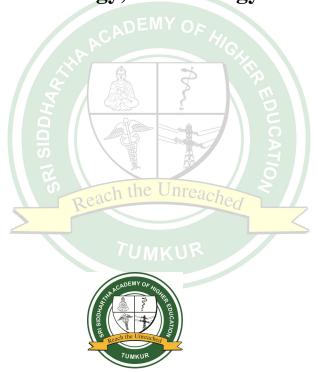
Regulations and Curricula For Post Graduate Degree Course in Medical Sciences

Volume III: Clinical Subjects

M. D. Dermatology, Venereology and Leprosy



Sri Siddhartha Academy of Higher Education

Deemed-to-be-University Accredited 'A' Grade by NAAC

Established under Section 3 of the UGC Act, 1956 MHRD, GOI No. F.9-31/2006-U.3 (A) Dtd. 30th May 2008

Agalakote, B.H. Road, Tumkur - 572107, Karnataka, India

Contents

Reach the Unreached

Chapter I : Regulations

Chapter II : Goals and Objectives

Chapter III : Course Description

M. D. Dermatology, Venereology and Leprosy

Chapter IV : Monitoring Learning Progress

Chapter V : Medical Ethics

2

Regulations for Post Graduate Degree Course in Medical Sciences

Chapter I

1. Branches of Study

1.1 Postgraduate Degree Courses

The following courses of studies may be pursued.

A. M.D. (Doctor of Medicine)

- 1. Anaesthesiology
- 2. Aviation Medicine
- 3. Anatomy
- 4. Biochemistry
- 5. Community Medicine
- 6. Dermatology, Venereology and Leprosy
- 7. Forensic Medicine
- 8. General Medicine
- 9. Microbiology
- 10. Pathology
- 11. Paediatrics
- 12. Pharmacology
- 13. Physiology
- 14. Psychiatry
- 15. Radio-diagnosis
- 16. Radio-threapy
- 17. Tuberculosis & Respiratory Medicine

B. M.S. (Master of Surgery)

- 1. General Surgery
- 2. Obstetrics and Gynecology
- 3. Ophthalmology
- 4. Orthopedics
- 5. Oto-Rhino-Laryngology

2. Eligibility for Admission

MD / MS Degree and Diploma Courses: A candidate affiliated to this university and who has passed final year M.B.B.S. examination after pursuing a study in a medical college recognised by the Medical Council of India, from a recognised Medical College affiliated to any other University recognised as equivalent thereto, and has completed one year compulsory rotating internship in a teaching Institution or other Institution recognised by the Medical Council of India, and has obtained permanent registration of any State Medical Council shall be eligible for admission.

3. Obtaining Eligibility Certificate by the University before making Admission

No candidate shall be admitted for any postgraduate degree/diploma course unless the candidate has obtained and produced the eligibility certificate issued by the University. The candidate has to make an application to the University with the following documents along with the prescribed fee:

- 1. MBBS pass / degree certificate issued by the University.
- 2. Marks cards of all the university examinations passed MBBS course.
- 3. Attempt Certificate issued by the Principal.
- 4. Certificate regarding the recognition of the medical college by the Medical Council of India.
- 5. Completion of internship certificate.
- 6. In case internship was done in a non-teaching hospital, a certificate from the Medical Council of India that the hospital has been recognised for internship.
- 7. Registration by any State Medical Council and
- 8. Proof of SC/ST or Category I, as the case may be.

Candidates should obtain the Eligibility Certificate before the last date for admission as notified by the University.

A candidate who has been admitted to postgraduate course should register his / her name in the University within a month of admission after paying the registration fee.

4. Intake of Students

The intake of students to each course shall be in accordance with the ordinance in this behalf.

5. Duration of Study

M.D /M.S Degree Courses

The course of study shall be for a period of 3 years consisting of 6 terms.

