Dr. M.G.R. EDUCATIONAL AND RESEARCH INSTITUTE
Deemed to be University
Maduravoyal, Chennai – 600 095, Tamilnadu, India
(An ISO 2001:2018 Certified Institution)

University with Graded Autonomy Status

SYLLABUS & CURRICULUM
for
M.D. DERMATOLOGY, VENEREOLOGY & LEPROSY

2020 onwards

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Dr. M.G.R. EDUCATIONAL AND RESEARCH INSTITUTE TRUST

M.D. DERMATOLOGY, VENEREOLOGY & LEPROSY

COURSE DESCRIPTION

COMPONENTS OF THE PG CURRICULUM

The major components of the PG curriculum shall be:

- **Theoretical knowledge**
- **Practical/clinical Skills**
- **Training in Thesis.**
- **Attitudes, including communication.**
- **Training in research methodology.**

M.D. 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, 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 postgraduate 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 ultra structural 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 analyse 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.
- **Behaviour 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 behavioural 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 counselling 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 paediatric cases with skin diseases.

COURSE CONTENTS

THEORY SYLLABUS

(Source: ROOK'S TEXT BOOK OF DERMATOLOGY

Volume 1-4, Ninth Edition, 2016

Edited by – Christopher Griffiths, Jonathan Barker, Tanya Bleiker, Robert Chalmers, Daniel Creamer)

1. History of Dermatology
2. Structure and Function of the Skin
3. Histopathology of the Skin: General Principles
4. Diagnosis of Skin Disease
5. Epidemiology of Skin Disease
6. Health Economics and Skin Disease
7. Genetics and the Skin
8. Inflammation, Immunology and Allergy\
9. Photobiology
10. Cutaneous Response to Injury and Wound Healing
11. Psychological and Social Impact of Long-term Dermatological
12. Adverse Immunological Reactions to Drugs
13. Topical Drug Delivery

14. Clinical Pharmacology
15. Principlesof Holistic Management of Skin Disease
16. Principles of Measurement and Assessment in Dermatology
17. Principles of Evidence-based Dermatology
18. Principles of Topical Therapy
19. Principles of Systemic Therapy
20. Principles of Skin Surgery
21. Principles of Phototherapy
22. Principles of Photodynamic Therapy
23. Principles of Cutaneous Laser Therapy
24. Principles of Radiotherapy
25. Viral Infections
26. Bacterial Infections
27. Mycobacterial Infections
28. HIV and the Skin
29. Fungal Infections
30. Parasitic Diseases
31. Arthropods
32. Psoriasis and Related Disorders
33. Pityriasis Rubra Pilaris
34. Lichen Planus and Lichenoid Disorders
35. Graft-versus-host Disease
36. Eczematous Disorders
37. Seborrhoeic Dermatitis
38. Atopic Eczema
39. Urticaria
40. Recurrent Angio-oedema without Wheals
41. Urticarial Vasculitis
42. Autoinflammatory Diseases Presenting in the Skin

43. Mastocytosis
44. Reactive Inflammatory Erythemas
45. Adamantiades–BehcetDisease
46. NeutrophilicDermatoses
47. Immunobullous Diseases
48. Lupus Erythematosus
49. Antiphospholipid Syndrome
50. Dermatomyositis
51. Mixed Connective Tissue Disease
52. Dermatological Manifestations of Rheumatoid Disease
53. Systemic Sclerosis
54. Morphoea and Allied Scarring and Sclerosing Inflammatory Dermatoses
55. Cutaneous Amyloidoses
56. Cutaneous Mucinoses
57. Cutaneous Porphyrias
58. Calcificationof the Skin and Subcutaneous Tissue
59. Xanthomas and Abnormalities of Lipid Metabolism and Storage
60. Nutritional Disorders Affecting the Skin
61. Skin Disorders in Diabetes Mellitus
62. Inherited Disorders of Cornification
63. Inherited Acantholytic Disorders
64. Ectodermal Dysplasias
65. Inherited Hair Disorders
66. Genetic Defects of Nails and Nail Growth
67. Genetic Disorders of Pigmentation
68. Genetic Blistering Diseases
69. Genetic Disorders of Collagen, Elastin and Dermal Matrix
70. Disorders Affecting Cutaneous Vasculature
71. Genetic Disorders of Adipose Tissue

72. Congenital Naevi and Other Developmental Abnormalities Affecting the Skin
73. Chromosomal Disorders
74. Poikiloderma Syndromes
75. DNA Repair Disorders with Cutaneous Features
76. Syndromes with Premature Ageing
77. Hamartoneoplastic Syndromes
78. Inherited Metabolic Diseases
79. Inherited Immunodeficiency
80. Pruritus, Prurigo and Lichen Simplex
81. Mucocutaneous Pain Syndromes
82. Neurological Conditions Affecting the Skin
83. Psychodermatology and Psychocutaneous Disease
84. Acquired Disorders of Epidermal Keratinization
85. Acquired Pigmentary Disorders
86. Acquired Disorders of Hair
87. Acne
88. Rosacea
89. Hidradenitis Suppurativa
90. Other Acquired Disorders of the Pilosebaceous Unit
91. Disorders of the Sweat Glands
92. Acquired Disorders of the Nails and Nail Unit
93. Acquired Disorders of Dermal Connective Tissue
94. Granulomatous Disorders of the Skin
95. Sarcoidosis
96. Panniculitis
97. Other Acquired Disorders of Subcutaneous Fat
98. Vascular Disorders Involving the Skin
99. Purpura

