

VEER NARMAD SOUTH GUJARAT UNIVERSITY
FIRST M.B.B.S. COURSE

M.B.B.S. COURSE MODIFIED AS PER M.C.I. RECOMMENDATIONS
W.E.F. ACADEMIC YEAR 1991-92

O.259 (For students joining from June 1991 and thereafter).

Candidates before presenting themselves for the first examination shall produce certificates of:-

Having attended the following courses to the satisfaction of the College.

1. Human Anatomy including Embryology and Histology:

- (a) A course of lectures and demonstrations extending over year on :
 - (i) Principles of human embryology
 - (ii) Principles of human genetics
 - (iii) Histology
 - (iv) Gross anatomy of the entire body including living anatomy and applied Anatomy.

- (b) The practical teaching in gross Anatomy done by:
 - (i) Students dissecting the human body alongwith demonstrations of dissected parts.
 - (ii) Or models and charts of other parts.

- (c) Practical classes in Histology;

2. Human Physiology :

A course of lectures and demonstrations and practical work extending over 1 ½ years comprising of;

- (a) General systemic physiology of the human body.
- (b) Principles of Bio-physics as applicable to the human body.
- (c) Growth, development, nutrition and dietetics.
- (d) Experimental work involving demonstration of functions of various organ systems on mammalian and other animals including use of instruments required for such demonstration for the purpose of assessment of functions in the human body.
- (e) General aspects of the applied physiology and clinical human Physiology.

3. Bio-Chemistry :

- A. Course of lectures; demonstrations and practical work extending for a period of 1 ½ years – comprising of :
 - (a) Principles of Bio-Chemistry as applicable to the human body.
 - (b) bio-chemical examinations of samples of body fluids etc.
 - (c) Laboratory work in practical Bio-chemistry.
 - (d) General aspects of the metabolic basis of diseases.

4. Introductory lectures on the following subjects.

- (a) Principles of Psychology
- (b) Principles of Bio-Statistics
- (c) Role of Nutrition in health and diseases.

5. Community Medicine :

The course of theoretical and practical teaching comprising

- (a) Introduction to community Medicine.
- (b) Principles of Sociology including demography, population dynamics and elements of bio-statistics, social factors related to health and diseases, urban and rural society impact of urbanisation on health and disease, community behaviour and ecology.

- (c) Elements of normal psychology and social psychology.
- (d) The students shall also be introduced to the principles of practice of Medicine including visits to the hospitals for familiarisation with elementary nursing practices, techniques, necessity for record keeping art of communication with patients including history taking, medico social work and immunisation against diseases and health checkup.

NOTE : 1. Teaching of community medicine should be both theoretical as well as practical. The practical aspects of the training programme should include visits to the health establishments and to the community where health intervention programmes are in operation. For this purpose full time staff, are necessary. Part time and Honorary staff will not be able to give proper orientation.

NOTE : 2. In order to inculcate in the mind of the students the basic concepts of community medicine to be introduced in this phase of training, it is suggested that the detailed curriculum drawn should include at least 30 hours of lectures, demonstrations, seminars etc. together with at least 15 field visits spread over 18 months. (See Appendix B).

O.260: To be deleted.

O.261:
Failure to pass the examination will not debar candidates from appearing at any subsequent examination on the submission of a new application, the payment of a fresh fee and the production of certificates showing that they have during the interval between the declaration of their failure and subsequent reappearance at the examination, pursued a further course of study in the subjects of the examination to the satisfaction of the head of a medical college recognized by the University; provided, however, that candidates who fail to pass this examination on five occasions will not be eligible to reappear thereafter.

Candidates shall be deemed to have failed to pass an examination under the above clause if their names have been submitted by the Principal of their college for inclusion in the list of candidates appearing for the examination, and if the candidates have failed to

pass examination because they have not attained the standard of passing.

O.262 : Deleted.

R. 164 : Deleted.

1. Human Anatomy including Embryology and Histology

The total of marks are distributed a under :-

A. Theory – 200 marks

1. Two written papers of 80 marks each and each of 3 hrs. duration.
2. Terminal examination of 40 marks

B. Practicals 100 marks.

- | | |
|--------------------------|----------|
| 1. Practicals | 50 marks |
| 2. Oral | 40 marks |
| 3. Day to day assessment | 10 marks |

The details of examinations at University and College levels are as under:-

At University Level

A. Two written papers as under :-

Paper – I Head, Neck & Face, Superior extremity Neuroanatomy, General Anatomy, Embryology and Histology.

Paper – II Thorax, Abdoman, Inferior extremity, Principles of Genetics, Embryology and Histology.

