REGULATIONS AND CURRICULUM GOVERNING

MD IN DERMATOLOGY, VENEREOLOGY & LEPROSY PROGRAM

(2024-25)

Name of the Constituent Unit/Centre: Yenepoya Medical College



YENEPOYA

Deemed to be University

Deralakatte, Mangalore, Karnataka.

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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

NOTIFICATION – 34-ACM/2019 dtd. 20.02.2019

Sub:- Implementation of Competency Based Medical Education PG Curriculum

Ref. : Resolution of the Academic Council at its 34th Meeting held on 08.02.2019 vide Agenda 33

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The Academic Council at its 34th Meeting held on 08.02.2019 and subsequently the 45th meetings of Board of Management held on 09.02.2019 have accepted the proposal for implementation of Competency Based Medical Education (CBME) for the PG Curricula of the following programs as per the MCI Norms.

1. MD in Pathology
2. MD in General Medicine
3. MD in Anaesthesiology
4. MD in Paediatrics
5. MD in Respiratory Medicine
6. MD in Radio-diagnosis
7. MD in Anatomy
8. MD in Physiology
9. MD in Biochemistry
10. MD in Microbiology
11. MD in Pharmacology
12. MD in Forensic Medicine
13. MD in Psychiatry
14. MD in Dermatology
15. MD in Community Medicine
16. MS in General Surgery
17. MS in OBG
18. MS in Otorhinolaryngology
19. MS in Ophthalmology
20. MS in Orthopaedics

This revised curriculum shall come into effect from the academic year 2019-2020 onwards.

REGISTRAR

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COMPETENCY BASED POSTGRADUATE TRAINING PROGRAMME FOR MD IN DERMATOLOGY,

VENEREOLOGY & LEPROSY

Preamble:

The purpose of PG education is to create specialists who would provide high quality health care and advance the cause of science through research & training.

A post graduate specialist having undergone the required training should be able to recognize the health needs of community, should be competent to handle effectively the medical problems and aware of recent advances pertaining to the discipline. The PG student should acquire basic skills in teaching medical/para-medical students. The student should be able to counsel patients and relatives in infectious diseases like HIV/AIDS, STDs, coetaneous tuberculosis, leprosy and any event of serious illness or death.

The purpose of this document is to provide teachers and learners illustrative guidelines to achieve defined outcomes through learning and assessment. This document was prepared by various subject-content specialists. The Reconciliation Board of the Academic Committee has attempted to render uniformity without compromise to purpose and content of the document. Compromise in purity of syntax has been made in order to preserve the purpose and content. This has necessitated retention of "domains of learning" under the heading "competencies".

SUBJECT SPECIFIC OBJECTIVES

At the end of 3 years of post graduate training in Dermatology,

Venereology & Leprosy:

- Student should have knowledge of basic sciences (Anatomy, Physiology, Biochemistry, Microbiology, Pathology and Pharmacology) as applied to dermatology. The student should acquire in-depth knowledge of his subject including recent advances. The student should be fully conversant with the bedside procedures (diagnostic and therapeutic) and having knowledge of latest diagnostics and therapeutics available.
- Student should have acquired practical and procedural skills related to the subject.
- Critically evaluate, initiate investigation and clinically manage cases in Dermatology, Venereology and Leprosy with the help of relevant investigations.
- Should plan and advise measures for the prevention and rehabilitation of patients with various dermatological conditions.
- Able to ensure the implementation of National Health Programmes, particularly in sexually transmitted diseases (STD) and leprosy.
- Acquire training skills in research methodology, professionalism, attitude and communication skills, as below:

- Student must know basic concepts of research methodology, plan a research project, consult library and online resources, has basic knowledge of statistics and can evaluate published studies.

- Should be able to practice the specialty of dermatology ethically.
- Recognize the health needs of patients and carry out professional obligations in keeping with principles of National Health Policy and professional ethics.
    - teaching skills in the subject
        - Student should learn the basic methodology of teaching and develop competence in teaching medical/paramedical students.
        - should have acquired Problem Solving skills

SUBJECT SPECIFIC COMPETENCIES

By the end of the course, the student should have acquired knowledge (cognitive domain), professionalism (affective domain)and skills (psychomotor domain) as given below:

A. Cognitive domain

At the end of the course, the student should have acquired following theoretical competencies:

- Describe structure, functions and development of human skin.
- Describe ultrastructural aspects of epidermis, epidermal appendages, dermo- epidermal junction, dermis, and sub-cutis.
- Describe basic pathologic patterns and reactions of skin.
- Demonstrate the knowledge of common laboratory stains and procedures used in the histopathologic diagnosis of skin diseases and special techniques such as immunofluorescence, immunoperoxidase and other related techniques.
- Describe the basics of cutaneous bacteriology, mycology, virology, parasitology and host resistance.
- Describe papulosqamous and vesiculobullous disorders.
- Describe disorders of epidermal appendages and related disorders.
- Describe inflammatory and neoplastic disorders of dermis.
- Describe skin lesions in nutritional, metabolic and heritable disorders.
- Describe pharmacokinetics and principles of topical and systemic therapy.
- Describe drug reaction, its diagnosis and management.
- Describe cutaneous manifestations of systemic disorders.
- Describe anatomy of male and female genitalia, epidemiological transmission, clinical aspects and management of STDs and HIV.
- Describe clinical features, reactions, treatment and rehabilitation in leprosy.
- Describe etiology, pathophysiology, principles of diagnosis and management of common problems in dermatology including emergencies in adults and children.
- Describe indications and methods for fluid and electrolyte replacement

therapy including blood transfusion in dermatological conditions.