100. Cutaneous Vasculitis
101. Dermatoses Resulting from Disorders of the Veins and Arteries
102. Ulceration Resulting from Disorders of the Veins and Arteries
103. Disorders of the Lymphatic Vessels
104. Flushing and Blushing
105. Dermatoses of the Scalp
106. Dermatoses of the External Ear
107. Dermatoses of the Eye, Eyelids and Eyebrows
108. Dermatoses of the Oral Cavity and Lips
109. Dermatoses of the Male Genitalia
110. Dermatoses of the Female Genitalia
111. Dermatoses of Perineal and Perianal Skin
112. Cutaneous Complications of Stomas and Fistulae
113. Dermatoses of Pregnancy
114. Dermatoses of the Neonate
115. Dermatoses and Haemangiomas of Infancy
116. Benign Cutaneous Adverse Reactions to Drugs
117. Severe Cutaneous Adverse Reactions to Drugs
118. Cutaneous Side Effects of Chemotherapy and Radiotherapy
119. Dermatoses Induced by Illicit Drugs
120. Dermatological Manifestations of Metal Poisoning
121. Mechanical Injury to the Skin
122. Pressure Injury and Pressure Ulcers
123. Cutaneous Reactions to Cold and Heat
124. Burns and Heat Injury
125. Cutaneous Photosensitivity Diseases
126. Allergic Contact Dermatitis
127. Irritant Contact Dermatitis
128. Occupational Dermatology

129. Stings and Bites
130. Benign Melanocytic Proliferations and MelanocyticNaevi
131. Benign KeratinocyticAcanthomas and Proliferations
132. Cutaneous Cysts
133. Lymphocytic Infiltrates
134. Cutaneous Histiocytoses
135. Soft-tissue Tumours and Tumour-like Conditions
136. Tumours of Skin Appendages
137. Kaposi Sarcoma
138. Cutaneous Lymphomas
139. Basal Cell Carcinoma
140. Squamous Cell Carcinoma and its Precursors
141. Melanoma
142. Melanoma Clinicopathology
143. Systemic Treatment of Melanoma
144. Dermoscopy of Melanoma and Naevi
145. Merkel Cell Carcinoma
146. Skin Cancer in the Immunocompromised Patient
147. Cutaneous Markers of Internal Malignancy
148. The Skin and Disorders of the Haematopoietic and Immune Systems
149. The Skin and Endocrine Disorders
150. The Skin and Disorders of the Heart
151. The Skin and Disorders of the Respiratory System
152. The Skin and Disorders of the Digestive System
153. The Skin and Disorders of the Kidney and Urinary Tract
154. The Skin and Disorders of the Musculoskeletal System
155. Skin Ageing
156. Cosmeceuticals
157. Soft Tissue Augmentation (Fillers)

158. Aesthetic Uses of Botulinum Toxins

159. Chemical Peels

160. Lasers and Energy-based Devices

161. Sexually Transmitted Infections

(Source : SEXUALLY TRANSMITTED INFECTIONS 2nd edition

Editors: Dr. Somesh Gupta & Bhushan Kumar)

1. Historical aspects of Sexually Transmitted Infections
2. Global Epidemiology of Sexually Transmitted infections
3. Global Epidemiology of HIV infection
4. Sexual Behaviour and Sexually Transmitted infections
5. Prevention strategies for the control of sexually transmitted infections
6. Behavioural and counselling aspects of sexually transmitted infections (Including HIV)
7. Condoms and other Barrier methods of STI and HIV prevention
8. Prevention of HIV and other Sexually Transmitted Infections : Male circumcision
9. Microbicides for prevention of Sexually Transmitted Infections
10. Vaccines for Sexually Transmissible infections
11. Vaccines for HIV
12. Partner Notification for Sexually Transmitted Diseases
13. Implementation of STI programs
14. Monitoring and Evaluating Sexually Transmitted Infection Control Programs
15. Anatomy of the Male Genital Tract
16. Anatomy of the Female Genital Tract
17. Normal Genital Flora
18. History and Physical examination
19. Genital Mucosal Immunity Against Sexually Transmitted Infections
20. Laboratory Diagnosis of Sexually Transmitted Infections

21. Rapid tests for the Detection of Sexually Transmitted infections
22. Genital herpes simplex infections
23. Anogenital Human Papillomavirus infection: Natural History: Epidemiology, and vaccination
24. Anogenital Warts, Intraepithelial Neoplasia and their clinical management
25. Molluscum Contagiosum
26. Hepatitis Viruses
27. Human Cytomegalovirus infection
28. Epstein-Barr Virus Infections
29. Kaposi Sarcoma Herpesvirus
30. Infectious Syphilis
31. Late Syphilis
32. Endemic Treponematoses
33. Gonococcal Infections
34. Chlamydia Trachomatis Infections
35. LymphogranulomaVenereum
36. Chancroid
37. Donovanosis
38. Bacterial Vaginosis
39. Pelvic Inflammatory disease
40. Genital Mycoplasmas
41. Sexually Transmitted Anorectal Infections and Enteric Bacterial Infections
42. Genital Candidal Infections
43. Trichomonasvaginalis Infections
44. Intestinal Protozoa
45. The syndromic approach for the management of STIs: An overview
46. Genital Ulcer-Adenopathy syndrome