6. Method of training

The training of postgraduate for degree/diploma shall be residency pattern with graded responsibilities in the management and treatment of patients entrusted to his/her care. The participation of the students in all facets of educational process is essential. Every candidate should take part in seminars, group discussions, grand rounds, case demonstration, clinics, journal review meetings, CPC and clinical meetings. Every candidate should be required to participate in the teaching and training programme of undergraduate students. Training should include involvement in laboratory and experimental work, and research studies. Basic medical sciences students should be posted to allied and relevant clinical departments or institutions. Similarly, clinical subjects' students should be posted to basic medical sciences and allied speciality departments or institutions.

7. Attendance, Progress and Conduct

- 7.1 A candidate pursuing degree/diploma course should work in the concerned department of the institution for the full period as a full time student. No candidate is permitted to run a clinic/laboratory/nursing home while studying postgraduate course.
- 7.2 Each year shall be taken as a unit for the purpose of calculating attendance.

- 7.3 Every student shall attend symposia, seminars, conferences, journal review meetings, grand rounds, CPC, case presentation, clinics and lectures during each year as prescribed by the department and not absent himself / herself from work without valid reasons.
- 7.4 Every candidate is required to attend a minimum of 80% of the training during each academic year of the post graduate course. Provided further, leave of any kind shall not be counted as part of academic term without prejudice to minimum 80% attendance of training period every year.
- 7.5 Any student who fails to complete the course in the manner stated above shall not be permitted to appear for the University Examinations.

8. Monitoring Progress of Studies:

8. Monitoring Progress of Studies:

8.1 Work diary / Log Book - Every candidate shall maintain a work diary and record of his/her participation in the training programmes conducted by the department such as journal reviews, seminars, etc. (please see Chapter IV for model checklists and logbook specimen copy). 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. The work diary shall be scrutinised and certified by the Head of the Department and Head of the Institution, and presented in the university practical/clinical examination.

8.2 Periodic tests:

Incase of degree courses of three years duration (MD/MS), 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. Records and marks obtained in such tests will be maintained by the Head of the Department and sent to the University, when called for.

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.

8.3 Records: Records and marks obtained in tests will be maintained by the Head of the Department and will be made available to the University or MCI.

9. Dissertation

- 9.1 Every candidate pursuing MD/MS degree course is required to carry out work on a selected research project under the guidance of a recognised post graduate teacher. The results of such a work shall be submitted in the form of a dissertation.
- 9.2 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.

- 9.3 Every candidate shall submit to the Registrar (Academic) of the University in the prescribed proforma, a synopsis containing particulars of proposed dissertation work within 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.
- 9.4 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.
- 9.5 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
 - x. Tables
 - xi. Annexures
- 9.6 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.
- 9.7 Four copies of dissertation thus prepared shall be submitted to the Controller of Examinations six months before final examination on or before the dates notified by the University.
- 9.8 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.
- 9.9 **Guide:** The academic qualification and teaching experience required for recognition by this University as a guide for dissertation work is as per Medical Council of India Minimum Qualifications for Teachers in Medical Institutions Regulations, 1998. Teachers in a medical college/institution having a total of eight years teaching experience out of which at least five years teaching experience as Lecturer or Assistant Professor gained after obtaining post graduate degree shall be recognised as post graduate teachers.
- A **Co-guide** may be included provided the work requires substantial contribution from a sister department or from another medical institution recognised for teaching/training by SSAHE/Medical Council of India. The co-guide shall be a recognised post graduate teacher SSAHE.
- 9.10 **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.

10. Schedule of Examination

The examination for M.D / M.S courses shall be held at the end of three academic years (six academic terms). The university shall conduct two examinations in a year at an interval of four to six months between the two examination. Not more than two examinations shall be conducted in an academic year.

11. Scheme of Examination

11.1 M.D. / M.S. Degree

- M.D. / M.S. Degree examinations in any subject shall consist of dissertation, written paper (Theory), Practical/Clinical and Viva voce.
- 11.1.1 Dissertation: Every candidate shall carryout work and submit a dissertation as indicated in Sl.NO.9. Acceptance of dissertation shall be a precondition for the candidate to appear for the final examination.
- 11.1.2 Written Examination (Theory): A written examination shall consist of **four** question papers, each of **three** hours duration. Each paper shall carry 100 marks. Out of the **four** papers, the 1st paper in clinical subjects will be on applied aspects of basic medical sciences. Recent advances may be asked in any or all the papers.