- Describe common dermatological malignancies in the country and their management including prevention.
- Should be expert in evaluation of ECG, chest X-ray (CXR), biochemical, haematology and immunology reports related to dermatology.
- Acquire knowledge of common laboratory stains and procedures used in the histopathologic diagnosis of skin diseases and special techniques such as immuno-fluorescence, immuno-peroxidase and other related techniques.
- Acquire knowledge of the basics of laser operation and precautions which needs to be taken.
- Demonstrate competence in basic concepts of research methodology and interpretation of data in medical literature/publications.
- Skilled as a self-directed learner, recognize continuing educational needs; use appropriate learning resources and critically analyze relevant published literature in order to practice evidence-based dermatology;
- Should also have a broad idea how to approach an uncommon dermatological disease.

B. Affective Domain

At the end of the course, the student should have acquired the following attitudinal competencies:

- Demonstrate self-awareness and personal development in routine conduct.
- **Behavior and Emotional Stability:** Dependable, disciplined, dedicated, stable in emergency situations and shows positive approach.
- **Motivation and Initiative:** Is innovative, enterprising, does not shirk duties or leave any work pending and motivates team members.
- **Honesty and Integrity:** Is truthful, admits mistakes, does not cook up information, has ethical conduct and exhibits good moral values.
- **Interpersonal Skills and Leadership Quality:** Has compassionate attitude towards patients and attendants, gets on well with colleagues and paramedical staff, is respectful to seniors, has good communication skills.
- Should be able to maintain confidentiality with regards to history, physical examination and management of patients.

- Identify social, economic, environmental, biological and emotional determinants of patients, and institute diagnostic, therapeutic, rehabilitative, preventive and promotive measures to provide holistic care to patients at individual and community level against skin, venereal disease and leprosy.
- Recognize the emotional and behavioral characteristics of patients and keep these fundamental attributes in focus while dealing with them.
- Demonstrate empathy and humane approach towards patients and their families and respect their sensibilities.
- Demonstrate communication skills of a high order in explaining management and prognosis, providing counseling and giving health education messages to patients, families and communities.
- Organize and supervise the desired managerial and leadership skills.
- Should be able to function as a part of a team, develop an attitude of cooperation with colleagues, and interact with the patient and the clinician or other colleagues to provide the best possible diagnosis or opinion.
- Always adopt ethical principles and maintain proper etiquette in dealings with patients, relatives and other health personnel and to respect the rights of the patient including the right to information and second opinion.

C. Psychomotor Domain

A student at the end of training of 3 years of MD programme, must acquire the following practical skills:

- General medical skills as learnt in MBBS to be maintained:
  - Should be able to provide basic life support (BLS).
  - Should be expert in blood pressure measurement, intravenous access, blood sampling, fluid electrolytes therapy, plerual and cerebrospinal; fluid (CSF) fluid examination.
  - Should be able to provide basic and advanced life-saving support services in emergency situations.

- Should be able to undertake complete monitoring of the patient and identify social, economic, environmental and emotional determinants in a given case and take them into account for planning therapeutic measures.

- Recognize conditions that may be outside the area of his specialty/competence and refer them to the proper specialist.

Dermatology, Venereology and Leprosy, HIV/AIDS Skills

The student should:

- Acquire skills in history taking, physical examination, diagnosis and management of patients in dermatology, venereology and leprosy.
- Be able to identify, classify and differentiate cutaneous findings in dermatological terms in a systematic way.
- Be able to perform systemic examination (chest, cardiac, abdomen, neurological, genitals, oral, eye and gynaecological examination) relevant to dermatologic condition.
- Be competent to manage dermatologic emergencies like angioedema, toxic epidernmal necrolysis (TEN), Stevens-Johnson syndrome (SJS), pemphigus, drug reaction and necrotic erythema nodosum leprosum (ENL).
- Be able to plan and deliver comprehensive treatment for diseases using principles of rational drug therapy.
- Be able to plan and advice measures for the prevention of infectious disease.
- Be able to plan rehabilitation of patient suffering from chronic illness and disability and those with special needs like leprosy.
- Demonstrate skills in documentation of case details and of morbidity/mortality data relevant to the assigned situation.

Laboratory Skills

The student:

- Should be able to perform common laboratory procedures like potassium hydroxide (KOH) mount, Gram stain, Giemsa stain, acid fast bacilli (AFB) stain, Woods lamp examination, stains, culture media etc. related to the cutaneous diagnosis independently.
- Should be able to order relevant investigations and interpret them to reach to a diagnosis.
- Should be familiar with other recent investigations.

Dermatopathology - Student should be competent enough to:

- To interpret histopathology of common skin diseases.
- To diagnose common skin diseases by examining slides under microscope.

Surgery in dermatology

At the end of training following skills should be performed independently by the student:

1. Should be able to make incisions and perform suturing.
2. Should be trained performing skin and nail biopsies.
3. Should be able to perform chemical peels, manual dermabrasion, skin punch grafting and wound dressing independently.
4. Should be able to perform cryosurgery, nail surgery and acne surgery.
5. Able to perform chemical cauterization, cryotherapy, patch and photopatch test, slit smears and tissue smears.

Venereology

1. Should be competent in the clinical approach to the patient with STDs and HIV/AIDS.
2. Should be able to interpret the histopathological diagnosis including laboratory AIDS related with venereology.

3. Able to perform dark ground illumination, gram stain, Bubo aspiration and tissue smear.
4. Able to manage the patient according to syndromic approach for treatment of STDs.

Leprosy

The student should be:

1. Able to diagnose and approach the case of leprosy.
2. Perform AFB smear.
3. Able to manage cases of lepra reaction.
4. Identify, judge and decide when to refer the patients at appropriate level for surgery or rehabilitation. Should able to manage pediatric cases with skin diseases.