47. Urethral Discharge
48. Epididymitis and Epididymo-orchitis
49. Abnormal Vaginal Discharge: Syndromic management
50. Syndromic Management of Lower Abdominal pain in women
51. Inguinal and Femoral Buboes
52. Vulvar Vestibulitis Syndrome
53. Male Genital pain syndromes
54. Ocular Manifestations of Sexually transmitted infections
55. Arthritis associated with sexually transmitted infections
56. Human Immunodeficiency Virus: Biology and Natural history of infections
57. HIV Diagnosis
58. Pharmacology of Antiretroviral Drugs
59. Surrogate Markers of Antiretroviral Efficacy
60. Antiretroviral Drugs for HIV Prevention
61. Acute HIV infection
62. Opportunistic Infections
63. Mucocutaneous Manifestations of HIV
64. Pulmonary Manifestations of HIV Disease
65. Neurological Manifestations of HIV
66. Gastrointestinal Manifestations of HIV Infections and AIDS
67. Renal Manifestations of HIV Infection and AIDS
68. HIV and Endocrine Manifestations
69. AIDS Associated Malignancies and their treatment
70. Rheumatic Manifestations of HIV and AIDS
71. Cardiac Involvement in HIV Infection/AIDS
72. Ocular Manifestations of HIV Infection and AIDS
73. Sexually Transmitted Infections in HIV-Infected Patients
74. Human Immuno deficiency Virus infection in women

75. HIV in children
76. HIV infection in Homosexual Men
77. HIV in blood and blood product recipients
78. HIV in Injection and other drugs users
79. Sexually transmitted infections and pregnancy
80. Sexually Transmitted infections in Neonates and Infants
81. Congenital Syphilis
82. Sexually Transmitted Infections and Infertility
83. Aging. Sexual Behavior, and HIV/STI Risk
84. Sexually Transmitted infections in the Female Sex Worker Community
85. Sexually Transmitted Infections Associated with Sexual Assault
86. Sexual Health of Migrant Populations
87. Human Sexuality
88. Homosexuality, Bisexuality and Sexual Orientation
89. Sexually Transmitted Infections among women who have Sex with Women
90. Sexually Transmitted Infections in Transgender
91. Sexual Abuse in Children
92. Male Sexual Dysfunction
93. Women's Sexual Dysfunction
94. Sexuality Education for Young People
95. Dhat Syndrome: A Culture Bound Sex Related disorder in Indian Subcontinent
96. Clinical Services for Sexually Transmitted Infections and HIV
97. Medicolegal Aspects of Sexually Transmitted Infections and Sexual Assault
98. Sexually Transmitted Infections: Screening and Diagnostic Practices

99. Sexually Transmitted Infections Related Genital Neoplasias
100. HIV, Sexually Transmitted Infections and HumanRight
101. Animal Models of Sexually Transmitted Infections
102. Guidelines for the Treatment of HIV and AIDS in Resource Limited Countries
103. Guidelines for Prevention of Perinatal HIV Infection
104. Guidelines for the Management of HIV-Associated opportunities Infections Leprosy
(Source: IAL TEXT BOOK OF LEPROSY
Editors: Dr. Bhushan Kumar &Hemanta KumarKar2nd edition, 2016)

1. History of Leprosy in India: A Historical overview from Antiquity to the introduction of MDT
2. Epidemiology of Leprosy
3. Global Leprosy situation: Historical perspective, Achievements, Challenges and future steps
4. Changing National Scenario, National Leprosy Control programmes, National Leprosy Eradication Programme, and New Paradigms of Leprosy Control
5. Immunogenetics of Leprosy
6. Bacteriology of Leprosy
7. Immunological Aspects
8. Biochemical Aspects of Leprosy
9. Pathological Aspects of Leprosy
10. Structure Electrophysiological and Ultrasongraphics studies of Peripheral Nerve
11. Pathomechanisms of Nerve Damage
12. Naturally occurring Leprosy: Mycobacterium leprae and other environmental mycobacteria in Nature

13. Experimental Leprosy: Contributions of Animal Models to Leprosy Research
14. History taking and clinical examination
15. Case definition and clinical types of Leprosy
16. Classification
17. Methods of Nerve examination
18. Histoid Leprosy
19. Laboratory diagnosis
20. Serological and molecular diagnosis of leprosy
21. Differential diagnosis of Dermatological Disorders in relation to Leprosy
22. Differential diagnosis of Neurological disorders in relation to Leprosy
23. Systemic involvement in Leprosy
24. Leprosy and Human immunodeficiency virus coinfection
25. Leprosy and pregnancy
26. Childhood Leprosy
27. Ocular Leprosy
28. Neuritis: Definition, Clinicopathological manifestations and Proforma to record nerve impairment in Leprosy
29. Leprosy Reactions: Pathogenesis and clinical features
30. Chemotherapy of Leprosy
31. Chemotherapy: Development and evolution of WHO-MDT and Newer treatment regimens
32. Management of Leprosy reactions
33. Management of neuritis and neuropathic pain
34. Chemoprophylaxis in Leprosy
35. Leprosy vaccine: Immunoprophylaxis and Immunotherapy
36. Nursing care in Leprosy patients
37. Deformities of Face, Hands, Feet and Ulcers and their management

38. Deformity and Disability prevention
39. Relapse in Leprosy
40. Drug resistance in Leprosy
41. Morbidity and Mortality in Leprosy Rehabilitation
42. Community-based initiatives in Comprehensive Leprosy Work
43. Psychosocial Aspects in Leprosy
44. Human Rights and Stigma in Leprosy
45. Health Promotion, Education and Counselling
46. Role of NGOs in National Leprosy Eradication Programme

Teaching and Learning Activities

A candidate pursuing the course should work in the institution as a fulltime 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 not absent himself / herself from work without valid reasons.

