K S	K	Female infertility investigation	Discuss in detail the investigation in female infertility	CI	MK	Lecture Small group learning	MCQ VIVA	LA SAQ	
Hom-UG ObGy-II 9.11	K S	K	Male infertility investigations	Discuss in detail investigation in male infertility	CI	MK	Lecture Small group learning	MCQ VIVA	LA SAQ	
Hom-UG ObGy-II 9.12	K S	K	BBT	Explain BBT & its clinical importance	CI	MK	Lecture Small group learning	MCQ VIVA	SAQ	Physiology
Hom-UG ObGy-II 9.13	K S	K	Ovulatory test	Discuss the ovulatory tests for infertility	CI	MK	Lecture Small group learning	MCQ VIVA	SAQ	
Hom-UG ObGy-II 9.14	K S	K	Tubal patency test	Discuss the tubal patency test	CI	MK	Lecture Small group learning	MCQ VIVA	SAQ	
Hom-UG ObGy-II 9.15	K S	K	HSG	Describe the advantages of HSG (Hysterosalphigography)	CI	DK	Lecture Small group learning	MCQ VIVA		
Hom-UG ObGy-II 9.16	K S	K		Describe the disadvantage of HSG (Hysterosalphigography)	CI	DK	Lecture Small group learning	MCQ VIVA		
Hom-UG ObGy-II 9.17	K S	K	Semen analysis	Explain Semen analysis	CI	DK	Lecture Small group learning e	MCQ VIVA		

Hom-UG ObGy-II 9.18		K	ART	List the methods of ART (Assisted reproductive techniques)in infertility	CI	DK	Lecture Small group learning	MCQ VIVA		
Hom-UG ObGy-II 9.19	K S	K	IVF	Explain the indications of IVF	CI	DK	Lecture Small group learning	MCQ VIVA		
Hom-UG ObGy-II 9.20	K S	K	Artificial insemination	Define artificial insemination	CI	DK	Lecture Small group learning	MCQ VIVA	SAQ	
Hom-UG ObGy-II 9.21	K S	K	Post coital test	Explain post-coital test	CI	DK	Lecture Small group learning	MCQ VIVA	SAQ	
Hom-UG ObGy-II 9.22	H O	K	Homoeopathic therapeutics	List the homoeopathic remedies in female infertility	CI	MK	Lecture Small group learning	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 9.23	H O	K		List the homoeopathic remedies in male infertility	CI	MK	Lecture Small group learning	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 9.24	H O	K		Discuss the characteristic features of indicated remedies in male & female infertility	CI	MK	Lecture Small group learning	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 9.25	P C	K	Scope & limitation Scope & limitation	Describe the prognosis of the case based on age and aetiological factors	CI	MK	Lecture Small group learning	MCQ VIVA	SAQ	

Hom-UG ObGy-II 9.26	P C	K		Discuss the scope and limitation of homoeopathy in infertility and timely referral	CI	MK	Lecture Small group learning0	MCQ VIVA	SAQ	Organon
Hom-UG ObGy-II 9.27	P C	K	Alternative methods for infertility	Discuss the alternative methods for infertility	CI	DK	Lecture Small group learning0	MCQ VIVA	SAQ	
Hom-UG ObGy-II 9.28	P C	K	Scope and limitation of homoeopathy for infertility	Discuss the Assisted Reproductive techniques	CI	NK	Lecture Small group learning0	MCQ VIVA		
Hom-UG ObGy-II 9.29	K S	K	Population control and dynamic contraception	Define contraception	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		Community medicine
Hom-UG ObGy-II 9.30	K S	K H		Discuss the aims and objectives of family planning	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		Community medicine
Hom-UG ObGy-II 9.31	K S	K H		Discuss the temporary methods of contraception	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 9.32	K S	K H		Explain the advantages of Cu-T	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-	K S	K H		Describe the Barrier methods of contraception	CI	MK	Lecture Small group discussion	MCQ VIVA	SAQ	

II 9.33							Tutorials			
Hom-UG ObGy-II 9.34	K S	K H		Discuss the natural methods of contraception.	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 9.35	K S	K H		Discuss the advantages of natural methods of contraception	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 9.36	K S	K H		Discuss the advantages of IUCD's	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 9.37	K S	K H		Discuss the disadvantages of IUCD's.	CI	MK	Lecture Small group discussion K STutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 9.38	K S	K H		Discuss the adverse effects of combined oral contraceptive pills	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	

5.10 Genital non-malignant growths - scope and limitation of management in Homoeopathy

Sl. No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom-UG ObGy-II 10.1	Knowledge care &scholarship	Knows	Benign lesions of vagina	Describe the vulval cysts	C I	MK	Lecture Small group learning	MCQ, Viva		
Hom-UG ObGy-II 10.2	Knowledge care &scholarship	Knows		Describe the vaginal cysts	C I	MK	Lecture Small group learning	MCQ, Viva		
Hom-UG ObGy-II 10.3	Knowledge care &scholarship	Knows		List the vulval ulcers	C I	MK	Lecture Small group learning	MCQ, Viva		
Hom-UG ObGy-II 10.4	Knowledge care &scholarship	Knows		Explain the Nabothian cyst	C I	MK	Lecture Small group learning	MCQ, Viva		
Hom-UG ObGy-II 10.5	Knowledge care &scholarship	Knows		Discuss the clinical features of vaginal cyst	C I	MK	Lecture Small group learning	MCQ, Viva		
Hom-UG ObGy-II	Knowledge care &scholarship	Knows		Discuss the clinical features of vaginal cyst	C I	MK	Lecture Small group learning	MCQ, Viva		

10.6			Benign lesions of the vulva							
Hom-UG ObGy-II 10.7	Homoeopathic orientation	Knows		List the homoeopathic remedies for vaginal & vulval cysts	C I	MK	Lecture Small group learning	MCQ, Viva		Materia medica
Hom-UG ObGy-II 10.8	Homoeopathic orientation	Knows		Discuss the characteristic features of indicated remedies in vulval and vaginal cysts	C I	MK	Lecture Small group learning	MCQ, Viva		Materia medica
Hom-UG ObGy-II 10.9	Knowledge care &scholarship	Knows	Investigations	Discuss the differential diagnosis of vulval cysts	C I	MK	Lecture Small group learning	MCQ, Viva		
Hom-UG ObGy-II 10.10	Knowledge care &scholarship	Knows how		Discuss the investigations for Vulval & vaginal cysts	C I	MK	Lecture Small group learning	MCQ, Viva		
Hom-UG ObGy-II 10.11	Knowledge care &scholarship	Knows how	Scope & limitation	Discuss the scope and limitation of homoeopathy in vulval & vaginal cysts	C I	MK	Lecture Small group learning	MCQ, Viva		Organon of Medicine
Hom-UG ObGy-II 10.12	Knowledge care &scholarship	Knows how	Benign lesions of cervix	Explain the types of cervical cysts Explain endomeriotic cyst Explain the symptoms of cervical fibroid	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 10.13	Knowledge care &scholarship	Knows	Cervix	Define cervical Erosion	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-	Knowledge care	Knows		Describe the causes of cervical erosion	C I	MK	Lecture Small group	MCQ, Viva	SAQ	

II 10.14	&scholarship						learning			
Hom-UG ObGy-II 10.15	Knowledge care &scholarship	Knows		Discuss the Clinical features of cervical erosion	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 10.16	Knowledge care &scholarship	Knows		Discuss the investigations for cervical erosion	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 10.17	Knowledge care &scholarship	Knows	Benign lesions of ovary	Classify ovarian tumours	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 10.18	Knowledge care &scholarship	Knows		Explain Corpus luteum cyst	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 10.19	Knowledge care &scholarship	Knows		Explain serous cyst Adenoma	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 10.20	Knowledge care &scholarship	Knows		Define Lutein cyst	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 10.21	Knowledge care &scholarship	Knows		Define Mucinous cyst adenoma	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II	Knowledge care &scholarship	Knows		Define Brenner's tumour	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	

10.22										
Hom-UG ObGy-II 10.23	Knowledge care &scholarship	Knows		Discuss the features of follicular cyst	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 10.24	Knowledge care &scholarship	Knows		Discuss the clinical features of Benign ovarian tumour	C I	MK	Lecture Small group learning	MCQ, Viva	LA SAQ	
Hom-UG ObGy-II 10.25	Knowledge care &scholarship	Knows		Describe Meigs syndrome	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 10.26	Knowledge care &scholarship	Knows		Describe the origin & clinical features of Dermoid cyst	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 10.27	Knowledge care &scholarship	Knows		Discuss the D/D Ovarian tumour	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 10.28	Knowledge care &scholarship	Knows		Explain the non-neoplastic causes of ovarian enlargement	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 10.29	Knowledge care &scholarship	Knows		Explain the features of functional cyst	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II	Knowledge care &scholarship	Knows how		Explain the complication of Benign Ovarian tumour	C I	MK	Lecture Small group learning	MCQ, Viva	LA SAQ	

10.30										
Hom-UG ObGy-II 10.31	Knowledge care &scholarship	Knows how		Differentiate between Benign & Malignant ovarian tumours	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 10.32	Knowledge care &scholarship	Knows	Benign lesions of uterus	Define Leiomyoma / fibroid	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 10.33	Knowledge care &scholarship	Knows how		Classify different types of fibroids	C I	MK	Lecture Small group learning	MCQ, Viva	LA SAQ	
Hom-UG ObGy-II 10.34	Knowledge care &scholarship	Knows how		Describe the clinical feature of uterine fibroids	C I	MK	Lecture Small group learning	MCQ, Viva	LA SAQ	
Hom-UG ObGy-II 10.35	Knowledge care &scholarship	Knows how		Describe the causes of uterine fibroid	C I	MK	Lecture Small group learning	MCQ, Viva	LA SAQ	
Hom-UG ObGy-II 10.36	Knowledge care &scholarship	Knows how		Describe the secondary changes occurring in fibroid	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 10.37	Knowledge care &scholarship	Knows how		Explain red degeneration	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II	Knowledge care &scholarship	Knows how		Discuss the complications of uterine fibroid	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	

10.38										
Hom-UG ObGy-II 10.39	Knowledge care &scholarship	Knows how		Discuss the investigations in fibroid	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 10.40	Homoeopathic orientation	Knows how	Homoeopathic therapeutics	List the homoeopathic remedies for uterine fibroid	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	Materia medica
Hom-UG ObGy-II 10.41	Homoeopathic orientation	Knows how		Distinguish the characteristic features of indicated remedies in fibroids	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	Materia medica
Hom-UG ObGy-II 10.41	Patient care	Knows how		Discuss the surgical management in fibroids	C I	MK	Lecture Small group learning Tutorials	MCQ, Viva	SAQ	Surgery
Hom-UG ObGy-II 10.42	Patient care	Knows how		Discuss the scope & limitation in treating fibroids	C I	MK	Lecture Small group learning	MCQ, Viva		Organon
Hom-UG ObGy-II 10.43	Patient care	Knows how		Mention the life threatening complication of fibroid	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 10.44	Knowledge care &scholarship	Knows	Polyps	Define uterine polyps	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II	Knowledge care &scholarship	Knows		Discuss the types of polyps	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	

10.45										
Hom-UG ObGy-II 10.46	Homoeopathic orientation	Knows how		List the homoeopathic remedies for polyp	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	Materia medica
Hom-UG ObGy-II 10.47	Homoeopathic orientation	Knows how		Discuss the characteristic features of indicated remedies in polyp	C I	MK	Lecture Small group learning	MCQ, Viva	SAQ	Materia medica

5.11 Genital malignancy with scope of Homoeopathic treatment and its limitations

Sl. No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom-UG ObGy-II 11.1	Knowledge care &scholarship	Knows	Cervical cancer	Describe the pre-disposing risk factors of Ca Cervix	CI	MK	Lecture Small group learning	MCQ, Viva	LA SAQ	
Hom-UG ObGy-II 11.2	Knowledge care &scholarship	Knows		Describe the mode of spread of Ca Cervix	CI	MK	Lecture Small group learning	MCQ, Viva	LA SAQ	
Hom-UG ObGy-	Knowledge care	Knows		Describe the clinical features of Ca Cervix	CI	MK	Lecture Small group	MCQ, Viva	LA SAQ	

II 11.3	&scholarship						learning			
Hom-UG ObGy-II 11.4	Knowledge care &scholarship	Knows		Discuss the diagnosis of Ca Cervix	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 11.5	Knowledge care &scholarship	Knows		Discuss the per vaginal examination findings in ca cervix	CI P1	MK	Lecture Small group learning OSCE DOPS	MCQ, Viva	SAQ	
Hom-UG ObGy-II 11.6	Knowledge care &scholarship	Knows		Describe FIGO staging of Ca cervix	CI P1	MK	Lecture Small group learning OSCE	MCQ, Viva	LA SAQ	
Hom-UG ObGy-II 11.7	Knowledge care &scholarship	Knows		Discuss the D/D of Ca cervix	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 11.8	Knowledge care &scholarship	Knows		Discuss the complications of Ca cervix	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 11.9	Knowledge care &scholarship	Knows		Differentiate between Cervical erosion & Ca Cervix	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 11.10	Knowledge care &scholarship	Knows		Discuss the Primary & Secondary preventive management of Ca cervix	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II	Knowledge care &scholarship	Knows		Discuss the investigations for Ca cervix	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	

11.11										
Hom-UG ObGy-II 11.12	Homoeopathic orientation	Knows how		List the homoeopathic remedies in Ca cervix	CI	MK	Lecture Small group learning	MCQ, Viva	LA SAQ	Materia medica
Hom-UG ObGy-II 11.13	Homoeopathic orientation	Knows how		Describe the characteristic features of indicated remedies in Ca cervix	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	Materia medica
Hom-UG ObGy-II 11.14	Knowledge care &scholarship	Knows	Ovarian malignancy	Classify the malignant ovarian tumours	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 11.15	Knowledge care &scholarship	Knows		Discuss the clinical features of ovarian cancer	CI	MK	Lecture Small group learning	MCQ, Viva	LA SAQ	
Hom-UG ObGy-II 11.16	Knowledge care &scholarship	Knows		Define Androblastoma	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 11.17	Knowledge care &scholarship	Knows		Discuss the clinical features of Androblastoma	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 11.18	Knowledge care &scholarship	Knows		Discuss the staging of ovarian cancer	CI P1	MK	Lecture Small group learning OSCE	MCQ, Viva	SAQ	
Hom-UG ObGy-II 11.19	Knowledge care &scholarship	Knows		Discuss the clinical features of Androblastoma	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	

Hom-UG ObGy-II 11.20	Knowledge care &scholarship	Knows		Discuss the clinical features of Granulosa cell tumour of the ovary	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 11.21	Knowledge care &scholarship	Knows		Describe Krukenburg cell tumour	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 11.22	Knowledge care &scholarship	Knows		Discuss the clinical features of Krukenburg cell tumour of the ovary	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 11.23	Knowledge care &scholarship	Knows		Discuss the clinical features of Epithelial cell tumour of the ovary	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 11.24	Knowledge care &scholarship	Knows		Discuss the clinical features of Sex cord stromal tumour of the ovary	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 11.25	Knowledge care &scholarship	Knows		Discuss the investigation in ca ovary	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 11.26	Homoeopathic orientation	Knows how		List the homoeopathic remedies for ovarian malignancies	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	Materia medica
Hom-UG ObGy-II 11.27	Homoeopathic orientation	Knows how		Discuss the characteristic features of indicated remedy in ovarian tumours	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	Materia medica

Hom-UG ObGy-II 11.28	Knowledge care &scholarship	Knows	Endometrial carcinoma	Describe FIGO staging of Endometrial Ca	CI P1	MK	Lecture Small group learning OSCE	MCQ, Viva	SAQ	
Hom-UG ObGy-II 11.29	Knowledge care &scholarship	Knows		Discuss the aetiology of endometrial cancer	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 11.30	Knowledge care &scholarship	Knows		Discuss the clinical features & diagnosis of Endometrial Cancer	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 11.31	Knowledge care &scholarship	Knows		Discuss the differential diagnosis of Ca Endometrium	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 11.32	Knowledge care &scholarship	Knows		Explain the preventive treatment in Ca Endometrium	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 11.33	Homoeopathic orientation	Knows how		List the homeopathic remedies in endometrial carcinoma	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	Materia medica
Hom-UG ObGy-II 11.34	Homoeopathic orientation	Knows how		Discuss the characteristic features of indicated remedy in endometrial carcinoma	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	Materia medica
Hom-UG ObGy-II 11.35	Knowledge care &scholarship	Knows	Vaginal & vulval cancer	Discuss the causes of vaginal & vulval cancer	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	

Hom-UG ObGy-II 11.36	Knowledge care &scholarship	Knows		Discuss the clinical features of vaginal & vulval cancer	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 11.37	Knowledge care &scholarship	Knows		Discuss the predisposing factors in vaginal & vulval carcinoma	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 11.38	Knowledge care &scholarship	Knows		Describe the stages of vaginal & vulval carcinoma	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	
Hom-UG ObGy-II 11.39	Homoeopathic orientation	Knows how		List the homeopathic remedies in vaginal & vulval carcinoma	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	Materia medica
Hom-UG ObGy-II 11.40	Homoeopathic orientation	Knows how		Discuss the characteristic features of indicated remedy in vaginal & vulval carcinoma	CI	MK	Lecture Small group learning	MCQ, Viva	SAQ	Materia medica
Hom-UG ObGy-II 11.41	Patient care	Knows how	Scope & limitation	Discuss the scope and limitation of homoeopathy in genital malignancies	CI	MK	Lecture Small group learning	MCQ, Viva		Organon

5.12 Identifying the indications of surgical procedures in Gynaecology, its complications, after effects and to refer for surgical intervention either as a life saving measure or for removing mechanical obstacles.

Sl. No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom-UG ObGy-II 12.1	Knowledge &scholarship	Knows how	Dilatation and curettage	Describe the preoperative & post-operative procedures in gynaecological surgeries	C1 P1	DK	Small group discussion Audio visual Instruments DOPS	MCQ Viva		
Hom-UG ObGy-II 12.2	Knowledge &scholarship	Knows how		Explain the instruments used in D & C	C1 P1	DK	Small group discussion Audio visual Instruments DOPS	MCQ Viva		
Hom-UG ObGy-II 12.3	Knowledge &scholarship	Knows how		List the indications of Dilatation and curettage	C1	MK	Small group discussion	MCQ Viva	SAQ	
Hom-UG ObGy-II 12.4	Knowledge &scholarship	Knows how		Explain the complications of D&C	C1	MK	Small group discussion	MCQ	SAQ	
Hom-UG ObGy-II 12.5	Knowledge &scholarship	Knows how		Mention the indications of D&E	C1	MK	Small group discussion	Viva	SAQ	
Hom-	Knowledge	Knows	HSG	Describe the indications	C1	MK	Small group	MCQ	SAQ	

UGObGy-II 12.6	&scholarship			of Hysterosalpingography			discussion Audio visual Instruments X-ray	Viva		
Hom-UG ObGy-II 12.7	Knowledge &scholarship	Knows		Describe the complications of Hysterosalpingography	C1	MK	Small group discussion Audio visual Instruments X-ray	MCQ Viva	SAQ	
Hom-UG ObGy-II 12.8	Knowledge &scholarship	Knows	Cervical biopsy	Discuss types of cervical biopsy	C1 P1	MK	Small group discussion DOPS	MCQ Viva		
Hom-UG ObGy-II 12.9	Knowledge &scholarship	Knows how	Hysterectomy	Differentiate indications of abdominal hysterectomy & radical hysterectomy	C1	MK	Small group discussion Lecture	MCQ Viva	SAQ	

5.13 Radiotherapy, Chemotherapy, Immunotherapy, Gene therapy, Tumor markers - utility and its complications

Sl. No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom-UG ObGy-II	Knowledge and scholarship	Knows	Radiotherapy	Explain the radiation reactions and their management	C1	NK	Small group discussion CBL	MCQ VIVA	SAQ	

13.1										
Hom-UG ObGy-II 13.2	Knowledge and scholarship	Knows	chemotherapy	Mention the indications of chemotherapy in gynaecological conditions	C1	NK	Small group discussion CBL	MCQ VIVA	SAQ	
Hom-UG ObGy-II 13.3	Knowledge and scholarship	Knows	immunotherapy	Describe the principles of immunotherapy in gynaecological practice	C1	NK	Small group discussion CBL	MCQ VIVA	SAQ	
Hom-UG ObGy-II 13.4	Knowledge and scholarship	Knows	Tumour markers	List the commonly used tumour markers in gynaecology	C1	NK	Small group discussion CBL	MCQ VIVA	SAQ	

5.14 General and Homoeopathic management, repertorisation, therapeutics, posology, Formulation of prognostic criteria, Prognosis and future advances of related topics in Gynaecology

Sl. No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom-UG ObGy-II 14.1	Patient care	Knows how	General management	Describe the general management in infertility cases	C2	MK	CBL, Tutorial,	VIVA	SAQ	
Hom-UG ObGy-II 14.2	Patient care	Knows how		Describe the general management in STD's	C2	MK	CBL, Tutorial,	VIVA	SAQ	

Hom-UG ObGy-II 14.3	Patient care	Knows how		Describe the general management in infectious diseases	C2	MK	CBL, Tutorial,	VIVA	SAQ	
Hom-UG ObGy-II 14.4	Patient care	Knows how		Describe the general management in benign neoplastic growths	C2	MK	CBL, Tutorial,	VIVA	SAQ	
Hom-UG ObGy-II 14.5	Patient care	Knows how		Describe general management in genital malignancies.	C2	MK	CBL, Tutorial,	VIVA	SAQ	
Hom-UG ObGy-II 14.6	Homoeopathic orientation	Knows how	Homoeopathic materia medica & therapeutics	Distinguish the remedies having predominant action on female genital tract	C2	MK	CBL, Tutorial,	VIVA	SAQ	Materia medica
Hom-UG ObGy-II 14.7	Homoeopathic orientation	Knows how		Establish the physiological action of remedies indicated in gynaecological conditions	C2	MK	CBL, Tutorial,	VIVA	SAQ	Materia medica
Hom-UG ObGy-II 14.8	Homoeopathic orientation	Knows how		Co-relate Homoeopathic remedies with pathology and pathogenesis in gynaecological conditions	C2	MK	CBL, Tutorial,	VIVA	SAQ	Materia medica
Hom-UG ObGy-II 14.9	Homoeopathic orientation	Knows how		List the homoeopathic remedies in various specific gynaecological conditions	C2	MK	CBL, Tutorial,	VIVA	SAQ	Materia medica
Hom-	Homoeopathic	Knows how		Discuss the	C2	MK	CBL, Tutorial,	VIVA	SAQ	Materia

UGObGy-II 14.10	orientation			characteristic features of indicated remedies in specific gynaecological conditions						medica
Hom-UG ObGy-II 14.11	Homeopathic orientation	Knows how	Repertory	Discuss the selection of repertory based on symptoms in gynaecology	C2 P2	MK	CBL, Tutorial, OSCE	VIVA		Repertory
Hom-UG ObGy-II 14.12	Homoeopathic orientation	Knows how		Enlist the rubrics of various gynaecological conditions from different Repertory	C2 P2	MK	CBL, Tutorial, OSCE	VIVA		Repertory
Hom-UG ObGy-II 14.13	Homoeopathic orientations	Knows how	Posology	Discuss the selection of potency based on the symptomatology	C2 P2	MK	CBL, Tutorial, OSCE	VIVA		Organaon medicine
Hom-UG ObGy-II 14.14	Homoeopathic orientations	Knows how	Prognostic criteria	Discuss the prognosis of case based on the etio-pathogenesis and pathological end results	C2 P2	MK	CBL, Tutorial, OSCE	VIVA		Organaon medicine
Hom-UG ObGy-II 14.15	Homoeopathic orientation	Knows how		Formulate the prognostic criteria of case based on the symptomatology of the case	C2 P2	MK	CBL, Tutorial, OSCE	VIVA		Organaon of medicine

Unit 2: Obstetrics, Infant Care & Homoeopathic Therapeutics

5.15 Introduction to Abnormal pregnancy and labour with its scope and limitation in Homoeopathy Review of literature, Therapeutics and Repertory source books.