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Syllabus

Topics related to allied basic sciences

- The structure, functions and development of human skin.
- Ultrastructural aspects of epidermis, epidermal appendages, dermo-epidermal junction, dermis, and sub-cutis.
- Immunology, molecular biology and genetics in relation to the skin.
- Epidermal cell kinetics and keratinization.
- Lipids of epidermis and sebaceous glands.
- Percutaneous absorption.
- Skin as an organ of protection and thermoregulation.
- Biology of eccrine and apocrine sweat glands.
- Biology of melanocytes and melanin formation.
- Biology of hair follicles, sebaceous glands and nails.
- Epidermal proteins.
- Dermal connective tissue: collagen, elastin, reticulin, basement membrane and ground substance.
- Metabolism of carbohydrates, proteins, fats and steroids by the skin.
- Cutaneous vasculature and vascular reactions.
- Mechanism of cutaneous wound healing.
- Cellular and molecular biology of cutaneous inflammation and arachidonic acid metabolism.
- Immunologic aspects of epidermis.
- Human leukocyte antigen (HLA) system.
- Immunoglobulins.
- Cytokines and chemokines.
- Lymphocytes, neutrophils, eosinophils, basophils and mast cells.
- Complement system.
- Hypersensitivity and allergy.
- Cutaneous carcinogenesis (chemical, viral and radiation).

- Basics of cutaneous bacteriology, mycology, virology, parasitology and host resistance.
- Common laboratory procedures, stains, culture media etc. related to the cutaneous diagnosis.
- Basic pathologic patterns and reactions of skin.
- Common laboratory stains and procedures used in the histopathologic diagnosis of skin diseases and special techniques such as immunofluorescence, immunoperoxidase and other related techniques.

Clinical dermatology

- Epidemiology of cutaneous disease.
- Psychologic aspects of skin disease and psycho-cutaneous disorders.
- Pathophysiology and clinical aspects of pruritus.

Papulosquamous diseases

- Psoriasis, pityriasis rubra pilaris, pityriasis rosea.
- Parapsoriasis, lichen planus, lichen niditus.
- Palmo-plantar keratodermas, Darier's disease, porokeratosis.
- Ichthyoses and ichthyosiform dermatoses.
- Kyrle's disease and other perforating disorders.

Vesiculo - bullous disorders

- Erythema multiforme, Stevens-Johnson syndrome, Toxic epidermal necrolysis.
- Bullous pemphigoid, Pemphigus.
- Chronic bullous disease of childhood.
- Herpes gestationis (pemphigoid gestationis).
- Hereditary epidermolysis bullosa.
- Epidermolysis bullosa acquisita.
- Dermatitis herpetiformis.
- Familial benign pemphigus.
- Subcorneal pustular dermatoses.
- Pustular eruptions of palms and soles.

Dermoscopy:

- Principles and Technique of Dermoscopy and Videodermoscopy
- Dermoscopy in Pigmentary disorders
- Dermoscopy in inflammatory disorders
- Trichoscopy

Disorders of epidermal appendages and related disorders

- Disorders of hair and nails.
- Disorders of sebaceous glands.
- Rosacea, Perioral dermatitis, acne.
- Disorders of eccrine and apocrine sweat glands.
- Follicular syndromes with inflammation and atrophy.

Epidermal and appendageal tumours

- Precancerous lesions, squamous cell carcinoma and basal cell carcinoma
- Keratoacanthoma, benign epithelial tumours, appendageal tumours
- Merkel cell carcinoma, Paget's disease

Disorders of melanocytes

- Disorders of pigmentation, albinism, benign neoplasia and hyperplasias of melanocytes, dysplastic melanocytic nevi, cutaneous malignant melanoma.

Inflammatory and neoplastic disorders of the dermis

- Acute febrile neutrophilic dermatosis (Sweet's syndrome)
- Erythema elevatum diutinum
- Cutaneous eosinophilic diseases
- Granuloma faciale
- Pyoderma grangrenosum
- Erythema annulare centrifugum and other figurate erythemas
- Granuloma annulare
- Malignant atrophic papulosis (Dego's Disease)
- Neoplasms, pseudoneoplasms and hyperplasias of the dermis
- Vascular anomalies
- Kaposi's Sarcoma
- Anetoderma and other atrophic disorders of the skin
- Ainhum and pseudoainhum

- Neoplasias and hyperplasias of neural and muscular origin
- Elastosis perforans serpiginosa and reactive perforating collagenosis

Lymphomas, pseudolymphomas and related conditions

Disorders of subcutaneous tissue

- Panniculitis
- Lipodystrophy
- Neoplasms of the subcutaneous fat

Disorders of the mucocutaneous integument

- Biology and disorders of the oral mucosa
- Disorders of the genitalia of males and females

Cutaneous changes in disorders of altered reactivity

- Genetic immunodeficiency diseases
- Urticaria and Angioedema
- Disorders associated with complement abnormalities
- Graft-versus-host Disease
- Muco-cutaneous manifestations in immunosuppressed host other than HIV-infection
- Contact dermatitis
- Auto-sensitization dermatitis
- Atopic dermatitis (atopic eczema)
- Nummular eczematous dermatitis
- Seborrhoeic dermatitis
- Vesicular palmoplantar eczema

Skin changes due to mechanical and physical factors

- Occupational skin disease
- Radiobiology of the skin
- Skin problems in amputee
- Sports dermatology
- Skin problems in war field
- Decubitus ulcers

Photomedicine, photobiology and photo immunology in relation to skin

- Acute and chronic effects of ultraviolet radiation and sun light on the skin
- Narrow-band ultraviolet B (NBUVB) therapy, phototherapy, photochemotherapy

Disorders due to drugs and chemical agents

- Cutaneous reactions to drugs
- Mucocutaneous complications of anti-neoplastic therapy
- Cutaneous manifestations of drug abuse

Dermatology and the ages of man

- Neonatal dermatological problems
- Pediatric and adolescent dermatological problems
- Ageing of skin
- Geriatric dermatological problems