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**: Recommended for selected common topics for post graduate students of all specialties. Few topics are suggested as examples:

1) Bio-statistics
2) Use of library,

3) Research Methods
4) Medical code of Conduct and Medical Ethics
5) National Health and Disease Control Programs
6) Communication Skills etc.

These topics may preferably taken up in the first few weeks of the 1st year.

b) **Integrated Lectures**: These are recommended to be taken by multidisciplinary teams for selected topics, eg. Jaundice, Diabetes mellitus, Thyroid etc.

2. **Journal Club:** Recommended to be held once a week. All the PG students are expected to attend and actively participate in discussion and enter in the Log Book relevant details. Further, every candidate must make a presentation from the allotted journal(s), selected articles at least four times a year and a total of 12 seminar presentations in three years. The presentations would be evaluated using check lists and would carry weightage for internal assessment (See Checklist in Chapter IV). A time table with names of the student and the moderator should be announced at the beginning of every year.

3. **Subject Seminar:** Recommended to be held once a week. All the PG students are expected to attend and actively participate in discussion and enter in the Log Book relevant details. Further, every candidate must present on selected topics at least four times a year and a total of 12 seminar presentations in three years. The presentations would be evaluated using check lists and would carry weightage for internal assessment (See Checklist in Chapter IV). A timetable for the subject with names of the student and the moderator should be scheduled at the beginning of every year.

4. **Student Symposium:** Recommended as an optional multidisciplinary programme. The evaluation may be similar to that described for subject seminar.

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

a) **Service Rounds**: Postgraduate students and Interns should do every day for the 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 should be maintained for day to day activities by the students.

Entries of (a) and (b) should be made in the Log book.

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

7. **Clinico-Pathological Conference**: Recommended once a month for all post graduate students. Presentation be done by rotation. If cases are not available due to lack of clinical postmortems, it could be supplemented by published CPCs.

8. **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 postgraduate students and discussed by them as well as the senior staff of Surgery department. The staff of Pathology department would then show the slides and present final diagnosis. In these sessions the advance immuno-histo-chemical techniques, the burgeoning markers other recent developments can be discussed.

Radio-diagnosis: Interesting cases and the imaging modalities should be discussed.

8. **Teaching Skills**: Post graduate students must teach under graduate students (Eg. medical, nursing) by taking demonstrations, bed side clinics, tutorials, lectures etc. Assessment is made using a checklist by surgery faculty as well students. (See model check list in Chapter IV). Record of their participation be kept in Log book. Training of post graduate students in Educational Science and Technology is recommended.

9. **Continuing Medical Education Programmes (CME)**: Recommended that at least 2 state level CME programmes should be attended by each student in 3 years.

10. **Conferences:** Attending conferences is optional. However, it is encouraged.

11. 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

Dissertation

1. Every candidate pursuing degree course is required to carry out work on a selected research project under the guidance of a recognized post graduate teacher. The results of such a work shall be submitted in the form of a dissertation.

2. The dissertation is aimed to train a post graduate student in research methods and techniques. It includes identification of a problem, formulation of a hypothesis, search and review of literature, getting acquainted with recent advances, designing of a research study, collection of data, critical analysis, comparison of results and drawing conclusions.

3. Every candidate shall submit to the Registrar, in the prescribed proforma, a synopsis containing particulars of proposed dissertation work six months from the date of commencement of the course on or before the dates notified by the University. The synopsis shall be sent through the proper channel.

4. Such synopsis will be reviewed and the dissertation topic will be registered by the University. No change in the dissertation topic or guide shall be made without prior approval of the University.

5. The dissertation should be written under the following headings:

i. Introduction
ii. Aims or Objectives of study
iii. Review of Literature
iv. Material and Methods
v. Results
vi. Discussion
vii. Conclusion
viii. Summary
ix. References (Vancouver style)
x. Tables
xi. Annexures

6. The written text of dissertation shall be not less than 50 pages and shall not exceed 150 pages excluding references, tables, questionnaires and other annexures. It should be neatly typed in double line spacing on one side of paper (A4 size, 8.27” x 11.69”) and bound properly. Spiral binding should be avoided. The dissertation shall be certified by the guide, head of the department and head of the Institution.

7. Four copies of dissertation thus prepared shall be submitted to the Registrar (Evaluation), six months before final examination on or before the dates notified by the University.

8. The dissertation shall be valued by examiners appointed by the University.

   Approval of dissertation work is an essential precondition for a candidate to appear in the University examination.

9. For some more details regarding Guide etc., please see Chapter I and for books on research methodology, ethics, etc., see Chapter II.

