MAHATMA GANDHI UNIVERSITY
of
MEDICAL SCIENCES & TECHNOLOGY
JAIPUR

Syllabus

MD – DERMATOLOGY, VENEREOLOGY & LEPROSY

(3 Years Post Graduate Degree Course)

Notice

1. Amendment made by the Medical Council of India in Rules/Regulations of Post Graduate Medical Courses shall automatically apply to the Rules/Regulations of the Mahatma Gandhi University of Medical Sciences & Technology (MGUMST), Jaipur.

2. The University reserves the right to make changes in the syllabus/books/guidelines, fees-structure or any other information at any time without prior notice. The decision of the University shall be binding on all.

3. The Jurisdiction of all court cases shall be Jaipur Bench of Hon'ble Rajasthan High Court only.

RULES & REGULATIONS

MD DERMATOLOGY, VENEREOLOGY & LEPROSY(9070)
(3 Years Post Graduate degree course)

TITLE OF THE COURSE:
It shall be called Doctor of Medicine.

ELIGIBILITY FOR ADMISSION:
No candidate of any category (including NRI quota) shall be eligible for admission to MD/MS courses, if he or she has not qualified NEET PG (MD/MS) conducted by National Board of Examinations or any other Authority appointed by the Government of India for the purpose.

(1) General Seats

(a) Every student, selected for admission to postgraduate medical course shall possess recognized MBBS degree or equivalent qualification and should have obtained permanent Registration with the Medical Council of India, or any of the State Medical Councils or should obtain the same within one month from the date of his/her admission, failing which the admission of the candidate shall be cancelled;

(b) Completed satisfactorily one year's rotatory internship or would be completing the same before the date announced by the University for that specific year as per MCI rules after passing 3rd professional MBBS Part II Examination satisfactorily.

(c) In the case of a foreign national, the Medical Council of India may, on payment of the prescribed fee for registration, grant temporary registration for the duration of the postgraduate training restricted to the medical college/institution to which he/she is admitted for the time being exclusively for postgraduate studies; however temporary registration to such foreign national shall be subject to the condition that such person is duly registered as medical practitioner in his/her own country from which he has obtained his basic medical qualification and that his degree is recognized by the corresponding Medical Council or concerned authority.

(2) NRI Seats

(a) Students from other countries should possess passport, visa and exchange permits valid for the period of their course of study in this Institution and should also observe the regulations of both central and state governments regarding residential permits and obtain no-objection certificate from the same.

(b) The candidate should have a provisional "Student Visa". If he comes on any other visa and is selected for admission, he will have to first obtain a student visa from his country and then only he will be allowed to join the course. Therefore it is imperative to obtain provisional student visa before coming for Counseling.

(c) This clause is applicable to NRI/Foreign Students only.

CRITERIA FOR SELECTION FOR ADMISSION:

(1) NRI Quota

15% of the total seats are earmarked for Foreign National / PIO / OCI/ NRI / Ward of NRI/NRI sponsored candidates who would be admitted on the basis of merit obtained in NEET PG or any other criteria laid down by Central Government/MCI.

(2) Remaining Seats (Other than NRI Quota Seats)

(a) Admissions to the remaining 85% of the seats shall be made on the basis of the merit obtained at the NEET conducted by the National Board of Examinations or any other Authority appointed by the Government of India for the purpose.
(b) The admission policy may be changed according to the law prevailing at the time of admission.

COUNSELING/INTERVIEW:

(1) Candidates in order of merit will be called for Counseling/Interview and for verification of original documents and identity by personal appearance.
(2) Counseling will be performed and the placement will be done on merit-cum-choice basis by the Admission Board appointed by the Government of Rajasthan.

RESERVATION:

Reservation shall be applicable as per policy of the State Government in terms of scheduled caste, scheduled tribe, back ward class, special back ward class, women and handicapped persons.

ELIGIBILITY AND ENROLMENT:

Every candidate who is admitted to MD/MS course in Mahatma Gandhi Medical College & Hospital shall be required to get himself/herself enrolled and registered with the Mahatma Gandhi University of Medical Sciences & Technology after paying the prescribed eligibility and enrolment fees.

The candidate shall have to submit an application to the MGUMST for the enrolment/eligibility along with the following original documents with the prescribed fees (upto November 30 of the year of admission without late fees and upto December 31 of the year of admission with late fees) –

(a) MBBS pass Marks sheet/Degree certificate issued by the University (Ist MBBS to Final MBBS)
(b) Certificate regarding the recognition of medical college by the Medical Council of India.
(c) Completion of the Rotatory Internship certificate from a recognized college.
(d) Migration certificate issued by the concerned University.
(e) Date of Birth Certificate
(f) Certificate regarding registration with Rajasthan Medical Council / Medical Council of India / Other State Medical Council.