Sl. No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom-UG ObGy-II 15.1	Knowledge care & scholarship	Knows	Abnormal labour	Define dystocia	C1	MK	Group discussions, seminar, tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 15.2	Knowledge care & scholarship	Knows		List the abnormalities of pregnancy	C1	MK	Group discussions, seminar, tutorials	VIVA		
Hom-UG ObGy-II 15.3	Knowledge care & scholarship	Knows	Abnormal puerperium	Define Puerperal pyrexia	CI	MK	Group discussions, seminar, tutorials	VIVA	SAQ	
Hom-UG ObGy-II 15.4	Knowledge care & scholarship	Knows		List the causes for puerpereal pyrexia	C1	MK	Group discussions, seminar, tutorials	VIVA	SAQ	
Hom-UG ObGy-II 15.5	Knowledge care & scholarship	Knows		Define Puerperal sepsis	CI	MK	Group discussions	VIVA	SAQ	
Hom-UG ObG	Knowledge care &	Knows		List any 3 predisposing factors	C1	MK	Group discussions,	VIVA	SAQ	

y-II 15.6	scholarship						seminar, tutorials			
Hom-UG ObGy-II 15.7	Knowledge care & scholarship	Knows		Describe the mode of spread, C/F investigation of puerperal sepsis	C1	MK	Group discussions, seminar, tutorials	VIVA	SAQ	
Hom-UG ObGy-II 15.8	Knowledge care & scholarship	Knows		Define acute mastitis	CI	MK	Group discussions	VIVA	SAQ	
Hom-UG ObGy-II 15.9	Knowledge care & scholarship	Knows		Discuss the clinical feature & complication of acute mastitis	C1	MK	Group discussions, seminar, tutorials	VIVA	SAQ	
Hom-UG ObGy-II 15.10	Knowledge care & scholarship	Knows		Discuss the prophylaxis for puerperal pyrexia	C1	MK	Group discussions, seminar, tutorials	VIVA	SAQ	
Hom-UG ObGy-II 15.11	Knowledge care & scholarship	Knows		Discuss the causes & treatment of cracked nipples	C1	MK	Group discussions, seminar, tutorials	VIVA	SAQ	
Hom-UG ObGy-II 15.12	Knowledge care & scholarship	Knows		Define sub-involution & discuss its clinical features	C1	MK	Group discussions, seminar, tutorials	VIVA	SAQ	
Hom-UG ObGy-II 15.13	Knowledge care & scholarship	Knows	Scope and limitation of homoeopathy	Discuss the scope and limitations of homeopathy in abnormal pregnancy	C1	MK	Group discussions, seminar, tutorials	VIVA		Organon of medicine
Hom-UG ObGy-II	Patient care	Know how		Discuss the scope and limitation of homeopathy in	C1	MK	Group discussions, seminar,	VIVA		Organon of medicine

15.14				abnormal labour			tutorials			
Hom-UG ObGy-II 15.15	Patient care	Know how		Discuss the scope and limitation of homoeopathy in abnormal puerperium	C1	MK	Group discussions, seminar, tutorials	VIVA		Organon of Medicine
Hom-UG ObGy-II 15.16	Patient care	Know how		Discuss the scope and limitation of homoeopathy in abnormalities of new-born	C1	MK	Group discussions, seminar, tutorials	VIVA		Organon of Medicine
Hom-UG ObGy-II 15.17	Knowledge care & scholarship	Knows	Homoeopathic materia medica with Obstetrics & new born care	Distinguish the remedies having predominant action on pregnancy & labour	C1	MK	Group discussions, seminar, tutorials	VIVA MCQ	SAQ	Materia Medica
Hom-UG ObGy-II 15.18	Knowledge care & scholarship	Knows		Distinguish the remedies having predominant action on new born care	C1	MK	Group discussions, seminar, tutorials	MCQ VIVA		Materia medica
Hom-UG ObGy-II 15.19	Homoeopathic orientation	Knows	Review of literature in therapeutics	Apply the knowledge of sources of drugs while selecting the medicines	C1	MK	Group discussions, seminar, tutorials	VIVA		Materia Medica
Hom-UG ObGy-II 15.20	Homoeopathic orientation	Knows		Co-relate Homoeopathic materia medica with pathology and pathogenesis of obstetrical conditions & new born	C1	MK	Group discussions, seminar, tutorials	MCQ VIVA		Materia medica, Paediatrics
Hom-UG ObGy-II	Homoeopathic orientation	Knows		Identify the remedies indicated in care of abnormal pregnancy	C1	MK	Group discussions, seminar,	MCQ VIVA		Materia medica

15.21							tutorials			
Hom-UG ObGy-II 15.22	Homoeopathic orientation	Knows		Identify the remedies indicated in care of abnormal deliveries	C1	MK	Group discussions, seminar, tutorials	MCQ VIVA		Materia medica
Hom-UG ObGy-II 15.23	Homoeopathic orientation	Knows		Identify the remedies indicated in care of new-born	C1	MK	Group discussions, seminar, tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 15.24	Homoeopathic orientation	Knows		Discuss the characteristic features of indicated remedies in care of abnormal pregnancy	C1	MK	Group discussions, seminar, tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 15.25	Homoeopathic orientation	Knows		Discuss the characteristic features of indicated remedies in care of abnormal delivery	C1	MK	Group discussions, seminar, tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 15.26	Homoeopathic orientation	Knows	Review of literature of repertory source books	Apply the knowledge of source books of repertory while selecting the medicine	C1	MK	Group discussions, seminar, tutorials	MCQ		Repertory
Hom-UG ObGy-II 15.27	Homoeopathic orientation	Knows		Select the repertory mediums to use in abnormal labour	C1	DK	Group discussions, seminar, tutorials	MCQ VIVA		Repertory
Hom-UG ObGy-II 15.28	Homoeopathic orientation	Knows		List the various rubrics of Obstetrical care from different repertories	C1 P1	DK	Group discussions, seminar, tutorials OSCE	MCQ VIVA		Repertory

Hom-UG ObGy-II 15.29	Homoeopathic orientation	Knows		Identify the ailments from rubrics in new born	C1 P1	DK	Group discussions, seminar, tutorials OSCE	MCQ VIVA		Repertory

5.16 High risk labour, Dystocia - mal-positions and mal-presentation, prolapse of cord and limbs, abnormalities in the action of the uterus, abnormal conditions of soft parts, contracted pelvis, obstructed labour, complications of 3rd stage of labour, preterm labour, post maturity, injuries of birth canal, scope and limitation in Homoeopathy

Sl. No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	TL MIM	Assessment		Integration
								Formative	Summative	
Hom-UG ObGy-II 16.1	Knowledge & Scholarship	Knows	Obstructed labour Prolonged Labour	Define Pronged labour.	CI	MK	Lecture Small group discussion Tutorials CBL	MCQ VIVA		
Hom-UG ObGy-II 16.2	Knowledge & Scholarship	Knows		Define obstructed labour.	CI	MK	Lecture Small group discussion	MCQ VIVA		
Hom-UG ObGy-II 16.3	Knowledge & Scholarship	Knows		Describe the maternal causes of prolonged labour	CI	MK	Lecture Small group discussion	VIVA	SAQ	
Hom-UG ObGy-	Knowledge & Scholarship	Knows		Discuss the maternal causes of obstructed labour	C1	MK	Lecture Small group discussion	VIVA	SAQ	

II 16.4										
Hom-UG ObGy-II 16.5	Knowledge & Scholarship	Knows		Describe the Fetal causes of prolonged labour	CI	MK	Lecture Small group discussion Tutorials	VIVA	SAQ	
Hom-UG ObGy-II 16.6	Knowledge & Scholarship	Knows		Describe the Fetal causes of obstructed labour			Lecture Small group discussion	VIVA	SAQ	
Hom-UG ObGy-II 16.7	Knowledge & Scholarship	Knows		Describe the clinical features of Prolonged & Obstructed labour	CI	MK	Lecture Small group discussion Tutorials		SAQ	
Hom-UG ObGy-II 16.8	Knowledge & Scholarship	Knows		Discuss the diagnostic criteria's for prolonged & obstructed labour	CI	MK	Lecture Small group discussion Tutorials		SAQ	
Hom-UG ObGy-II 16.9	Knowledge & Scholarship	Knows		Discuss the maternal complication in obstructed & prolonged labour	CI	MK	Lecture Small group discussion Tutorials		SAQ	
Hom-UG ObGy-II 16.10	Knowledge & Scholarship	Knows		Discuss the foetal complications in obstructed & prolonged labour	CI	MK	Lecture Small group discussion Tutorials		SAQ	
Hom-UG ObGy-II 16.11	Knowledge & Scholarship	Knows how		Discuss the general management of prolonged labour& Obstructed labour	CI	MK	Lecture Small group discussion Tutorials CBL	MCQ	SAQ	
Hom-UG ObGy-	Knowledge &	Knows how		Discuss the scope & Limitation in	CI	MK	Lecture Small group	MCQ VIVA		

II 16.12	Scholarship			Homoeopathy for Prolonged and obstructed labour			discussion Tutorials			
Hom-UG ObGy-II 16.13	Knowledge & Scholarship	Knows	Mal presentation & Mal positions	Define Breech presentation	CI	MK	Lecture Small group discussion Tutorials Manikin	MCQ VIVA		
Hom-UG ObGy-II 16.14	Knowledge & Scholarship	Knows		Classify Breach presentation	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	LA SAQ	
Hom-UG ObGy-II 16.15	Knowledge & Scholarship	Knows		Describe the types of breech presentation	CI	MK	Lecture Small group discussion Tutorials Manikin	MCQ VIVA	LA SAQ	
Hom-UG ObGy-II 16.16	Knowledge & Scholarship	Knows		Discuss the etiology of breech presentation	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	LA SAQ	
Hom-UG ObGy-II 16.17	Knowledge & Scholarship	Knows		Discuss the clinical, per abdominal and vaginal findings for diagnosis of breech presentation	CI P1	MK	Lecture Small group discussion Tutorials DOPS	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.18	Knowledge & Scholarship	Knows		Describe the Mechanism of breech presentation	CI	MK	Lecture Small group discussion Tutorials Manikin	MCQ VIVA	LAQ SAQ	
Hom-UG ObGy-	Knowledge &	Knows		Discuss the management of breech presentation	CI	MK	Lecture Small group	MCQ VIVA	SAQ	

II 16.19	Scholarship						discussion Tutorials			
Hom-UG ObGy-II 16.20	Knowledge & Scholarship	Knows		Discuss the management of complicated breech presentation	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 16.21	Knowledge & Scholarship	Knows		Define Transverse lie	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 16.22	Knowledge & Scholarship	Knows		Describe the causes of transverse lie	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.23	Knowledge & Scholarship	Knows		Describe the per abdominal & vaginal examination findings in transverse lie	CI P1	MK	Lecture Small group discussion Tutorials DOPS	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.24	Knowledge & Scholarship	Knows		Define version	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 16.25	Knowledge & Scholarship	Knows		Discuss the indication for external cephalic version	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-	Knowledge &	Knows		Discuss the contraindications for	CI	MK	Lecture Small group	MCQ VIVA	SAQ	

II 16.26	Scholarship			external cephalic version			discussion Tutorials			
Hom-UG ObGy-II 16.27	Knowledge & Scholarship	Knows		Discuss the complications of version	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.28	Knowledge & Scholarship	Knows		Define Occipito posterior presentation	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 16.29	Knowledge & Scholarship	Knows		Define Face presentation	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 16.30	Knowledge & Scholarship	Knows		Define Compound presentation	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 16.31	Knowledge & Scholarship	Knows		Define Cord prolapse	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 16.32	Homoeopathic orientation	Knows		Discuss the Homoeopathic remedies for breech presentation	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-	Patient care	Knows		Discuss the management of breech presentation	CI	MK	Lecture Small group	MCQ VIVA	SAQ	

II 16.33							discussion Tutorials			
Hom-UG ObGy-II 16.34	Homoeopathi corientation	Knows how		Discuss the management of homoeopathy in transverse lie	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Organon Materia medica
Hom-UG ObGy-II 16.35	Homoeopathi corientation	Knows how		List the homoeopathic remedies in malpresentation & mal-position.	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 16.36	Homoeopathi corientation	Knows how		Discuss the characteristic features of indicated remedies in malpresentation & mal position			Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 16.37	Homoeopathi corientation	Knows how		Discuss the scope and limitation of Homoeopathy in Breech presentation	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		Organon
Hom-UG ObGy-II 16.38	Homoeopathi corientation	Knows how		Discuss the scope and limitation of Homoeopathy in Face & Brow presentation	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		Organon
Hom-UG ObGy-II 16.39	Homoeopathi corientation	Knows how		Discuss the scope and limitation of Homoeopathy in Compound presentation	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		Organon
Hom-UG ObGy-	Homoeopathi c orientation	Knows how		Discuss the scope and limitation of Homeopathy	CI	MK	Lecture Small group	MCQ VIVA		Organon

II 16.40				in Cord presentation & cord prolapse.			discussion Tutorials			
Hom-UG ObGy-II 16.41	Knowledge & Scholarship	Knows	Constriction & retraction ring	Define constriction ring	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.42	Knowledge & Scholarship	Knows		Differentiate constriction ring & retraction ring	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.43	Knowledge & Scholarship	Knows		Discuss the characteristic features for the diagnosis of constriction ring	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 16.44	Patient care	Knows how		Discuss the management of constriction ring	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 16.45	Homoeopathic orientation	Knows how		Describe the scope and limitation of Homoeopathy in constriction & contraction ring	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		Organon , Materia medica
Hom-UG ObGy-II 16.46	Knowledge & Scholarship	Knows how	Cervical dystocia-types Precipitate labor	Define Cervical dystocia	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 16.47	Knowledge & Scholarship	Knows how		Discuss the types of Cervical dystocia	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-	Knowledge	Knows		Define precipitate labour	CI	MK	Lecture	MCQ	SAQ	

UGObGy-II 16.48	& Scholarship						Small group discussion Tutorials	VIVA		
Hom-UG ObGy-II 16.49	Knowledge & Scholarship	Knows		Discuss the complications of precipitate labour	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.50	Patient care	Knows how		Discuss the management of precipitate labour	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 16.51	Patient care	Knows how		Discuss the management of cervical dystocia	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 16.52	Homoeopathi corientation	Knows how		Discuss the scope & limitation of Homoeopathy in Cervical dystocia	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA		Organon, Materia medica
Hom-UG ObGy-II 16.53	Homoeopathi corientation	Knows how		Discuss the scope & limitation of Homoeopathy in Precipitate labour	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA		Organon, Materia medica
Hom-UG ObGy-II 16.54	Knowledge & Scholarship	Knows	Uterine inertia-types & diagnosis	Define Uterine inertia	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 16.55	Knowledge & Scholarship	Knows		Discuss the types of uterine inertia	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-	Homoeopathi corientation	Knows	Management	Discuss the management of uterine inertia	CI	DK	Lecture Small group	MCQ VIVA		

II 16.56							discussion Tutorials			
Hom-UG ObGy-II 16.57	Patient care	Knows how		Describe the scope and limitation Homoeopathy for uterine inertia	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA		Organon, Materia medica
Hom-UG ObGy-II 16.58	Knowledge & Scholarship	Knows	Contracted pelvis	Define Cephalo-pelvic disproportion	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 16.59	Knowledge & Scholarship	Knows		Discuss the common causes of contracted pelvis	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 16.60	Knowledge & Scholarship	Knows		Discuss Muller –Munro 'kerr' method of pelvis assessment	CI P1	DK	Lecture Small group discussion Tutorials DOPS	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.61	Knowledge & orientation	Knows		Discuss the diagnostic features of contracted pelvis	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.62	Knowledge & orientation	Knows		Describe the different types of pelvis	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Anatomy
Hom-UG ObGy-II 16.63	Knowledge & orientation	Knows		Define X-ray pelvimetry	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II	Knowledge & orientation	Knows		Discuss the indications of X-ray pelvimetry	CI	DK	Lecture Small group discussion	MCQ VIVA		

16.64							Tutorials			
Hom-UG ObGy-II 16.65	Knowledge & orientation	Knows		Discuss the limitation of X-ray pelvimetry	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 16.66	Knowledge & orientation	Knows		Define Trial labour	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.67	Knowledge & Scholarship	Knows		Discuss the contraindications for trial labour	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.68	Homoeopathi corientation	Knows how		Discuss the management of contracted pelvis	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.69	Patient care	Knows how		Discuss the scope and limitation of contracted pelvis.	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 16.70	Knowledge & Scholarship	Knows		Define retained placenta	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 16.71	Knowledge & Scholarship	Knows		Discuss the causes for retained placenta	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.72	Knowledge & Scholarship	Knows		Define Placenta accreta	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		

Hom-UG ObGy-II 16.73	Knowledge & Scholarship	Knows how		Define inversion of uterus	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 16.74	Knowledge & Scholarship	Knows how		Discuss the causes for inversion of uterus	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 16.75	Knowledge & Scholarship	Knows how		Discuss the varieties of inversion of uterus	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 16.76	Patient care	Know how		Discuss the management of inversion of uterus	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 16.77	Patient care	Know how		Describe in detail the management of primary postpartum hemorrhage	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 16.78	Patient care	Know how		Discuss the management of Secondary postpartum hemorrhage	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 16.79	Homoeopathic orientation	Knows how		List the Homoeopathic remedies for postpartum hemorrhage	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		Materia medica
Hom-UG ObGy-II 16.80	Patient care	Know how		Discuss the scope & Limitation of homoeopathy in postpartum hemorrhage	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		Organon , Materia medica
Hom-	Knowledge	Knows	Preterm labour &	Define Pre-term labour	CI	MK	Lecture	MCQ		

UGObGy-II 16.81	& Scholarship		post maturity, IUD, PROM				Small group discussion Tutorials	VIVA		
Hom-UG ObGy-II 16.82	Knowledge & Scholarship	Knows		Define Full term	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 16.83	Knowledge & Scholarship	Knows		Discuss the etiology of preterm labour	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	LA SAQ	
Hom-UG ObGy-II 16.84	Knowledge & Scholarship	Knows		Describe the clinical presentation of preterm labour	CI P1	MK	Lecture Small group discussion Tutorials OSCE	MCQ VIVA	LA SAQ	
Hom-UG ObGy-II 16.85	Knowledge & Scholarship	Knows		Discuss the maternal complication of preterm labour	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.86	Knowledge & Scholarship	Knows		Discuss the fetal complications of preterm labour	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.87	Knowledge & Scholarship	Knows		Define PROM	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.88	Knowledge & Scholarship	Knows		Discuss the symptom of PROM	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-	Knowledge &	Knows		Define Post maturity	CI	MK	Lecture Small group	MCQ VIVA	SAQ	

II 16.89	Scholarship						discussion Tutorials			
Hom-UG ObGy-II 16.90	Knowledge & Scholarship	Knows		Discuss the causes of post maturity	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.91	Knowledge & Scholarship	Knows		Discuss the maternal complications of post maturity	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.92	Knowledge & Scholarship	Knows		Discuss the fetal complications of post maturity	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.93	Knowledge & Scholarship	Knows		Define Intra uterine death (IUD)	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.94	Knowledge & Scholarship	Knows		Describe the diagnostic features of IUD	CI P1	MK	Lecture Small group discussion Tutorials OSCE	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.95	Patient care	Know how		Discuss the Ultrasonography & X-ray finding in IUD	CI P1	MK	Lecture Small group discussion Tutorials OSCE	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.96	Patient care	Know how		Discuss the management of IUD	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II	Knowledge & Scholarship	Knows		Discuss the complications of IUD	CI	DK	Lecture Small group discussion	MCQ VIVA	SAQ	

16.97							Tutorials			
Hom-UG ObGy-II 16.98	Patient care	Know how		Discuss the management of post maturity	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.99	Patient care	Know how		Discuss the scope and limitation of Homoeopathy in post maturity.	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Organon, Materia medica
Hom-UG ObGy-II 16.100	Knowledge & Scholarship	Knows	Injuries of birth canal	Discuss the common perineal injuries during birth	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Surgery
Hom-UG ObGy-II 16.101	Knowledge & Scholarship	Knows		Discuss the risk factors for third degree perineal tear	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.102	Knowledge & Scholarship	Knows		Describe the degrees of obstetric anal sphincter injuries	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.103	Knowledge & Scholarship	Knows		Discuss the causes for cervical tear	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.104	Knowledge & Scholarship	Knows		Define vulval hematoma	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 16.105	Knowledge & Scholarship	Knows		Discuss the causes of pelvic hematoma	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	

Hom-UG ObGy-II 16.106	Knowledge & Scholarship	Knows		Discuss the causes of vulval hematoma	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 16.107	Knowledge & Scholarship	Knows		Describe the clinical features of vulval hematoma.	CI P1	DK	Lecture Small group discussion Tutorials OSCE	MCQ VIVA		
Hom-UG ObGy-II 16.108	Knowledge & Scholarship	Knows		Describe the causes of rupture of the uterus	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.109	Knowledge & Scholarship	Knows		Discuss the complications of rupture of the uterus	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.110	Knowledge & Scholarship	Knows		Discuss the diagnosis of rupture of uterus	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.111	Patient care	Know		Discuss the management of rupture of uterus	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 16.112	Patient care	Know how		Discuss the scope and limitation of homoeopathy in ruptured uterus	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA		Organon of medicine
Hom-UG ObGy-II 16.113	Homoeopathic orientation	Knows how		List the Homoeopathic remedies for perineal tears	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-	Homoeopathi	Knows		List the homoeopathic	CI	DK	Lecture	MCQ	SAQ	Materia

UGObGy-II 16.114	c orientation	how		remedies for pelvic hematoma			Small group discussion Tutorials	VIVA		medica
Hom-UG ObGy-II 16.115	Knowledge & Scholarship	Knows how		Discuss the characteristic features of indicated remedies in perineal tear	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 16.116	Patient care	Know how		Discuss the management for injuries to the birth canal	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 16.117	Patient care	Know how		Discuss the scope & limitation of homoeopathy in injuries to the birth canal	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Organon

5.17 Abnormal pregnancies - Hemorrhages during Antepartum, postpartum and early pregnancy, multiple pregnancy, hypertensive disorders, in identifying common problems during Abnormal pregnancy and to manage it in Homoeopathic perspective including scope, limitations and timely referral

Sl. No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	

Hom-UG ObGy-II 17.1	Knowledge & Scholarship	Knows	Abortion	Define Abortion	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.2	Knowledge & Scholarship	Knows		Classify abortion	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	LA SAQ	
Hom-UG ObGy-II 17.3	Knowledge & Scholarship	Knows		Define inevitable abortion	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.4	Knowledge & Scholarship	Knows		Define incomplete abortion	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.5	Knowledge & Scholarship	Knows		Define complete abortion	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.6	Knowledge & Scholarship	Knows		Define septic abortion	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.7	Knowledge & Scholarship	Knows		Describe the Aetiology of abortion	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.8	Knowledge & Scholarship	Knows		Define cervical incompetence	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	

Hom-UG ObGy-II 17.9	Knowledge & Scholarship	Knows		Discuss the causes of cervical incompetence	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.10	Knowledge & Scholarship	Knows		Describe the clinical feature, of abortion	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.11	Knowledge & Scholarship	Knows		Discuss the clinical feature & complications of missed abortion	CI P1	DK	Lecture Small group discussion Tutorials OSCE	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.12	Knowledge & Scholarship	Knows		Define threatened abortion	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.13	Knowledge & Scholarship	Knows		Discuss signs & symptoms, of threatened abortion	CI P1	DK	Lecture Small group discussion Tutorials OSCE	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.14	Knowledge & Scholarship	Knows		Describe in investigations in abortion	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.15	Knowledge & Scholarship	Knows		Discuss the causes, diagnosis of recurrent abortion	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.16	Knowledge & Scholarship	Knows		Discuss the general management of septic abortion	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	

Hom-UG ObGy-II 17.17	Knowledge & Scholarship	Knows		Define carneous mole	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.18	Knowledge & Scholarship	Knows		Discuss the causes of causes of septic abortion	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.19	Knowledge & Scholarship	Knows		Discuss the complications of septic abortion	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.20	Knowledge & Scholarship	Knows		Define hydatidiform mole	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.21	Knowledge & Scholarship	Knows		Describe the clinical feature of hydatidiform mole	CI P1	DK	Lecture Small group discussion Tutorials OSCE	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.22	Knowledge & Scholarship	Knows		Discuss the investigation of hydatidiform mole	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.23	Knowledge & Scholarship	Knows	Hydatidioform mole	Discuss the complications of hydatidiform mole	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.24	Knowledge & Scholarship	Knows		List the investigations in molar pregnancy.	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	

Hom-UG ObGy-II17.25	Knowledge & Scholarship	Knows	Ectopic pregnancy	List the D/D of molar pregnancy	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.26	Knowledge & Scholarship	Knows		Define Ectopic pregnancy	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.27	Knowledge & Scholarship	Knows		Describe the causes of Ectopic pregnancy	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.28	Knowledge & Scholarship	Knows		List the signs & symptoms of unruptured ectopic pregnancy	CI P1	DK	Lecture Small group discussion Tutorials OSCE	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.29	Knowledge & Scholarship	Knows		Discuss differential diagnosis of Sub acute ectopic pregnancy	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.30	Knowledge & Scholarship	Knows		List the investigations for diagnosis of tubal ectopic pregnancy	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.31	Knowledge & Scholarship	Knows		Discuss the immediate complications of MTP	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.32	Knowledge & Scholarship	Knows		Discuss the indications of termination of pregnancy under MTP Act	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Forensic medicine
Hom-	Knowledge	Knows		Discuss the indication for	CI	DK	Lecture	MCQ	SAQ	

UGObGy-II 17.33	& Scholarship			salpingectomy & salpingo-oophorectomy			Small group discussion Tutorials	VIVA		
Hom-UG ObGy-II 17.34	Homoeopathic orientation	Know how		List the homoeopathic remedies for abortion	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 17.35	Homoeopathic orientation	Know how		Discuss the characteristic features of indicated remedies in abortion	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 17.36	Homoeopathic orientation	Know how		List the homeopathic remedies for ectopic pregnancy	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 17.37	Homoeopathic orientation	Know how		Discuss the characteristic features of indicated remedies in ectopic pregnancy	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 17.38	Patient care	Knows how		Discuss the scope and limitation of homeopathy in ectopic pregnancy	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		Organon
Hom-UG ObGy-II 17.39	Knowledge & Scholarship	Knows	Homoeopathic materia medica & therapeutics	Define Antepartum haemorrhage	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.40	Knowledge & Scholarship	Knows		Discuss the causes for Antepartum haemorrhage	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	LA SAQ	
Hom-	Knowledge	Knows		Define Abruptio-placenta	CI	MK	Lecture	MCQ	SAQ	

UGObGy-II 17.41	& Scholarship						Small group discussion Tutorials	VIVA		
Hom-UG ObGy-II 17.42	Knowledge & Scholarship	Knows		Define Placenta previa	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.43	Knowledge & Scholarship	Knows	Scope and limitation	Describe the clinical features of Abruptio-placenta	CI P1	MK	Lecture Small group discussion Tutorials OSCE	MCQ VIVA	LA SAQ	
Hom-UG ObGy-II 17.44	Knowledge & Scholarship	Knows		Describe the clinical features of Placenta previa	CI P1	MK	Lecture Small group discussion Tutorials OSCE	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.45	Knowledge & Scholarship	Knows		Classify abruptio placenta	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.46	Knowledge & Scholarship	Knows	Antepartum haemorrhage	Discuss the types of placenta previa	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.47	Knowledge & Scholarship	Knows		Differentiate Abruptio placenta and Placenta previa with clinical features	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	LA SAQ	
Hom-UG ObGy-II 17.48	Knowledge & Scholarship	Knows how		Discuss the diagnostic features of abruption placenta	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-	Knowledge &	Knows how		Discuss the diagnostic features of placenta	CI	MK	Lecture Small group	MCQ VIVA	SAQ	

II 17.49	Scholarship			preavia			discussion Tutorials			
Hom-UG ObGy-II 17.50	Knowledge & Scholarship	Knows how		Discuss the investigations for Antepartum haemorrhage	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.51	Knowledge & Scholarship	Knows		Define Couvelaire uterus	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.52	Patient care	Know how		Describe the management of antepartum haemorrhage	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.53	Knowledge & Scholarship	Knows how		Discuss the complications of APH	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.54	Homoeopathic orientation	Knows how		List the Homoeopathic remedies for antepartum haemorrhage	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 17.55	Homoeopathic orientation	Knows how		Describe the characteristic features of indicated remedies	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 17.56	Patient care	Know how		Describe the scope and Limitation of homoeopathy in APH	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II	Knowledge & Scholarship	Knows how	Postpartum hemorrhage	Define Postpartum hemorrhage	CI	MK	Lecture Small group discussion	MCQ VIVA	SAQ	

17.57							Tutorials			
Hom-UG ObGy-II 17.58	Knowledge & Scholarship	Knows how		Define Primary postpartum hemorrhage	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	AL SAQ	
Hom-UG ObGy-II 17.59	Knowledge & Scholarship	Knows how		Define secondary postpartum hemorrhage	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.60	Knowledge & Scholarship	Knows how		Discuss the causes of Primary postpartum hemorrhage	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.61	Knowledge & Scholarship	Knows how		Discuss the causes of secondary postpartum hemorrhage	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.62	Knowledge & Scholarship	Knows how		Discuss the complications of primary postpartum hemorrhage	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.63	Knowledge & Scholarship	Knows how		Discuss the complications of secondary postpartum hemorrhage	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.64	Patient care	Know how		Describe in detail the management of primary postpartum hemorrhage	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	LA SAQ	
Hom-UG ObGy-II 17.65	Patient care	Know how		Discuss the management of Secondary postpartum hemorrhage	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	