11.1.3 Practical / Clinical Examination:

In case of practical examination, it should be aimed at assessing competence and skills of techniques and procedures as well as testing students ability to make relevant and valid observations, interpretations and inference of laboratory or experimental work relating to his/her subject.

In case of clinical examination, it should aim at examining clinical skills and competence of candidates for undertaking independent work as a specialist. Each candidate should examine at least one long case and **two** short cases.

The total marks for practical / clinical examination shall be 200.

- 11.1.4 Viva Voce: Viva Voce Examination shall aim at assessing depth of knowledge, logical reasoning, confidence and oral communication skills. The total marks shall be 100 and the distribution of marks shall be as under:
 - (i) For examination of all components of syllabus 80 Marks
 - (ii) For Pedagogy 20 Marks
- 11.1.5 Examiners: There shall be at least four examiners in each subject. Out of them two shall be external examiners and two shall be internal examiners. The qualification and teaching experience for appointment as an examiner shall be as laid down by the Medical Council of India.

11.1.6 Criteria for declaring as pass in University Examination: A candidate shall secure not less than 50% marks in each head of passing which shall include (1) Theory, (2) Practical including clinical and viva voce examination.

A candidate securing less than 50% of marks as described above shall be declared to have failed in the examination. Failed candidate may appear in any subsequent examination upon payment of fresh fee to the Controller of Examinations.

11.1.7 Declaration of distinction: A successful candidate passing the University examination in first attempt will be declared to have passed the examination with distinction, if the grand total aggregate marks is 75 percent and above. Distinction will not be awarded for candidates passing the examination in more than one attempt.

Number of Candidates per day. The maximum number of candidates for practical/clinical and viva-voce examination shall be as under:

MD / MS Course: Maximum of 6 per day



CHAPTER II

GOALS AND GENERAL OBJECTIVES OF POSTGRADUATE MEDICAL EDUCATION PROGRAM

GOAL

The goal of postgraduate medical education shall be to produce competent specialist and /or Medical teacher:

- (i) who shall recognise the health needs of the community, and carry out professional obligations ethically and in keeping with the objectives of the national health policy;
- (ii) who shall have mastered most of the competencies, pertaining to the specialty, that are required to be practiced at the secondary and the tertiary levels of the health care delivery system:
- (iii) who shall be aware of the contemporary advances and developments in the discipline concerned;
- (iv) who shall have acquired a spirit of scientific inquiry and is oriented to the principles of research methodology and epidemiology; and
- (v) who shall have acquired the basic skills in teaching of the medical and paramedical professionals.

GENERAL OBJECTIVES

At the end of the postgraduate training in the discipline concerned the student shall be able to:

- i) Recognise the importance of the concerned speciality in the context of the health need of the community and the national priorities in the health sector.
- ii) Practice the speciality concerned ethically and in step with the principles of primary health care.
- iii) Demonstrate sufficient understanding of the basic sciences relevant to the concerned speciality.
- iv) Identify social, economic, environmental, biological and emotional determinants of health in a given case, and take them into account while planning therapeutic, rehabilitative, preventive and promotive measures/strategies.
- v) Diagnose and manage majority of the conditions in the speciality concerned on the basis of clinical assessment, and appropriately selected and conducted investigations.
- vi) Plan and advise measures for the prevention and rehabilitation of patients suffering from disease and disability related to the specialty.
- vii) Demonstrate skills in documentation of individual case details as well as morbidity and mortality data relevant to the assigned situation.