REGISTRATION

Every candidate who is admitted to MD/MS course in Mahatma Gandhi Medical College & Hospital shall be required to get himself/herself registered with the Mahatma Gandhi University of Medical Sciences & Technology after paying the prescribed registration fees.

The candidate shall have to submit an application to the MGUMST for registration with the prescribed fees (upto November 30 of the year of admission without late fees upto December 31 of the year of admission with late fees).

DURATION OF COURSE:

The course shall be of 3 years duration from the date of commencement of academic session.

PERIOD OF TRAINING:

(1) The period of training for obtaining Post graduate degrees (MD/MS) shall be three completed years including the period of examination.

(2) It shall however be two years for candidates who have obtained the recognised PG Diploma in the subject.

MIGRATION:
No application for migration to other Medical Colleges will be entertained from the students already admitted to the MD/MS course at this Institute.

METHODS OF TRAINING FOR MD/MS:
Method of training for MD/MS courses shall be as laid down by the Medical Council of India.

ONLINE COURSE IN RESEARCH METHODS

i. All postgraduate students shall complete an online course in Research Methods to be conducted by an Institute(s) that may be designated by the Medical Council of India by way of public notice, including on its website and by Circular to all Medical Colleges. The students shall have to register on the portal of the designated institution or any other institute as indicated in the public notice.
ii. The students have to complete the course by the end of their 2nd semester.
iii. The online certificate generated on successful completion of the course and examination thereafter, will be taken as proof of completion of this course
iv. The successful completion of the online research methods course with proof of its completion shall be essential before the candidate is allowed to appear for the final examination of the respective postgraduate course.
v. This requirement will be applicable for all postgraduate students admitted from the academic year 2019-20 onwards

ATTENDANCE, PROGRESS AND CONDUCT:

(1) Attendance:

(a) 80% attendance in each course is compulsory. Any one failing to achieve this, shall not be allowed to appear in the University examination.
(b) A candidate pursuing MD/MS course shall reside in the campus and work in the respective department of the institution for the full period as a full time student. No candidate is permitted to run a clinic/work in clinic/laboratory/ nursing home while studying postgraduate course. No candidate shall join any other course of study or appear for any other examination conducted by this university or any other university in India or abroad during the period of registration. Each year shall be taken as a unit for the purpose of calculating attendance.
(c) Every candidate shall attend symposia, seminars, conferences, journal review meetings, grand rounds, CPC, CCR, case presentation, clinics and lectures during each year as prescribed by the department and not absent himself / herself from work without valid reasons. Candidates should not be absent continuously as the course is a full time one.

(2) Monitoring Progress of Studies- Work diary/Log Book:

(a) Every candidate shall maintain a work diary in which his/her participation in the entire training program conducted by the department such as reviews, seminars, etc. has to be chronologically entered.
(b) The work scrutinized and certified by the Head of the Department and Head of the Institution is to be presented in the University practical/clinical examination.

(3) Periodic tests:

There shall be periodic tests as prescribed by the Medical Council of India and/ or the Board of Management of the University, tests shall include written papers, practical/clinical and viva voce.

(4) Records:

Records and marks obtained in tests will be maintained by the Head of the Department and will be made available to the University when called for.

THESIS:

(1) Every candidate pursuing MD/MS degree course is required to carry out work on research project under the guidance of a recognized post graduate teacher. Then such a work shall be submitted in the form of a Thesis.
(2) The Thesis is aimed to train a postgraduate student in research methods & techniques.
(3) It includes identification of a problem, formulation of a hypothesis, designing of a study, getting acquainted with recent advances, review of literature, collection of data, critical analysis, comparison of results and drawing conclusions.
(4) Every candidate shall submit to the Registrar of the University in the prescribed format a Plan of Thesis containing particulars of proposed Thesis work within six months of the date of commencement of the course on or before the dates notified by the University.
(5) The Plan of Thesis shall be sent through proper channel.
(6) Thesis topic and plan shall be approved by the Institutional Ethics Committee before sending the same to the University for registration.
(7) Synopsis will be reviewed and the Thesis topic will be registered by the University.
(8) No change in the thesis topic or guide shall be made without prior notice and permission from the University.
(9) The Guide, Head of the Department and head of the institution shall certify the thesis. Three printed copies and one soft copy of the thesis thus prepared shall be submitted by the candidate to the Principal. While retaining the soft copy in his office, the Principal shall send the three printed copies of the thesis to the Registrar six months before MD/MS University Examinations. Examiners appointed by the University shall evaluate the thesis. Approval of Thesis at least by two examiners is an essential pre-condition for a candidate to appear in the University Examination.
(10) Guide: The academic qualification and teaching experience required for recognition by this University as a guide for thesis work is as laid down by Medical Council of India/Mahatma Gandhi University of Medical Sciences & Technology, Jaipur.
(11) Co-guide: A co-guide may be included provided the work requires substantial contribution from a sister department or from another institution recognized for teaching/training by Mahatma Gandhi University of Medical Sciences & Technology, Jaipur/Medical Council of India. The co-guide shall be a recognized postgraduate teacher.
(12) Change of guide: In the event of a registered guide leaving the college for any reason or in the event of death of guide, guide may be changed with prior permission from the University.