Hom-UG ObGy-II 17.66	Homoeopathicorientation	Knows how		List the Homoeopathic remedies for postpartum hemorrhage	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 17.67	Homoeopathicorientation	Knows how		Discuss the characteristic features of the indicated remedies	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 17.68	Patient care	Know how		Discuss the scope & Limitation of homoeopathy in postpartum hemorrhage	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Organon
Hom-UG ObGy-II 17.69	Knowledge & Scholarship	Knows how	Multiple pregnancy	Define Multiple pregnancy	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.70	Knowledge & Scholarship	Knows how		Discuss the varieties of multiple pregnancy	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.71	Knowledge & Scholarship	Knows how		Discuss the diagnosis of multiple pregnancy	CI P1	MK	Lecture Small group discussion Tutorials OSCE	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.72	Knowledge & Scholarship	Knows how		Describe the maternal complications in multiple pregnancy	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.73	Knowledge & Scholarship	Knows how		Describe the fetal complications in multiple pregnancy	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-	Patient care	Knows how		Discuss the management	CI	MK	Lecture	MCQ	SAQ	

UGObGy-II 17.74				of multiple pregnancy during labour			Small group discussion Tutorials	VIVA		
Hom-UG ObGy-II 17.75	Patient care	Knows how		Discuss the Homeopathic scope and limitation and timely referral of case in multiple pregnancy	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 17.76	Knowledge & Scholarship	Knows how	Hypertension in pregnancy	Define Pregnancy induced hypertension (PIH)	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.77	Knowledge & Scholarship	Knows		Define Pre-eclampsia	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.78	Knowledge & Scholarship	Knows how		Discuss the classification of Preeclampsia	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.79	Knowledge & Scholarship	Knows how		Describe the clinical features of preeclampsia	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.80	Knowledge & Scholarship	Knows how		Discuss the complications of preeclampsia	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.81	Knowledge & Scholarship	Knows		Define gestational hypertension	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-	Knowledge	Knows		Define eclampsia	CI	MK	Lecture	MCQ	SAQ	

UGObGy-II 17.82	& Scholarship						Small group discussion Tutorials	VIVA		
Hom-UG ObGy-II 17.83	Knowledge & orientation	Knows how		Discuss the types of eclampsia	CI	MK	Lecture Small group discussion Tutorials CBL	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.84	Knowledge & Scholarship	Knows how		Discuss the clinical features of eclampsia	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.85	Knowledge & Scholarship	Knows how		Discuss the complications of eclampsia	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.86	Knowledge & Scholarship	Knows how		Describe the management of preeclampsia	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	LA SAQ	
Hom-UG ObGy-II 17.87	Patient care	Knows how		Discuss the management of eclampsia	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 17.88	Homoeopathic orientation	Knows how		List the homoeopathic remedies for gestational hypertension	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 17.89	Homoeopathic orientation	Knows how		List the homoeopathic remedies for Preeclampsia	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-	Homoeopat	Knows how		List the homoeopathic	CI	MK	Lecture	MCQ	SAQ	Materia

UGObGy-II 17.90	hic orientation			remedies for Eclampsia			Small group discussion Tutorials	VIVA		medica
Hom-UG ObGy-II 17.91	Homoeopathic orientation	Knows how		Discuss the characteristic features of indicated remedies.	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 17.92	Patient care	Knows how		Discuss the Homoeopathic scope and limitation and timely referral of the case.	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		Organon

5.18 Common disorders and systemic diseases associated with pregnancy. A holistic understanding of disease evolution and approach to diagnosis, prognosis, Homoeopathic management, scope and limitations

Sl. No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom-UG ObGy-II 18.1	Knowledge & Scholarship	Knows how	Systemic diseases Anaemia, diabetes, asthma, tuberculosis, CVS, epilepsy, STD's	Define Anaemia in pregnancy	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Physiology
Hom-UG ObGy-II 18.2	Knowledge & Scholarship	Knows how		Discuss the classification of anaemia	CI	MK	Lecture Small group discussion	MCQ VIVA	SAQ	Physiology

							Tutorials			
Hom-UG ObGy-II 18.3	Knowledge & Scholarship	Knows how		Define Sickle cell anaemia	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA		Practice of medicine
Hom-UG ObGy-II 18.4	Knowledge & Scholarship	Knows how		Discuss the causes of anaemia in pregnancy	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Practice of medicine
Hom-UG ObGy-II 18.5	Knowledge & Scholarship	Knows how		Discuss the causes of megaloblastic anaemia	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Practice of Medicine
Hom-UG ObGy-II 18.6	Knowledge & Scholarship	Knows how		Discuss the clinical features of anaemia	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Practice of medicine
Hom-UG ObGy-II 18.7	Knowledge & Scholarship	Knows how		Discuss the maternal complications due to iron deficiency anaemia	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Practice of medicine
Hom-UG ObGy-II 18.8	Knowledge & Scholarship	Knows how		Discuss the foetal complications due to maternal iron deficiency anaemia	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Practice of medicine
Hom-UG ObGy-II 18.9	Knowledge & Scholarship	Knows how		Discuss the general management in iron deficiency anaemia	CI	MK	Lecture Small group discussion	MCQ VIVA	SAQ	Practice of medicine

							Tutorials			
Hom-UG ObGy-II 18.10	Homoeopathic orientation	Knows how		List the homoeopathic remedies for anaemia	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 18.11	Homoeopathic orientation	Knows how		Discuss the characteristic features of indicated remedies for anaemia	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 18.12	Homoeopathic orientation	Knows how		List the homoeopathic remedies for STD's	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 18.13	Homoeopathic orientation	Knows how		List the homoeopathic remedies for asthma	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 18.14	Homoeopathic orientation	Knows how		List the homoeopathic remedies for cardiac complaints	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 18.15	Homoeopathic orientation	Knows how		Discuss the characteristic features of indicated remedies for asthma	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 18.16	Patient care	Knows how		Discuss the general management in severe anaemia	CI	MK	Lecture Small group discussion	MCQ VIVA	SAQ	Practice of medicine

							Tutorials			
Hom-UG ObGy-II 18.17	Knowledge & Scholarship	Knows how		Define gestational diabetes	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Practice of medicine
Hom-UG ObGy-II 18.18	Knowledge & Scholarship	Knows how		Discuss the causes for retention of urine	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Surgery
Hom-UG ObGy-II 18.19	Knowledge & Scholarship	Knows how		Discus the causes for increased frequency of micturition	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 18.20	Knowledge & Scholarship	Knows how		Discuss the complications of diabetes in pregnant mother.	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Practice of medicine
Hom-UG ObGy-II 18.21	Knowledge & Scholarship	Knows how		Discuss the foetal complications due to diabetic mother	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Practice of medicine
Hom-UG ObGy-II 18.22	Patient care	Knows how		Discuss the general management in diabetic mothers during pregnancy	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Practice of medicine
Hom-UG ObGy-II 18.23	Homoeopathic orientation	Knows how		List the homoeopathic remedies for diabetes	CI	MK	Lecture Small group discussion	MCQ VIVA	SAQ	Materia medica

							Tutorials			
Hom-UG ObGy-II 18.24	Homoeopathic orientation	Knows how		Discuss the characteristic features of indicated remedies	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 18.25	Knowledge & Scholarship	Knows how		Discuss the complications of hyperthyroidism in pregnancy	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Practice of medicine
Hom-UG ObGy-II 18.26	Knowledge & Scholarship	Knows how		Discuss the clinical features of cardio vascular disease in pregnancy	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Practice of medicine
Hom-UG ObGy-II 18.27	Knowledge & Scholarship	Knows how		Discuss the complications of CVD in pregnancy	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Practice of Medicine
Hom-UG ObGy-II 18.28	Patient care	Knows how		Discuss the management of CVD in pregnancy	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Practice of medicine
Hom-UG ObGy-II 18.29	Patient care	Knows how		Discuss the management of Asthma in pregnancy	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Practiceof medicine
Hom-UG ObGy-II 18.30	Homoeopathic orientation	Knows how		Discuss the homoeopathic scope and limitation in epilepsy.	CI	MK	Lecture Small group discussion	MCQ VIVA	SAQ	Organon

							Tutorials			
Hom-UG ObGy-II 18.31	Patient care	Knows how		Discuss the management of epilepsy in pregnancy	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Practice of medicine
Hom-UG ObGy-II 18.32	Homoeopathic orientation	Knows how		List the homoeopathic remedies for epilepsy	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 18.33	Homoeopathic orientation	Knows how		Discuss the characteristic features of indicated remedies for epilepsy	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 18.34	Patient care	Knows how		Discuss the management of STD's in pregnancy	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 18.35	Patient care	Knows how		Discuss the investigations advised in STD's	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 18.36	Patient care	Knows how		Discuss the investigations advised in tuberculosis.	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Practice of medicine
Hom-UG ObGy-II 18.37	Patient care	Knows how		Discuss the management of tuberculosis in pregnancy	CI	MK	Lecture Small group discussion	MCQ VIVA	SAQ	

							Tutorials			
Hom-UG ObGy-II 18.38	Patient care	Knows how		Discuss the homoeopathic scope and limitations in severe cases of systemic diseases (Asthma, cardiac, tuberculosis and epilepsy) and timely referral of case	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Organon

5.19 Understanding Pre- natal diagnostic Techniques (Regulation and Prevention of Misuse) Act 1994

Sl. No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom-UG ObGy-II 19.1	Knowledge & scholarship	Knows how	Pre- natal diagnostic Techniques	Discuss the importance of prohibition of sex selection act before or after conception	CI	DK	Lecture Small group discussion Tutorials CBL	MCQ VIVA		Forensic medicine
Hom-UG ObGy-II 19.2	Knowledge & scholarship	Knows how		Discuss the indications to conduct the prenatal diagnostic test on mother	CI	DK	Lecture Small group discussion Tutorials CBL	MCQ VIVA		

5.20 Knowledge about the indication of common obstetrical operations, medical termination of pregnancy, criminal abortion, caesarean section, induction of labour, episiotomyEtc., and its complications, after effects and to refer for surgical intervention either as a life saving measure or for removing mechanical obstacles.

Sl. No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom-UG ObGy-II 20.1	Knowledge & scholarship	Knows	Version	Define version	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 20.2	Knowledge & scholarship	Knows how		Discuss the types of version	CI	DK	Lecture Small group discussion Tutorials Manikin	MCQ VIVA	SAQ	
Hom-UG ObGy-II 20.3	Knowledge & scholarship	Knows how		Discuss the indications for version	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 20.4	Knowledge & scholarship	Knows how		Discuss the contraindications for version	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 20.5	Knowledge & scholarship	Knows how		Discuss the complications of version	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II	Knowledge & scholarship	Knows	Episiotomy	Define Episiotomy	CI	DK	Lecture Small group discussion	MCQ VIVA	SAQ	

20.6							Tutorials			
Hom-UG ObGy-II 20.7	Knowledge & scholarship	Knows how		Explain the types of episiotomy	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 20.8	Knowledge & scholarship	Knows how		Discuss the complications of episiotomy	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 20.9	Homoeopathic orientation	Knows how		List the homoeopathic remedies for healing of episiotomy wound	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 20.10	Homoeopathic orientation	Knows how		Discuss the characteristic features of indicated remedies in episiotomy	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 20.11	Knowledge & scholarship	Knows	Caesarean section	Define caesarean section	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 20.12	Knowledge & scholarship	Knows how		Discuss the indications for absolute and relative indications for caesarean section	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 20.13	Knowledge & scholarship	Knows how		Describe the maternal complications of caesarean section	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 20.14	Knowledge & scholarship	Knows how		Discuss the management in caesarean section	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-	Knowledge &	Knows how		List the homoeopathic remedies for healing of	CI	DK	Lecture Small group	MCQ VIVA		Materia medica

UGObGy-II 20.15	scholarship			caesarean section wound and complications			discussion Tutorials			
Hom-UG ObGy-II 20.16	Knowledge & scholarship	Knows how		Discuss the characteristic features of indicated remedies in caesarean section wound healing	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 20.17	Knowledge & scholarship	Knows	Suction & evacuation	Define Suction and Evacuation	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA		
Hom-UG ObGy-II 20.18	Knowledge & scholarship	Knows	Forceps	Define Forceps	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 20.19	Knowledge & scholarship	Knows how		Explain the varities of forceps	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 20.20	Knowledge & scholarship	Knows how		Explain the prerequisite before applying forceps	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 20.21	Knowledge & scholarship	Knows how		Discuss the foetal complication of applying forceps	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 20.22	Knowledge & scholarship	Knows how		Discuss the maternal complications applying forceps	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 20.23	Knowledge & scholarship	Knows	D & C	Define D & C	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-	Knowledge	Knows		Discuss the indications of	CI	DK	Lecture	MCQ	SAQ	

UGObGy-II 20.24	& scholarship	how		D & C			Small group discussion Tutorials	VIVA		
Hom-UG ObGy-II 20.25	Knowledge & scholarship	Knows	Hysterotomy	Define hysterotomy	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 20.26	Knowledge & scholarship	Knows how		Discuss the indications of hysterotomy	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 20.27	Knowledge & scholarship	Knows	Induction of labour	Define Induction of labour	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 20.28	Knowledge & scholarship	Knows how		Discuss the indications of induction of labour	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 20.29	Knowledge & scholarship	Knows how		Explain the contraindication of induction of labour	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 20.30	Knowledge & scholarship	Knows how	ARM	Discuss the indications of Artificial rupture of the membrane	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	

5.21 Emergency obstetric care

Sl. No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom-UG ObGy-II 21.1	Patient care	Knows how	Sub-involution	Discuss the management of sub-involution of uterus	P -1	DK	Small group discussion OSCE	MCQ VIVA	SAQ	
Hom-UG ObGy-II 21.2	Patient care	Knows how	Severe Hyperemmesis gravidarum	Discuss the management of severe hyperemesis gravidarum	P -1	DK	Role play Small group discussion OSCE	MCQ VIVA	SAQ	
Hom-UG ObGy-II 21.3	Patient care	Knows how	Puerpereal sepsis	Discuss the management of puerperal sepsis	P -1	DK	Small group discussion OSCE	MCQ VIVA	SAQ	
Hom-UG ObGy-II 21.4	Patient care	Knows how	Severe preeclampsia	Discuss the management of severe preeclampsia during pregnancy & labour	P -1	DK	Role play Small group discussion OSCE	MCQ VIVA	SAQ	
Hom-UG ObGy-II 21.5	Patient care	Knows how	Eclampsia	Discuss the management of eclampsia, during pregnancy, labour and postnatal period	P -1	DK	Role play Small group discussion OSCE	MCQ VIVA	SAQ	
Hom-UG ObGy-II	Patient care	Knows how	Severe hypertension	Discuss the management of severe hypertension during pregnancy &	P -1	DK	Role play Small group discussion	MCQ VIVA	SAQ	Practice of medicine

21.6				labour			OSCE			
Hom-UG ObGy-II 21.7	Patient care	Knows how	Septic abortion	Discuss the management of septic abortion	P -1	DK	Small group discussion OSCE	MCQ VIVA	SAQ	
Hom-UG ObGy-II 21.8	Patient care	Knows how	APH	Discuss the management of labour in APH	P -1	DK	Role play Small group discussion OSCE	MCQ VIVA	SAQ	
Hom-UG ObGy-II 21.9	Patient care	Knows how	PPH	Discuss the management of labour in PPH	P -1	DK	Small group discussion Role play OSCE	MCQ VIVA	SAQ	
Hom-UG ObGy-II 21.10	Patient care	Knows how	Multiple pregnancy	Discuss the management of labour in Multiple pregnancy	P -1	DK	Small group discussion OSCE	MCQ VIVA	SAQ	
Hom-UG ObGy-II 21.11	Patient care	Knows how	Polyhydramnios	Discuss the management of labour with polyhydramnios	P -1	DK	Small group discussion OSCE	MCQ VIVA	SAQ	
Hom-UG ObGy-II 21.12	Patient care	Knows how	Oligohydramnios	Discuss the management of labour with oligohydramnios	P -1	DK	Small group discussion OSCE	MCQ VIVA	SAQ	
Hom-UG ObGy-II 21.13	Patient care	Knows how	Severe anaemia	Discuss the management of labour in severe anaemia	P -1	DK	Small group discussion Role play OSCE	MCQ VIVA	SAQ	Practice of medicine
Hom-UG ObGy-II 21.14	Patient care	Knows how	Severe asthma & cardiac and HIV	Discuss the management of Asthma, CVD, & HIV associated with pregnancy	P -1	DK	Small group discussion OSCE	MCQ VIVA	SAQ	Practice of medicine

Hom-UG ObGy-II 21.15	Patient care	Knows how	Elderly primigravida	Discuss the management of labour in elderly primigravia	P -1	DK	Small group discussion OSCE	MCQ VIVA	SAQ	
Hom-UG ObGy-II 21.16	Patient care	Knows how	Past bad obstetrical history	Discuss the management of labour with history of past bad obstetrical history	P -1	DK	Small group discussion OSCE	MCQ VIVA	SAQ	
Hom-UG ObGy-II 21.17	Patient care	Knows how	Pregnancy associated with uterine fibroids	Discuss the management of labour associated with uterine fibroids	P I	DK	Small group discussion OSCE	MCQ VIVA	SAQ	
Hom-UG ObGy-II 21.18	Patient care	Knows how	Pregnancy associated with prolapse of the uterus	Discuss the management of labour associated with uterine prolapse	P I	DK	Small group discussion OSCE	MCQ VIVA	SAQ	

5.22 Infant care - neonatal hygiene, common disorders of newborn, breast feeding , artificial feeding, management of premature child, asphyxia, birth injuries, neonatal infections, Congenital malformations of newborn intrauterine growth retardation, foetal anomalies including scope and limitation in Homoeopathy and timely referral.

Sl. No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom-UG ObGy-II 22.1	Knowledge & Scholarship	Knows	Common disorders in new born	Define foetal distress	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	MCQ VIVA	SAQ

Hom-UG ObGy-II 22.2	Knowledge & Scholarship	Knows how		Discuss the causes of foetal distress	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 22.3	Knowledge & Scholarship	Knows how	Birth injuries in new born	Discuss the causes of birth injuries in new born	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Practice of Medicine
Hom-UG ObGy-II 22.4	Knowledge & Scholarship	Knows	Asphyxia neonatorum	Define Asphyxia neonatorum	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 22.5	Knowledge & Scholarship	Knows how		Discuss the causes of asphyxia neonatorum	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 22.6	Knowledge & Scholarship	Knows		Define APGAR score	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 22.7	Knowledge & Scholarship	Knows how		Discuss the APGAR scoring	CI P1	MK	Lecture Small group discussion Tutorials OSCE	MCQ VIVA	SAQ	
Hom-UG ObGy-II 22.8	Homoeopathic orientation	Knows how		List the homoeopathic remedies for asphyxia neonatorum	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-	Homoeopathic	Knows how		Discuss the characteristic features of indicated	CI	MK	Lecture Small group	MCQ VIVA	SAQ	Materia medica

II 22.9	orientation			remedies in asphyxia neonatorum			discussion Tutorials			
Hom-UG ObGy-II 22.10	Knowledge & Scholarship	Knows how	Jaundice in new born	Discuss the causes of physiological neonatal jaundice	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Physiology
Hom-UG ObGy-II 22.11	Knowledge & Scholarship	Knows how		Discuss the pathological causes of neonatal jaundice	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Physiology
Hom-UG ObGy-II 22.12	Knowledge & Scholarship	Knows	Ophthalmia neonatorum	Define ophthalmia neonatorum	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Surgery(Ophalmology)
Hom-UG ObGy-II 22.13	Knowledge & Scholarship	Knows how		Discuss the causes of ophthalmia neonatorum	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Surgery (Ophthalmology)
Hom-UG ObGy-II 22.14	Homoeopathic orientation	Knows how		List the homoeopathic remedies for ophthalmia neonatorum	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 22.15	Homoeopathic orientation	Knows how		Discuss the characteristic features of indicated remedy in ophthamia neonaturm	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Materia medica
Hom-UG ObGy-II 22.16	Knowledge & Scholarship	Knows how	Care of the new born	Describe the characteristic features of new born baby	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Practice of Medicine (Paediatrics)
Hom-	Knowledge	Knows		Describe the immediate	CI P1	DK	Lecture	MCQ	SAQ	

UGObGy-II 22.17	& Scholarship	how		care of the new born			Small group discussion Tutorials DOPS	VIVA		
Hom-UG ObGy-II 22.18	Knowledge & Scholarship	Knows how		Discuss the Neonatal hygiene	CI P1	DK	Lecture Small group discussion Tutorials DOPS	MCQ VIVA	SAQ	
Hom-UG ObGy-II 22.19	Knowledge & Scholarship	Knows how	Breast feeding	Describe the Weaning of infants	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 22.20	Knowledge & Scholarship	Knows how		Discuss the advantages of breast feeding	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 22.21	Knowledge & Scholarship	Knows how		Discuss the contraindications for breast feeding	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 22.22	Knowledge & Scholarship	Knows	Artificial feeding	Define artificial feeding	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 22.23	Knowledge & Scholarship	Knows how		Discuss the complications of artificial feeding	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-	Knowledge	Knows	Preterm baby	Define Preterm baby	CI	DK	Lecture	MCQ	SAQ	

UGObGy-II 22.24	& Scholarship						Small group discussion Tutorials	VIVA		
Hom-UG ObGy-II 22.25	Knowledge & Scholarship	Knows		Discuss the maternal and foetal causes of preterm baby	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 22.26	Knowledge & Scholarship	Knows	IUGR	Define IUGR baby	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Practice of Medicine (Pediatrics)
Hom-UG ObGy-II 22.27	Knowledge & Scholarship	Knows how		Discuss the causes of IUGR baby	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Practice of medicine (Pediatrics)
Hom-UG ObGy-II 22.28	Knowledge & Scholarship	Knows	LBWB	Define low birth weight baby	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Practice of Medine (Pediatrics)
Hom-UG ObGy-II 22.29	Knowledge & Scholarship	Knows how		Discuss the causes of low birth weight baby	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 22.30	Knowledge & Scholarship	Knows how		Describe the complications of preterm baby	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Practice of medicine (Pediatrics)
Hom-	Knowledge	Knows	Rh incompatibility	Define Rh incompatibility	CI	DK	Lecture	MCQ	SAQ	Physiology

UGObGy-II 22.31	& Scholarship						Small group discussion Tutorials	VIVA		
Hom-UG ObGy-II 22.32	Knowledge & Scholarship	Knows how		Discuss the complications of RH incompatibility	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Physiology
Hom-UG ObGy-II 22.33	Knowledge & Scholarship	Knows	Anencephaly	Define Anencephaly	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Practice of medicine(pediatrics)
Hom-UG ObGy-II 22.34	Knowledge & Scholarship	Knows how		Discuss the causes of Anencephaly	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Practice of medicine (pediatrics)
Hom-UG ObGy-II 22.35	Knowledge & Scholarship	Knows	Hydrocephalus	Define Hydrocephalus	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Practice of medicine (pediatrics)
Hom-UG ObGy-II 22.36	Knowledge & Scholarship	Knows how		Discuss the causes of Hydrocephalus	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	
Hom-UG ObGy-II 22.37	Knowledge & Scholarship	Knows	Exomphalos	Define Exomphalos	CI	DK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Practice of medicine (Pediatrics)
Hom-	Knowledge	Knows		Discuss the risks of	CI	DK	Lecture	MCQ	SAQ	

UGObGy-II 22.38	& Scholarship	how		exomphalos			Small group discussion Tutorials	VIVA		
Hom-UG ObGy-II 22.39	Knowledge & Scholarship	Knows how		Discuss down's syndrome	CI	MK	Lecture Small group discussion Tutorials	MCQ VIVA	SAQ	Practice of Medicine (Pediatrics)

5.23 Knowledge about Reproductive and child health care (a) safe motherhood and child survival (b) Risk approach – MCH care (c) Maternal mortality and morbidity (d) Perinatal mortality and morbidity (e) Diseases of foetus and new born.

Sl. No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom-UG ObGy-II 23.1	Knowledge & Scholarship	knows	Perinatal mortality	Define Perinatal mortality	CI	MK	Lecture Small group discussion Tutorials CBL	MCQ VIVA	SAQ	Community Medicine
Hom-UG ObGy-II 23.2	Knowledge & Scholarship	Knows how		Discuss the causes for perinatal mortality	CI	MK	Lecture Small group discussion Tutorials CBL	MCQ VIVA	SAQ	
Hom-	Knowledge	Knows how		Discuss the predisposing	CI	MK	Lecture	MCQ	SAQ	

UGObGy-II 23.3	& Scholarship		Still birth	factors of perinatal mortality			Small group discussion Tutorials CBL	VIVA		
Hom-UG ObGy-II 23.4	Knowledge & Scholarship	Knows how		Discuss the prevention of perinatal mortality	CI	MK	Lecture Small group discussion Tutorials CBL	MCQ VIVA	SAQ	Community medicine
Hom-UG ObGy-II 23.5	Knowledge & Scholarship	knows		Define still birth	CI	DK	Lecture Small group discussion Tutorials CBL	MCQ VIVA	SAQ	
Hom-UG ObGy-II 23.6	Knowledge & Scholarship	Knows how	Safe motherhood	Discuss the causes of still birth	CI	DK	Lecture Small group discussion Tutorials CBL	MCQ VIVA	SAQ	
Hom-UG ObGy-II 23.7	Knowledge & Scholarship	knows		Define neonatal deaths	CI	DK	Lecture Small group discussion Tutorials CBL	MCQ VIVA	SAQ	
Hom-UG ObGy-II 23.8	Knowledge & Scholarship	Knows how	Maternal mortality & morbidity	Discuss the safe motherhood	CI	DK	Lecture Small group discussion Tutorials CBL	MCQ VIVA	SAQ	Community medicine
Hom-UG ObGy-II 23.9	Knowledge & Scholarship	Knows how		Discuss the maternal morbidity	CI	DK	Lecture Small group discussion Tutorials CBL	MCQ VIVA	SAQ	Community medicine
Hom-	Knowledge	Knows how		Discuss the maternal	CI	DK	Lecture	MCQ	SAQ	Communi

UGObGy-II 23.10	& Scholarship			mortality			Small group discussion Tutorials CBL	VIVA		ty medicine
Hom-UG ObGy-II 23.11	Knowledge & Scholarship	Knows how		Discuss the causes of maternal mortality	CI	DK	Lecture Small group discussion Tutorials CBL	MCQ VIVA	SAQ	
Hom-UG ObGy-II 23.12	Knowledge & Scholarship	Knows how		Discuss the causes of maternal morbidity	CI	DK	Lecture Small group discussion Tutorials CBL	MCQ VIVA	SAQ	
Hom-UG ObGy-II 23.13	Knowledge & Scholarship	Knows how		Describe the steps to reduce maternal mortality	CI	DK	Lecture Small group discussion Tutorials CBL	MCQ VIVA	SAQ	Community medicine

5.24 Medico legal aspects in obstetrics

Sl. No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom-	Knowledge	Knows how		Discuss the areas of legal	CI	DK	Lecture	MCQ	SAQ	Forensic

UGObGy-II 24.1	& Scholarship		Medico-legal aspects in obstetrics	threat in Obstetrics			Small group discussion Tutorials CBL	VIVA		medicine
Hom-UG ObGy-II 24.2	Knowledge & Scholarship	Knows how		Discuss the methods to minimise the medico-legal problems	CI	DK	Lecture Small group discussion Tutorials CBL	MCQ VIVA	SAQ	Forensic medicine
Hom-UG ObGy-II 24.3	Knowledge & Scholarship	Knows how		Discuss the medico-legal importance of prohibition of sex selection act before or after conception	CI	DK	Lecture Small group discussion Tutorials CBL	MCQ VIVA	SAQ	Forensic medicine
Hom-UG ObGy-II 24.4	Knowledge & Scholarship	Knows how		Discuss the medico-legal indication for MTP act	CI	DK	Lecture Small group discussion Tutorials CBL	MCQ VIVA	SAQ	Forensic medicine

5.25 General and Homoeopathic Management, repertorization, therapeutics, posology, Formulation of prognostic criteria, Prognosis and future advances in Obstetrics and newborn care.