Rotation Postings

This is essential to acquire knowledge in allied subjects as applicable to Dermatology, S.T.D. and Leprosy. It is preferable to post P.G. students to General Medicine, Paediatrics, Plastic Surgery and Psychiatry – 4 weeks each and posting to a Leprosy hospital or National Leprosy control units for 8 weeks.

Monitoring Learning Progress

It is essential to monitor the learning progress of each candidate through continuous appraisal and regular assessment. It not only also helps teachers to evaluate students, but also students to evaluate themselves. The monitoring be done by the staff of the department based on participation of students in various teaching / learning activities. It may be structured and assessment be done using checklists that assess various aspects. Checklists are given in Chapter II.

The learning out comes to be assessed should include: (i) Personal Attitudes, (ii) Acquisition of Knowledge, (iii) Clinical and operative skills, (iv) Teaching skills and (v) Dissertation.

i) ***Personal Attitudes.*** The essential items are:

- ❖ Caring attitudes
- ❖ Initiative
- ❖ Organisational ability
- ❖ Potential to cope with stressful situations and undertake responsibility
- ❖ Trust worthiness and reliability
- ❖ To understand and communicate intelligibly with patients and others
- ❖ To behave in a manner which establishes professional relationships with patients and colleagues
- ❖ Ability to work in team
- ❖ A critical enquiring approach to the acquisition of knowledge

The methods used mainly consist of observation. It is appreciated that these items require a degree of subjective assessment by the guide, supervisors and peers.

ii) ***Acquisition of Knowledge***: The methods used comprise of `Log Book' which records participation in various teaching / learning activities by the students. The number of activities attended and the number in which presentations are made are to be recorded. The log book should periodically be validated by the supervisors. Some of the activities are listed. The list is not complete. Institutions may include additional activities, if so, desired.

Journal Review Meeting (Journal Club): The ability to do literature search, in depth study, presentation skills, and use of audio- visual aids are to be assessed. The assessment is made by faculty members and peers attending the meeting using a checklist (see Model Checklist – I, Chapter II)

Seminars / Symposia: The topics should be assigned to the student well in advance to facilitate in depth study. The ability to do literature search, in depth study, presentation skills and use of audio- visual aids are to be assessed using a checklist (see Model Checklist-II, Chapter II)

Clinico-pathological conferences : This should be a multidisciplinary case study of an interesting case to train the candidate to solve diagnostic and therapeutic problems by using an analytical approach. The presenter(s) are to be assessed using a check list similar to that used for seminar.

Medical Audit: Periodic morbidity and mortality meeting be held. Attendance and participation in these must be insisted upon. This may not be included in assessment.

iii) **Clinical skills**

Day to Day work: Skills in outpatient and ward work should be assessed periodically. The assessment should include the candidates' sincerity and punctuality, analytical ability and communication skills (see Model Checklist III, Chapter II).

Clinical meetings*:* Candidates should periodically present cases to his peers and faculty members. This should be assessed using a check list (see Model checklist IV, Chapter II).

Clinical and Procedural skills*:* The candidate should be given graded responsibility to enable learning by apprenticeship. The performance is assessed by the guide by direct observation. Particulars are recorded by the student in the log book. (Table No.3, Chapter II)

iv) Teaching skills: Candidates should be encouraged to teach undergraduate medical students and paramedical students, if any. This performance should be based on assessment by the faculty members of the department and from feedback from the undergraduate students (See Model checklist V, Chapter II)

v) Dissertation in the Department: Periodic presentations are to be made in the department. Initially the topic selected is to be presented before submission to the University for registration, again before finalisation for critical evaluation and another before final submission of the completed work (See Model Checklist VI & VII, Chapter II)

vi) ***Periodic tests****:* The departments may conduct three tests, two of them be annual tests, one at the end of first year and the other in the second year. The third test may be held three months before the final examination. The tests may include written papers, practicals / clinicals and viva voce.

vii) Work diary / Log Book- Every candidate shall maintain a work diary and record his/her participation in the training programmes conducted by the department such as journal reviews, seminars, etc. Special mention may be made of the presentations by the candidate as well as details of clinical or laboratory procedures, if any conducted by the candidate.

viii) *Records:* Records, log books and marks obtained in tests will be maintained by the Head of the Department and will be made available to the University or MCI.

Log book

The log book is a record of the important activities of the candidates during his training, Internal assessment should be based on the evaluation of the log book. Collectively, log books are a tool for the evaluation of the training programme of the institution by external agencies. The record includes academic activities as well as the presentations and procedures carried out by the candidate.

Format for the log book for the different activities is given in Tables 1,2 and 3 of Chapter II. Copies may be made and used by the institutions.

Procedure for defaulters: Every department should have a committee to review such situations. The defaulting candidate is counseled by the guide and head of the department. In extreme cases of default the departmental committee may recommend that defaulting candidate be withheld from appearing the examination, if she/he fails to fulfill the requirements in spite of being given adequate chances to set himself or herself right.

SCHEME OF EXAMINATION

A. Theory

There shall be four question papers, each of three hours duration. Each paper shall consist of 10 short essay questions each carrying 10 marks. Total marks for each paper will be 100.