ELIGIBILITY TO APPEAR FOR UNIVERSITY EXAMINATION:

The following requirements shall be fulfilled by every candidate to become eligible to appear for the final examination:

(1) Attendance: Every candidate shall have fulfilled the requirement of 80% attendance prescribed by the University during each academic year of the postgraduate course. (as per MCI rules)

(2) Progress and Conduct: Every candidate shall have participated in seminars, journal review meetings, symposia, conferences, case presentations, clinics and didactic lectures during each year as designed by the department.
(3) Work diary and Logbook: Every candidate shall maintain a work diary for recording his/her participation in the training program conducted in the department. The work diary and logbook shall be verified and certified by the Department Head and Head of the Institution.
(4) Every student would be required to present one poster presentation, to read one paper at a National/State Conference and to have one research paper which should be published/accepted for publication/ sent for publication to an indexed journal during the period of his/her post graduate studies so as to make him/her eligible to appear at the Post Graduate Degree Examination.
(5) Every student would be required to appear in and qualify the Pre-University Post graduate degree Mock examination. Post graduate students who fail to appear in or do not qualify the Pre-University Post graduate degree Mock examination shall not be permitted to appear in the final examination of the University.

The certification of satisfactory progress by the Head of the Department/ Institution shall be based on (1), (2), (3), (4) and (5) criteria mentioned above.

ASSESSMENT:

(1) The progress of work of the candidates shall be assessed periodically by the respective guides and report submitted to the Head of the Institution through the Head of the Department at the end of every six months. The assessment report may also be conveyed in writing to the candidate who may also be advised of his/her shortcomings, if any.
(2) In case the report indicate that a candidate is incapable of continuing to do the work of the desired standard and complete it within the prescribed period, the Head of the Institution may recommend cancellation of his/her registration at any time to the University.
(3) Formative Assessment:
    (a) General Principles
        i. The assessment is valid, objective, constructive and reliable.
        ii. It covers cognitive, psychomotor and affective domains.
        iii. Formative, continuing and summative (final) assessment is also conducted.
        iv. Thesis is also assessed separately.
    (b) Internal Assessment
        i. The internal assessment is continuous as well as periodical. The former is based on the feedback from the senior residents and the consultants concerned. Assessment is held periodically.
        ii. Internal assessment will not count towards pass/fail at the end of the program, but will provide feedback to the candidate.
        iii. The performance of the Postgraduate student during the training period should be monitored throughout the course and duly recorded in the log books as evidence of the ability and daily work of the student.
        iv. Marks should be allotted out of 100 as under
            1) Personal Attributes - 20 marks
                a. Behavior and Emotional Stability: Dependable, disciplined, dedicated, stable in emergency situations, shows positive approach.
                b. Motivation and Initiative: Takes on responsibility, innovative, enterprising, does not shirk duties or leave any work pending.

c. Honesty and Integrity: Truthful, admits mistakes, does not cook up information, has ethical conduct, exhibits good moral values, loyal to the institution.