Sl. No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	TL MM	Assessment		Integration
								Formative	Summative	
Hom-UG ObGy-II 25.1	Patient care	Knows how	General management APH & PPH	Describe the general management in APH	C2	MK	CBL, Tutorial, Role play	VIVA		
Hom-UG ObGy-II 25.2	Patient care	Knows how		Describe the general management PPH	CI	DK	Tutorial CBL Role play	VIVA		
Hom-UG ObGy-II 25.3	Patient care	Knows how		Discuss the general management in gestational hypertension	CI	DK	Small group discussion Tutorials CBL role play	VIVA		Practice of medicine
Hom-UG ObGy-II 25.4	Patient care	Knows how	General management Gestation diabetes	Describe general management of gestational diabetes	CI	DK	Small group discussion Tutorials CBL	VIVA	SAQ	Practice of medicine
Hom-UG ObGy-II 25.5	Patient care	Knows how	General management in abortion Ectopic pregnancy &	Explain the general management of early weeks of pregnancy (In case of abortion, ectopic	CI	DK	Lecture Small group discussion	VIVA	SAQ	

			hydatidiform mole	pregnancy & hydatidiform mole)			Tutorials CBL			
Hom-UG ObGy-II 25.6	Patient care	Knows how	General management in Puerperal sepsis	Describe the general management in puerperal sepsis	CI	DK	Small group discussion Tutorials CBL	VIVA	SAQ	
Hom-UG ObGy-II 25.7	Patient care	Knows how	General management	Formulate the general management as per the requirement of the case, based on symptomatology and clinico-pathological findings	CI P1	DK	Small group discussion Tutorials CBL OSCE			Organon
Hom-UG ObGy-II 25.8	Patient care	Knows how	Homoeopathic management	Construct the totality based on the symptoms received from case taking	C2 A2	MK	CBL, Tutorial, OSCE			Organon of medicine,
Hom-UG ObGy-II 25.9	Patient care	Knows how	Therapeutics	Distinguish the remedies indicated in obstetrical cases based on symptomatology	C2	MK	CBL, Tutorial,			Materia medica
Hom-UG ObGy-II 25.10	Homeopathic orientation	Knows how	Repertory	Discuss the selection of repertory based on symptoms	C2	MK	CBL, Tutorial,			Repertory
Hom-UG ObGy-II 25.11	Homeopathic orientation	Knows how	Posology	Discuss the selection of potency based on the symptomatology	C2	MK	CBL, Tutorial,			Organaon medicine
Hom-UG ObGy-II 25.12	Knowledge and scholarship	Knows	Future advances in obstetrics & new born care	Mention the importance of audit in obstetrics	C1	NK	Seminar			
Hom-UG ObGy-II 25.13	Knowledge and scholarship	Knows		Explain prohibition of sex selection act	C2	NK	CBL, Tutorial,			Forensic medicine
Hom-UG ObGy-II	Knowledge and	Knows		Explain umbilical cord blood banking	C2	NK	CBL, Tutorial,			

25.14	scholarship									
Hom-UG ObGy-II 25.15	Knowledge and scholarship	Knows		State the role of stem cell therapies in obstetrics	C2	NK	CBL, Tutorial,			Practice of medicine

6. Teaching learning methods

Lectures (Theory)	**Non-lectures (Practical/Demonstrative)**
Lectures- black board, AV aids	Demonstration of charts, models, pelvis and dummy, birth simulators, neonatal manikin & resuscitation simulators, specimens, instruments, videos, simulator based learning, tutorials etc.
Small group discussion	Clinical demonstration, DOAP, DOPS,OSCE
Integrated lectures	Problem based learning/discussion- Case based learning, assignments, minor research projects
	Flipped classroom
	Participatory learning e.g. quiz, seminar etc.
	Library reference
	Self-learning

7. Details of assessment

7.1. Overall Scheme of Assessment (Summative)

Sr. No	Professional Course	Term I (1-6 Months)		Term II (7-12 Months)		
1. 1 **Details of assessment**	Third Professional BHMS	PA I (end of 3 months)	TT I (end of 6 months)	PA II (end of 9 months)	FUE (end of 12 months)	
		20 Marks Viva	100 Marks Practical/ Viva i) Viva voce - 50 marks ii) Practical* – 50 marks	20 Marks Viva	200 marks theory	200 marks Practical+ Viva+ IA

PA: Periodical Assessment; TT: Term Test; FUE: Final University Examinations; IA: Internal Assessment

****Practical examinations TT I:***

Case taking: total 2 cases to be taken, one for each Gynaecological and Obstetrical condition-
Construct the portrait of disease in presenting Gynaec./Obs. condition with relevance to Hahnmeannian case taking**. (5 marks)**
Perceive the symptomatology and derive the rubrics **(5 marks)**
Derive at the miasmatic background of presenting gynaecological condition with help of clinico-pathological findings including Homoeopathic management **(5 marks)**
General physical/ Per abdominal/ per vaginal examination for the presenting complaint **(5 marks)**
Suggest the relevant lab investigations for the presenting condition **(5 marks)**

7.2 Number of papers and Mark Distribution for Final University Examination (FUE)

Sr. No.	Course Code	Papers	Theory	Practical/ Clinical**	Viva Voce	Internal Assessment*	Grand Total
1	Hom-UG ObGy-II	02	200 marks	100 marks	80 marks	20 marks (Marks of PA I + TT I + PA II)	400 marks

***Method of Calculation of Internal Assessment Marks for Final University Examination:**

Marks of IA (M) = S + T /2

S = Marks of IA in II BHMS

T = Marks of IA in III BHMS = (Marks of PA-1 + Marks of TT + Marks of PA-2) / 140 X 20

****Refer to the table 7.8 for the details of practical/clinical exam and marks distribution in FUE**

7.3 Paper Layout

Summative assessment (FUE):

Theory- 200 marks

Paper I (100 Marks) **Gynaecology & homoeopathic therapeutics**		
1.	LAQ	50
2.	SAQ	40
3.	MCQ	10
Paper II (100 Marks)		

Obstetrics, new born care & homoeopahic therapeutics		
1.	LAQ	50
2.	SAQ	40
3.	MCQ	10

7.4. Theme-wise distribution of questions for theory exam paper I:

Theme	Topics	Term		Marks	MCQ	SAQ	LAQ
		II BHMS	III BHMS				
A	• Introduction to Gynaecology with definition of Hahnemannian classification of disease. • Importance in the review of the Homoeopathic literature, Therapeutics and Repertory source books	**I**		**10**	**Yes**	**Yes**	**No**
	• A review of the applied anatomy of female reproductive system, Development and Developmental anomalies	**I**			**Yes**	**Yes**	**No**
	• Gynaecological Case taking, physical examination, investigation and approach to clinical diagnosis and Differential diagnosis.	**I**			**Yes**	**Yes**	**No**
	• Epidemiology -Predisposition including fundamental miasm: personality type known to develop particular disease	**I**			**Yes**	**Yes**	**No**
	• Sex & Intersexuality- Knowledge and scope to eradicate genetic Dyscrasias, predisposition, miasm and personality types known to develop particular diseases through Homoeopathic outlook.	**II**			**Yes**	**Yes**	**No**
	• Introduction to abnormal disease conditions in Gynaecology with Homoeopathic management related to causation, Clinico-pathological and miasmatic correlations with pathological end result. Review of the Homoeopathic literature, Therapeutics and Repertory source books		**I**		**Yes**	**Yes**	**No**
	• A review of the applied physiology of female reproductive systems, puberty, menstruation and its disorders including Menorrhagia,	**I**			**Yes**	**Yes**	**Yes**

B	Metrorrhagia, Dysfunctional uterine bleeding and menopause with related ailments and its scope and management in Homoeopathy and integrate Where ever necessary (Vertically and Horizontally) with other disciplines.			**20**			
	• Uterine displacements – Prolapse, Retroversion and inversion with its exciting and maintaining causes, disease manifestations, prognosis, management and scope in homoeopathic perspective	**II**			**Yes**	**Yes**	**Yes**
	• Urinary problems in gynaecology – Incontinence, retention, urinary tract infection, dysuria and urethral carungle with Homoeopathic management		**I**		**Yes**	**Yes**	**Yes**
C	• General and Homoeopathic Management, repertorization, therapeutics, posology, Formulation of prognostic criteria and Prognosis of related topics in Gynaecology	**II**		**20**	**Yes**	**Yes**	**Yes**
	• Infections & Ulcerations of the female genital organs, their Causation and modifying factors: exciting-maintaining causes from micro-organisms to environmental to climacteric to occupational etc. Psychosomatic aspect, Pathogenesis, Pathology, Clinico-pathological and miasmatic correlations with pathological end result including Homoeopathic management		**I**		**Yes**	**Yes**	**No**
	• Injuries of the genital tract, Homoeopathic management - scope and limitations.		**I**		**Yes**	**Yes**	**No**
	• Etiological factors related with male and female Infertility, their diagnosis, Artificial Reproductive Techniques, scope and limitation of Homoeopathic management along with population dynamics and control of Conception		**II**		**Yes**	**Yes**	**Yes**
	• General and Homoeopathic Management, repertorization, therapeutics, posology, Formulation of prognostic criteria, Prognosis and future advances of related topics inGynaecology.		**II**		**Yes**	**Yes**	**Yes**
D	• Disorders of Female genital tract - Abnormal vaginal discharge, Pelvic pain, Low backache, Veganism's, Dyspareunia, Abdomino pelvic lump, withHomoeopathic management		**I**	**15**	**Yes**	**Yes**	**No**

	• Sexually transmitted diseases including Homoeopathic management		I		Yes	Yes	No
E	• Genital non-malignant growths - scope and limitation of management in Homoeopathy		II	20	Yes	Yes	Yes
	• Diseases of breasts with Homoeopathic management		I		Yes	Yes	No
	• Endometriosis and Adenomyosis - scope and limitation of management in Homoeopathy		II		Yes	Yes	Yes
F	• Genital malignancy with scope of Homoeopathic treatment and its limitations		II	15	Yes	Yes	Yes
	• Identifying the indications of surgical procedures in Gynaecology, its complications, after effects and to refer for surgical intervention either as a life saving measure or for removing mechanical obstacles.		II		Yes	Yes	No
	• Radiotherapy, Chemotherapy, Immunotherapy, Gene therapy, Tumor markers - utility and its complications		II		Yes	Yes	No

7.5 Distribution of questions for theory exam paper II

Theme	Topic	II BHMS Term	III BHMS Term	Marks	MCQ'S	SAQ'S	LAQ'S
A	• Introduction to Obstetrics and Newborn care related with Homoeopathic Philosophy, Therapeutics and Repertorisation.	I		10	Yes	Yes	No
	• Fundamentals of reproduction	I			Yes	Yes	No
	• Development of intra uterine pregnancy	I			Yes	Yes	No
	• Diagnosis of pregnancy, investigations & examinations, applied anatomy & physiology, Normal pregnancy – physiological changes	I			Yes	Yes	No
	• Understanding Pre- natal diagnostic Techniques (Regulation and Prevention of Misuse) Act 1994	II			Yes	Yes	No
B	• Antenatal care – aims, objectives, visits, advise, procedures, investigations, identifying high risk cases, scope and limitation of management in Homoeopathy	I		10	Yes	Yes	No
	• Common conditions such as Vomiting, backache, constipation in	I			Yes	Yes	No

	pregnancy and Homoeopathic management						
	• Important Investigations for diagnosis in Obstetrics	**II**			**Yes**	**Yes**	**No**
	• Knowledge about Reproductive and child health care. • Safe motherhood and child survival (b) Risk approach – MCH care • Maternal mortality and morbidity • Perinatal mortality and morbidity • (e) Diseases of foetus and new born.		**II**		**Yes**	**Yes**	**No**
	• Medico legal aspects in obstetrics		**II**		**Yes**	**Yes**	**No**
C	• Normal labour with its causes of onset, anatomy, physiology, mechanism, stages, events and clinical course in each stage, importance of Homoeopathic scope and management	**II**		**20**	**Yes**	**Yes**	**Yes**
	• Postnatal & puerperal cure - scope and limitation of management in Homoeopathy		**II**		**Yes**	**Yes**	**Yes**
	• Introduction to Abnormal pregnancy and labour with its scope and limitation in Homoeopathy Review of literature, Therapeutics and Repertory source books.		**I**		**Yes**	**Yes**	**No**
	• Common disorders and systemic diseases associated with pregnancy. • A holistic understanding of disease evolution and approach to diagnosis, prognosis, Homoeopathic management, scope and limitations		**I**		**Yes**	**Yes**	**No**
D	High risk labour, • Dystocia • Mal-positions and mal-presentation, Prolapse of cord and limbs, Abnormalities in the action of the uterus, Abnormal conditions of soft parts, Contracted pelvis, • Obstructed labour, • Complications of 3rd state of labour, Preterm labour, • Post maturity, • Injuries of birth canal, • Scope and limitation in Homoeopathy		**I**	**20**	**Yes**	**Yes**	**Yes**
	• Indication of common obstetrical operations, • Medical termination of pregnancy, Criminal abortion, • Caesarean section,		**II**		**Yes**	**Yes**	**No**

	• Induction of labour, Episiotomy. etc and its complications, after effects and to refer for surgical intervention either as a life saving measure or for removing mechanical obstacles.						
	• Emergency obstetric care		**II**		**Yes**	**Yes**	**No**
E	Abnormal pregnancies: • Hemorrhages during Antepartum, postpartum and early pregnancy, Multiple pregnancy, • Hypertensive disorders, in identifying common problems during Abnormal pregnancy and to manage it in Homoeopathic perspective including scope, limitations and timely referral.		**I**	**20**	**Yes**	**Yes**	**Yes**
	• General and Homoeopathic Management, repertorisation, therapeutics, posology, Formulation of prognostic criteria and Prognosis of related topics in Obstetrics and newborn care.	**II**			**No**	**Yes**	**Yes**
F	Infant care : • Neonatal hygiene, • Common disorders of newborn, • Breast feeding, • Artificial feeding, • Management of premature child, • Asphyxia &OphthalmiaNeonatorum • Birth injuries, • Neonatal infections, • Congenital malformations of newborn Intrauterine growth retardation, • Foetal anomalies including scope and limitation in Homoeopathy and timely referral.		**II**	**20**	**Yes**	**Yes**	**Yes**
	• Care of new born in homoeopathic point of view	**II**			**Yes**	**Yes**	**Yes**
	• General and Homoeopathic Management, • repertorisation, • Therapeutics, • Posology, • Formulation of prognostic criteria, Prognosis and future advances in Obstetrics and newborn care.		**II**		**No**	**Yes**	**Yes**

7.6 Question paper blue print Paper I- Gynaecology & Homoeopahic Therapuetics

A Question Serial Number	B Type of Question	C Theme (Refer table 7.4 for themes)
Q1	Multiple Choice Questions(MCQ) 10 Questions 1 mark each All compulsory	Theme A Theme B Theme C Theme D Theme E Theme F
Q2	Short answer Questions (SAQ) Eight Questions 5 Marks Each All compulsory	Theme A Theme B Theme C Theme D Theme E Theme F
Q3	Long answer Questions (LAQ) Five Questions 10 marks each All compulsory	Theme B Theme C Theme E Theme F

7.7 Question paper blue print Paper II- Obstetrics, New Born Care & Homoeopahic Therapuetics

A Question Serial Number	B Type of Question	C Theme (Refer table 7.5 for themes)
Q1	Multiple Choice Questions(MCQ) 10 Questions 1 mark each	Theme A Theme B Theme C Theme D

	All compulsory	Theme E Theme F
Q2	Short answer Questions(SAQ) Eight Questions 5 Marks Each All compulsory	Theme A Theme B Theme C Theme D Theme E Theme F Theme G
Q3	Long answer Questions(LAQ) Five Questions 10 marks each All compulsory	Theme C Theme D Theme E Theme F Theme G

7.8 Details of practical assessment

Clinical performance - Bedside case taking - ANC, PNC or Gynae with case analysis	15 marks
Diagnosis and D/D (in Gynaec case),	03 marks
Investigations	02 marks
Totality, Remedy selection, Potency selection, Repetition of dose, Repertorization etc.	20 marks
Identification of instruments, models and specimens	30 marks
Case Records to be maintained by each student (**10 Gynae cases + 10 Obs cases)**	20 marks
Log Book/ Problem based assignments/ Small project, clinical evaluation, DOPS/OSCE etc.	10 marks

Viva Voce -Theory (Obstetrics, Gynaecology and Infant care with Homoeopathic Therapeutics)	80 marks
Internal Assessment	20 marks
Total marks for viva & clinical exam	**200 Marks**

8. List of recommended text/reference books

- D.C. Dutta- Text book of Obstetrics -6th edition, New Central Book Agency Pvt. Ltd. (2004)
- D.C. Dutta -Text book of Gynaecology, 4th edition, New Central Book Agency Pvt. Ltd. (2007)
- Homoepathy for Mother and Child care – Volume 1
- Handbook on homeopathy for mother and child care
- Text book of Gynaecology by Cowperthwaite Reprint 2001B Jain Publishers (P) Ltd.
- Gynaecologic and Obstetric Therapeutics, KulkarniShrikant
- Uterine therapeutics by Henry Minton Reprint 2005B Jain Publishers (P) Ltd.
- Samuel Lilienthal- Homoeopathic Therapeutics, 5th Edition , B Jain Publishers (P) LTD. (Reprint 2003)

Reference books

- C. S. Dawn - Textbook of Obstetrics and Neonatology –15th edition 2001, Smt. Arati Dawn Books Kolkata.
- C. S. Dawn – Textbook of Gynaecology Contraception and Demography, 14th edition 2003, Smt. Arati Dawn &Debabrata Dawn
- Five Teachers text book of Gynaecology, Khan, Rashid Latif
- Gems of Obstetric and Gynecology With Homoeopathic Therapeutics, Patil,J.D
- Homoeopathy for Mother and Child Care Vol-III, Jalasa.S
- Principles & Practice of Homeopathy in Obstetrics& Pediatrics, Guernsey H.N
- Handbook of Homoeopathic Therapeutics on Obstetrics and Gynaecology
- Mudaliar and Menon's Clinical Obstetrics 12th Edition

9. List of contributors

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COMPETENCY BASED DYNAMIC CURRICULUM FOR THIRD BHMS PROFESSIONAL COURSE

(Applicable from Batch 2022-2023 onwards for 5 years or until further notification by National Commission for Homoeopathy whichever is earlier)

(Community Medicine)

HOMOEOPATHY EDUCATION BOARD

NATIONAL COMMISSION FOR HOMOEOPATHY

MINISTRY OF AYUSH, GOVERNMENT OF INDIA

JAWAHAR LAL NEHRU BHARTIYA CHIKITSA AVUM HOMOEOPATHY ANUSANDHAN BHAVAN

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Subject name: - Community Medicine

Subject code: HomUG-CM -I

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1. Preamble

Community medicine identifies different bio-psycho-social-cultural-economical-environmental-occupational and climatic factors, that determine health and influence the human body, and derange it if the adaptation to these factors gets deviated. These influence the quality of life and predispose individuals to disease. Several genetic, nutritional, and microbiological factors, if taken care of in early stages, not only prevent diseases but also help in the promotion of health and enhance the quality of life. Behavioural factors play a key role in keeping a man healthy and maintaining better adaptation to other factors. Many lifestyle illnesses and preventable diseases are on the rise which need better understanding for their prevention. The main goal of community medicine/public health is to improve the health of the community.

Homoeopathic practitioners' responsibility is not only to restore the sick to health with their basic clinical skills but also to analyse the community health problem, prevent diseases at the community level as well as promote good health. To improve community health homoeopathic community medicine practitioners are required to work beyond their medical knowledge, they should possess knowledge of other sub-disciplines such as biostatistics, social and behavioral health, environmental health, healthcare management, public health nutrition, health economics, health financing, health informatics, and other related disciplines.

Clinical specialists are generally confined to clinics or hospitals, whereas the scope of community medicine practitioners extends from clinic/hospital to community to provide their preventive, promotive curative, rehabilitative, and palliative services. The Homoeopathic physician, as directed in aphorism 4, is the preserver of health and helps the community to live for the higher purpose of existence

Homoeopathic physicians as Community medicine practitioners should be able to identify and prioritize the health problems, as well as the health needs of the community. He/she must identify the determinants provide appropriate intervention and also educate the community about prevention and maintaining good health. This will require early exposure to community posting so that the student understands the multifactorial causes and preserves health when derailed.

Community medicine deals with prevention at the individual and community levels and integration of it with Organon will equip the homoeopathic physician better to manage them. Homoeopathic physicians should become a holistic healer and leaders in all caring disciplines. The current concept of prevention and promotion will become clear through the integration of homoeopathic subjects such as Organon, Materia Medica, and other medical courses with community medicine. It would enable the students to render their duties and responsibilities efficiently, effectively, and sustainable way. To accomplish this Community Medicine CBDC curriculum is aptly designed.

2. Program outcomes (PO)

i. **PO1: Community Health Expertise**
Demonstrate a comprehensive understanding of community health issues and apply homoeopathic clinical knowledge to effectively assess, manage, and resolve them.

ii. **PO2: Preventive and Social Medicine Application**
Integrate knowledge of health and disease determinants to develop strategies for disease prevention, health promotion, and control measures at the individual and population levels.

iii. **PO3: Public Health Surveillance and Response**
Identify and prioritise public health problems, initiate timely interventions, and contribute to disease surveillance and reporting systems at local, regional, and national levels.

iv. **PO4: Epidemic and Outbreak Management**
Understand and participate in the investigation and management of epidemics and outbreaks using standard public health tools and homoeopathic principles.

v. **PO5: Community-Based Screening and Intervention**
Engage in screening programs for early detection of diseases and provide relevant homoeopathic interventions at individual and community levels.

vi. **PO6: Community Engagement and Empowerment**
Promote and facilitate active community involvement in health-related decision-making and implementation of disease prevention and health promotion strategies.

vii. **PO7: Socio-behavioral Health Interventions**
Recognize the role of community behaviors and socio-cultural factors in health and disease and plan suitable health education and behavioral interventions.

viii. **PO8: Epidemiology and Research Proficiency**
Apply epidemiological methods in identifying, analyzing, and interpreting public health data; contribute to the planning and execution of health studies.

ix. **PO9: National Health Program Implementation**
Participate in the planning, execution, and monitoring of national and state health programs tailored to the needs of specific communities.

x. **PO10: Research Methodology in Homoeopathy**
Select and apply appropriate research study designs to conduct ethical, evidence-based research in community-oriented homoeopathy practice.

3. Course outcomes

At the end of the Community Medicine course, the student shall be able to

i. Recognise community health problems, apply clinical skills, and manage the problems using homoeopathic principles.

ii. Identify determinants of health and disease, and use the knowledge for prevention, and control of diseases and promote good health in the community.

iii. Identify, prioritise, manage, and report diseases of public health importance at the appropriate levels.

iv. Outline the process of epidemics/outbreak investigation and manage them with a homoeopathic approach.

v. Participate in screening of diseases at individual and community levels.

vi. Promote community participation in disease prevention and control; and promotion of health.

vii. Identify community behaviours associated with health problems and provide interventions.

viii. Factor in epidemiological principles while conducting studies /research; collect, collate, analyse, and report public health problems.

ix. Plan and participate in implementing national health programs in the community.

x. Select an appropriate research study design to conduct research in homoeopathy.

4. Learning objectives (LO)

The learning objectives for this course are to-

i. Define the concept of community medicine and describe the growth and development of public health in India
ii. Explain the concept of health, disease and causation from a public health point of view and specifically from the homoeopathic science perspective.
iii. Explain the Community Health, Healthcare of the Community, and Healthcare Delivery Systems in India
iv. Summarise the Social and Behavioural Health issues and their Relevance to Homoeopathy.
v. Detect the role of Nutrition for Community Health.
vi. Evaluate the role of environmental factors on health.
vii. Illustrate the mental health issues in the community in general and those arising due to addiction.
viii. Determine the reproductive, maternal, newborn, child, adolescent health, geriatric health, and communicable and occupational health issues.
ix. Compile the Demography, and Vital Statistics.