B. Practical Examination as under :

A. Practicals.

- | | |
|----------------------|----------|
| (a) Osteology | 25 marks |
| (b) Normal radiology | 05 marks |
| (c) Surface Anatomy | 05 marks |
| (d) Histology | 05 marks |

- (i) Identification of Histology slides - 05 marks
- (ii) Viva Voce on Histology Slides 10 marks

B. Oral

- (a) Head Neck, Face, Superior extremity
And Neuroanatomy. 20 marks
- (b) Thorax, Abdomen and inferior
Extremity 20 marks

At college level:

- A. Terminal Examinations in Theory consisting of 2 terminal examinations of 10 marks each and one preliminary examination of 20 marks.
Total 40 marks
- B. Day to day assessment based on periodical practical tests. 10 marks

The Scheme of examination in subject of Human Physiology including, Systemic Human Physiology, experimental physiology and elementary psychology.

The total of 300 marks are distributed as under :-

- (A) Theory (1) Two written papers of 80 mark each with duration of 3 hours each. (2) 40 mark of termination examination.
- (B) Practical and Oral

Practical	50 marks
Oral	40 marks
Day to day Assessment	10 marks

The details of examination of University and College levels are as under :-

At University Level:

- (a) Two written papers as under :

Paper – I Blood and lymph, respiration and circulation. Excretory system including skin and temperature regulations, Gatro-intestinal system.

Paper – II Nervous system including autonomic system, Muscle special senses, psychology, endocrine and reproductive system.

N.D. : Each written paper shall be divided into two equal sections and in Paper – II, one of the questions shall include elementary normal psychology.

(b) Practical Examination as under :-

Oral	40 marks
Haematology	20 marks
Clinical Physiology	20 marks
Spotting from experimental physiology (Amphibian/demonstrations)	10 marks

At College Level:

Terminal examination (in theory) 40 marks
(consisting of 2 terminal examinations of 10 marks each and one preliminary examination of 20 marks).

Day to day assessment 10 marks
(to be added to oral)

This will be based in periodical practical tests and theoretical assignment.

Biochemistry Examination

At University level

(A) THEORY : One paper of 3 hours' duration containing of two sections :
80 marks

Section I : Chemistry, Biophysics, Chemical, Digestion,
Nutrition, Enzymes, etc.

Section II : Vitamins, Minerals, Metabolism and Functional
Biochemistry.

(B) Practicals : Two hours	25 marks
(i) Quantitative	12 marks
(ii) Quantitative	08 marks
(iii) Spotting, problems and interpretations of Charts	05 marks

(C) Orals 15 marks

At College Level:

Terminal Examination (Theory) 20 marks
(Consisting of 2 terminal Examinations of 5 marks each and one preliminary (examination of 10 marks)

Day to day assessment (to be added to oral)
Based on periodical practical test and theoretical
Assignment.

10 marks

RULES REGARDING INTERNAL EVALVATION FOR FIRST M.B.B.S.
EXAMINATION

1. Course for the test for internal evaluation.

1st Test – Course of study covered in the first term.

2nd Test – Course of study covered in the second term.

3rd Test – At least six weeks before the commencement of the University examination covering the entire course.

NB : The examination dates for the tests may be fixed according to the convenience of the Colleges/Departments round about the dates indicated above.

2. The principal/Dean of the Colleges in due consultation with the is authorized to arrange in his discretion for an extra test in case a student is not able to a appear at any one test for a bonafide reason. Under no circumstances student shall be given an opportunity to appear in any subject at an extra test more than once.
3. The answer-scripts of the candidates in the various tests shall be duly examined and assessed by the Examiners concerned in the colleges/department and shall be marked in ink, and no marking shall be erased or defaced and no correction of marking made without corresponding initialing by the Examiner to whom the work is assigned in support of the correction.
4. The answer-scripts of the candidates in the various tests shall be confidentially preserved by the colleges/department for at least eight months after the expiry of the academic year to which they related and shall be produced before the University as and when asked for by the University Office.
5. The result of each test shall be put on the department notice board within one month after it is held.
6. The marks assigned to each student for the internal evaluation of each subject shall be sent to the University office as soon as possible after each test is completed.

7. The consolidated marks assigned to each student in each subject for theory and day to day assessment will be sent to the University office by the Department through the Principal of the College from where the student is sent up for the examination.
8. In case of repeaters fresh internal evaluation will be made after holding a fresh test to be arranged by the College/department and reported to the University.
9. The result of the test shall be placed on the departmental notice board and any candidate who has any doubt or dispute relating thereto shall apply to the Principal/Dean of the College within days of the declaration of the result for internal evaluation in the subject concerned together with a fee of Rs. 5/- which shall be retained by the college if no mistake is found or returned to the candidate if a mistake is found. If a mistake is found, the Principal shall communicate the amended result within three days.
10. The decision of the Principal/Dean in due consultation with the HoDs in the internal evaluation of any doubt or dispute relating thereto, subject to the time limit mentioned in No. (g) above; shall be final and no appeal shall be entertained thereon.
11. It shall be duty of the college/department to communicate the result of internal evaluation of all the candidates whether fresh or repeaters by the prescribed date and in the prescribed manner. Pass 50% in the aggregate in each of the subject separately with a minimum of 50% in Theory.