Paper I	= 100 Marks
Paper II	= 100 Marks
Paper III	= 100 Marks
Paper IV	= 100 Marks

Total	**400 Marks**

Details of distribution of topics for each paper will be as follows;

Paper I	Basic Sciences as applied to Dermatology, STD., and Leprosy
Paper II	Dermatology
Paper III	S.T.D. & Leprosy
Paper IV	Recent advances in field of Dermatology, applied sciences pertaining to skin/VD and internal medicine & Skin

Note: The distribution of chapters / topics shown against the papers are suggestive only.

B. Clinical: 200 marks

2 Long case – (45 marks each)	-	90 marks
2 Short cases – (25 marks each)	-	50 marks
10 spotters – (6 marks each)	-	60 marks

C. Viva Voce: 100 marks

1) Viva-Voce Examination: (80 Marks)

All examiners will conduct viva-voce conjointly on candidate's comprehension, analytical approach, expression and interpretation of data. It includes all components of course contents. In addition, candidates may be also

be given case reports, charts, gross specimens, pathology slides, instruments, X- rays, ultrasound, CT scan images, for interpretation. It includes discussion on dissertation also.

2) Pedagogy Exercise: (20 Marks)

A topic be given to each candidate in the beginning of clinical examination. He/she is asked to make a presentation on the topic for 8-10 minutes.

	Theory	Practical & Viva	Grand Total
Maximum marks for M.D. Dermatology, Venereology & Leprosy	400	300 (Practical – 200 & Viva – 100)	700

MARKS QUALIFYING FOR A PASS

Obtaining a minimum of 40% marks in each theory paper and not less than 50% cumulatively in all the four papers for degree examination. Obtaining of 50% marks in Practical examination shall be mandatory for passing the examination as a whole in the degree examination.

Recommended books and Journals

1. Wilkinson/Ebling, Text Book of Dermatology, 4 Volumes, 5th Ed. 1998, Oxford Blackwell Scientific Publications, London.
2. Samuel L. Moschela M.D. Harry J. Hurllay M.D., Text Book of Dermatology 2 Volumes – 2nd (Latest Edition 1994), 1985 First Indian Edition 1987, Jaypee Brothers, New Delhi.
3. Walter – F. Lever Gundula Schaumburg Lever, Histopathology o the Skin – 7th (Latest Edition 1996), 1990, J.B. Lippincott Company, Philadelphia Grand Rapids New York.
4. Iadvl Indian Association of Dermatologists Veneraeologiste & Leproligists, Text Book Atlas of Dermatology 2 Volumes – Ist Edition, 1994, Bhalani Publishing House, Dadar, Mumbai.

5. I Iarry L, Arnold Richard 13-Dom William D. James, Andrew's Diseases of the Skin 1 Volume – 8th Edition, 1990, W.B. Saun Philedelphiader's company.
6. Satish S. Savant, Radha Atalshah, Deepak Gore, Text Book & Atlas of Dermato Surgery & Cosemetology – 1st Edition, 1998, ASCAD, Mumbai (Association of Indian Scientific Cosmetology and Dermatosurgey).
7. Richard Ashion, Barbara Lepdard, Differential Diagnosis in Dermatology – 2nd Edition 1992, Radchiffe Medical Press, Oxford.
8. Dharmendra, Leprosy 2 Volumes – 1st Edition 1985, Samant and Company, Mumbai.
9. Champion, R.H. Pye, R.J., Recent Advances in Dermatology 8th Volumes – 1st (8th) Edition 1990, Churchill Living Stone, London.
10. Amborse King Claude Nicol Philip Rodin, Venereal Diseases – 4th Edition 190 Reprinted 1984, 1986, EL.BS English Language Book Society/Baillere Tindall, East Sussex.
11. R.S. Morton and J.R.W. Harris, Recent Awances in Std – 1st Edition 1975, Churchill Livingstone, London.
12. Hugh Wansey Bayly, Venerral Diseases – 3rd Edition, Buttreworth & Company, Bombay.
13. Jarnus Marshell, Diseases – 2nd Edition 1948, Mc Millan & Co, London
14. Parish L.C., Std – 2nd Edition 1989, Spring erlag, New York London.
15. King K Holmes, Sexually Transmitted Diseases – 3rd Edition (Latest) 1999, Mc Graw-Hill – Helath profession Division, New Delhi, $ 129.00, Rs. 5688.90
16. Jopin W.H, Hand Book of Leprosy – 3rd Edition, 1984, William Hethgunah Medical Book Ltd., London.
17. Dermatology in General Medicine by Thomas B. Fitzpatrick McGraw Hill Book Company.

Journals

1. Archives or Dermatology
2. British Journal or Dermatology
3. Indian Journal or Dermatology
4. Indian Journal or Dermatology and Leprosy
5. Indian Journal or Leprosy
6. Journal of American Academy of Dermatology
7. International Journal of Dermatology
8. International Journal of STD & AIDS

ADDITIONAL READING

1. Indian Council of Medical Research, "Ethical Guidelines for Biomedical Research on Human Subjects", I.C.M.R, New Delhi, 2000.
2. Code of Medical Ethics framed under section 33 of the Indian Medical Council Act, 1956. Medical Council of India, Kotla Road, New Delhi.
3. Francis C M, Medical Ethics, J P Publications, Bangalore, 1993.
4. Indian National Science Academy, Guidelines for care and use of animals in Scientific Research, New Delhi, 1994.
5. Internal National Committee of Medical Journal Editors, Uniform requirements for manuscripts submitted to biomedical journals, N Engl J Med 1991; 424-8
6. Kirkwood B R, Essentials of Medical Statistics, 1st Ed., Oxford: Blackwell Scientific Publications 1988.
7. Mahajan B K, Methods in Bio statistics for medical students, 5th Ed. New Delhi, Jaypee Brothers Medical Publishers, 1989.
8. Compendium of recommendations of various committees on Health and Development (1943-1975). DGHS, 1985 Central Bureau of Health Intelligence, Directorate General of Health Services, min. of Health and Family Welfare, Govt. of India, Nirman Bhawan, New Delhi. P - 335.