5. Course content and its term-wise distribution

SI. No.	List of Topics	Term
1.	**Fundamental Concepts of Community Medicine, Public Health, and History of Community Medicine.** 1.1. Basic definitions 1.2. Public health 1.3. History of public health 1.4. History of public health in India 1.5. Importance of community medicine for Homoeopath 1.6. Role of homoeopaths in public health	I

2.	**Concepts of Health, Disease Causation & Prevention and Homoeopathy** 2.1. Concept of health 2.2. Health 2.3. Disease causation 2.4. Biomedical Model of Health 2.5. Web of Causation 2.6. Natural history of disease 2.7. Levels of prevention 2.8. Determinants of health 2.9. Iceberg phenomenon 2.10. Spectrum of health 2.11. Disease elimination and control 2.12. Concept of health and disease from a Homoeopathic perspective 2.13. Concept of well-being 2.14. Indicators of health and disease 2.15. Mortality Rates 2.16. Morbidity Rates 2.17. Disability rates 2.18. Summary measures 2.19. Health status of India	I
3.	**Community Health, Healthcare of the Community, and Healthcare Delivery Systems in India** 3.1. Health System 3.2. Types of health systems 3.3. Health systems framework 3.4. Healthcare of the community 3.5. Healthcare Levels in India 3.6. Healthcare Delivery Systems in India	I
4.	**Social and Behavioural Health and its Relevance to Homoeopathy** 4.1. Social and Behavioural Health 4.2. Health Behaviour 4.3. Medical Sociology 4.4. Social Determinants of Health	I

	4.5. Community 4.6. Family in Health and Disease 4.7. Social Stratification: Socioeconomic status, social class, Poverty, and Health 4.8. Health promotion, Behavioural health theories, and Behaviour Change Communication (BCC) 4.9. Clinical, social-cultural, and demographic assessment of individual, family, and community (Medico social case workup) 4.10. Family Health Record	
5.	**Nutrition for Community Health** 5.1. Nutrition: General concepts 5.2. Dietary standards: Recommended Dietary Allowance (RDA and Estimated Average Requirement (EAR) 5.3. Energy 5.4. Proximate Principles of Food, Protein, Fats, Carbohydrates 5.5. Dietary fibre 5.6. Vitamins 5.7. Minerals 5.8. Nutritional requirements of special groups 5.9. Nutritional problems of public health importance 5.10. Milk and Meat 5.11. Nutritional assessment, surveillance, education and rehabilitation 5.12. Food Safety, Food Hygiene, Food Processing, Food Additives, Food preservatives, Food Fortification, Food adulteration and food toxicants. 5.13. National Nutritional Programs	I
6.	**Environment and Health** 6.1. Basic introduction to environmental health 6.2. Water and Health 6.3. Sanitation, Solid Waste, Human Excreta and Sewage disposal 6.4. Disposal of Solid waste and wastewater 6.5. Excreta Disposal 6.6. Bio-medical waste and its management 6.7. Temperature and health	I

	6.8. Noise and health 6.9. Environmental Pollution 6.10. Air and health 6.11. Ventilation and health 6.12. Radiation and health 6.13. Light and Health 6.14. Housing and Health 6.15. Laws of environmental pollution 6.16. Medical Entomology	
7.	**Mental Health** 7.1.Mental Health 7.2.Health problems due to tobacco, alcohol, and drug abuse.	II
8.	**Reproductive, Maternal, Newborn, Child and Adolescent Health and related National Health Programmes** 8.1.RMNCHA Introduction 8.2.Maternal Health 8.3.Gender issues and women's empowerment 8.4.Care of Newborn 8.5.Infant and Child Healthcare 8.6.Under-Five Children 8.7.Growth and Development of Child 8.8.Adolescents Health 8.9.Reproductive health 8.10. Immunisation	II
9.	**Geriatric Health and Health of Specially Abled Population** 9.1. Definitions 9.2. Concept of Geriatric Services 9.3. Prevention and Control of Health Problems of the Elderly 9.4. National Health Programs 9.5. End-of-Life Care and Palliative Care of the Elderly 9.6. Comprehensive Geriatric Assessment 9.7. Disability / Healthcare of Specially abled population	II

10.	**Demography, Vital Statistics, Family Welfare Planning and Contraception** 10.1. Definition 10.2. Demographic Cycle/Transition 10.3. Population statistics 10.4. Demographic Profile 10.5. Vital Statistics 10.6. Measures of Fertility 10.7. Vital Statistics: Sources of information /vital statistics 10.8. Family Welfare 10.9. Contraception 10.10. MTP Act 10.11. PC PNDT Act	II
11.	**Communicable Diseases and Relevant National Health Programmes** 11.1. Definitions 11.2. Classification of Infectious Diseases 11.3. General epidemiology of airborne diseases 11.4. Respiratory Infections 11.5. Intestinal Infections 11.6. Arthropod Infections 11.7. Zoonoses Diseases 11.8. Surface Infection 11.9. Hospital-Acquired Infections / Nosocomial Infections	II
12.	**Occupational Health** 12.1. Occupational Health 12.2. Ergonomics 12.3. Health Hazards in Agriculture 12.4. Health Hazards in Healthcare Professionals 12.5. Health Hazards in other sectors 12.6. Occupational Diseases 12.7. Occupational Lung Diseases 12.8. Occupational industrial accidents 12.9. Occupational Dermatitis	II

	12.10. Lead poisoning 12.11. Occupational burnout and stress 12.12. Working condition 12.13. Occupational health assessment	

6. Teaching Hours

6.1. Gross division of teaching hours

Community Medicine		
Year	**Teaching hours- Lectures**	**Teaching hours- Non-lectures**
III BHMS	100	60

6.2 Teaching hours theory

S. no.	List of Topics	Hours
1	Fundamental Concepts of Community Medicine, Public Health, and History of Community Medicine.	02
2	Concepts of Health, Disease Causation & Prevention and Homoeopathy	05
3	Community Health, Healthcare of the Community, and Healthcare Delivery Systems in India	08
4	Social and Behavioural Health and its Relevance to Homoeopathy	08
5	Nutrition for Community Health	10
6	Environment and Health	10
7	Mental Health	04
8	Reproductive, Maternal, Newborn, Child and Adolescent Health and related National Health Programmes	10
9	Geriatric Health and Health of Specially Abled Population	05
10	Demography, Vital Statistics, Family Welfare Planning and Contraception	06
11	Communicable Diseases and Relevant National Health Programmes	24
12	Occupational Health	08
	Total	**100**

6.3 Teaching hours: Non-lecture

Sr. No.	Non–Lecture Activity	Term	Time Allotted per Activity (Hours)
A.	**Practical:**		**42**
1.	Balanced Diet	I	3
2.	Growth Chart (RMNCHA+)	II	3
3.	Menstrual Hygiene	II	3
4.	Family Planning & Contraceptive Methods	II	3
B.	**Field Visits:**		
1.	Water treatment plant	I	3
2.	Milk Pasteurization Plant	I	3
3.	Primary Health Centre/Sub-Centre/Anganwadi Centre	I	6
4.	Infectious Disease Hospital Visits	II	6
5.	Industrial units	II	6
6.	Old age home, Rehab centre for physical and mental disabilities, Mental health facility including remand home, asylum, child care centre	II	6
C.	**Demonstration:**		**18**
1.	Water Quality & Purification	I	5
2.	Air Quality Assessment	I	4
3.	Food & Beverage Adulterations: Milk	I	4
4.	Nutritional Assessment	II	5
	Total Hours		**60**

7. Content mapping (competencies tables)

7.1. Topic: Fundamental Concepts of Community Medicine, Public Health, and History of Community Medicine

SI No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment	Integration
								Formative	Summative
Hom UG CM I-T 1.1	KS	K	Basic definitions	Define the terms "Community Medicine", "Preventive Medicine", "Social Medicine", "Preventive Medicine", and "Public Health".	C-I	NK	Lecture Library Reference	Viva MCQ	NA
Hom UG CM I-T 1.2	KS	KH	Public health	Discuss the functions of public health Differentiate between preventive medicine and public health	C-II	NK	Lecture, Library Reference	Viva MCQ	NA
Hom UG CM I-T 1.3	KS	KH	History of public health	Discuss the evolution of public health globally	C-II	NK	Lecture, Library Reference	Viva MCQ	NA
Hom UG CM	KS	KH	History of public health in India	Discuss the evolution of public health in India	C-II	NK	Lecture, Library Reference	Viva MCQ	NA

I-T 1.4									
Hom UG CM I-T 1.5	KS	KH	Importance of community medicine for Homoeopath	Discuss the need to study community medicine in BHMS	C-II	NK	Lecture, Library Reference	Viva MCQ	NA
Hom UG CM I-T 1.6	KS	KH	Role of homoeopaths in public health	Recognize the role of homoeopathic practitioners in public health.	C-II	NK	Lecture, Library Reference	Viva MCQ	NA

7.2. **Concepts of Health, Disease Causation & Prevention and Homoeopathy**

SI No	**Domain Competency**	**Miller**	**Content**	**Specific Learning Objectives**	**Bloom/ Gilbert**	**Priority**	**T-L M/M**	**Assessment**		**Integration**
								Formative	**Summative**	
Hom UG CM I-T 2.1	KS	KH	Concept of health	Discuss the history of health Discuss the biomedical, ecological, psychological, and spiritual dimensions of holistic health	C-II	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	Organon of Medicine
Hom UG CM I-T	KS	K	Health	Define the term "Health" as per WHO.	C-I	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ,	

SI No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
2.2										
Hom UG CM I-T 2.3	KS	KH	Disease causation	Describe theories of disease causation in the Primitive and Middle Ages.	C-II	DK	1. Lecture 2. Small Group Discussion	MC Q Viva Quiz	MCQ, SAQ	Organon of medicine- Vital force, and miasms
				Describe the Germ Theory of disease.	C-II	MK	1. Lecture 2. Small Group Discussion	MC Q Viva Quiz	MCQ, SAQ	
Hom UG CM I-T 2.4	KS	KH	Biomedical Model of Health	Describe the characteristics of agent, host, and environmental factors in health and disease in the epidemiological triad	C-II	MK	1. Lecture 2. Small Group Discussion	MC Q Viva Quiz	MCQ, SAQ	Organon of Medicine - Vital Force
Hom UG CM I-T 2.5		KH	Web of causation	Describe the multifactorial aetiology of disease. & "BEINGS" Model	C-II	MK	1. Lecture 2. Small Group Discussion	MC Q Viva Quiz	MCQ, SAQ	Organon of Medicine- Hahnemann's classification of causation
				Discuss predisposing, enabling, precipitating,	C-II	MK	1. Lecture 2. Small	MC Q	MCQ, SAQ	Organon of Medicine-

SI No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				reinforcing, and risk factors in disease causation			Group Discussion	Viva Quiz		
Hom UG CM I-T 2.6	KS	KH	Natural history of the disease	Discuss the natural history & Evolution of the disease.	C-II	MK	1. Lecture 2. Small Group Discussion	MC Q Viva Quiz	MCQ, SAQ	Organon of Medicine-
	KS	KH		Describe the incubation and latent period of disease .	C-II	MK	1. Lecture 2. Small Group Discussion	MC Q Viva Quiz	MCQ, SAQ	Organon of Medicine-
Hom UG CM I-T 2.7	KS, PC	KH	Levels of preventio n	Describe various levels of prevention. Discuss the application of intervention at various levels of prevention.	C-II	MK	1. Lecture 2. Small Group Discussion	MC Q Viva Quiz	MCQ, SAQ	
Hom UG CM I-T 2.8	KS, PC	KH	Determina nts of health	Describe the determinants of health	C-II	MK	1. Lecture 2. Small Group Discussion	MC Q Viva Quiz	MCQ, SAQ	Organon of Medicine
Hom UG CM	KS, PC	KH	Iceberg phenomen on	Explain the concept of the iceberg phenomenon in human	C-II	DK	1. Lecture 2. Small Group	MC Q Viva	MCQ, SAQ	

SI No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
I-T 2.9				diseases.			Discussion	Quiz		
Hom UG CM I-T 2.10	KS, PC	KH	Spectrum of health	Discuss the spectrum of health and disease	C-II	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	
Hom UG CM I-T 2.11	KS, PC	KH	Disease elimination and control	Discuss the concept of disease control, elimination, and eradication.	C-II	MK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ LAQ	
Hom UG CM I-T 2.12	KS, PC, HO	KH	Concept of health disease from a Homoeopathic perspective	Compare and contrast the concept of health and disease according to Hahnemann.	C-II	DK	1. Lecture 2. Small Group Discussion 3. Flipped Classroom	MCQ Viva Quiz	MCQ, SAQ	
		K		Discuss the concept of classification of disease.	C-II	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	Organon of Medicine- Hahnemann's classification of disease.
		K		Discuss the concept of the International	C-II	NK	1. Lecture 2. Small Group	MCQ Viva	Not Assessed in Exams	

SI No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				Classification of Disease-11.			Discussion	Quiz	(NA)	
Hom UG CM I-T 2.13	KS, PC,	K	Concept of well-being	Discuss the components of the Standard of living as per the WHO.	C-I	NK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	NA	
	KS	KH		Describe the various indices to measure quality of life. (Physical quality of life, Human Development Index)	C-II	NK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	NA	
Hom UG CM I-T 2.14	KS	KH	Indicators of health and disease	Discuss the Rate, Ratio and Proportions,	C-II	NK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	NA	
Hom UG CM I-T 2.15	KS	KH	Mortality Rates	Describe mortality rates and their types. (Crude Rates, Specific Rates, Adjusted rates)	C-II	MK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	

SI No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	KS	KH		Demonstrate the application of indicators of mortality: Crude Death Rate, Specific Mortality rates, Case Fatality Rate, Proportional Mortality Ratio,	C-II	MK	1. Lecture 2. Small Group Discussion 3. Blended learning	MCQ Viva Quiz	MCQ, SAQ	Obstetrics and Gynaecology, Pediatrics
Hom UG CM I-T 2.16	KS	KH	Morbidity Rates	Describe the application of Iincidence and prevalence	C-II	MK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	
Hom UG CM I-T 2.17	KS	KH	Disability rates	Describe the application of indicators of disability (DALYs)	C-II	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	
Hom UG CM I-T 2.18	KS	KH	Summary measures	Describe the application of indicators of summary measures of population health: YPLL, PQLI, HDI, Sullivan's indicator	C-II	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	

SI No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM I-T 2.19	KS,	KH	Health status of India	Describe the current Health status of India as per various indicators	C-II	NK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	NA	

7.3. Community Health, Healthcare of the Community, and Healthcare Delivery Systems in India

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM I-T 3.1	KS,	K	Health System	Define the term "Health system"	C-I	NK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	NA	
Hom UG CM I-T 3.3	KS, PBL,	KH	Types of health systems	Describe the types of healthcare systems.	C-II	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM I-T 3.3	KS, PBL	KH	Health systems framework	Describe the structure & function of the health systems framework as per the WHO	C-II	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	
Hom UG CM I-T 3.4	KS, CS, PBL, PRF, PC	KH	Healthcare of community	Describe the concept of healthcare in the community.	C-II	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	
		K		Explain health as a fundamental right under the constitution of India.	C-I	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	
Hom UG CM I-T 3.5	KS, CS, PBL,	KH	Healthcare Levels in India	Describe the Levels of Healthcare in India.	C-II	MK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	
				List the components of primary healthcare	C-II	MK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				Describe the principles of primary healthcare.	C-II	MK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	
Hom UG CM I-T 3.6	KS, CS, PBL,	K	Healthcare Delivery Systems in India	Outline the organization, and functions of health administration at the national level, State, District level	C-I	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	
		KH		Discuss the functions of the Union Ministry of Health and Family Welfare. and responsibilities & Functions of the Director General of Health services, Central Bureau of Health Intelligence,	C-II	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	
		KH								

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				Describe the organization, functions, services, and staffing at the center level & PHC, Ayushman Bharat Health and Wellness Centers, Community Health Center (CHC) (male and female)	C-II	MK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	
		KH		Describe the concept of the First Referral Unit (FRU)	C-II	MK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	
		KH		Describe the Basic Emergency Obstetric Care (BEmOC) and Comprehensive Emergency Obstetric Care (CEmOC)	C-II	MK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
		KH		Describe the Concept, Structure, functions, activities, and staffing pattern of Taluk and District Hospitals	C-II	MK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ LAQ	

7.4. Social and Behavioural Health and its Relevance in Homoeopathy

SI No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM I-T 4.1	KS, PC, HO, CS, PBL, PRF	KH	Social and Behavioural Health	Recognize the need for social and behavioural health for homoeopathic practice	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	MCQ, SAQ	Organon of Medicine

SI No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	KS	K		Define the terms "Sociology", and "Community". "Culture". "Customs", "Acculturation",	C-I	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	
Hom UG CM I-T 4.2	KS	K	Health Behaviour	Define the terms "health behaviour", "Illness behaviour", "Sick role behaviour", and "Health risk behaviour".	C-I	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS, CS, PBL, PC	KH		Discuss the principles of behaviour change	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	MCQ , SAQ	
	KS, CS, PC, PBL, PRF	KH		Define the terms "health-seeking behaviour". Discuss factors influencing health-seeking behaviour.	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	MCQ , SAQ	
	KS, CS, PBL, PRF,	KH		Discuss barriers to good health-seeking behaviour.	C-II	MK	1. Lecture 2. Small group discussion 3. Brain	MCQ Viva Quiz	MCQ , SAQ	

SI No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
							Storming			
	KS, CS, PBL, PRF	KH		Identify methods to overcome the barriers to good health-seeking behaviour.	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	MCQ, SAQ	
Hom UG CM I-T 4.3	KS	K	Medical Sociology	Define the term "medical sociology".	C-I	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	
	KS, CS, PBL, PRF, HO, PC	KH		Recognize the importance of medical sociology in Homoeopathic Practice.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	MCQ, SAQ	
	KS, CS, PBL, PRF, HO, PC	KH		Define the term "social psychology". Discuss the role of social psychology in community medicine and homoeopathic medical practice at the community level.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	MCQ, SAQ	
Hom	KS, CS, PBL,	KH	Social	Discuss social	C-II	MK	1. Lecture	MCQ	MCQ	

SI No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
UG CM I-T 4.4	PRF, PC		Determinants of Health	determinants of health and disease			2. Small group discussion 3. Brain Storming	Viva Quiz	, SAQ	
	KS, CS, PBL, PRF, PC	KH		Describe the role of social-cultural factors in health and disease	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	MCQ , SAQ	
Hom UG CM I-T 4.5	KS	K	Community	Define the term "community".	C-I	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	
	KS,	KH		Classify community as per Brint. Discuss the types of community.	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	MCQ , SAQ	
	KS	K		Define the term "community behaviour".	C-I	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	

SI No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	KS, CS, PBL, PRF, HO, PC	KH		Discuss the importance of community behaviour discipline for community medicine/public health/ homoeopathic practice at the community level.	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	MCQ , SAQ	
	KS	K		Define the term “community relationship. / Community engagement”.	C-I	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	
	KS, CS, PBL, PRF, HO, PC	KH		Justify the need and importance of community relationships for health interventions in the community.	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	MCQ , SAQ	
	KS, CS, PBL, PRF, PC	KH		Explain community participation in health management and development.	C-III	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	MCQ , SAQ	
	KS, CS, PBL,	KH		Discuss the types of	C-II	MK	1. Lecture	MCQ	MCQ	

SI No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	PRF, PC			community participation in managing the healthcare of the community.			2. Small group discussion 3. Brain Storming	Viva Quiz	, SAQ	
	KS, CS, PBL, PRF, PC	KH		Demonstrate how Rogi Kalyan Samiti enhances community participation.	C-II	DK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	MCQ , SAQ	
Hom UG CM I-T 4.6	KS	K	Family in Health and Disease	Define the term “family”	C-I	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	MCQ , SAQ	
	KS,	KH		Discuss the types of family.	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	MCQ , SAQ	
	KS	KH		Classify families based on (a) Authority or nature of residence.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	MCQ , SAQ	

SI No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				(b) Marriage pattern (c) Sanctions of marriage or nature of relation (d) size and structure (e) ancestry			3. Brain Storming			
	KS, CS, PBL,	KH		Discuss broken family, problem family, symmetrical family, reconstituted family.	C-II	DK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	MCQ, SAQ	
	KS,	KH		Discuss the functions of the family.	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	MCQ, SAQ	
	KS, CS, PBL,	KH		Outline the role of family in health and illness.	C-II	DK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	MCQ, SAQ	
Hom	KS, CS, PBL,	KH	Social	Discuss social	C-II	DK	1. Lecture	MCQ	MCQ	

SI No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
UG CM I-T 4.7			Stratification: Socioeconomic status, social class, Poverty and Health	stratification. Recognize how social stratification influences health and disease.			2. Small group discussion	Viva Quiz	, SAQ	
	KS, CS, PBL, PRF, PC	KH		Enumerate the application of social stratification in public health/community medicine.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	MCQ , SAQ	
	KS, CS, PBL, PRF, PC	KH		Analyse socioeconomic status as a determinant of health and illness.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	MCQ , SAQ	
	KS, CS, PBL, PRF, PC	SH		Demonstrate the assessment of socioeconomic status according to the Kuppuswamy scale and Prasad's scale.	P-II	DK	Demonstration	Viva, DOPS	NA	
	KS, CS, PBL, PRF, PC	SH		Demonstrate calculation of wealth index.	P-II	DK	Demonstration	Viva DOPS	NA	
	KS	K		Define the term "poverty", "Below Poverty Line" (BPL),	C-I	NK	1. Lecture 2. Small group	MCQ Viva Quiz	NA	

SI No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
							discussion			
	KS, CS, PBL, PRF, PC	KH		Compare the Multidimensional Poverty Index (MPI) with the Kuppuswamy scale and Prasad scale.	C-II	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	
	KS	K		Define the term "Social security".	C-I	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	
	KS, CS, PBL, PRF, PC	KH		Describe the relationship of social security to health and disease.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	MCQ, SAQ	
	KS, CS, PBL, PRF, PC	K		Outline the social security scheme of the Government of India.	C-I	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	MCQ, SAQ	
Hom UG CM I-T 4.8	KS	K	Health promotion, Behavioural health theories,	Define the term "health promotion"	C-I	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	MCQ, SAQ	

SI No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	KS, CS, PBL, PRF, PC, HO	KH	and Behaviour Change Communication (BCC)	Discuss the application of behaviour health theories in community medicine and homoeopathic practice at individual and community levels.	C-III	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	MCQ, SAQ	Psychology
	KS, CS, PBL, PRF, PC, HO	KH		Describe the Behavioural Model of Health Services and its application in Homoeopathic practice.	C-III	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	MCQ, SAQ	Psychology
	KS, CS, PBL, PRF, PC, HO	KH		Discuss the constructs and application of The Health Belief Model to predict health promotion behaviour.	C-III	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	MCQ, SAQ	Psychology
	KS, CS, PBL, PRF, PC, HO	KH		Describe individual motivation and readiness to change behaviour using the Transtheoretical Model/ Stages of Change.	C-III	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	MCQ, SAQ	Psychology

SI No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	KS, CS, PBL, PRF, PC, HO	KH		Examine the relations between an individual belief, attitude, intentions, behaviour, and perceived control over that behaviour using the theory of planned behaviour.	C-III	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	MCQ, SAQ	Psychology
	KS, CS, PBL, PRF, PC, HO	KH		Explain the stages in an individual's journey from lack of awareness to change of behaviour using the Precaution Adoption Process model.	C-III	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	MCQ, SAQ	Psychology
	KS, CS, PBL, PRF, PC, HO	KH		Explain how the Diffusion of Innovation theory addresses the new ideas or social practices in a community/society.	C-III	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	MCQ, SAQ	Psychology
	KS, CS, PBL, PRF, PC, HO	KH		Explain the application of the socioecological model in managing	C-III	MK	1. Lecture 2. Small group	MCQ Viva Quiz	MCQ, SAQ	Psychology

SI No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				/controlling diseases			discussion 3. Brain Storming			
	KS	K		Outline behaviour change technique	C-I	NK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	MCQ , SAQ	
Hom UG CM I-T 4.9	KS, CS, PBL, PRF, PC, HO	KH	Clinical, social-cultural, and demographic assessment of individual, family, and community (Medico social case workup)	Illustrate the steps in the clinical, social-cultural, and demographic assessment of individuals, families, and communities.	C-III	MK	Demonstration	DOPS	NA	Organon of Medicine
	KS, CS, PBL, PRF, PC, HO	SH		Perform the medico-social case workup and plan appropriate intervention	P-II	MK	Demonstration	DOPS	NA	Organon of Medicine
Hom UG	KS, CS, PBL, PRF, PC, HO	SH	Family Health	Create a family health record	P-II	MK	Demonstration		NA	Organon of Medicine

SI No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
CM I-T4.10			Record							

7.5. Nutrition for Community

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM I-T 5.1	KS	K	Nutrition: General concepts	Define the terms “nutrition”, “food”, “diet”, and “nutrients”.	C-I	NK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	NA	
	KS	KH		Classify nutrients,	C-II	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	LAQ SAQ MCQ Viva	
	KS	KH		Enumerate functions of food	C-II	MK	1. Lecture 2. Small Group	MCQ Viva Quiz	SAQ MCQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
							Discussion 3. Seminar		Viva	
	KS, CS, PBL, PRF, PC	KH		Discuss the significance of nutrition for individuals and community	C-II	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	SAQ MCQ	
	KS, PBL,	KH		Classify food based on origin, chemical composition, major function, and nutritive value.	C-II	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	LAQ SAQ MCQ	
	KS	KH		Describe common sources of nutrients.	C-II	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	LAQ SAQ MCQ Viva	
	KS, CS, PBL, PC	KH		Identify nutritional requirements by age and sex.	C-II	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	SAQ, MCQ	
	KS	KH		Define references for Indian men and women.	C-I	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	SAQ MCQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
							3. Seminar			
Hom UG CM I-T 5.2	KS, CS, PBL, PRF, PC	KH	Dietary standards: Recommended Dietary Allowance (RDA and Estimated Average Requirement (EAR)	Describe Recommended Dietary Allowance. Calculate RDA for children and adults.	C-II	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	SAQ, MCQ	
	KS, CS, PBL, PRF,PC	KH		Discuss the reference man and woman	C-II	DK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	SAQ MCQ	
	KS,	KH		Describe the estimated average requirement.	C-II	DK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	SAQ MCQ	
Hom UG CM I-T 5.3	KS	K	Energy	Recall the energy requirement for adults	C-I	DK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	SAQ MCQ	
Hom UG CM	KS, CS, PBL, PRF,	KH	Proximate Principles of food :	Describe the sources and functions of	C-II	MK	1. Lecture 2. Small Group	MCQ Viva Quiz	LAQ SAQ MC	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
I-T 5.4			Protein, Fats and Carbohydrate	protein, Fat & Carbohydrates.			Discussion 3. Seminar		Q viva	
	KS, CS, PBL, PRF, PC	KH		Identify the RDA and EAR of protein, Fat & Carbohydrate age-wise and sex-wise.	C-II	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	SAQ MC Q	
	KS, CS, PBL,	KH		Discuss the deficiency of protein, Fats and carbohydrates and its control.	C-II	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	SAQ MC Q Viva	Materia Medica, Practice of Medicine, Paediatrics
Hom UG CM I-T 5.5	KS	KH	Dietary fibre	Classify dietary fibers. Discuss the functions of dietary fiber and its advantages. Identify the dietary fiber in common foods.	C-II	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	LAQ SAQ MC Q	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM I-T 5.6	KS, CS, PBL, PRF, HO, PC	KH	Vitamins	Describe the sources, functions, dietary requirements, features /signs, and symptoms of deficiency and prevention of Vit A, Thiamin (B1), riboflavin (Vitamin B_2), Niacin (Nicotinic Acid and Nicotinamide) (Vitamin B_3),folic acid (folate or pteroyl glutamic acid) (Vitamin B_9), cyanocobalamin (Vitamin B_{12}), ascorbic acid (Vitamin C), Vitamin D, Vitamin E, Vitamin K.	C-II	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	LAQ SAQ MCQ Viva	Materia Medica, Practice of Medicine, Paediatrics