- viii) Demonstrate empty and humane approach towards patients and their families and exhibit interpersonal behaviour in accordance with the societal norms and expectations.
- ix) Play the assigned role in the implementation of national health programmes, effectively and responsibly.
- x) Organise and supervise the chosen/assigned health care services demonstrating adequate managerial skills in the clinic/hospital or the field situation.
- xi) Develop skills as a self-directed learner, recognise continuing educational needs; select and use appropriate learning resources.
- xii) Demonstrate competence in basic concepts of research methodology and epidemiology, and be able to critically analyse relevant published research literature.
- xiii) Develop skills in using educational methods and techniques as applicable to the teaching of medical/nursing students, general physicians and paramedical health workers.
- xiv) Function as an effective leader of a health team engaged in health care, research or training.

STATEMENT OF THE COMPETENCIES

Keeping in view the general objectives of postgraduate training, each disciplines shall aim at development of specific competencies, which shall be defined and spelt out in clear terms. Each department shall produce a statement and bring it to the notice of the trainees in the beginning of the programme so that he or she can direct the efforts towards the attainment of these competencies.

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.

Source: Medical Council of India, Regulations on postgraduate medical education, 1997.

Chapter III

Course Description

Postgraduate Courses in Dermatology

M.D. Dermatology, Venereology and Leprosy

Goals

The goals of postgraduate training course would be to train a MBBS doctor who will:

- Practice efficiently and effectively, backed by scientific knowledge and skill base.
- Exercise empathy and a caring attitude and maintain high ethical standards.
- Continue to evince keen interest in continuing education in the speciality irrespective of whether he is in a teaching institution or is a practicing specialist.
- Be a motivated 'teacher' defined as a specialist keen to share his knowledge and skills with a colleague or a junior or any learner.

Objectives

The following objectives are laid out to achieve the goals of the course. These objectives are to be achieved by the time the candidate completes the course. The Objectives may be considered under the subheadings

- 1. Knowledge (Cognitive domain)
- 2. Skills (Psycho motor domain)
- 3. Human values, Ethical practice and Communication abilities

Knowledge:

- Describe aetoiology, pathophysiology, principles of diagnosis and management of common problems including emergencies, in adults and children.
- Describe indications and methods for fluid and electrolyte replacement therapy including blood transfusion
- Describe common malignancies in the country and their management including prevention
- Demonstrate understanding of basic sciences relevant to this speciality
- 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 to refer them to the proper specialist.
- Advise regarding the operative or non-operative management of the case and to carry out this management effectively.
- Update oneself by self-study and by attending courses, conferences and seminars relevant to the speciality.

- Teach and guide his team, colleagues and other students.
- Undertake audit, use information technology tools and carry out research, both basic and clinical, with the aim of publishing his work and presenting his work at various scientific fora.

Skills

- Take a proper clinical history, examine the patient, perform essential diagnostic procedures and order relevant tests and interpret them to come to a reasonable diagnosis about the surgical condition.
- Perform common procedures relevant to the specialitay.
- Provide basic and advanced life saving support services (BLS) in emergency situations
- Undertake complete monitoring of the patient.

Human values, Ethical practice and Communication abilities

- Adopt ethical principles in all aspects of his/her practice. Professional honesty and integrity are to be fostered. Care is to be delivered irrespective of the social status, caste, creed or religion of the patient.
- Develop communication skills, in particular the skill to explain various options available in management and to obtain a true informed consent from the patient.
- Provide leadership and get the best out of his team in a congenial working atmosphere.
- Apply high moral and ethical standards while carrying out human or animal research.
- Be humble and accept the limitations in his knowledge and skill and to ask for help from colleagues when needed.
- Respect patient's rights and privileges including patient's right to information and right to seek a second opinion.

The goal is to provide learning opportunities for acquisition of knowledge, human values and skills that may enable to diagnose and treat relevant diseases and disorders as a specialist.