Skin lesions in nutritional metabolic and heritable disorders

- Cutaneous changes in nutritional disease
- Acrodermatitis enteropathica and other zinc deficiency disorders
- Cutaneous changes in errors of amino acid metabolism: Tyrosinemia II, phenylketonuria, arginine succinic aciduria, and alkaptonuria
- Amyloidosis of the skin
- The porphyrias
- Xanthomatosis and lipoprotein disorders
- Fabry's Disease; galactosidase - a deficiency (Angiokeratoma corporis diffusum)
- Lipid proteinosis
- Cutaneous mineralisation and ossification
- Heritable disorders of connective tissue with skin changes
- Heritable disease with increased sensitivity to cellular injury
- Basal cell Naevus syndrome

Skin manifestations of hematologic disorders

- Skin changes in hematological disease
- Langerhans cell and other cutaneous histiocytoses
- The Mastocytosis syndrome

Skin manifestations of systemic disease

- The skin and disorders of the alimentary trat
- The hepatobiliary system and the skin
- Cutaneous changes in renal disorders, cardiovascular, pulmonary disorders and endocrinal disorders
- Skin changes and diseases in pregnancy
- Skin changes in the flushing disorders and the carcinoid syndrome

Skin manifestations of rheumatologic disease

- Lupus Erythematosus
- Dermatomyositis
- Scleroderma
- Systemic Necrotizing Arteritis
- Cutaneous Necrotising venulitis
- Cryoglobulinemia and Cryofibrinogenemia
- Relapsing Polychondritis
- Rheumatoid Arthritis, Rheumatic Fever and Gout
- Sjogren's syndrome
- Raynaud's phenomenon
- Reiter's syndrome
- Multicentric Reticulohisticytosis

Cutaneous manifestations of disease in other organ systems

- Sarcoidosis of the skin
- Cutaneous manifestations of Internal Malignancy
- Acanthosis Nigricans
- Scleredema
- Papular Mucinosis
- Neurocutaneous disease
- Tuberous Sclerosis Complex
- The Neurofibromatosis
- Ataxia Telangiectasia
- Behcet's disease

Bacterial diseases with cutaneous involvement

- General considerations of bacterial diseases
- Pyodermas: Staphylococcus aureus, Streptococcus, and others
- Staphylococcal Scalded-Skin syndrome
- Soft Tissue Infections: Erysipelas, Cellulitis, Septicemia and Gangrenous Cellulitis
- Gram-Negative Coccal and bacillary infections
- Bartonellosis
- Miscellaneous bacterial infections with cutaneous manifestations
- Tuberculosis and other myopacterial infections
- Actinomycosis, Necardiosis, and Actinomycetoma
- Lyme Borreliosis
- Kawasaki Disease

Fungal diseases with cutaneous involvement

- Superficial fungal infection: Dermatophytosis, Tinea Nigra, Piedra
- Yeast Infections: Candidiasis, Pitryiasis (Tinea) Versicolor
- Deep Fungal Infections

Viral and ricketisial disease

- Viral Diseases: general consideration
- Rubella (German Measles)
- Measles
- Hand, Foot and Mouth Disease
- Herpangina
- Erythema Infectiosum and Parvovirus B 19 infection
- Herpes simplex
- Varicella and Herpes Zoster
- Cytomegalovirus Infection
- Epstein - Barr Virus Infections
- Human Herpes virus 6 & 7 infections and Exanthem subitum (Roseola Infantum or Sixth Disease)

- Smallpox and Complications of small pox vaccination
- Contagious Pustular Dermatitis, Contagious Ecthyma: Orf virus infection
- Milluscum Contagiosum
- Miller's Nodules
- Warts
- Human Retroviral Disease: Human T-Lymphotropic Virusviruses

Therapeutics

Topical therapy

- Pharmacokinetics principles intopical applications of drugs.
- Principles of topical therapy.

Topical agents

- Glucocorticoids, Acne therapies, Analgesics, Anesthetics, Anti-inflammatory, Anti hair loss, Anti-microbial, Anti-parasitic, Anti-perspirants, Anti-pruritic, Anti-viral, Astringents, Bleaching agents, Keratolytics, Psoriasis therapies, Wart therapies, Topical Retinoids, Topical Antibiotics, Topical Anti-fungal Agents, Sun-protective Agents, Keratolytic Agents, Topical Cytotoxic Agents, Cosmetics and Skin care in practice.

Systemic therapy

- Systemic Glucocorticoids, Sulfones, Aminoquinolines, Cytotoxic and Antimetabolic Agents, Oral Retinoids, Antihistamines, Antibiotics, Antiviral Drugs, Oral Antifungal Agents, Immunosuppressive and Immunomodulatory drugs, Thalidomide, photo-chemotherapy and photo-therpay, electric cautery, cryotherapy, electrolysis, tattooing, intra-lesional injections etc.

Surgery in dermatology

- Dermatologic Surgery: Introduction and Approach
- Skin Resurfacing: Chemical Peels
- Skin Resurfacing: Dermabrasion
- Skin Resurfacing: Laser
- Skin punch grafting
- Wound Dressings

- Cryosurgery
- Nail Surgery
- Non Surgical Fat reduction procedures

Venereology

- Clinical approach to the patient of sexually transmitted disease
- Anatomy of male and female genitalia
- Epidemiological aspects of STDs
- Viral STDs including HIV, Herpes, Human Papilloma virus (HPV), Molluscum contagiosum, Espirito Santo virus (ESV) etc.
- Bacterial STD's: Syphilis, Gonorrhoea, Chancroid, Donovanosis
- Chlamydial infections: Lymphogranuloma venereum, urethritis, cervicits, nongonococcal urethritis (NGU), non-specific vaginitis etc.
- Fungal: Candidiasis
- Protozoal: Trichomoniasis
- Ectoparasitic: Scabies, Pediculosis infestations.
- Syndromic management of STDs
- HIV/AIDS - Epidemiology, transmission, patient load, High risk groups, cutaneous manifestations of HIV, treatment of opportunistic infections, antiretroviral therapy, management of STDs in HIV positive cases
- STDs in reproduction health and Pediatrics
- STDs and HIV
- Prevention, counselling and education of different STDs including HIV
- National Control Programmes of STDs and HIV infection
- Medico-legal, social aspects of STDs including psychological and behavioural abnormalities in STD patients