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM I-T 5.7	KS, CS, PBL, PRF, PC	KH	Minerals	Describe macronutrients and micronutrients.	C-II	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	SAQ MCQ	
	KS, CS, PBL, PRF, HO, PC	KH		Describe the sources, functions, dietary requirements, features /signs, and symptoms of deficiency & toxicity of calcium, Phosphorus, Iron, iron toxicity, iodine, iodine toxicity, fluoride, Zinc	C-II	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	LAQ SAQ MCQ Viva	Materia Medica, Practice of Medicine, Paediatrics
	KS, CS, PBL, PRF, HO, PC	KH								
	KS, CS, PBL, PRF, HO, PC	KH		Classify major foodstuffs into various food groups.	C-II	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	SAQ MCQ	
	KS, CS, PBL, PRF, HO, PC	KH		Identify and describe the nutritive relevance	C-II	MK	1. Lecture 2. Small Group	MCQ Viva Quiz	SAQ MCQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				of common food items used in the Indian diet with examples such as rice, wheat, maize, millets, ragi, bajra, pulses, animal foods, milk and milk products, eggs, common vegetables, roots and tubers, fruits and nuts, oils, sugar, jaggery,			Discussion 3. Seminar			
	KS, CS, PBL, PRF, PC	K KH		Define the term balanced diet. Suggest a balanced diet for age-wise and sex-wise.	C-I C-III	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	SAQ MCQ	
Hom UG CM I-T 5.8	KS, CS, PBL, PRF, HO, PC	KH	Nutritional requirements of special groups	Discuss dietary requirements for women during pregnancy and lactation. Plan a suitable nutritious diet for	C-II C-III	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	LAQ SAQ MCQ Viva	Materia Medica, Practice of Medicine, Paediatrics OBG

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				women during pregnancy and lactation.						
	KS, CS, PBL, PRF, HO, PC	KH		Discuss the age-related nutritional needs of infants, children, and adolescents.	C-II	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	LAQ SAQ MCQ	Materia Medica, Practice of Medicine, Paediatrics
	KS, CS, PBL, PRF, HO, PC	KH		Discuss the composition and advantages of breastfeeding.	C-II	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	LAQ SAQ MCQ	Materia Medica, Practice of Medicine, Paediatrics OBG
	KS, CS, PBL, PRF, HO, PC	KH		Discuss complementary feeding.	C-II	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	SAQ MCQ Viva	Materia Medica, Practice of Medicine, Paediatrics OBG
	KS, CS, PBL, PRF, HO, PC	KH		Discuss the importance of colostrum milk. Identify the myths related to colostrum milk.	C-II	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	SAQ MCQ Viva	Materia Medica, Practice of Medicine, Paediatrics OBG

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	KS, CS, PBL, PRF, HO, PC	KH		Counsel and educate the mother and community on best practices of colostrum and complementary feed.	A-I	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	Viva	Materia Medica, Practice of Medicine, Paediatrics OBG
	KS, CS, PBL, PRF, HO, PC	KH		Discuss dietary and nutritional requirements for geriatric groups.	C-II	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	ME Q SAQ MC Q Viva	Materia Medica, Practice of Medicine, Paediatrics OBG
	KS, CS, PBL, PRF, HO, PC	KH		Plan and appropriate diet advice for respective age groups based on local availability of food and, the economic status of the population.	A-I	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	LAQ ME Q SAQ MC Q Viva	Materia Medica, Practice of Medicine, Paediatrics
Hom UG CM I-T	KS, CS, PBL, PRF, HO, PC	KH	Nutritional problems of public health importance	Describe the epidemiology of malnutrition (both undernutrition and	C-II	MK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	LAQ ME Q SAQ	Materia Medica, Practice of Medicine,
	KS, CS, PBL, PRF, HO, PC	KH								

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
5.9				over nutrition), Protein Energy Malnutrition (PEM), nutritional anaemia, iodine deficiency disorder, Vitamin A, fluorine worldwide and in India.			3. Seminar		MCQ Viva	Paediatrics
	KS, CS, PBL, PRF, PC	KH		Discuss the types of malnutrition.	C-II	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	LAQ MEQ SAQ MCQ Viva	Materia Medica, Practice of Medicine, Paediatrics
	KS, CS, PBL, PRF, HO, PC	KH		Discuss the methods to measure malnutrition.	C-II	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	LAQ MEQ SAQ MCQ Viva	Materia Medica, Practice of Medicine, Paediatrics

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	KS, CS, PBL, PRF, HO, PC	KH		Discuss the prevention and control measures for malnutrition.	C-II	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	LAQ MEQ SAQ MCQ Viva	Practice of Medicine, Paediatrics
Hom UG CM I-T 5.10	KS, CS, PBL, PRF, HO, PC	KH	Milk and Meat	Discuss milk and meat hygiene.	C-II	DK	1. Lecture 2. Seminar	MCQ Viva Quiz	SAQ MCQ	
	KS, CS, PBL, PRF, HO, PC	KH		Describe the process of pasteurization. Explain various methods.	C-II	DK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	SAQ MCQ	
	KS, CS, PBL, PRF, HO, PC	KH		Discuss the various laboratory tests to ensure the safety of milk	C-II	NK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	NA	
Hom	KS, CS, PBL,	KH	Nutritional	Enumerate	C-II	MK	1. Lecture	MCQ	SAQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
UG CM I-T 5.11	PRF, HO, PC		assessment, surveillance, education and rehabilitation	objectives and methods of nutritional assessment			2. Small Group Discussion 3. Seminar	Viva Quiz	MC Q Viva	
	KS, CS, PBL, PRF, HO, PC	KH		Discuss various anthropometric measurements for nutritional assessment.	C-II P-I	MK	1. Lecture 2. Small Group Discussion 3. Demonstration	MCQ Viva Quiz	SAQ MC Q Viva	
	KS, CS, PBL, PRF, HO, PC	KH		Classify and interpret the nutritional status of infants, children, and adolescents based on anthropometric parameters. Describe the terms stunting, wasting, and underweight.	C-II	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	SAQ MC Q Viva	
	KS, CS, PBL, PRF, HO, PC	KH		Discuss the assessment of nutritional status	C-II	MK	1. Lecture 2. Small Group	MCQ Viva Quiz	SAQ MC Q	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				using clinical signs.			Discussion 3. Seminar		Viva	
	KS, CS, PBL, PRF, HO, PC	KH		Discuss the dietary assessment methods for nutritional status.	C-II	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	SAQ MCQ Viva	
	KS, CS, PBL, PRF, HO, PC	KH		Describe 24-hour recall and food frequency methods in nutritional assessment.	C-II	DK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	SAQ MCQ Viva	
	KS, CS, PBL, PRF, HO, PC	KH		Discuss nutritional surveillance and steps in nutritional surveillance.	C-II P-I	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	SAQ MCQ Viva	
	KS, CS, PBL, PRF, HO, PC	KH		Discuss assessment of the nutritional status using biochemical and laboratory methods.	C-II	MK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	SAQ MCQ Viva	
	KS, CS, PBL, PRF, HO, PC	K		Describe nutritional rehabilitation.	C-1	NK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	NA	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM I-T 5.12	KS	K	Food Safety, Food Hygiene, Food Processing, Food Additives, Food preservatives, Food Fortification, Food adulteration and food toxicants.	Define the terms "food safety", and "food hygiene".	C-1	NK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	NA	
	KS, CS, PBL, PRF, PC	KH		Describe food safety, food hygiene, and the five keys of WHO for safe food.	C-II	DK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	SAQ MCQ Viva	
	KS, CS, PBL, PRF, PC	KH		Describe food processing and methods of food processing. Discuss the objectives, advantages, and disadvantages of food processing. Enumerate a few common food processing techniques.	C-II	DK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	SAQ MCQ Viva	
	KS, CS, PBL, PRF, PC	KH		Describe food fortification. Identify the need	C-II	DK	1. Lecture 2. Small Group	MCQ Viva Quiz	SAQ MCQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				and benefits of food fortification. Debate the Government Program on food fortification (Food fortification initiative.)			Discussion 3. Seminar		Viva	
	KS, CS, PBL, PRF, PC	KH		Describe food additives. Classify food additives	C-II	DK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	SAQ MCQ Viva	
	KS, CS, PBL, PRF, PC	KH		Interpret the law related to food additives.	C-II	DK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	SAQ MCQ Viva	
	KS, CS, PBL, PRF, PC	KH		Describe the principles and methods of food preservation. Discuss the health effects of food preservatives.	C-II	DK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	SAQ MCQ Viva	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	KS, CS, PBL, PRF, PC	KH		Outline the Food Safety and Standards Authority of India (FSSAI)	C-II	NK	1. Lecture 2. Small Group Discussion 3. Seminar	MCQ Viva Quiz	NA	
	KS,	K		Describe Food toxicants	C-I	NK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	NA	
Hom UG CM I-T 5.13	KS,	K	National Nutritional Programs	Enumerate the salient features of the National Nutrition Policy of India.	C-I	NK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	NA	
	KS,	KH		Discuss the nutritional programmes of the Government of India such as Poshan Abhiyan, ICDS. Mid-day Meal Program.	C-II	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ	

7.6. Environment and Health including Medical Entomology

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM I-T 6.1	KS	K	Basic introduction to environmental health	Define the term "environment".	C-I	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	
	KS	KH		Discuss the environment as a determinant of health.	C-II	DK	1. Lecture 2. Small Group Discussion 3. Self-directed learning	MCQ Viva Quiz	SAQ MCQ	
	KS	K		Define the term "environmental health"	C-I	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	
	KS	KH		Enumerate the components of environmental health.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	MCQ	
Hom UG CM	KS	K	Water and Health	Define the terms "Safe and wholesome water", "improved drinking water", "water-borne diseases",	C-I	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
I-T 6.2				"water-washed diseases", "water-based diseases", "water-related diseases",						
	KS	KH		Describe the sources of water, their characteristics/qualities, advantages and disadvantages.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Describe the concept of safe and wholesome water.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Indicate the uses and daily requirements of water for various purposes for an individual and family.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Discuss the natural methods of water purification	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	KS	KH		Discuss the methods of water purification on a small-scale level (household water treatment) and safe storage and large-scale level (Community-based water supply and treatment)	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH		Describe the water quality criteria and standards	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH		Enumerate the guidelines of drinking water quality recommended by WHO.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH		Describe the components and steps of surveillance of drinking water quality.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH		Recognize fluoridation of	C-II	DK	1. Lecture	MCQ	SAQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				water			2. Small group discussion	Viva Quiz	MCQ	
	KS	KH		Describe the process of sanitation of the swimming pool.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Discuss the concept of water conservation	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Recognize the sources of water pollution	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH		Identify the salient features of the National Program for supplying drinking water and sanitation.: national rural drinking water program, Jal Jeevan Mission,	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	MEQ SAQ MCQ	
	KS	KH		Enumerate waterborne diseases and their prevention.	C-II	MK	1. Lecture 2. Small group	MCQ Viva Quiz	LAQ MEQ SAQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
							discussion		MCQ	
Hom UG CM I-T 6.3	KS	KH	Sanitation, Solid Waste, Human Excreta and Sewage disposal	Define the term "Sanitation",	C-I	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	
	KS	KH		Relate the importance of sanitation to health.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	MCQ	
	KS	K		Enumerate the steps of handwashing.	C-I	DK	1. Lecture 2. Small group discussion 3. Demonstration	MCQ Viva Quiz	SAQ MCQ	
Hom UG CM I-T 6.4	KS	KH	Disposal of Solid waste and wastewater	Define the terms "Solid Waste", "biodegradable waste", "non-biodegradable waste", "e-waste",	C-I	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	MCQ SAQ	
	KS	KH		Classify solid waste	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	KS	KH		Discuss the environmental impact of solid waste disposal	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	MCQ	
	KS	KH		Differentiate biodegradable and non-biodegradable waste	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Discuss the solid waste management in urban & rural areas from collection, sorting, storage, transportation, and disposal.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH		Discuss the types of disposals of solid waste with their advantages and disadvantages.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	KS	KH		Enumerate various methods of composting	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH		Recognize the laws related to solid waste management.	C-I	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	
	KS	KH		Describe the disposal methods of wastewater at the household level.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH		Describe solid waste management during disasters and special events.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH		Discuss the sanitary waste disposal	C-II	MK	1. Lecture 2. Small group	MCQ Viva Quiz	LAQ MEQ SAQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
							discussion		MCQ	
	KS	KH		Discuss the salient features of Swachh Bharat Abhiyan/ Mission.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
Hom UG CM I-T 6.5	KS	KH	Excreta Disposal	Enumerate the methods of disposal of human excreta.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH		Describe the sanitary barrier and hygiene barrier.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Differentiate between unsanitary and sanitary methods of excreta disposal.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Discuss the sanitary methods of excreta disposal in unsewered & sewered areas through the waste carriage (sewerage) system	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH		Discuss the principles behind functioning of	C-II	MK	1. Lecture 2. Small	MCQ Viva	SAQ MCQ	
	KS	KH								

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				sanitary latrines and other methods			group discussion	Quiz		
	KS	KH		Classify the sewerage system.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Enumerate the components & composition of the sewerage system	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH		Describe Biochemical Oxygen Demand and Chemical Oxygen Demand	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Describe the process involved in the sewerage treatment plant.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH		Enumerate the	C-II	MK	1. Lecture	MCQ	LAQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				effects/hazards of open defecation on health			2. Small group discussion	Viva Quiz	MEQ SAQ MCQ	
	KS	K		Recognize disposal of animal excreta.	C-I	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	
Hom UG CM I-T 6.6	KS	K	Bio-medical waste and its management	Define the terms “bio-medical waste”, “hospital waste”,	C-I	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Discuss the components of biomedical waste /	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Classify the types of hospital waste / hazardous waste as per WHO	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH		Discuss the consequences/types of hazards while handling bio-medical waste/hazardous waste.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH		Enumerate the steps in the	C-II	MK	1. Lecture	MCQ	LAQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				management of biomedical waste			2. Small group discussion	Viva Quiz	MEQ SAQ MCQ	
	KS	KH		Describe the various technologies and standards for the treatment of hospital waste/biomedical waste.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH								
	KS	K		Outline the bio-medical waste management rules as per the Government of India.	C-I	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	
Hom UGCMI-T 6.7	KS	K	Temperature and health	Define the term “thermal stress”	C-I	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	
	KS	KH		Describe the adverse effects of a hot environment on health including heat stroke, heat exhaustion, and others.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH		Discuss the prevention of health illness.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	KS, HO	KH		Enumerate the immediate first aid management of heat stroke. Discuss Homoeopathic management	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine
	KS	KH		Describe the adverse effects of a cold environment on health including hypothermia, frostbite, and other cold injuries.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine
	KS	KH		Discuss the prevention of cold illness.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Practice of Medicine
	KS, HO	KH		Enumerate the immediate first aid management of cold illness. Discuss Homoeopathic management	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine
	KS	KH		Discuss the adverse effects of a high-altitude environment.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine
	KS	KH		Enumerate prevention of	C-II	MK	1. Lecture	MCQ	LAQ	Practice of

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				adverse effects of high altitude.			2. Small group discussion	Viva Quiz	MEQ SAQ MCQ	Medicine
	KS, HO	KH		Enumerate the immediate first aid measures for managing the adverse effects of high altitude. Discuss Homoeopathic management	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine
Hom UG CM I-T 6.8	KS	KH	Noise and health	Discuss the health effects of noise	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine
Hom UG CM I-T 6.9	KS	KH	Environmental Pollution	Define environmental pollution. Enumerate various types of environmental pollution.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
Hom UG CM	KS	KH	Air and health	Discuss the acute and chronic ill effects of health due to air pollution.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
I-T 6.10	KS	KH		Describe the major causes of air pollution.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH		Describe the various components of air pollution.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH		Describe monitoring of air pollution and AQI	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH		Discuss the prevention and control of air pollution	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
Hom UGCM I-T 6.11	KS	KH	Ventilation and health	Describe the effects of inadequate ventilation on the health of the community	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH		Discuss the types of ventilation.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH		Enumerate the norms and	C-II	MK	1. Lecture	MCQ	LAQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				standards of adequate ventilation.			2. Small group discussion	Viva Quiz	MEQ SAQ MCQ	
Hom UGCM I-T 6.12	KS	KH	Radiation and health	Enumerate the sources of radiation exposure	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH		Discuss the types of radiation	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine
	KS	KH		Describe the effects of radiation on health.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine
	KS	KH		Describe the measure for prevention and protection against radiation exposure.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
Hom UGCM I-T 6.13	KS	KH	Light and Health	Classify types of light.	C-I	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	
	KS	KH		Discuss the biological effects of light	C-II	DK	1. Lecture 2. Small	MCQ Viva	SAQ MCQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
							group discussion	Quiz		
	KS	KH		Discuss the types of light pollution	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
Hom UG CM I-T 6.14	KS	KH	Housing and Health	Describe healthful housing.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Recognize the housing standards.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	MEQ SAQ MCQ	
	KS	KH		Enumerate the factors affecting healthful housing.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	MEQ SAQ MCQ	
	KS	KH		Enumerate the problems experienced in poor housing.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH		Describe the hazards of overcrowding	C-II	DK	1. Lecture 2. Small group	MCQ Viva Quiz	SAQ MCQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
							discussion			
	KS	KH		Describe the impact of climate change and the global greenhouse effect on health	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Practice of Medicine
Hom UG CM I-T 6.15	KS	K	Laws of environmental pollution	List the laws in dealing with environmental pollution in India	C-I	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	
Hom UG CM I-T 6.16	KS	K	Medical Entomology	Define the terms “medical entomology”, “arthropod”	C-I	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	Parasitology
	KS	K		Enumerate the arthropods of medical importance and the diseases transmitted by them.	C-I	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	MCQ	
	KS	KH		Describe the principles of vector control.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	MEQ SAQ MCQ	Parasitology

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	KS	KH		Enumerate the personal protective measures from vectors.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	MEQ SAQ MCQ	
	KS	KH		Describe integrated vector control	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	MEQ SAQ MCQ	Parasitology
	KS	KH		Describe the life cycle of vectors of public health importance (mosquitoes, house fly, sandflies, fleas, human lice, ticks, mites, scabies)	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	MCQ	Parasitology
	KS	KH		Describe the various vector control measures	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	MEQ SAQ MCQ	
	KS	K		Enumerate the diseases transmitted by rodents and, the mode of spread.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	MEQ SAQ MCQ	Practice of Medicine,
	KS	KH		Discuss the prevention and control measures of rodents.	C-II	MK	1. Lecture 2. Small group	MCQ Viva Quiz	MEQ SAQ MCQ	Parasitology

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/ Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
							discussion			
	KS	KH		Enumerate the hazards of injudicious use of insecticides.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Describe the salient features of the National Vector Borne Diseases Control Program.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	MEQ SAQ MCQ	

7.7. **Mental Health**

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM	KS	K	Mental Health	Define the term “mental health” as per	C-I	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
I- T 7.1				WHO.						
	KS	KH		Describe the concept of mental health.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Discuss the epidemiology of mental health disorders.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Compare the disease burden of mental health globally and in India.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Enumerate the early warning signs of mental health disorders	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Enumerate the types of mental disorders according to	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				ICD 10/11						
	KS	KH		Discuss the risk factors of mental health disorders.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS, , CS, PBL, PRF	KH		Describe prevention and control of mental health problems.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS, , CS, PBL, PRF	KH		Interpret mental illness and stigma.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Discuss the objectives, strategy, and components of the National Mental Health Programme.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	K		Recognize the Mental Health Care Act 2017.	C-I	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	
	KS	K		Recognize the	C-I	NK	1. Lecture	MCQ	NA	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				National Mental Health Policy of India			2. Small group discussion	Viva Quiz		
Hom UG CM I-T 7.2	KS	KH	Health problems due to tobacco, alcohol, and drug abuse.	Describe the disease burden due to tobacco, alcohol, and drug abuse in India and worldwide.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Enumerate tobacco, alcohol, related diseases.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH								
	KS, , CS, PBL, PRF	KH		Discuss prevention and control of tobacco and alcohol abuse in the community.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	K		Define the term “drug abuse” or	C-I	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				"substance use.						
	KS	KH		Enumerate the risk factors of drug abuse.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Enumerate the common classes of abused drugs in India.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Enumerate the adverse outcomes of drug abuse.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS, , CS, PBL, PRF	KH		Discuss the strategies for prevention and control of drug abuse.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	K		Recognise the Tobacco control legislation in India	C-I	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	
	KS	K		Discuss the objectives, and	C-I	DK	1. Lecture 2. Small group	MCQ Viva	SAQ MCQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				components of the National Tobacco Control Programme.			discussion	Quiz		
	KS, PC, CS, PBL, PRF	S		Prepare health education materials for prevention and control of tobacco and alcohol abuse in the community. Create awareness	P-II	MK	Demonstration	DOPS	NA	

7.8. **Reproductive, Maternal, Newborn, Child and Adolescent Health and related National Health Programmes**

Competenc	Domian	Mille	Content	Specific Learning	Bloom	Priorit	T-L M/M	Assessment	Integratio

y No	Competency	r		Objectives	/Gilbert	y		Formative	Summative	n
Hom UG CM I-T 8.1	KS,	KH	RMNCHA Introduction	Describe the components of RMNCHA	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Describe the current status of Reproductive, Maternal, Newborn, Child, and Adolescent health in India.	C-II	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	
Hom UG CM I-T 8.2	KS, PC, CS	KH	Maternal Health	Enumerate the major health problems of women	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	OBG
	KS, PC	KH		Discuss the objectives, frequency, and components of antenatal care.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	OBG
	KS, PC, PRF, PBL, HO, CS	KH		Describe history taking, and laboratory tests required to be conducted during antenatal checkup.	CII P-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	OBG
	KS, PC, PRF, PBL, CS, HO	KH		Describe the services provided in Antenatal Care.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	OBG
	KS, PC, PRF,	KH		Describe the intra-natal	C-II	MK	1. Lecture	MCQ	LAQ	OBG

Competency No	Domian Competency	Miller	Content	Specific Learning Objectives	Bloom /Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	PBL, CS			care.			2. Small group discussion	Viva Quiz	MEQ SAQ MCQ	
	KS, PC, PRF, PBL, CS	KH		Discuss domiciliary intranatal care. Describe the role of the birth attendant/midwife.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	OBG
	KS, PC, PRF, PBL, CS	KH		Enumerate the prerequisites for safe home delivery. Describe the Dos and Don'ts of home delivery.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	OBG
	KS, PRF, PBL,	KH		Identify the danger signs in the mother and child to be referred to FRU.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	OBG
	KS, PC, PRF, PBL, HO, CS	KH		Enumerate the objectives of post-natal care. Describe post-natal care. Discuss Homoeopathic approach	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	OBG
	KS, PC, PRF, PBL, HO, CS	KH		Identify the complications of the	C-II	MK	1. Lecture 2. Small	MCQ Viva	LAQ MEQ	OBG

Competency No	Domian Competency	Miller	Content	Specific Learning Objectives	Bloom /Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				postnatal period /puerperium.			group discussion	Quiz	SAQ MCQ	
	KS, PC, PRF, PBL, HO, CS	KH		Discuss high-risk pregnancies and their interventions. Discuss homoeopathic approach	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	OBG
	KS, PC, PRF, PBL, HO, CS	KH		Describe Essential Obstetric Care.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	OBG
	KS, PC, PRF, PBL, HO, CS	KH		Describe Emergency Obstetric Care.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	OBG
	KS, PC, PRF, PBL, HO, CS	KH		Enumerate the indicators of maternal health	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	OBG
	KS,	K		Define the term “maternal mortality rate” (MMR)	C-I	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	OBG,
	KS,	KH		Enumerate the maternal mortality indices. Compare the magnitude	C-II	DK	1. Lecture 2. Small group	MCQ Viva Quiz	LAQ MEQ SAQ	OBG

Competency No	Domian Competency	Miller	Content	Specific Learning Objectives	Bloom /Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				of MMR in different states of India.			discussion		MCQ	
	KS	KH		Enumerate the risk factors/causes of MMR in India.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	OBG
	KS, PC, PRF, PBL, HO, CS	KH		Enumerate the prevention of MMR.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	OBG
	KS, , PRF, PBL, CS	KH		Discuss the Maternal Death Review	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	OBG
	KS, PC, PRF, PBL, HO, CS	KH		Discuss verbal autopsy as a tool for the review of maternal and child deaths.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	OBG
Hom UG CM I-T 8.3	KS, PC, PRF, PBL, CS	KH	Gender issues and women’s empowerment	Discuss gender inequality in India.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	OBG
	KS, PC, PRF, PBL, HO, CS	KH		Enumerate the government policies and schemes for women's	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	OBG

Competency No	Domian Competency	Miller	Content	Specific Learning Objectives	Bloom /Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				empowerment.						
	KS, PC, PRF, PBL, HO, CS	KH		Enumerate the Maternal Health programs in India	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	OBG
	KS, PC, PRF, PBL, CS	K		Discuss the salient features of Janani Shishu Suraksha Karyakram (JSSK)	C-I	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS, PC, PRF, PBL, CS	K		Discuss the salient features of the Janani Suraksha Yojana (JSY)	C-I	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS, PC, PRF, PBL, CS	K		Discuss the salient features of Pradhan Mantri SurakshitMatritva Abhiyan (PMSMA)	C-I	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS, PC, PRF, PBL,CS	K		Discuss the salient features of SurakshitMatritvaAashwasan (SUMAN)	C-I	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
Hom UG CM I-T 8.4	KS, PC, PRF, PBL, HO, CS	KH	Care of Newborn	Enumerate the essential newborn care.	C-II	MK	1. Lecture 2. Small group	MCQ Viva Quiz	LAQ MEQ SAQ	Paediatrics

Competency No	Domian Competency	Miller	Content	Specific Learning Objectives	Bloom /Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
							discussion		MCQ	
	KS, PC, PRF, PBL, HO, CS	KHS		Examine newborns for malformation, injuries, and other risk factors.	C-II P-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Paediatrics
	KS, PC, PRF, PBL, HO, CS	KH		Describe routine care at birth, early neonatal care, immediate neonatal care,	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Paediatrics
	KS, PC, PRF, PBL, HO, CS	KH		Describe risk identification in the newborn	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Paediatrics
	KS, PC, PRF, PBL, HO, CS	KH		Discuss Kangaroo Mother Care (KMC)	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Paediatrics
	KS, PC, PRF, PBL, HO, CS	KH		Describe the procedure of breastfeeding. Enumerate the advantages of breastfeeding	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Paediatrics
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the principles of artificial feeding.	C-II	MK	1. Lecture 2. Small group	MCQ Viva Quiz	SAQ MCQ	Paediatrics

Competency No	Domian Competency	Miller	Content	Specific Learning Objectives	Bloom /Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
							discussion			
	KS,	KH		Define the term "neonatal mortality rate".	C-I	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Paediatrics
	KS, PC, PRF, PBL,CS	KH		Discuss the prevention of neonatal mortality.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Paediatrics
	KS,	K		Define the term "Perinatal mortality".	C-I	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	Paediatrics
	KS, PC, PRF, PBL,, CS	KH		Discuss the prevention of perinatal mortality.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	MEQ SAQ MCQ	Paediatrics
	KS, PC, PRF, PBL, CS	KH		Discuss the concept of home-based newborn care. Enumerate the components and advantages of home-based newborn care.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Paediatrics
	KS, PC, PRF, PBL, HO, CS	KH		Discuss Mother and Child Tracking System	C-II	DK	1. Lecture 2. Small	MCQ Viva	SAQ MCQ	