2) Clinical Work - 20 marks
   a Availability: Punctual, available continuously on duty, responds promptly on calls and takes proper permission for leave.
   b Diligence: Dedicated, hardworking, does not shirk duties, leaves no work pending, does not sit idle, competent in clinical case work up and management.
   c Academic Ability: Intelligent, shows sound knowledge and skills, participates adequately in academic activities and performs well in oral presentation and departmental tests.
   d Clinical Performance: Proficient in clinical presentations and case discussion during rounds and OPD work up. Preparing Documents of the case history/examination and progress notes in the file (daily notes, round discussion, investigations and management) Skill of performing bed side procedures and handling emergencies.
3) Academic Activities - 20 marks
   Performance during presentation at Journal club/ Seminar/Case discussion/Stat meeting and other academic sessions. Proficiency in skills as mentioned in job responsibilities.
4) End of term theory examination - 20 marks
   End of term theory examination conducted at end of 1st, 2nd year and after 2 years 9 months.
5) End of term practical examination - 20 marks
   a. End of term practical/oral examinations after 2 years 9 months.
   b. Marks for personal attributes and clinical work should be given annually by all the consultants under whom the resident was posted during the year. Average of the three years should be put as the final marks out of 20.
   c. Marks for academic activity should be given by the all consultants who have attended the session presented by the resident.
   d. The Internal assessment should be presented to the Board of examiners for due consideration at the time of Final Examinations.
   e. Yearly (end of 1st, 2nd & 3rd year) theory and practical examination will be conducted by internal examiners and each candidate will enter details of theory paper, cases allotted (2 long & 2 short) and viva.
   f. Log book to be brought at the time of final practical examination.

APPOINTMENT OF EXAMINERS:

Appointment of paper setters, thesis evaluators, answer books evaluators and practical & viva voce examiners shall be made as per regulations of the Medical Council of India.

SCHEME OF EXAMINATION:

Scheme of examination in respect of all the subjects of MD/MS shall be as under :

(1) The examination for MD/MS shall be held at the end of three Academic Years.
(2) Examinations shall be organized on the basis of marking system.
(3) The period of training for obtaining MD/MS degrees shall be three completed years including the period of examination.

(4) The University shall conduct not more than two examinations in a year for any subject with an interval of not less than 4 months and not more than 6 months between the two examinations.

(5) The examinations shall consist of:

(a) Thesis :

i. Thesis shall be submitted at least six months before the main Theory examinations.

ii. 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/Practical.

iii. In departments where besides the two earmarked practical/clinical examiners no one else is a qualified P.G. teacher, in that case the Thesis shall be sent to the third external examiner who shall actually be in place of the internal examiner.

iv. Only on the acceptance of the thesis by any two examiners, the candidate shall be eligible to appear for the final examination.

v. A candidate whose thesis has been once approved by the examiners will not be required to submit the Thesis afresh, even if he/she fails in theory and/or practical of the examination of the same branch.

vi. In case the Thesis submitted by a candidate is rejected, he/she should be required to submit a fresh Thesis.

(b) Theory papers:

i. There shall be four theory papers.

ii. Out of these, one shall be of Basic Sciences and one shall be of Recent Advances.

iii. Each theory paper examination shall be of three hours duration.

iv. Each theory paper shall carry maximum 100 marks.

v. Each theory paper shall consist of two long essay questions, three short essay questions and four short notes.

vi. The question papers shall be set by the External Examiners.

vii. The answer books of theory paper examination shall be evaluated by two External and two internal examiners. Out of the four paper setters, the two paper setters will be given answer books pertaining to their papers and the answer books of the remaining two papers will be evaluated by two Internal Examiners. It will be decided by the President as to which paper is to be assigned to which Internal Examiner for evaluation.

viii. A candidate will be required to pass theory and practical examinations separately in terms of the governing provisions pertaining to the scheme of examination in the post graduate regulations. The examinee should obtain minimum 40% marks in each theory paper and not less than 50% marks cumulatively in all the four papers for degree examination to be cleared as "passed" at the said Degree examination.

(c) Clinical/ Practical & Oral examinations:

i. Clinical/Practical and Oral Examination of 400 marks will be conducted by at least four examiners, out of which two (50%) shall be External Examiners.

ii. A candidate will be required to secure at least 50% (viz. 200/400) marks in the Practical including clinical and viva voce examinations.

(6) If a candidate fails in one or more theory paper(s) or practical, he/she shall have to reappear in the whole examination i.e. in all theory papers as well as practical.

GRACE MARKS

No grace marks will be provided in MD/MS examinations.

REVALUATION / SCRUTINY:

No Revaluation shall be permitted in the MD/MS examinations. However, the student can apply for scrutiny of the answer books as per University Rules.

COMPETENCY BASED POSTGRADUATE TRAINING PROGRAMME FOR MD IN DERMATOLOGY, VENEREOLOGY & LEPROSY (9070)

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, cutaneous 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 able to give incisions, take stitches and sutures.
2. Should be trained in taking skin biopsy and nail biopsy.
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 of 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.

Syllabus

Course contents

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.