Leprosy

- Approach to the patient with leprosy
- Epidemiological aspects
- Structure, biochemistry, microbiology of Mycobacterium leprae
- Animal models
- Pathogenesis
- Classification
- Immunology and molecular biological aspects

- Histopathology and diagnosis including laboratory aids
- Clinical features
- Reactions
- Systemic involvement (Ocular, bone, mucosa, testes and endocrine etc.)
- Pregnancy and leprosy
- HIV infection and leprosy

TEACHING AND LEARNING METHODS

A post graduate student pursuing the course should work in the institution as a full time student. No candidate should be permitted to run a clinic/laboratory/nursing home while studying postgraduate course. Each year should be taken as a unit for the purpose of calculating attendance. Every student shall attend teaching and learning activities during each year as prescribed by the department and should not be absent from work without valid reasons**.**

Teaching methodology:

A list of teaching and learning activities designed to facilitate students acquire essential knowledge and skills outlined is given below.

1. **Lectures:** Lectures are to be kept to a minimum. They may, however, be employed for teaching certain topics. Lectures may be didactic or integrated.

   a) **Didactic Lectures**: Few topics are suggested as examples:

      1) Bio-statistics
      2) Use of library
      3) Research Methodology
      4) Medical code of Conduct and Medical Ethics
      5) National Health and Disease Control Programmes
      6) Communication Skills

   These topics may preferably be taken up in the first few weeks of the first year.

   b) **Integrated Lectures:** Some of the topics may be taken up by multidisciplinary teams eg. Jaundice, Diabetes mellitus, Thyroid etc.

2. **Journal Club & Subject seminars:** Both are recommended to be held once a week. All PG students are expected to attend and actively participate in discussion and enter relevant details in the Log Book. Further, every post graduate student must make a presentation from the allotted journal(s), selected articles at least four times a year. The presentations would be evaluated and would carry weightage for internal assessment.

3. **Student Symposium**: Recommended as an optional multi-disciplinary programme. The evaluation may be similar to that described for subject seminar.

4. **Ward Rounds:** Ward rounds may be service or teaching rounds.

   a) **Service Rounds:** Post graduate students and Interns should be responsible for everyday care of the patients. Newly admitted patients should be worked

up by the PGs and presented to the seniors the following day.

b) **Teaching Rounds:** Every unit should have 'grand rounds' for teaching purpose. A diary (log book) should be maintained for day to day activities by the students. Entries of (a) and (b) should be made in the Log book. Log books shall be checked and assessed periodically by the faculty members imparting the training.

5. **Clinical Case Presentations:** Minimum of 5 cases to be presented by every post graduate student each year. They should be assessed using check lists and entries made in the log book

6. **Clinico-Pathological Conference (CPC):** Recommended once a month for all post graduate students. Presentation is to be done by rotation. If cases are not available, it could be supplemented by published CPCs.

7. **Inter-Departmental Meetings:** Strongly recommended particularly with Departments of Pathology and Radio-Diagnosis at least once a week. These meetings should be attended by post graduate students and relevant entries must be made in the Log Book.

Pathology: A dozen interesting cases may be chosen and presented by the post graduate students and discussed. The staff of Pathology department would then show the slides and present final diagnosis. In these sessions, the advances in immuno-histochemical techniques can be discussed.

Radiodiagnosis: Interesting cases and imaging modalities should be discussed.

8. Teaching Skills: The post graduate students shall be required to participate in the teaching and training programme of undergraduate students and interns.

9. The post graduate students should undertake audit, use information technology tools and carry out research, both basic and clinical, with the aim of publishing the work and presenting the same at various scientific fora.

10. Continuing Medical Education Programmes (CME): At least two CME programmes should be attended by each student during the MD programme.

11. Conferences: The student should attend courses, conferences and seminars relevant to

the speciality.

12. A postgraduate student of a postgraduate degree course in broad specialities/super specialities would be required to present one poster presentation, to read one paper at a national/state conference and to present one research paper which should be published/accepted for publication/sent for publication during the period of his postgraduate studies so as to make him eligible to appear at the postgraduate degree examination.

13. Department should encourage e-learning activities.

14. Rotation:

Clinical Postings

A major tenure of posting should be in the Department of Dermatology. It should include care of in-patients, out-patients, special clinics like STD clinic, leprosy clinic, vitiligo clinic and maintenance of case records for both in- and out-patients.

A short posting for 2-4 weeks in the Department of Medicine is to be arranged for exposure to Emergency Medicine and Resuscitation.

15. Clinical meetings:

There should be intra - and inter- departmental meetings for discussing uncommon / interesting medical problems. Each student must be asked to present a specified number of cases for clinical discussion, perform procedures/tests/operations/present seminars/review articles from various journals in inter-unit/interdepartmental teaching sessions. These should be entered in a Log Book; log books should be checked and assessed periodically by the faculty members imparting the training.

16. Thesis writing:

Thesis writing is compulsory. All MD students are required to carry out work on a selected research project under the guidance of a recognized post graduate teacher, the result of which shall be written up and submitted in the form of a Thesis.

During the training programme, patient safety is of paramount importance, therefore, skills are to be learnt initially on the models, later to be performed under supervision followed by performing independently; for this purpose, provision of surgical skills laboratories in medical colleges is mandatory.

ASSESSMENT

FORMATIVE ASSESSMENT, i.e., during the training may be as follows:

Formative assessment should be continual and should assess medical knowledge, patient care, procedural & academic skills, interpersonal skills, professionalism, self directed learning and ability to practice in the system.

Quarterly assessment during the MD training should be based on:

1. Journal based / recent advances learning
2. Patient based /Laboratory or Skill based learning
3. Self directed learning and teaching
4. Departmental and interdepartmental learning activity
5. External and Outreach Activities / CMEs

SUMMATIVE ASSESSMENT, i.e., at the end of training

The summative examination would be carried out as per the Rules given in POSTGRADUATE MEDICAL EDUCATION REGULATIONS, 2000.