Competency No	Domian Competency	Miller	Content	Specific Learning Objectives	Bloom /Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				(MCTS)			group discussion	Quiz		
Hom UG CM I-T 8.5	KS,	K	Infant and Child Healthcare	Define the term "Infant Mortality Rate" (IMR), Under-Five Children mortality, and "Low Birth Weight Babies".	C-I	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Paediatrics
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the burden of infant mortality in India and globally.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Paediatrics
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the determinants of Infant mortality	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Paediatrics
	KS, PC, PRF, PBL, HO, CS	KH		Describe the preventive measures of infant mortality.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Paediatrics
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the burden of Low Birth Weight (LBW) babies in India and globally.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Paediatrics
	KS, PC, PRF, PBL, HO, CS	KH		Classify low birth weight babies.	C-II	MK	1. Lecture 2. Small group	MCQ Viva Quiz	SAQ MCQ	Paediatrics

Competency No	Domian Competency	Miller	Content	Specific Learning Objectives	Bloom /Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
							discussion			
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the causes of preterm births.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Paediatrics
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the management and preventive measures for LBW babies. Discuss the homoeopathic approach in managing LBW	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Paediatrics
	KS, PC, PRF, PBL, CS	KH		Discuss government initiatives to reduce low birth weight babies.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Paediatrics
Hom UG CM I-T 8.6	KS, PC, PRF, PBL, HO, CS	KH	Under-Five Children	Describe the objectives and functions of Under-Five Clinics (Well Baby Clinic).	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Paediatrics
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the magnitude, causes, prevention, and control of childhood infections. Discuss the	C-II	MK	1. Lecture 2. Small group discussion 3. Case	MCQ Viva Quiz	SAQ MCQ	Paediatrics

Competency No	Domian Competency	Miller	Content	Specific Learning Objectives	Bloom /Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				homoeopathic approach to managing childhood infections			study			
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the risk factors of congenital birth defects.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Paediatrics
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the prevention of birth defects.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Paediatrics
	KS, PC, PRF, PBL, HO, CS	KH		Identify the common childhood disabilities.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Paediatrics
	KS, PC, PRF, PBL, HO, CS	KH		Describe the prevention of childhood disabilities.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Paediatrics
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the cause of mortality among children and associated factors.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Paediatrics
	KS, PC, PRF, PBL, HO, CS	KH		Enumerate the factors associated with child mortality.	C-II	MK	1. Lecture 2. Small group	MCQ Viva Quiz	SAQ MCQ	Paediatrics

Competency No	Domian Competency	Miller	Content	Specific Learning Objectives	Bloom /Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
							discussion			
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the national strategies and interventions to reduce IMR and U5MR	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Paediatrics
Hom UG CM I-T 8.7	KS, PC, PRF, PBL, HO, CS	KH	Growth and Development of Child	Enumerate the various growth indicators and monitor the development of the child.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Paediatrics
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the features of the growth chart.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Paediatrics
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the importance of the growth chart.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Paediatrics
Hom UG CM I-T 8.8	KS, PC, PRF, PBL, HO, CS	KH	Adolescents Health	Describe the health issues of adolescents. Discuss the homoeopathic approach in managing the health issues of adolescents	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Paediatrics

Competency No	Domian Competency	Miller	Content	Specific Learning Objectives	Bloom /Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	KS, PC, PRF, PBL, HO, CS	KH		Discuss adolescent reproductive and sexual health problems. Discuss the homoeopathic approach to managing reproductive and sexual health problems	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Paediatrics
	KS, PC, PRF, PBL, HO, CS	KH		Enumerate adolescent-friendly health services.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Paediatrics
Hom UG CM I-T 8.9	KS, PC, PRF, PBL, HO, CS	KH	Reproductive health	Discuss the concept of reproductive health.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Paediatrics
	KS, PC, PRF, PBL, HO, CS	KH		Enumerate the 12 pillars of reproductive health	C-II		1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Paediatrics
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the burden of infertility in India	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Paediatrics
	KS, PC, PRF, PBL, HO, CS	KH		Describe the methods of Assisted	C-II	MK	1. Lecture 2. Small	MCQ Viva	SAQ MCQ	OBG

Competency No	Domian Competency	Miller	Content	Specific Learning Objectives	Bloom /Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				Reproductive Technology Discuss the homoeopathic approach to managing infertility			group discussion	Quiz		
	KS, PC, PRF, PBL, HO, CS	KH		Trace the Reproductive and Child health phases 1 and 2 in India.	C-I	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the essential features of the RMNCHA+ Approach	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
Hom UG CM I-T 8.10	KS, PC, PRF, PBL, HO, CS	KH	Immunisation	Discuss the child immunisation program and immunisation schedule.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Paediatrics

7.9. Geriatric Health and Health of Specially Abled Population

SI.	Domain	Miller	Content	Specific Learning	Bloom/Gilbert	Priority	T-L M/M	Assessment	Integration

No	Competency			Objectives				Formative	Summative	
Hom UG CM I-T 9.1	KS	K	Definitions	Define the terms “Aging Population”, “Geriatrics”, “Old Age”, “Elderly”, and “Gerontology”	C-I	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	
Hom UG CM I-T 9.2	KS, PC, PRF, PBL,	KH	Concept of Geriatric Services	Describe the concept of geriatric services.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS, PC, PRF, PBL, CS	KH		Discuss the demography and importance of the aging/elderly population in public health.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS, PC, PRF, PBL, CS	KH		Discuss the indicators or signs of aging	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS, PC, PRF, PBL,	KH		Discuss the physiological and structural changes of aging	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Physiology
	KS	K		Relate the theories of aging	C-I	NK	1. Lecture 2. Small group	MCQ Viva Quiz	NA	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
							discussion			
	KS, PC, PRF, PBL, HO, CS	KH		Describe the health problems of the elderly population, elderly females, and elderly males.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Practice of Medicine Materia Medica
	KS, PC, PRF, PBL, HO, CS	KH		Discuss early diagnosis, treatment, and prevention of the problems of the elderly. Discuss Homoeopathic approach in managing problames of elderly.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Practice of Medicine Materia Medica
Hom UG CM I-T 9.3	KS, PC, PRF, PBL, HO, CS	KH	Prevention and Control of Health Problems of the Elderly	Describe the guiding principles or approaches of elderly care.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Practice of Medicine
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the medical measures for prevention and control of health problems of the elderly.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS, PC, PRF, PBL, HO, CS	KH		Enumerate the social security measures for the elderly population.	C-I	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	KS, PC, PRF, PBL, HO, CS	K		Discuss the legal measures for the prevention and control of health problems of the elderly population	C-I	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	
	KS, PC, PRF, PBL, HO, CS	K		Discuss the engineering measures prevention and control of health problems of the elderly population.	C-I	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the role of the community, government, and NGOs in managing the health of the elderly.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
Hom UG CM I-T 9.4	KS, PC, PRF, PBL, HO, CS	KH	National Health Programs	Describe the salient features of the National Program for the Healthcare of Elderly (NPHCE)	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS, PC, PRF, PBL,	K		Trace the salient features of National Policy on older persons.	C-I	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	
Hom	KS, PC,	KH	End-of-Life	Discuss the end-of-life	C-II	DK	1. Lecture	MCQ	SAQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
UG CM I-T 9.5	PRF, PBL, HO, CS		Care and Palliative Care of the Elderly	care and Palliative care in the Elderly			2. Small group discussion	Viva Quiz	MCQ	
Hom UG CM I-T 9.6	KS, PC, PRF, PBL, HO, CS	KH	Comprehensive Geriatric Assessment	Discuss various geriatric assessment tools and Instruments.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
Hom UG CM I-T 9.7	KS, PC, PRF, PBL, HO, CS	KH	Disability / Healthcare of Specially abled population	Discuss disability as a public health problem.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the determinants of disabilities in India.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the epidemiology of disability	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS,	K		Classify disability according to the International Classification of	C-I	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				Functioning, Disability, and Health						
	KS	K		Discuss the salient features of "The Right to Health of Persons with Disabilities in India"	C-I	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	
	KS, PC, PRF, PBL, HO, CS	KH		Outline the community-based rehabilitation	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS, PC, PRF, PBL, HO, CS	KH		Analyse access to healthcare for the disabled population.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the role of Homoeopathy in Physical disability and Mental disability disorders.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	Organon of medicine and Materia Medica

7.10. **Demography, Vital Statistics, Family Welfare Planning and Contraception**

SI.	Domain	Miller	Content	Specific Learning	Bloom/Gilbert	Priority	T-L M/M	Assessment	Integration

No	Competency			Objectives				Formative	Summative	
Hom UG CM I-T 10.1 Hom UG CM I-T 10.2	KS,	K	Definition	Define the term "Demography",	C-I	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH	Demographic Cycle/Transition	Describe demographic cycle	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH		Discuss the demographic cycle and population dynamics in the Indian context.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS,	KH		Discuss the importance of demography in public health or community medicine.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH		Recognize demographic transition.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS, PBL,	KH		Examine the population trend of the world and	C-II	NK	1. Lecture 2. Small group	MCQ Viva Quiz	NA	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				India.			discussion			
	KS, PBL,	KH		Recognise the population trend state-wise in India.	C-II	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	
	KS, PBL,	KH		Discuss the causes and consequences of the population explosion in India.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS, PBL,	KH		Discuss demographic dividend in the Indian context.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS, PBL,	KH		Discuss population stabilization and population momentum.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
Hom UG CM I-T 10.3	KS	KH	Population statistics	Discuss Age and Sex composition	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Define the terms “Sex ratio”, “Child Sex Ratio”, “Sex Ratio at Birth”,	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	KS	KH		Compare the trends in the Sex ratio	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS, PBL	KH		Enumerate the causes, implications, and preventive measures for low sex ratio.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS, PBL	KH		Compare various types of population pyramids.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
Hom UG CM I-T 10.4	KS	KH	Demographic Profile	Discuss the demographic profile of India.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS, PBL	KH		Explain the impact of population growth on the health of the population.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH		Define the term “Density of	C-I	DK	1. Lecture 2. Small	MCQ Viva	SAQ MCQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				Population"			group discussion	Quiz		
	KS	KH		Discuss India's demographic achievement.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
Hom UG CM I-T 10.5	KS	KH	Vital Statistics	Discuss the term "Dependency Ratio" and its importance	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH		Identify the current literacy rate in India and its importance in healthcare.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	K		Define the terms "Birth Rate", "Death Rate"	C-I	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Discuss the interstate birth rate differentials in India and its determinants.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Discuss the growth	C-II	MK	1. Lecture	MCQ	SAQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				rate of the population in India.			2. Small group discussion	Viva Quiz	MCQ	
	KS, PBL,	KH		Calculate crude and specific mortality rates.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
Hom UG CM I-T 10.6	KS	K	Measures of Fertility	Define the terms "General Fertility Rate", and "Age Specific Fertility Rate".	C-I	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	OBG
	KS, PBL,	KH		Calculate the General Fertility Rate. Discuss its significance.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	OBG
	KS, PBL,	KH		Discuss the implications of the fertility rate.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	OBG
	KS	KH		Define the term "General Marital Fertility Rate".	C-I	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	OBG
	KS, PBL,	KH		Discuss the						OBG

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				implications of the general marital fertility rate.						
	KS	KH		Define the term "Age Specific Fertility Rate".	C-I	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS, PBL,	KH		Discuss the implications of the age-specific fertility rate.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	OBG
	KS	KH		Define the terms "Gross Reproduction Rate, Net Reproduction Rate, eligible couple, Couple Protection Rate, and their importance.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS, PBL, PC	KH		Discuss parity, birth interval, and child-women ratio.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	OBG
	KS, PBL,	KH		Calculate and	C-II	MK	1. Lecture	MCQ	LAQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				interpret demographic indices such as birth rate, death rate, and fertility rates.			2. Small group discussion	Viva Quiz	MEQ SAQ MCQ	
	KS, PBL, PC	KH		Enumerate the methods of population control.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	OBG
	KS,	KH		Discuss the salient features of National Population Policy 2000	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
Hom UG CM I-T 10.7	KS	KH	Vital Statistics: Sources of information /vital statistics	Enumerate the various sources of data or health information/ vital statistics	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS	KH		Describe the process of the census.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Enumerate the various data	C-II	MK	1. Lecture 2. Small	MCQ Viva	SAQ MCQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				collected in the census.			group discussion	Quiz		
	KS	KH		Discuss the key findings in the previous Census in India.	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Discuss Sample Registration System. Discuss the uses and importance of SRS in Healthcare.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Discuss the National Family Health Survey, its objectives, and its uses.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ SAQ MCQ	
	KS, PBL	KH		Compare the last two National Family Health Surveys.	C-II	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	NA	
	KS	KH		Describe National Sample Survey	C-II	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	KS	KH		Discuss the Civil Registration System.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS	KH		Discuss the National and International Disease Notification.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS, PBL	KH		Discuss disease registries.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS, PBL	KH		Discuss epidemiological surveillance data	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
	KS, PBL	KH		Discuss records of hospitals and health services.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
Hom UG CM I-T	KS	K	Family Welfare	Define the term “Family Planning”	C-I	NK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	OBG

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
10.8	KS, PBL, PC, CS	KH		Enumerate the objectives of family planning	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	OBG
	KS, PBL, PC, CS	KH		Discuss the salient feature of the National Family Welfare Program.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS, PBL, PC, CS	KH		Classify family planning methods	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	OBG
Hom UG CM I-T 10.9	KS, PBL, PC, CS, PRF	KH	Contraception	Describe the various family planning / contraceptive methods, and their advantages and disadvantages.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	OBG
	KS, PBL, PC, CS, PRF	S		Demonstrate the use of family methods using mannequins/model	P-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	Viva DOPS	OBG
	KS, PBL,PC, CS, PRF	S		Counsel and educate couples on	A-II	MK	1. Lecture 2. Small	MCQ Viva	SAQ MCQ	OBG

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				appropriate contraceptive methods			group discussion	Quiz		
Hom UG CM I-T 10.10	KS	K	MTP Act	Trace the MTP Act in India	C-I	DK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	OBG
	KS, PBL, PRF	KH		Discuss the features/provisions of the ACT including the amendments (1971 and 2021)	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	OBG
Hom UG CM I-T 10.11	KS, PBL, PRF	KH	PC PNDT Act	Discuss the Pre-Conception and Pre-Natal Diagnostic Techniques Act 1994 and its amendments. (PC PNDT Act)	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	OBG

7.11. **Communicable Diseases and Relevant National Health Programmes**

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM I-T 11.1	KS, PC, PRF, PBL, HO, CS	K	Definitions	Define the terms "Infection", "Infectious disease", "Infectious Agent", "incubation period", "infectivity", "Communicable diseases",	C-I	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	MCQ	
	KS, PC, PRF, PBL, HO, CS	KH		Differentiate between infection and infectious diseases	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
Hom UG CM I-T	KS, PC, PRF, PBL, HO, CS	KH		Differentiate between communicable diseases	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
11.2				and infectious diseases.						
	KS, PC, PRF, PBL, HO, CS	KH	Classification of Infectious diseases	Classify infectious diseases	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	
Hom UG CM I T 11.3	KS, PC, PRF, PBL, HO, CS	KH	General epidemiology of airborne diseases	Discuss the modes of transmission, measures of prevention, and control of airborne diseases.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	SAQ MCQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM I T 11.4	KS, PC, PRF, PBL, HO, CS	KH	Respiratory Infections (Chickenpox, Measles, Rubella, Mumps, Influenza, Diphtheria, Whooping Cough, Meningococcal Meningitis, Acute Respiratory Infections, SARS, COVIID19, Tuberculosis)	Describe the disease burden (worldwide and India) epidemiology, agent factors, host factors, clinical features, diagnosis, essential laboratory test, types, complications, mode of transmission, prevention, and control measures of Respiratory Infectious	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine, Organon of Medicine, Materia Medica Microbiology, Biochemistry

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the global and Indian strategies for the prevention and control of Respiratory infections at the community level	C-II	DK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	SAQ MCQ	
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the home-based care of Respiratory Infections	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS, PC, PRF, PBL, HO,	KH		Discuss the adverse reactions to	C-II	MK	1. Lecture 2. Small group	MCQ Viva Quiz	LAQ MEQ SAQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	CS			Respiratory Infections Vaccine			discussion 3. Seminar 4. Library Reference		MCQ	
	KS, PC, PRF, PBL, HO, CS	KH		Discuss homoeopathic prophylaxis and management of Respiratory infections at the community level	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine, Organon of Medicine, Materia Medica Microbiology , Biochemistry
	KS, PC, PRF, PBL, HO, CS	KH		Enumerate the risk factors for tuberculosis.	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine, Organon of Medicine, Materia Medica Microbiology

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
							Reference			, Biochemistry
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the epidemiological indices of Tuberculosis.	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine, Organon of Medicine, Materia Medica Microbiology , Biochemistry
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the case definitions for tuberculosis.	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine, Organon of Medicine,
	KS, PC, PRF, PBL, HO, CS	KH		Enumerate the treatment regimen of newly diagnosed,	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine, Organon of Medicine, Materia Medica

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				previously treated, drug-resistant tuberculosis cases.			4. Library Reference			Microbiology, Biochemistry
	KS, PC, PRF, PBL, HO, CS	KH		Discuss treatment outcome definition, MDR and XDR	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine, Organon of Medicine, Materia Medica Microbiology, Biochemistry
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the global and Indian strategies / public health measures for the prevention and control	C-II	DK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	SAQ MCQ	Practice of Medicine, Organon of Medicine, Materia Medica Microbiology, Biochemistry

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				of Tuberculosis.						
	KS, PC, PRF, PBL, HO, CS	KH		Discuss homoeopathic prophylaxis and management of Tuberculosis at the community level	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine, Organon of Medicine, Materia Medica Microbiology, Biochemistry
	KS, PC, PRF, PBL, HO, CS	KH		Trace the history of the National Tuberculosis Control Program	C-I	NK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	NA	
	KS, PC, PRF, PBL, HO,	KH		Discuss the National Tuberculosi	C-II	MK	1. Lecture 2. Small group	MCQ Viva Quiz	SAQ MCQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	CS			s Elimination Program			discussion 3. Seminar 4. Library Reference			
	KS, PC, PRF, PBL, HO, CS	KH		Describe Directly Observer Treatment (DOTs)	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the Revised National Tuberculosis Control Program.	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the diagnosis of tuberculosi	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				s under RNTCP			3. Seminar 4. Library Reference			
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the Nikshay program	C-II	DK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the relationship of Tuberculosis and HIV/AIDS	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
Hom UG CM I T 11.5	KS, PC, PRF, PBL, HO, CS	KH	Intestinal Infections (Polio Myelitis, Viral Hepatitis, Acute Diarrhoeal	Describe the disease burden (worldwide and India)	C-II	MK	1. Lecture 2. Small group discussion 3.	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine, Organon of Medicine, Materia

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
			Diseases, Cholera, Thyphoid Fever, Food Poisoning, Amoebiasis, Ascariasis, Shigellosis, Anthrax, Hookworm Infections, Dracunculiasis	epidemiology, agent factors, host factors, clinical features, diagnosis, essential laboratory test, types, complications, mode of transmission, prevention, and control measures of Intestinal Infections			Seminar 4. Library Reference			Medica Microbiology, Biochemistry
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the global and Indian strategies for the	C-II	DK	1. Lecture 2. Small group discussion 3.	MCQ Viva Quiz	SAQ MCQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				prevention and control of Intestinal Infections at the community level			Seminar 4. Library Reference			
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the home-based care of Intestinal Infections	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the adverse reactions to the Intestinal Infections	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS, PC,	KH		Discuss	C-II	MK	1. Lecture	MCQ	LAQ	Practice of

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	PRF, PBL, HO, CS			homoeopathic prophylaxis and management of Intestinal Infections at the community level			2. Small group discussion 3. Seminar 4. Library Reference	Viva Quiz	MEQ SAQ MCQ	Medicine, Organon of Medicine, Materia Medica Microbiology, Biochemistry
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the objectives and steps of Acute Flaccid Paralysis (AFP) surveillance.	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine, Organon of Medicine, Materia Medica Microbiology, Biochemistry
				Discuss the polio eradication strategy.	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine, Organon of Medicine,

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
							3. Seminar 4. Library Reference			Materia Medica Microbiology, Biochemistry
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the National Diarrheal Diseases Control Program	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine, Organon of Medicine, Materia Medica Microbiology, Biochemistry
	KS, PC, PRF, PBL, HO, CS	KH		Describe the steps of preparation of ORS.	C-II P-I	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine, Organon of Medicine, Materia Medica Microbiology, Biochemistry
	KS, PC, PRF,	KH		Discuss the causes of	C-II	MK	1. Lecture 2. Small	MCQ Viva	LAQ MEQ	Practice of Medicine,

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	PBL, HO, CS			food poisoning			group discussion 3. Seminar 4. Library Reference	Quiz	SAQ MCQ	Organon of Medicine, Materia Medica Microbiology, Biochemistry
	KS, PC, PRF, PBL, HO, CS	KH		Describe the investigation of an outbreak of food poisoning.	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine, Organon of Medicine, Materia Medica Microbiology, Biochemistry
Hom UG CM I T 11.6	KS, PC, PRF, PBL, HO, CS	KH	Arthropod Infections (Dengue Syndrome, Malaria, Lymphatic Filariasis, Zika Virus Disease)	Describe the disease burden (worldwide and India) epidemiology, agent factors, host	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine, Organon of Medicine, Materia Medica Microbiology, Biochemistry

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				factors, clinical features, diagnosis, essential laboratory test, types, complications, mode of transmission, prevention, and control measures of Arthropod Infections						
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the global and Indian strategies for the prevention and control of Arthropod	C-II	DK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	SAQ MCQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				Infections at the community level						
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the home-based care of Arthropod Infections	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the adverse reactions to Arthropod Infections Vaccine	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS, PC, PRF, PBL, HO, CS	KH		Discuss homoeopathic prophylaxis	C-II	MK	1. Lecture 2. Small group discussion	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine, Organon of Medicine,

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				and management of Arthropod Infections at the community level			3. Seminar 4. Library Reference			Materia Medica Microbiology, Biochemistry
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the Dengue &Malaria surveillance /epidemiological survey	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine, Organon of Medicine, Materia Medica Microbiology, Biochemistry
	KS, PC, PRF, PBL, HO, CS	KH		Describe the epidemiological indices for dengue: larval	C-II	DK	1. Lecture 2. Small group discussion 3. Seminar 4. Library	MCQ Viva Quiz	SAQ MCQ	Practice of Medicine, Organon of Medicine, Materia Medica Microbiology

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				survey, pupae survey,			Reference			, Biochemistry
	KS, PC, PRF, PBL, HO, CS	KH		Describe indices related to parasite: Annual Parasite Index, Annual Blood Examination Rate, Slide positivity rate, vector indices, larval surveys.	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine, Organon of Medicine, Materia Medica Microbiology , Biochemistry
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the objectives, features, and activities of	C-II	MK	1. Lecture 2. Small group discussion 3.	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine, Organon of Medicine, Materia

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				the National Vector Borne Disease Control Programme.			Seminar 4. Library Reference			Medica Microbiology, Biochemistry
	KS, PC, PRF, PBL, HO, CS	KH		Trace the history of the National Malaria Control Program in India.	C-II	NK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	NA	
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the salient features of the National Framework for Malaria Elimination in India.	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine, Organon of Medicine, Materia Medica Microbiology, Biochemistry

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the National Filariasis Control Program and NVBDCP.	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	SAQ MCQ	
Hom UG CM I T 11.7	KS, PC, PRF, PBL, HO, CS	KH	Zoonoses Diseases - Viral (Rabies, Yellow Fever, Nipah virus infection, Japanese Encephalitis, Ebola, Kyasanur Forest diseases) - Bacterial (Chikungunya, Brucellosis, Leptospirosis, Plague, Human Salmonellosis) - Rickettsial	Describe the disease burden (worldwide and India) epidemiology, agent factors, host factors, clinical features, diagnosis, essential laboratory test, types, complicatio	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine, Organon of Medicine, Materia Medica Microbiology , Biochemistry

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
			Disease (Rickettsial disease, Scrub Typhus, Murine Typhus, Q-Fever - Parasitic Zoonosis (Taeniasis, Hydatid Disease, Leishmaniosis)	ns, mode of transmission, prevention, and control measures of Zooneses Diseases						
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the global and Indian strategies for the prevention and control of Zooneses Diseases at the community level	C-II	DK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	SAQ MCQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the home-based care of Zooneses Diseases	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the adverse reactions to Zooneses Diseases Vaccine	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS, PC, PRF, PBL, HO, CS	KH		Discuss homoeopathic prophylaxis and management of Zooneses Diseases	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine, Organon of Medicine, Materia Medica Microbiology, Biochemistry

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				at the community level						
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the National Program for Prevention and Control of Japanese Encephalitis and NVBDCP.	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine, Organon of Medicine, Materia Medica Microbiology, Biochemistry
Hom UG CM I T 11.8	KS, PC, PRF, PBL, HO, CS	KH	Surface Infections (Trachoma, Tetanus, Leprosy, STD, YAWS, AIDS)	Describe the disease burden (worldwide and India) epidemiology, agent factors, host factors, clinical	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine, Organon of Medicine, Materia Medica Microbiology, Biochemistry

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				features, diagnosis, essential laboratory test, types, complications, mode of transmission, prevention, and control measures of Surface Infections						
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the global and Indian strategies for the prevention and control of Surface Infections at the	C-II	DK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	SAQ MCQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				community level						
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the home-based care of Surface Infections	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the adverse reactions to Surface Infections	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	
	KS, PC, PRF, PBL, HO, CS	KH		Discuss homoeopathic prophylaxis and manageme	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine, Organon of Medicine, Materia Medica

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				nt of Surface Infections at the community level			4. Library Reference			Microbiology, Biochemistry
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the National Program for Prevention and Control of Surface Infections	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine, Organon of Medicine, Materia Medica Microbiology, Biochemistry
Hom UG CM I-T 11.09	KS, PC, PRF, PBL, HO, CS	KH	Hospital Acquired Infections / Nosocomial infections.	Define the term “Nosocomial infection”	C-I	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	MCQ	Practice of Medicine,
	KS, PC,	KH		Describe	C-II	MK	1. Lecture	MCQ	LAQ	Practice of