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

Lmphomas, 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 anogenitalia 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
- Fobry's Disease; galactosidase - a deficiency (Angiokeratoma corporis diffusum universale)
- 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 tract
- 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

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**
   Every post graduate student shall carry out work on an assigned research project under the guidance of a recognised Post Graduate Teacher, the result of which shall be written up and submitted in the form of a Thesis. Work for writing the Thesis is aimed at contributing to the development of a spirit of enquiry, besides exposing the post graduate student to the techniques of research, critical analysis, acquaintance with the latest advances in medical science and the manner of identifying and consulting available literature.

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 Dermtology, 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 GeneralMedicine, Thomas B. Fitzpatrick, McGraw Hill Book Company.
- Fundamentals of Pathology of skin, Mysore Venkataram

Journals

Three international and two national journals (all indexed)

Annexure - I

Postgraduate Students Appraisal Form
Pre / Para /Clinical Disciplines

Name of the Department/Unit :

Name of the PG Student :

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				

Publications Yes/ No

Remarks*_____
_____
_____

*REMARKS: Any significant positive or negative attributes of a postgraduate student to be mentioned. For score less than 4 in any category, remediation must be suggested. Individual feedback to postgraduate student is strongly recommended.

SIGNATURE OF ASSESSEE | SIGNATURE OF CONSULTANT | SIGNATURE OF HOD

MODEL PAPER

MD-9071 **Der.Ven.Lep-I**

MD Examination Month, Year

DERMATOLOGY, VENEREOLOGY & LEPROSY

Paper – I

Basic Science as applied to Dermatology, STDs and Leprosy

Time : Three Hours
Maximum Marks : 100

Attempt all questions
All the parts of one question should be answered at one place in sequential order.
Draw diagrams wherever necessary

Q.1 Discuss the anatomy of hair. Enumerate the hair shaft disorder. 20

Q.2 Describe the ultrastructure of DEJ and enumerate the various immunobullous disorder associated with it. 20

Q.3 Write short essay : 3x10=30

a) Discuss various ganulomas in dermatology.

b) Atypical mycobacteria.

c) TNF alpha and its biological actions.

Q.4 Write short notes : $4x7^{1}/_{2}=30$

a) AMP

b) MRSA

c) Cytodiagnosis in Dermatology.

d) Special stains in Dermatology.

MODEL PAPER

MD-9072 **Der.Ven.Lep-II**

MD Examination Month, Year

DERMATOLOGY, VENEREOLOGY & LEPROSY

Paper – II

Dermatology

Time : Three Hours
Maximum Marks : 100

Attempt all questions
All the parts of one question should be answered at one place in sequential order.
Draw diagrams wherever necessary

Q.1 Discuss cutaneous markers of internal malignancy. 20

Q.2 Enumerate the cause of skin failure and its management. 20

Q.3 Write short essay : 3x10=30

a) Intralesional therapies in dermatology.

b) Classification of porphyria and discuss EPP.

c) Management of hemangioma.

Q.4 Write short notes : $4x7^1/_2=30$

a) SCLE.

b) Perforating dermatosis.

c) Xeroderma pigmentosum.

d) Atopic eruption of pregnancy.

MODEL PAPER

MD-9073 **Der.Ven.Lep-III**

MD Examination Month, Year

DERMATOLOGY, VENEREOLOGY & LEPROSY

Paper – III

STD & Leprosy

Time : Three Hours
Maximum Marks : 100

Attempt all questions
All the parts of one question should be answered at one place in sequential order.
Draw diagrams wherever necessary

Q.1 Discuss reactions in leprosy and its management. 20

Q.2 Serological test in syphilis. 20

Q.3 Write short essay : 3x10=30

a) Ocular leprosy.

b) Protease inhibitors.

c) Drug resistance in leprosy.

Q.4 Write short notes : $4x7^{1}/_{2}=30$

a) Genital wart.

b) Immunoprophylaxis in leprosy.

c) HIV in pregnancy.

d) Current status in leprosy.

MODEL PAPER

MD-9074 **Der.Ven.Lep-IV**

MD Examination Month, Year

DERMATOLOGY, VENEREOLOGY & LEPROSY

Paper – IV

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

Time : Three Hours
Maximum Marks : 100

Attempt all questions
All the parts of one question should be answered at one place in sequential order.
Draw diagrams wherever necessary

Q.1 Discuss the mechanism of action of lasers and its use in pigmentary disorder. 20

Q.2 Recent advances in acne pathogenesis. 20

Q.3 Write short essay : 3x10=30

a) Newer treatment options for psoriasis.

b) Management of acne scars.

c) Newer chemical peels.

Q.4 Write short notes : $4x7^{1}/_{2}=30$

a) N-Acetylcysteine in dermatology.

b) JAK- STAT inhibitors.

c) Newer antifungal drugs.

d) USG in dermatology.