Course Contents

- 1. Introduction, Historical aspects and Epidemiology
- 2. Comparative dermatology
- 3. Anatomy and organization of human skin
- 4. Functions of skin
- 5. Diagnosis of skin diseases
- 6. Histo-pathology of the skin-general principles
- 7. Inflammation
- 8. Clinical immunology and allergy
- 9. Genetics and geno-dermatoses
- 10. Prenatal diagnosis of skin disease
- 11. The Neonate
- 12. Naevi and other developmental defects
- 13. Pruritus
- 14. Eczema, Lichenification, Prurigo and Erythroderma
- 15. Atopic dermatitis
- 16. Contact dermatitis
- 17. Irritants and Sensitizers
- 18. Occupational dermatoses

- 19. Reactions to mechanical and thermal injury
- 20. Reactions to cold
- 21. Cutaneous photo-biology
- 22. Viral infections
- 23. Bacterial infections
- 24. Mycobacterial infections
- 25. Leprosy
- 26. Treponematoses
- 27. Mycology
- 28. Parasitic infestations and Protozoa
- 29. Diseases caused by Arthropods and other Noxious substances
- 30. Disorders of keratinization
- 31. Psoriasis
- 32. Epidermal skin tumours
- 33. Tumours of the skin appendages
- 34. Melanocytic Naevi and Malignant melanoma
- 35. Disorders of skin colour
- 36. Bullous eruptions
- 37. Lichen planus and Lichenoid disorders
- 38. Disorders of the sebaceous glands
- 39. Disorders of sweat glands
- 40. Disorders of connective tissue
- 41. Disorders of blood vessels
- 42. Rosacea, Flushing, and perioral dermatitis
- 43. Urticaria
- 44. Purpura
- 45. Cutaneous vasculitis
- 46. Diseases of the veins and arteries including leg ulcers
- 47. Disorders of lymphatic vessels
- 48. Noorobiotic disorders
- 49. Histiocytoses
- 50. Mastocytoses
- 51. Soft tissue tumours
- 52. Cutaneous lymphocytic infiltrates and Pseudolymphomas
- 53. Lymphomas and Leukaemias
- 54. Subcutaneous fat
- 55. The Connective tissue diseases
- 56. Metabolic and Nutritional disorders
- 57. Sarcoidosis
- 58. Systemic diseases and the skin
- 59. Reiter's disease
- 60. Skin and the nervous system
- 61. Psychocutaneous disorders
- 62. Disorders of nails
- 63. Disorders of hair
- 64. The skin and the eyes
- 65. The External ear
- 66. The Oral cavity
- 67. The Lips
- 68. The Breast
- 69. The Umbilical, Perianal and Genital Regions

- 70. Racial influences and skin disease
- 71. The ages of man and their dermatoses
- 72. General aspects of treatment
- 73. STDs
- 74. HIV infection & AIDS
- 75. Cutaneous drug eruptions
- 76. Dermato Pharmacology
- 77. Dermato-surgery
- 78. Lasers in Dermatology

NOTE: Candidates are expected to be well versed in histopathology of all diseases.

Teaching and Learning Activities

A candidate 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 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 Programmes
 - 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 multi disciplinary 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 post graduate 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.

Dissertation

- 1. Every candidate pursuing degree course is required to carry out work on a selected research project under the guidance of a recognised 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 (Academic), SSAHE, 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.

each the Unreache

- 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 IV.

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 IV.

The learning out comes to be assessed should included: (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 IV)

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 audiovisual aids are to be assessed using a checklist (see Model Checklist-II, Chapter IV)

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 IV).

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 IV).

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 IV)

- *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 IV)
- 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 IV)
- 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 IV. 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 two long essay questions each question carrying 20 marks and 6 short essay questions each carrying 10 marks. Total marks for each paper will be 100. Questions on recent advances may be asked in any or all the papers. Details of distribution of topics for each paper will be as follows.

Paper I	Basic Sciences as applied	to Dermatol	ogy, STD	o., and	
_	Leprosy		14/		- 100
Paper II	Dermatology	A	32		- 100
Paper III	S.T.D. & Leprosy		8		- 100
Paper IV	Dermatoloy in relation to		\$		
	Other Systemic Diseases	Porte.	-7		- 100

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

B. Clinical: 200 marks

1 Long case (Dermatology)

2 Short cases (1 each of STD
& Leprosy)

35 marks
35 marks
10 spotters (Different verities of cases included)

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.

D.

Maximum marks for	Theory	Practical	Viva	Grand Total
M.D. degree course	400	200	100	700

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
- 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

h the Unreached

Chapter IV

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.