The examination shall be in three parts:

1. **Thesis**

Thesis shall be submitted at least six months before the Theory and Clinical / Practical examination. The thesis shall be examined by a minimum of three examiners; one internal and two external examiners, who shall not be the examiners for Theory and Clinical examination. A post graduate student shall be allowed to appear for the Theory and Practical/Clinical examination only after the acceptance of the Thesis by the examiners.

2. Theory Examination:

There shall be four papers each of three hours duration. Each paper shall consist of two long essay questions, three short essay questions and four short notes. These are:

Paper – I Basic Science as applied to Dermatology, STDs and Leprosy

Paper – II **Dermatology**

Paper – III **STD & Leprosy**

Paper – IV **Recent advances in field of Dermatology, Applied Sciences pertaining to skin /VD & internal medicine and skin**

3. Clinical / Practical and viva voce Examination

Practical examination should be taken to assess competence and skills of techniques and procedures and should consist of two long cases, two short cases and 10 spots.

During oral/viva voce examination, student should be evaluated for Interpretation of data, instruments, clinical problems, radiological and biochemical investigations, slides, drugs, X-rays etc.

Recommended Reading:

Books (latest edition)

- Sexually Transmitted Diseases - Sharma V K
- IADVL Text book of Dermatology - R G Walia
- IAL Textbook of Leprosy - H Kar
- Bolognia "Textbook of Dermatology"
- Text Book of Dermatology, Wilkinson/Ebling/Rook, 4 Volumes, Oxford
- Text Book of Dermatology, Samuel L. Moschelia M.D. Harry J. Hurllay M.D., 2 Volumes
- Histopathology of the Skin, Walter - F. Lever- Gundula Schaumburg Lever
- Atlas of Dermatology, 2 Volumes, Bhalani Publishing House, Dadar, Mumbai.
- Diseases of the skin, I Iarry L Arnold Richard 13-Dom William D. James, Andrews
- Differential Diagnosis in Dermatology, Satish S. Savant, Radha Atalshah, Deepak
- Gore, Richard Ashan, Barbara Lepdard
- Leprosy, Dharmendra, 2 Volumes, Samant and Company, Mumbai.
- Recent Advances in Dermatology, Champion, R.H. Pye, R.J. 8th Volumes.
- Venereal Diseases, Amborse King Claude Nicol Philip Rodin, EL.BS English
- Language Book Society/ Baillere Tindal, East Sussex.
- Sexually Transmitted Diseases, King K Holmes, McGraw-Hill Health profession
- Hand Book of leprosy, Jopling W.H, William Hethgunnah Medical Book Ltd., London.
- Dermatology in General Medicine, Thomas B. Fitzpatrick, McGraw Hill Book
- Company.
- Fundamentals of Pathology of skin, Mysore Venkataram
- Dermoscopy and Trichoscopy in Diseases of the Brown skin Atlas and Short Text; Uday S Khopkar

Journals

Three international and two national journals (all indexed)

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Department of Dermatology, Venereology, Leprosy Yenepoya Medical College

Blueprint for MD Dermatology, Venereology and Leprosy (DVL) theory question papers

Paper I: Basic Science as applied to Dermatology, STDs and Leprosy

Sl.No.	Topics	Weightage	Marks allotted	No. of questions
1.	Structural/ ultrastructural, functional, diagnostic and applied aspects related to dermatology, venerology and leprosy	**20%**	**20**	**01**
2.	Structural/ ultrastructural, functional, diagnostic and applied aspects related to dermatology, venerology and leprosy	**20%**	**20**	**01**
3	Basic aspects of inflammation, immunology, Immunopathogenesis and applied aspects related to dermatology, venerology and leprosy	**12%**	**12**	**01**
4	Basic aspects of inflammation, immunology, Immunopathogenesis and applied aspects related to dermatology, venerology and leprosy	**12%**	**12**	**01**
5	Basics of cutaneous bacteriology, mycology, virology, parasitology and host resistance related to dermatology, venerology and leprosy	**12%**	**12**	**01**
6	Basics of photobiology, pigmentation, metabolic diseases, genodermatoses, molecular biology and therapeutics in relation to dermatology, venereology and leprosy	**6%**	**6**	**01**
7	Basics of photobiology, pigmentation, metabolic diseases, genodermatoses, molecular biology and therapeutics in relation to dermatology, venerology and leprosy	**6%**	**6**	**01**
8.	Bedside tests (including dermoscopy and other imaging techniques) and applied aspects related to dermatology, venerology and leprosy	**6%**	**6**	**01**
9.	Basic pathologic patterns and reactions of skin.	**6%**	**6**	**01**
	Total	**100%**	**100**	**9**

Paper II: Dermatology

Sl. No.	Topics	Weightage	Marks allotted	No. of questions
1.	Infections and infestations related to dermatology	**20%**	**20**	**01**
2.	Papulosquamous, keratinisation disorders, Vesiculobullous diseases, Inflammatory and neoplastic disorders in dermatology	**20%**	**20**	**01**
3	Papulosquamous, keratinisation disorders, Vesiculobullous diseases, Inflammatory and neoplastic disorders in dermatology	**12%**	**12**	**01**
4	Disorders of epidermal appendages and related disorders	**12%**	**12**	**01**
5	Photodermatosis, eczemas, vascular disorders, urticaria and cutaneous reactions	**12%**	**12**	**01**
6	Disorders of melanocytes Nevi and other developmental defects	**6%**	**6**	**01**
7	Disorders due to drugs and injuries due to chemical agents, mechanical and physical factors and other environmental factors	**6%**	**6**	**01**
8.	Disorders of skin at different ages	**6%**	**6**	**01**
9.	Disorders of subcutaneous tissue, connective tissues and mucous membrane	**6%**	**6**	**01**
	Total	**100%**	**100**	**9**