9. National Health Policy, Min. of Health & Family Welfare, Nirman Bhawan, New Delhi, 1983
10. Srinivasa D K etal, Medical Education Principles and Practice, 1995. National Teacher Training Centre, JIPMER, Pondicherry

MONITORING LEARNING PROGRESS

It is essential to monitor the learning progress of each candidate through continuous appraisal and regular assessment. It not only also helps teachers to evaluate students, but also students to evaluate themselves. The monitoring be done by the staff of the department based on participation of students in various teaching / learning activities. It may be structured and assessment be done using checklists that assess various aspects. Model Checklists are given in this Chapter which may be copied and used.

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- ❖ Ability to work in team
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v) **Periodic tests:** In case of degree courses of three years duration, the concerned departments may conduct three tests, two of them be annual tests, one at the end of first year and the other in the second year. The third test may be held three months before the final examination. The tests may include written papers, practicals / clinicals and viva voce.

In case of diploma courses of two years duration, the concerned departments may conduct two tests, one of them be at the end of first year and the other in the second year three months before the final examination. The tests may include written papers, practicals / clinicals and viva voce.

vi) **Work diary / Log Book-** Every candidate shall maintain a work diary and record his/her participation in the training programmes conducted by the department such as journal reviews, seminars, etc. Special mention may be made of the presentations by the candidate as well as details of clinical or laboratory procedures, if any conducted by the candidate.

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Log book

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CHAPTER II (Contd.)

Format of Model Check Lists

Check List -I. MODEL CHECK-LIST FOR EVALUATION OF JOURNAL REVIEW PRESENTATIONS

Name of the Student: Name of the Faculty/Observer:
Date:

Sl. No.	Items for observation during presentation	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1.	Article chosen was					
2.	Extent of understanding of scope & objectives of the paper by the candidate					
3.	Whether cross references have been consulted					
4.	Whether other relevant publications consulted					
5.	Ability to respond to questions on the paper/ subject					
6.	Audio-Visual aids used					
7.	Ability to defend the paper					
8.	Clarity of presentation					
9.	Any other observation					
	Total Score					

Check List - II. MODEL CHECK-LIST FOR EVALUATION OF SEMINAR PRESENTATIONS

Name of the Student: Name of the Faculty/Observer:

Date:

Sl. No.	Items for observation during presentation	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1.	Whether cross references have been consulted					
2.	Whether cross references have been consulted					
3.	Completeness of Preparation					
4.	Clarity of Presentation					
5.	Understanding of subject					
6.	Ability to answer questions					
7.	Time scheduling					
8.	Appropriate use of Audio-Visual aids					
9.	Overall Performance					
10.	Any other observation					
	Total Score					

Check List - III

MODEL CHECK LIST FOR EVALUATION OF CLINICAL WORK IN WARD / OPD

(To be completed once a month by respective Unit Heads including posting in other departments)

Name of the Student: Name of the Unit Head:
Date:

Sl. No.	Points to be considered:	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1.	Regularity of attendance					
2.	Punctuality					
3.	Interaction with colleagues and supportive staff					
4.	Maintenance of case records					
5.	Presentation of cases during rounds					
6.	Investigations work up					
7.	Bedside manners					
8.	Rapport with patients					
9.	Counselling patient's relatives for blood donation or Post mortem and Case follow up.					
10.	Overall quality of Ward work					
	Total Score					

Check List – IV
EVALUATION FORM FOR CLINICAL PRESENTATION

Name of the Student: Name of the Faculty:
Date:

Sl. No.	Points to be considered	Poor 0	Below Average 1	Average 2	Above Average 3	Very Good 4
1.	Completeness of history					
2.	Whether all relevant points elicited					
3.	Clarity of Presentation					
4.	Logical order					
5.	Mentioned all positive and negative points of importance					
6.	Accuracy of general physical examination					
7.	Whether all physical signs elicited correctly					
8.	Whether any major signs missed or misinterpreted					
9.	Diagnosis: Whether it follows logically from history and findings					
10	Investigations required ▪ Complete list					
	▪ Relevant order					
	▪ Interpretation of investigations					
11.	Ability to react to questioning Whether it follows logically from history and findings					
12.	Ability to defend diagnosis					
13.	Ability to justify differential diagnosis					
14.	Others					
	Grand Total					

Check List - V

MODEL CHECK LIST FOR EVALUATION OF TEACHING SKILL PRACTICE

Sl. No.		Strong Point	Weak Point
1.	Communication of the purpose of the talk		
2.	Evokes audience interest in the subject		
3.	The introduction		
4.	The sequence of ideas		
5.	The use of practical examples and/or illustrations		
6.	Speaking style (enjoyable, monotonous, etc., specify)		
7.	Attempts audience participation		
8.	Summary of the main points at the end		
9.	Asks questions		
10.	Answers questions asked by the audience		
11.	Rapport of speaker with his audience		
12.	Effectiveness of the talk		
13.	Uses AV aids appropriately		