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

- 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 IV)

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 audiovisual aids are to be assessed using a checklist (see Model Checklist-II, Chapter IV)

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.

iv) 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 IV).

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 IV).

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 IV)

- *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 IV)
- vi) 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.

- 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 IV. 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.

CHAPTER IV (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	DF HIGH				
4.	Whether other relevant publications consulted		EDUC/			
5.	Ability to respond to questions on the paper / subject	eacheo	VIOV			
6.	Audio-Visual aids used 7UMKU	R				
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 other relevant publications consulted					
2.	Whether cross references have been consulted					
3.	Completeness of Preparation	Y 0 _{F /}				
4.	Clarity of Presentation	Han	THE THE			
5.	Understanding of subject		UCAT/			
6.	Ability to answer questions Reach the U	Jnreaci	led low			
7.	Time scheduling TUM	(UR				
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.	Points to be considered:	Poor	Below Average	Average	Good	Very Good
No.		0	1	2	3	4
1.	Regularity of attendance					
2.	Punctuality					
3.	Interaction with colleagues and supportive staff	DEMY O	HIGHE			
4.	Maintenance of case records					
5.	Presentation of cases during rounds	Signature		PATIO		
6.	Investigations work up	the Unre	ached			
7.	Bedside manners	UMKUR				
8.	Rapport with patients					
9.	Counseling patient's relatives for blood donation or Postmortem and Case follow up.					
10.	Over all quality of Ward work					
	Total Score					

Check List - IV

EVALUATION FORM FOR CLINICAL PRESENTATION

Name of the Student: Name of the Faculty: Date: Points to be considered Poor Below Average Above Very Sl. Good Average Average No. 0 2 4 1 3 1. Completeness of history 2. Whether all relevant points elicited 3. **Clarity of Presentation** 4. Logical order Mentioned all positive and negative points of 5. importance Accuracy of general physical examination 6. Whether all physical signs elicited correctly 7. 8. Whether any major signs missed or misinterpreted Diagnosis: Whether it follows follows logically from history 9. and findings Investigations required Complete list 10 Relevant order Interpretation of investigations Ability to react to questioning Whether it follows logically from history and 11. 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	20	
8.	Summary of the main points at the end	Fig.	
9.	Asks questions	Duc	
10.	Answers questions asked by the audience	AT _I	
11.	Rapport of speaker with his audience, the Unreach	d &	
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	IY OF				
4.	Quality of protocol	7	CHE			
5.	Preparation of proforma	\$	Epuc			

Reach the Unreached

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	IY OF A	(G _I			
5.	Quality of final output	8	REDU			
6.	Others		CATIO			
	Total Score Reach the	Unreac	hed			

TUMKUR

LOG BOOK

Table 1				-44 d - d
i abie i	\cdot \cdot \cdot	cademic	activities	attended

Name:	Admission Year:
College:	

Date	Type of Activity Specify Seminar, Journal Club, Presentation, UG teaching	Particulars
	ACADEMY OF HIGH	
	A VOCA STATE OF THE PROPERTY O	
	Reach the Unreached	
	TUMKUR	

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.
	ACADEMY	OF MICE
	Z O	D C F
	SIED	UCATIC
	Reach the Un	reached
	TUMKI	JR

LOG BOOK

Table 3: Diagnostic and Operative procedures performed

Name:	Admission Year:
College:	

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

* **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

TUMKUR

Model Overall Assessment Sheet

Name of the College: Academic Year:

Sl. No	Faculty Member & Others	Name of Student and Mean Score									
		A	В	С	D	E	F	G	Н	I	J
1			25	MY							
2		HAP	CADE		HIGH						
3		HAR		Park		EDL					
4		SIDI				CATI					
5		of Re	ach the	Unrea	ched	00/					
	Total Score		TUI	IKUR							

Note: Use separate sheet for each year.

Chapter V

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 programmes.

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

Justice

equality

the Unread

Self determination (autonomy)

liberty

fraternity

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 Behaviour 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, p 189, Rs. 60/-