Paper III: STD & Leprosy

Sl. No.	Topics	Weightage	Marks allotted	No. of questions
1.	Genital ulcer disease; clinical aspects, diagnosis, complications therapy and prevention	**20%**	**20**	**01**
2.	Leprosy: Clinical aspects, Reactions, therapy, deformities and prevention	**20%**	**20**	**01**
3	HIV / AIDS	**12%**	**12**	**01**
4	Genital discharge Syndrome: clinical aspects, diagnosis, complications, therapy and prevention	**12%**	**12**	**01**
5	Systemic involvement in Leprosy Leprosy in special situations	**12%**	**12**	**01**
6	Therapy in leprosy and reactions: Medical/ Surgical/ Immunotherapy Prevention, counselling measures, National Control Programmes of Leprosy	**6%**	**6**	**01**
7	Therapy in leprosy and reactions: Medical/ Surgical/ Immunotherapy Prevention, counselling measures, National Control Programmes of Leprosy	**6%**	**6**	**01**
8	Histopathology, laboratory diagnosis and imaging in Leprosy Deformities in leprosy; Diagnosis, grading and prevention	**6%**	**6**	**01**
9.	Viral STDs (excluding HIV) Non-venereal genital dermatoses Psychosexual disorders Prevention, counselling measures, Medico-legal aspects of STDs	**6%**	**6**	**01**
	Total	**100%**	**100**	**9**

Paper IV: Recent advances in field of Dermatology, Applied Sciences pertaining to skin /VD &
internal medicine and skin

Sl.No.	Topics	Weightage	Marks allotted	No. of questions
1.	Cutaneous manifestations in systemic diseases	**20%**	**20**	**01**
2.	Rheumatologic/ neoplastic / hematologic diseases relevant to dermatology	**20%**	**20**	**01**
3.	Granulomatous, Nutritional, metabolic and heritable skin disorders	**12%**	**12**	**01**
4.	Dermatosurgery/ aesthetic dermatology	**12%**	**12**	**01**
5.	Recent advances in Dermatotherapeutics (Topical/ Systemic)	**12%**	**12**	**01**
6	Inflammatory dermatoses Emerging infections Psychocutaneous diseases	**6%**	**6**	**01**
7.	Recent advances in Dermatotherapeutics (Topical/ Systemic)	**6%**	**6**	**01**
8.	Recent advances in diagnostic dermatology Regenerative medicine Newer devices/tools	**6%**	**6**	**01**
9.	Dermatosurgery/ aesthetic dermatology	**6%**	**6**	**01**
	Total	**100%**	**100**	**9**

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Postgraduate Students Appraisal Form
Clinical Disciplines

Name of the Department/Unit :

Name of the PG Student :

Annexure I

Period of Training : FROM……TO……

Sr. No.	PARTICULARS	Not Satisfactory	Satisfactory	More Than Satisfactory	Remarks
		1 2 3	4 5 6	7 8 9	
1.	Journal based / recent advances learning				
2.	Patient based /Laboratory or Skill based learning				
3.	Self directed learning and teaching				
4.	Departmental and interdepartmental learning activity				
5.	External and Outreach Activities / CMEs				
6.	Thesis / Research work				
7.	Log Book Maintenance				

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DEPARTMENT OF DERMATOLOGY, VENEREOLOGY & LEPROSY (DVL)

Formative assessment for Post graduates

Theory: Once a year, 100 Marks - Total 3

Practical: Once a year, 100 Marks - Total 3

Viva Voce: Once a year - Total 3

Final year formative assessment involves one external examiner. Mid-

Term Theory Examination Once a year, 50 marks - Total 3

Assignments on discussed cases – 2 times/weeks

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Model Question Papers

Yenepoya (Deemed to be University)

FINAL INTERNAL ASSESSMENT EXAMINATION- August 2025

DEPARTMENT OF DERMATOLOGY, VENEREOLOGY, LEPROSY

Paper I: Basic Science as applied to Dermatology, STDs and Leprosy Max marks: 100, Time: 3 hrs

Answer all questions

Draw neat, labelled diagrams wherever necessary

Long essay: (20 marks X 2 = 40 marks)

1. Describe the structure of eccrine sweat gland. Discuss the mechanism of sweat formation. (10 + 10)
2. Describe the various Immunofluorescence techniques in dermatology. Discuss the utility of Immunofluorescence in bullous diseases (10+10)

Short essay: (12 marks X 3 = 36 marks)

1. Chemokines – Types and application in dermatology (4+8)
2. Draw a neat, labelled diagram of HIV replication cycle with sites of drug action. (12)
3. Immunopathogenesis of allergic contact dermatitis (12)

Short notes: (6 marks X 4 = 24 marks)

6. Dermoscopy of melanoma
7. Acantholysis
8. Raper Mason pathway
9. Prenatal diagnostic techniques in genodermatoses

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FINAL INTERNAL ASSESSMENT EXAMINATION- August 2025

DEPARTMENT OF DERMATOLOGY, VENEREOLOGY, LEPROSY

Paper II

Max marks: 100, Time: 3 hrs

Answer all questions

Draw neat, labelled diagrams wherever necessary

Long essay: (20 marks X 2 = 40 marks)

1. Enlist various subcutaneous mycoses. List the clinical approach, differentials, investigations and treatment of a 40-year-old farmer with painless swelling on the foot? (2 + 18)

2. Describe the etiopathogenesis, clinical features , differential diagnosis and management of Dermatitis herpetiformis ? (4+4+5+7)

Short essay: (12 marks X 3 = 36 marks)

3. Classify vasculitis. Describe the aetiology, clinical features and management of Kawasaki's Disease. (5 + 7)

4. Mention the trichoscopic features seen in case of various hair disorders. Add a note on Menkys Kinky Hair Syndrome. (6 +6)

5. Non eczematous contact dermatitis (12)

Short notes: (6 marks X 4 = 24 marks)