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	PRF, PBL, HO, CS			the magnitude, impact, epidemiology-agent factors, Host /patient factors, and environmental factors for Nosocomial infections.			2. Small group discussion 3. Seminar 4. Library Reference	Viva Quiz	MEQ SAQ MCQ	Medicine, Organon of Medicine, Materia Medica Microbiology , Biochemistry
	KS, PC, PRF, PBL, HO, CS	KH		Enumerate the types of Hospital Acquired Infections	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine, Organon of Medicine, Materia Medica Microbiology , Biochemistry
	KS, PC, PRF,	KH		Discuss the prevention	C-II	MK	1. Lecture 2. Small	MCQ Viva	LAQ MEQ	Practice of Medicine,

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	PBL, HO, CS			and control of Hospital Acquired Infections.			group discussion 3. Seminar 4. Library Reference	Quiz	SAQ MCQ	Organon of Medicine, Materia Medica Microbiology , Biochemistry
	KS, PC, PRF, PBL, HO, CS	KH		Discuss the Universal Precautions .	C-II	MK	1. Lecture 2. Small group discussion 3. Seminar 4. Library Reference	MCQ Viva Quiz	LAQ MEQ SAQ MCQ	Practice of Medicine, Organon of Medicine, Materia Medica Microbiology , Biochemistry

7.12. **Occupational Health**

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM I-T 12.1	KS, CS, PBL, PRF, PC	K	Occupational Health	Define the term "Occupational Health"	C-I	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	MCQ, SAQ	
	KS, CS, PBL, PRF, PC	KH		Discuss the objectives of occupational health	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	LAQ MEQ MCQ, SAQ	
	KS, CS, PBL, PRF, , PC	KH		Classify Occupational Hazards	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	LAQ MEQ MCQ, SAQ	
	KS, CS, PBL, PRF, PC	KH		Discuss the magnitude of occupational health in India	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	MCQ, SAQ	
	KS, CS,	KH		Discuss the	C-II	MK	1. Lecture	MCQ	LAQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	PBL, PRF, PC			Engineering, Medical, Personal Protective Equipment, and Legislative measures of prevention and control of occupational diseases.			2. Small group discussion 3. Brain Storming	Viva Quiz	MEQ MCQ, SAQ	
	KS, CS, PBL, PRF, PC	KH		Discuss the scope and benefits of The Factories Act 1948.	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	LAQ MEQ MCQ, SAQ	
	KS, CS, PBL, PRF, HO, PC	KH		Discuss the scope and benefits of The ESI Act 1948	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	LAQ MEQ MCQ, SAQ	
Hom UG CM I-T 12.2	KS, CS, PBL, PRF, , PC	KH	Ergonomics	Define the term “Ergonomics”.	C-I	DK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	MCQ, SAQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	KS, CS, PBL, PRF, PC	KH		Discuss the principles and benefits of ergonomics.	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	LAQ MEQ MCQ, SAQ	
	KS, CS, PBL, PRF, PC	KH		Discuss sickness absenteeism.	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	LAQ MEQ MCQ, SAQ	
Hom UG CM I-T 12.3	KS, CS, PBL, PRF, PC	KH	Health Hazards in Agriculture	Describe the occupational health hazards in agriculture.	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	LAQ MEQ MCQ, SAQ	
	KS, CS, PBL, PRF, HO, PC	KH		Discuss the prevention and control of health hazards in agriculture Discuss Homoeopathic management	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	LAQ MEQ MCQ, SAQ	Organon Materia Medica
Hom	KS, CS,	KH	Health	Describe the biological,	C-II	MK	1. Lecture	MCQ	LAQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
UG CM I-T 12.4	PBL, PRF, PC		Hazards in Healthcare Professionals	ergonomic, chemical, physical, psychosocial, and emotional hazards in healthcare professionals.			2. Small group discussion 3. Brain Storming	Viva Quiz	MEQ MCQ, SAQ	
	KS, CS, PBL, PRF, PC	KH		Discuss the prevention and control of health hazards in healthcare professionals	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	LAQ MEQ MCQ, SAQ	
Hom UG CM I-T 12.5	KS, CS, PBL, PRF, HO, PC	KH	Health Hazards in other sectors	Describe the occupational health hazards in other sectors such as IT, Education, Mechanical, etc.	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	MCQ, SAQ	
	KS, CS, PBL, PRF, HO, PC	KH		Discuss the prevention and control of health hazards Discuss Homoeopathic management	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	LAQ MEQ MCQ, SAQ	
Hom UG	KS, CS, PBL, PRF,	KH	Occupational Diseases	Discuss the causes of occupational diseases	C-II	MK	1. Lecture 2. Small	MCQ Viva	MCQ, SAQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
CM I-T 12.6	PC						group discussion 3. Brain Storming	Quiz		
	KS, CS, PBL, PRF, HO, PC	KH		Discuss the risk factors and prevention of occupational cancers. Discuss Homoeopathic management	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	LAQ MEQ MCQ, SAQ	
Hom UG CM I-T 12.7	KS, CS, PBL, PRF,	KH	Occupational Lung Diseases	Enumerate the occupational lung diseases	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	MCQ, SAQ	
	KS, CS, PBL, PRF, HO, PC	KH		Discuss the causes, prevention, and control of pneumoconiosis, silicosis, asbestosis, anthracosis, and byssinosis. Discuss Homoeopathic management	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	LAQ MEQ MCQ, SAQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM I-T 12.8	KS, PBL, PRF,	KH	Occupational industrial accidents	Discuss the host, agent, and environmental factors of industrial accidents.	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	LAQ MEQ MCQ, SAQ	
	KS, PBL, PRF	KH		Enumerate the types of occupation injuries /accidents	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	LAQ MEQ MCQ, SAQ	
	KS, CS, PBL, PRF, PC	KH		Discuss the prevention of occupational industrial accidents.	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	LAQ MEQ MCQ, SAQ	
Hom UG CM I-T 12.9	KS, CS, PBL, PRF, HO, PC	KH	Occupational Dermatitis	Discuss the causes, management, prevention, and control of occupational dermatitis. Discuss Homoeopathic	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	LAQ MEQ MCQ, SAQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
				management						
Hom UG CM I-T 12.10	KS, CS, PBL, PRF, PC	KH	Lead poisoning	Discuss the risk factors, manifestation, prevention, and control of lead poisoning.	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	LAQ MEQ MCQ, SAQ	
Hom UG CM I-T 12.11	KS, CS, PBL, PRF, PC	KH	Occupational burnout and stress	Enumerate the causes of occupational burnout and stress.	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	LAQ MEQ MCQ, SAQ	
	KS, CS, PBL, PRF, HO, PC	KH		Discuss the prevention of occupational burnout and stress Discuss Homoeopathic management	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	LAQ MEQ MCQ, SAQ	
Hom UG CM I-T 12.12	KS, CS, PBL, PRF,	KH	Working condition	Discuss the strategies to improve working condition	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	LAQ MEQ MCQ, SAQ	

SI. No	Domain Competency	Miller	Content	Specific Learning Objectives	Bloom/Gilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
	KS, PBL, PRF, PC	KH		Discuss occupational health safety.	C-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	LAQ MEQ MCQ, SAQ	
Hom UG CM I-T 12.13	KS, CS, PBL, PRF, PC	S	Occupational health assessment	Assess occupation health conditions	P-II	MK	1. Lecture 2. Small group discussion 3. Brain Storming	MCQ Viva Quiz	LAQ MEQ MCQ, SAQ	

7.13. **Practical /Lab work / Field Visits / Demonstration:**

Competency No	Content	Competency/ Outcome	Entry Behaviour	Specific Learning Objectives	Learner Activity	Assessment
Hom UG CM I-P 13.1	Balanced Diet	• Explain the daily nutritional requirements for different age groups, genders, and	• Define a balanced diet and its components (carbohydrates, proteins, fats, vitamins, minerals, water,	• Interpreting deficiencies/disease caused by an imbalanced diet.	• **Plan a balanced diet**using locally available and culturally acceptable foods • **Interpret food**	• Problem-solving exercises • Viva • MCQs • OSPE

Competency No	Content	Competency/ Outcome	Entry Behaviour	Specific Learning Objectives	Learner Activity	Assessment
		physiological states (e.g., pregnancy, lactation, adolescence) • Correlate nutrition with public health programs like ICDS, Mid-Day Meal Scheme, and Poshan Abhiyaan.	and fiber).		**composition tables**and assess dietary adequacy using recall methods	
Hom UG CM I-P 13.2	RMNCHA+	Prepare a growth chart for a child	• Importance and application of growth chart.	• Plot growth chart • Interpret the growth chart	• Plot a growth for a minimum of 5 children. • Interpret growth charts. • Enumerate the uses of the growth chart.	• MCQ • Checklist • Viva • OSPE • Problem-solving exercises
Hom UG CM I-P 13.3	Menstrual Hygiene	Awareness of various menstrual hygiene practices and products	• Discuss the Hygiene practices during Menstruation	• Explain various menstrual hygiene practices. • Identify menstrual hygiene products, mention their	• Identify menstrual hygiene products. • Conduct a menstrual	• MCQ • Checklist • Viva

Competency No	Content	Competency/ Outcome	Entry Behaviour	Specific Learning Objectives	Learner Activity	Assessment
				advantages and disadvantages	hygiene health education program	
Hom UG CM I-P 13.4	Family Planning and Contraception	Orientation about appropriate family methods at the community level using Information, Education, and communication material.	Describe the contraceptive types and devices.	• Discuss the Scope, objectives, and benefits of family planning. • Differentiate Types of contraceptives • Describe the use of contraceptive devices.	• Identification of contraceptive devices • Preparing Information, Education, and communication material about family planning	• Viva • MCQs • Spot Identification
Hom UG CM I-P 13.5	Water Treatment Plant	Orientation about the water treatment plants in real-world settings.	Describe the stages and methods of water purification at large-scale water treatment plant	• To observe the equipment and procedures used at water treatment plant • To learn about the different stages of water purification	• To write a report of the field visit	• Report Writing
Hom UG CM I-P 13.6	Milk Pasteurization Plant	Orientation about the Milk Pasteurization Process, and food safety – Quality measures in the dairy industry	Describe the method of Milk Pasteurization	To witness the entire milk production process, from raw milk to the final product, and gain a practical understanding of the steps involved.	• To write a report of the field visit	• Report Writing
Hom UG CM I-P 13.7	Primary Health Centre/Sub-	Understand the organization of		• To observe services like outpatient care,	• To write a report of the field visit	• Report Writing

Competency No	Content	Competency/ Outcome	Entry Behaviour	Specific Learning Objectives	Learner Activity	Assessment
	Centre/Anganwadi Centre	Government Healthcare Delivery Centre facilities, and staff roles.		maternal and child health, immunization, and health promotion. • To learn respective centres' role in providing healthcare to rural or underserved areas. • To witness practical aspects of ANC, such as examination, lab tests, and counselling. • To interact with patients and observe their health-seeking behaviors.		
Hom UG CM I-P 13.8	Infectious Hospital Visits	Observing healthcare professionals protocols for infection prevention and control	• Recall Hospital – acquired infectious diseases • Recall the hand-wash steps	• To witness hand wash hygiene, proper use of personal protective equipment (PPE), and environmental disinfection. • To understand the Bio-Medical waste management system	• To write a report of the field visit	• Report Writing

Competency No	Content	Competency/ Outcome	Entry Behaviour	Specific Learning Objectives	Learner Activity	Assessment
				in the Hospital set-up		
Hom UG CM I-P 13.9	Industrial Units	Understanding the health consequences of Occupational Hazards and its prevention measures	Recall the Occupational Diseases inthe Physical and Psychological areas	• To gain knowledge of physical injuries, psychological trauma, and long-term health problems among industrial employees	• To write a report of the field visit	• Report Writing
Hom UG CM I-P 13.10	Geriatric or Disability – Rehab Centre visit	To sensitize the challenges faced by the Geriatric or Disabled patients	Recall important health issues in Geriatric or Disabled patients	• Understand the physical, mental, and emotional challenges of residents. • Learn the specific medical and nutritional needs. • Gain insight into the social isolation and loneliness experienced.	• To write a report of the field visit	• Report Writing
Hom UG CM I-P 13.11	Milk Adulteration	Demonstrate the use of the Lactometer to measure the water content in Milk	• Describe food adulteration • Name one common adulterant in Milk • Remember the household	• Perform the correct technique of assessing Milk adulteration. • Interpret the results of the experiments to determine the milk adulterations.	• Perform the procedure as per the methodology • Make entries into the pathology practical record	• MCQ • Checklist • Viva • OSPE

Competency No	Content	Competency/ Outcome	Entry Behaviour	Specific Learning Objectives	Learner Activity	Assessment
			methods for identifying milk adulteration.			
Hom UG CM I-P 13.12	Nutritional Assessment	Explain the significance in estimating body mass index, body fat percentage and nutritional status.	• Recall the interpretation of BMI as per WHO guidelines • Recall the definitions of Malnutrition, Overweight, and Obesity in Children and Adults	To demonstrate the use of adult and infant weighing scales, height measurement tools, Body Mass Index (BMI) calculation, Mid-Upper Arm Circumference (MUAC) tape, and skinfold calliper for assessing nutritional status in community health	• To use of adult weighing scale and an infant weighing scale to record the weight accurately. • To measure the standing height in adult and recumbent length in Infants • To calculate BMI and interpretation as per the WHO guidelines. • To measure MUAC accurately. • To measure the body fat percentage using Hyperdense	• Problem-solving exercises • Viva • MCQs • OSPE

Competency No	Content	Competency/ Outcome	Entry Behaviour	Specific Learning Objectives	Learner Activity	Assessment
					Skinfold Caliper.	
Hom UG CM I-P 13.13	Water Quality & Purification	• Compare results with BIS/WHO standards for drinking water quality. • Recognise importance of water quality monitoring in community settings	• Explain the basic principles of water purification at community and household levels. • Recall any two pollutants of water.	• To check Water Quality: By demonstrating the use of a Total Dissolved Solids (TDS) meter and Chloroscope • To demonstrate small-scale water purification methods (Water Purifier Apparatus, Choloscope, and Horrocks Meter Apparatus)	• Measure total dissolved solids in drinking water with a TDS Meter. • Test for free residual chlorine using a Chloroscope. • Demonstrate the Water Purifier Apparatus (gravity filter, RO, UV units). • Conduct the Horrocks Test to determine the bleaching powder dosage for water disinfection.	• MCQ • Checklist • Viva • OSPE • Problem-solving exercises
Hom UG CM I-P 13.14	Air Quality	Interpret barometric readings and understand their influence on weather	Recall safe and hazardous air quality levels as per CPCB or WHO standards.	• To demonstrate the use of the Barometer and Air Quality Meter, and to understand their relevance in assessing	• Demonstrate the use of a Barometer to measure atmospheric pressure.	• MCQ • Checklist • Viva

Competency No	Content	Competency/ Outcome	Entry Behaviour	Specific Learning Objectives	Learner Activity	Assessment
		conditions and respiratory health.		environmental conditions and their impact on public health.	• Use an Air Quality Meter to assess the gaseous pollutants.	

8. Teaching learning methods

Lectures (Theory)	Non-lectures (Practical/Demonstrative)
Lectures	Practical /Lab work
Small group discussion	Field Visits
Integrated lectures	Community-Based Activity
Structured interactive sessions	Clinical /Hospital Posting
	Problem based discussion
	Case based learning
	Tutorials
	Seminars
	Video clips
	Assignments

9. Details of assessment

9.1. Overall Scheme of Assessment (Summative)

Sr. No	Professional Course	Term I (1-6 Months)		Term II(7-12 Months)		
1	Third Professional BHMS	PA I (end of 3 months)	TT I (end of 6 months)	PA II (end of 9 months)	FUE (end of 12 months)	
		10 Marks Viva	50 Marks Practical/ Viva 1. Viva voce -25 marks 2. Practical– 25 marks*	10 Marks Viva	100 marks theory	100 marks (Clinical/practical+ Viva+ IA)

PA: Periodical Assessment; TT: Term Test; FUE: Final University Examinations; IA: Internal Assessment

*** Details of practical assessment at TERM I (OSPE Stations will remain the same as point 9.6):**

Sr. No.	Headings	Total Marks	Time
1.	**Viva Voce**	**25 Marks**	
2.	**Experiment: (One)** i. Measuring anthropometric measurements of a simulated patient ii. Measuring specified adulteration using appropriate Instruments (Water & Milk Adulteration)	5 marks × 1 Experiment = **5 marks**	**15 mins**
3.	**Case Study: (One)** i. Calculating Morbidity, Mortality, and Disability Rate ii. Plotting of the Growth Chart iii. Identifying infectious disease from the given Case description iv. Identifying Deficiency disease from the given Case	5 marks × 1 Case Study = **5 marks**	**15 mins**

	description		
4.	**Spotting (5):**	**10 Marks**	**15 mins**
	ANY FIVE SPOTTINGS (Health Definitions/ Disease Definitions/ Vital Statistics Formulae/ Behavioural Health/ Food spots & RDA values/ Food Nutritional values/ Food Safety & Adulteration tests)	2 marks X 5 Spotters = 10 marks	3 minutes for each spotting=15 minutes
5.	Journal or Practical Record Book	**5 marks**	
Total		**50 marks**	

9.2. Number of papers and Marks Distribution for Final University Examination (FUE)

Sr. No.	Course Code	Papers	Theory	Practical/ Clinical	Viva Voce	Internal Assessment*	Grand Total
1	HomUG-CM I	01	100 marks	50 marks**	40 marks	10 marks (Marks of PA I + TT I + PA II)	200marks

***Method of Calculation of Internal Assessment Marks for Final University Examination:**

Marks of IA- **(**Marks of PA-1 + Marks of TT + Marks of PA-2) / 70 X 10

**** Details of practical assessment at FUE (OSPE Stations will remain the same as point 9.6):**

Sr. No.	Headings	Total Marks	Time
1.	**Experiment / Case Study: (One) Examples** iii. Measuring anthropometric measurement of simulated patient iv. Segregation of Bio Medical waste v. Measuring specified adulteration using appropriate Instruments (Water & Milk Adulteration)	5 marks × 1 Experiment = 5 marks	**15 mins**
2.	**Case Study: (One)** v. Plotting of the Growth Chart vi. Identifying infectious disease from the given Case description vii. Identifying Deficiency disease from the given Case description	5 marks × 1 Case Study = 5 marks	**15 mins**
3.	**Spotters (5)** ANY FIVE SPOTTERS (Instruments/ Equipment/ Specimens / Models)- •Identify the spot •List the characteristic features/ utility of the spot	3 marks X 5 Spotters = 15 marks	**3 minutes for each spotting=15 minutes**

4.	**Spotting (5):** ANY FIVE SPOTTINGS (Food Items / Family Planning contraceptive devices/growth cycle of infective agents / Formula of vital statistics/calculations of BMI percentile growth charts)- •Identify the spot •List the characteristic Features/ utility of the spot	3 marks X 5 Spotters = 15 marks	3 minutes for each spotting=15 minutes
5.	Journal or Practical Record Book	10 marks	
6.	**Viva-voce**	40 marks	
7.	Internal assessment (IA)	10 marks	
Total		**100 marks**	

9.3. Paper Layout

Summative assessment(FUE):

Theory- 100 marks

MCQ	**10 marks**
SAQ	**40 marks**
LAQ	**50 marks**

9.4. Theme-wise distribution of questions for theory paper:

Theme	Topics	Term	Marks	MCQ's	SAQ's	LAQ's
A.	Fundamental Concepts of Community Medicine, Public Health, and History of Community Medicine.	I	0	0	0	0
B.	Concepts of Health, Disease Causation & Prevention and Homoeopathy	I	11	01	0	10
C.	Community Health, Healthcare of the Community, and Healthcare Delivery Systems in India	I	06	01	05	0
D.	Social and Behavioural Health and its Relevance to Homoeopathy	I	05	0	05	0
E.	Nutrition for Community Health	I	16	01	05	10
F.	Environment and Health	I	16	01	05	10
G.	Mental Health	II	06	01	05	0
H.	Reproductive, Maternal, Newborn, Child and Adolescent Health and related National Health Programmes	II	11	01	0	10
I.	Geriatric Health and Health of Specially Abled Population	II	01	01	0	0
J.	Demography, Vital Statistics, Family Welfare Planning and Contraception	II	06	01	05	0
K.	Communicable Diseases and Relevant National Health Programmes	II	16	01	05	10
L.	Occupational Health	II	06	01	05	0

9.5. Question paper blueprint

A Question Serial Number	B Type of Question	Question Paper Format (Refer table 8.16 for themes)
Q1	Multiple choice Questions (MCQ) 10 Questions 1 mark each All compulsory Must know part: 6 MCQ Desirable to know: 2 MCQ. Nice to know:2MCQ	1. Theme B 2. Theme C 3. Theme E 4. Theme F 5. Theme G 6. Theme H 7. Theme I 8. Theme J 9. Theme K 10. Theme L
Q2	Short answer Questions(SAQ) 8Questions 5 Marks Each All compulsory Must know part:7 SAQ Desirable to know: 1 SAQ Nice to know: Nil	1. Theme C 2. Theme D 3. Theme E 4. Theme F 5. Theme G 6. Theme J 7. Theme K 8. Theme L
Q3	Long Answer Questions (LAQ) 5 Questions 10 Marks each All compulsory	1. Theme B 2. Theme E 3. Theme F 4. Theme H 5. Theme K

9.6. OSPE STATIONS:

STATION # 1: EXPERIMENT (Observed Station)

For Organizer:
TOPIC SPECIFICATION: Assessing Practical Skills
SAMPLE MATERIAL: Instruments or materials required to perform the Experiment

For Candidate:
Max. Marks: 5 Marks
Time Allowed: 15 minutes
Task:

1. Demonstrating the Practical skills in the given Experiment
2. Writing the results and conclusion of the experiment

For Examiner:

Sr. No.	Key	Allotted Marks
1.	Assessing Practical Skills as per the checklist (procedure)	3
2.	Assessing the Result section as per the checklist (quality of written result)	2

STATION # 2: CASE STUDY (Unobserved Station)

For Organizer:
TOPIC SPECIFICATION: Case-based identification
SAMPLE MATERIAL: Case study (Caselets)

For Candidate:
Max. Marks: 5 Marks
Time Allowed: 15 minutes
Task:

1. Assessment of the Problem: Identification of Disease& Deficiency / Disease & Infectious Agent
2. Result & Conclusion: Preventive Approach / Dietary or Community Interventions / Assessment Parameters

For Examiner:

Sr. No.	Key	Allotted Marks
1.	Assessing the Problem (checklist for correct diagnosing and identifying the factors)	3
2.	Assessing the Result section as per the checklist (quality of written solutions to identified Problem)	2

STATION # 3: SPOTTERS (Unobserved Station)

For Organizer:
TOPIC SPECIFICATION: Identification of the spotters and its characteristics
SAMPLE MATERIAL: Instruments/ Equipment/Specimens / Models

For Candidate:
Max. Marks: 15 Marks
Time Allowed: 15 minutes
Task:
1. Identify the spot
2. List the characteristicfeatures/ utility of the spot

For Examiner:

Sr. No.	Key	Allotted Marks
1.	Assessment of the identification of the spotter (correct answer key)	1
2.	List the characteristic features/utility of the spot (based on the checklist)	2

STATION # 4: SPOTTING (Unobserved Station)

For Organizer:
TOPIC SPECIFICATION: Identification of the spotting and its characteristics
SAMPLE MATERIAL: Food Items / Family Planning contraceptive devices/growth cycle of infective agents / Formula of vital statistics/calculations of BMI percentile growth charts

For Candidate:
Max. Marks: 15 Marks
Time Allowed: 15 minutes
Task:

3. Identify the spot
4. List the characteristicfeatures/ utility of the spot

For Examiner:

Sr. No.	Key	Allotted Marks
1.	Assessment of the identification of the spot (correct answer key)	1
2.	List the characteristic features/utility of the spot (based on the checklist)	2

10. List of recommended Books

Basic Books

- Bhalwar, R. (2024). *Textbook of community medicine*. Wolters Kluwer India Pvt Ltd.
- Kadri, A. M. (2024). *IAPSM's Textbook of Community Medicine*. Jaypee Brothers Medical Publishers.
- Lal, S., Adarsh, P., & Pankaj. (2024). *Textbook of community medicine: Preventive and social medicine*. CBS.
- Park, K., & Park, K. (2024). *Preventive and social medicine*. m/s. BanarsidasBhanot, Jabalpur.
- Gupta, M. C., & Mahajan, B. K. (2013). *Textbook of preventive and social medicine*. New Delhi: Jaypee Brothers, 2005. Fourth edition
- Suryakantha, A. H. (2009). *Community Medicine:(with Recent Advances)*. Jaypee Bros
- Hahnemann .S, *Organon of Medicine*,6th Edition, B.Jain Publishers, New Delhi, Reprint 2010.

Reference

- Kishore, J. (2023). National health programs of India: national policies and legislations related to health. *Peer-reviewed, Official Publication of the Indian Academy of Geriatrics*, 165.
- Detels, R., Beaglehole, R., Lansang, M. A., & Gulliford, M. (2011). *Oxford textbook of public health*. Oxford University Press.

- Bhalwar, R., Vaidya, R., Tilak, R., Gupta, R., & Kunte, R. (2009). *Textbook of Public Health and Community Medicine AFMC*. Pune WHO India Country Office.
- Kothari, C. R. *Research methodology: Methods and techniques*. New Age International.
- Rao NSN, Murthy NSN, *Applied Statistics in Health Sciences*, JP Brothers Medical Publishers.
- Hersh, W. R., & Hoyt, R. E. (2018). *Health Informatics: Practical Guide* Seventh Edition. Lulu. com.
- Stuart Close, The Genius of Homoeopathy, Lectures and Essay on Homoeopathic Philosophy B. Jain Publishers Pvt. Ltd.

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COMPETENCY BASED DYNAMIC CURRICULUM FOR

THIRD BHMS PROFESSIONAL COURSE

(Applicable from Batch 2022-2023 onwards for 5 years or until further notification by National Commission for Homoeopathy whichever is earlier)

(Yoga for Health Promotion)

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Subject: Yoga for Health Promotion

Subject Code: Hom UG-YOGA III

Program Outcome (PO): The student shall learn the application of Yoga and its philosophy. Special emphasis should be given on practical methods and clinical yoga therapy.

Course Outcome (CO): The student shall become competent enough in the application of Yoga in various disease conditions.

Teaching Hours: 20 hours of class (including Theory and Practical)

Course content: The topic and respective allotted hours are as follows:

S.No.	TOPIC	No. of hrs.
1.	Advance yoga practices	02 hrs
2.	Yoga therapy and application	02 hrs
3.	Teaching and practical skills	02 hrs
4.	Yogic management of lifestyle disorders	02 hrs
5.	Importance of yoga in homeopathy	05 hrs
6.	Indian culture and historical concept of yoga	02 hrs
7.	Concept of Prana and Vital force	01 hrs
8.	Guided meditation sessions	01 hrs
9.	Understanding the core concepts and principles of yoga	02 hrs
10.	Practical application of yoga principles in the context of homeopathic treatment	01 hrs

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