Check list VI

MODEL CHECK LIST FOR DISSERTATION PRESENTATION

Name: Faculty/observer:
Date:

Sl. No.	Points to be considered divine	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1.	Interest shown in selecting a topic					
2.	Appropriate review of literature					
3.	Discussion with guide & other faculty					
4.	Quality of protocol					
5.	Preparation of proforma					

Checklist-VII

CONTINUOUS EVALUATION OF DISSERTATION WORK BY GUIDE / CO-GUIDE

Name of the Student: Name of the Faculty/Observer:
Date:

Sl. No.	Items for observation during presentation	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1.	Periodic consultation with guide/co-guide					
2.	Regular collection of case material					
3.	Depth of analysis / discussion					
4.	Departmental presentation of findings					
5.	Quality of final output					
6.	Others					
	Total Score					

LOG BOOK

Table 1 : Academic activities attended

Name: Admission Year:

College:

Date	Type of Activity Specify Seminar, Journal Club, Presentation, UG teaching	Particulars

LOG BOOK

Table 2 : Academic presentations made by the student

Name: Admission Year:

College:

Date	Topic	Type of Presentation Specify Seminar, Journal Club, Presentation, UG teaching etc.

LOG BOOK

Table 3: Diagnostic and Operative procedures performed

Name: Admission Year:

College:

Date	Name	ID No.	Procedure	Category O, A, PA, PI*

*** Key:**
O - Washed up and observed
A - Assisted a more senior Surgeon
PA - Performed procedure under the direct supervision of a senior surgeon
PI - performed independently

Model Overall Assessment Sheet

Name of the College:
Academic Year:

Sl. No	Faculty Member & Others	Name of Student and Mean Score									
		A	B	C	D	E	F	G	H	I	J
1											
2											
3											
4											
5											
Total Score											

Note: Use separate sheet for each year.

Medical Ethics

SENSITISATION AND PRACTICE

INTRODUCTION

There is now a shift from the traditional individual patient, doctor relationship, and medical care. With the advances in science and technology and the needs of patient, their families and the community, there is an increased concern with the health of society. There is a shift to greater accountability to the society. Doctors and health professionals are confronted with many ethical problems. It is, therefore necessary to be prepared to deal with these problems. To accomplish the Goal (i), General Objective (ii) stated in Chapter II (pages 2.1 to 2.3), and develop human values it is urged that ***ethical sensitisation*** be achieved by lectures or discussion on ethical issues, clinical case discussion of cases with an important ethical component and by including ethical aspects in discussion in all case presentation, bedside rounds and academic postgraduate programs.

Course Contents

1. *Introduction to Medical Ethics*
   What is Ethics
   What are values and norms
   Relationship between being ethical and human fulfillment
   How to form a value system in one's personal and professional life
   Heteronomous Ethics and Autonomous Ethics
   Freedom and personal Responsibility

2. *Definition of Medical Ethics*
   Difference between medical ethics and bio-ethics
   Major Principles of Medical Ethics 0

Beneficence	=	fraternity
Justice	=	equality
Self-determination (autonomy)	=	liberty

3. *Perspective of Medical Ethics*

The Hippocratic oath
The Declaration of Helsinki
The WHO Declaration of Geneva
International code of Medical Ethics (1993)
Medical Council of India Code of Ethics

4. *Ethics of the Individual*

The patient as a person
The Right to be respected
Truth and Confidentiality
The autonomy of decision
The concept of disease, health and healing
The Right to health
Ethics of Behavior modification
The Physician – Patient relationship
Organ donation

5. *The Ethics of Human life*

What is human life
Criteria for distinguishing the human and the non-human
Reasons for respecting human life
The beginning of human life
Conception, contraception
Abortion
Prenatal sex-determination
In vitro fertilization (IVF), Artificial Insemination by Husband (AIH)
Artificial Insemination by Donor (AID),
Surrogate motherhood, Semen Intrafallopian Transfer (SIFT),
Gamete Intrafallopian Transfer (GIFT), Zygote Intrafallopian Transfer (ZIFT),
Genetic Engineering

6. *The Family and Society in Medical Ethics*

The Ethics of human sexuality
Family Planning perspectives
Prolongation of life
Advanced life directives – The Living Will
Euthanasia
Cancer and Terminal Care

7. *Profession Ethics*

Code of conduct
Contract and confidentiality
Charging of fees, Fee-splitting
Prescription of drugs
Over-investigating the patient
Low – Cost drugs, vitamins and tonics
Allocation of resources in health cares
Malpractice and Negligence

8. *Research Ethics*

Animal and experimental research / humanness
Human experimentation
Human volunteer research – Informed Consent
Drug trials

9. *Ethical workshop of cases*

Gathering all scientific factors
Gathering all human factors
Gathering all value factors
Identifying areas of value – conflict, Setting of priorities,
Working out criteria towards decisions

Recommended Reading

Francis C.M., **Medical Ethics**, 1 Ed, 1993, Jaypee Brothers, New Delhi