6. Drug hypersensitivity syndrome (6)

7. Erythromelalgia (6)

8. Discuss differential diagnosis of vesiculobullous lesions in a neonate. (6)

9. Erythema induratum of Bazin (6)

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FINAL INTERNAL ASSESSMENT EXAMINATION- August 2025

DEPARTMENT OF DERMATOLOGY, VENEREOLOGY, LEPROSY

Paper III: STD and Leprosy

Max marks: 100, Time: 3 hrs

Answer all questions

Draw neat, labelled diagrams wherever necessary

Long essay: (20 marks X 2 = 40 marks)

1. Discuss the approach to the diagnosis of a18 year-old-male who presented with a painful ulcer over the glans penis for the last one week (20)
2. Describe the clinical features, diagnosis and management of histoid leprosy and Lucio leprosy. (10+5+5)

Short essay: (12 marks X 3 = 36 marks)

3. Describe Kaposi sarcoma etiology, types, differential diagnosis and treatment (2+3+4+3)
4. Describe the complications of gonococcal urethritis and their management (12)
5. Discuss the clinical features of ocular and bone leprosy (7+5)

Short notes: (6 marks X 4 = 24 marks)

6. Describe the diagnosis of drug-resistant leprosy (6)
7. Etiology, diagnosis and management of early claw hand (2+2+2)
8. Describe the histopathology of lepromatous leprosy with neat labelled diagram (6)
9. HPV vaccine (6)

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FINAL INTERNAL ASSESSMENT EXAMINATION- August 2025

DEPARTMENT OF DERMATOLOGY, VENEREOLOGY, LEPROSY Paper

IV: Recent advances in field of Dermatology, Applied Sciences pertaining to skin /VD & internal medicine and skin
Max marks: 100, Time: 3 hrs, Date: 14-08-2025

Answer all questions

Draw neat, labelled diagrams wherever necessary

Long essay: (20 marks X 2 = 40 marks)

1. Classify paraneoplastic dermatoses. What are Curth's postulates? Describe reactive erythemas associated with internal malignancies. (7+3+10)

2. Enlist and elaborate the 2019 EULAR/ACR classification criteria for systemic lupus erythematosus. Discuss the pathogenesis, clinical features, prognostic aspects and evaluation of neonatal LE. Add a note on lupus nephritis. (8+7+5)

Short essay: (12 marks X 3 = 36 marks)

3. Describe the etiopathogenesis, clinical manifestations, differentials and management of Porphyria Cutanea Tarda. (2+2+2+4)

4. Enumerate the therapeutic options utilized for hair restoration. Describe the principles and steps involved in follicular unit extraction (FUE) technique of hair transplantation. (3+9)

5. Phosphodiesterase-4 (PDE4) inhibitors in dermatology (12)

Short notes: (6 marks X 4 = 24 marks)

6. Trichotillomania (6)

7. Dupilumab (6)

8. Reflectance Confocal Microscopy (6)

9. Non-invasive body contouring techniques (6)

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Final PG University Examination MD/MS/DM/M.Ch. courses

For Clinical, Pre-clinical, and Para-clinical subjects

Distribution of marks for Theory examination

Item	**Marks**
No. of Theory Papers	4
Marks for each Theory Paper	100
Total marks for Theory Paper	**400**
Passing Minimum for Theory	200/400 (40% minimum in each paper) Theory – aggregate 50% (In addition, in each Theory paper a candidate has to secure minimum of 40%)

Distribution of marks for Practical examination- Clinical departments

Item	**Marks**	**Total Marks**
Long case	1*120	120
Short case	2*60	120
OSCE(Minimum 4 stations and two should be manned stations)	40	40
Dissertation viva	20	20
Subtotal of clinical/practical	300	**300**
Viva voce	100	100
Grand total	400	**400**

Practical/Clinical and Viva voce - aggregate 50%

OSCE Checklist – Manned Station (4x5=20 Marks)

Total Marks: 5

Sl No	Checklist Item	Marks
1	Diagnosis	1
2	Differential Diagnosis	1
3	Investigations	1.5
4	Treatment	1.5

OSCE Checklist- Unmated Station (4X5 = 20 Marks)

Total Marks: 5

Sl No	Checklist Item	Marks
1	Diagnosis	1
2	Differential Diagnosis	1
3	Association/ Defect	1
4	Investigations	1
5	Treatment	1

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Format of Model Checklists

Checklist - I

Department of Dermatology, Venereology & Leprosy(DVL)

Model checklist for Evaluation of Seminar Presentation

Name of the Student : Date :

Name of the Faculty/ Observer:

Sl. No	Items for observation during presentation	Poor 1	Below Average 2	Average 3	Good 4	Very good 5
1	Coverage of core concepts					
2	Use of recent guidelines / evidence					
3	Whether cross references/other textbooks have been consulted					
4	Clarity of Presentation/ Audibility /Proficiency in language					
5	Understanding knowledge of the subject					
6	Ability to answer questions/interaction					
7	Time scheduling / attitude/ body language					
8	Appropriate use of Audio - visual					
9	Powerpoint presentation –slide quality& organization					
10	Overall performance					
	Total score					
Signature of Moderator						

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Format of Model Checklists

Checklist- II

Department of Dermatology ,Venereology & Leprosy(DVL)

Model checklist for Evaluation of Journal Club Presentation

Name of the Student: Date :

Name of the Faculty/ Observer:

Sl. No	Items for observation during presentation	Poor 1	Below Average 2	Average 3	Good 4	Very good 5
1	Choice of article					
2	Extent of understanding of scope & objectives of the paper by the candidate					
3	Whether cross references have been consulted					
4	Ability to respond to questions on the paper/ subject					
5	Audio visual aids used					
6	Ability to defend the paper					
7	Critical Analysis					
8	Clinical applicability in dermatology practice					
9	Slide quality & organization					
10	Overall performance					
	Total score					
Signature of Moderator						