VEER NARMAD SOUTH GUJARAT UNIVERSITY

2. SECOND M.B.B.S. COURSES

O.263 :

No candidate shall be admitted to the Second M.B.B.S. Examination unless he has passed the First M.B.B.S. Examination and shall have been engaged in medical studies at a Medical College recognised by the University, for a period of 1 year after passing that examination.

O.264 : (1981) PHASE II (Para-Clinical Subjects)

Before admission to the Second M.B.B.S. Examination, candidate shall present certificates of having attended the following courses to the satisfaction of the head of the College and having attained the requisite standard at the internal evaluation in the relevant subject of the examination.

1. PATHOLOGY AND MICROBIOLOGY

- (a) General and special Pathology and morbid anatomy;
- (b) Clinical and Chemical pathology;
- (c) Microbiology including introductory virology;
- (d) Parasitology;
- (e) Immunology;

The teaching of applied pathology should be continued even after this phase during the clinical period.

Teaching in pathology and microbiology should be well co-ordinated.

The training during this period will also include practical instructions and the conduct of autopsies including medico-legal autopsies in at least 10 cases.

2. Pharmacology including pharmacotherapy and study of drugs in Indian Pharmacopoeia and introduction of Clinical Pharmacology. Clinical Pharmacology could be taught more usefully in collaboration with teachers of clinical medicine, pediatrics, etc., and group discussions

should be held taking actual cases where the repetitive programmes are carried out in the ward.

Experimental pharmacology by demonstration and practical by students.

3. Forensic Medicine : This course shall include Toxicology and instructions in the duties which devolve upon practitioners in their relation to the State, and on the generally recognised rules of medical ethics. If possible batches of students may taken by teachers when they are on court duties to introduce then the elements of legal aspects of medicine.

4. Community Medicine : The course in Community Medicine during this period of training shall comprise of :

- (a) Community health
- (b) Health promotion
- (c) National health programmes
- (d) Family Planning and Population Control
- (e) General epidemiology
- (f) Health care delivery systems
- (g) Maternal and Child Health
- (h) Occupational health and other non-communicable diseases
- (i) Practice of health education
- (j) Concept of comprehensive medical care
- (k) Further study of bio-statistics and vital statistics and medical certification.

O. 265 : Deleted

O.266 :

Further to pass the examination will not debar candidates from appearing at any subsequent examination on the submission of a new application, the payment of a fresh fee and the production of certificates showing that they have during the interval between the declaration of their failure and subsequent reappearance at the examination, pursued a further courses of study in the subjects of the

examination to the satisfaction of the head of the medical college recognised by the University.

Candidate shall be deemed to have failed to pass an examination under above ordinance, if their names have been submitted by the Principal of their college for inclusion in the list of candidates for the examination and if the candidates have failed to pass the examination and if the candidates have failed to pass the examination either because they have not attained the Standard or because they have been absent from the whole examination or from any part of it.

R. 172 :

Candidates shall be examined in the following subjects :

Pharmacology (including clinical Pharmacology and Pathology Microbiology – Forensic Medicine (including Toxicology) Community Medicine.

R. 173 :

The examinations in Para-Clinical subjects shall consist of ..

End of Phase II (Paraclinical Subjects)

(a) Pathology and Microbiology	
Written two papers of 80 marks each (oral paper in Pathology, one paper is Microbiology, Parasitology Virology	160 marks
Oral	40 marks
Practical	50 marks
Terminal Examination	40 marks
10 marks to be added to each theory paper	10 marks
Day to day assessment (10 marks to be added to oral)	
TOTAL	<u>300 marks</u>

Pass – 50% in aggregate with minimum 50% marks in theory.

(b) Pharmacology :

Written theory one paper	80 marks
Oral	15 marks
Practical	25 marks
Internal Assessment	<u>30 marks</u>
TOTAL	<u>150 marks</u>

Pass – 50% in aggregate with minimum 50% marks in theory.

(c) Forensic Medicine :

Written theory one paper	80 marks
Oral	05 marks
Practical	25 marks
Internal Assessment	<u>30 marks</u>
(Terminal 20 Class work 10) Total	<u>150 marks</u>

Pass – 50% in aggregate with minimum 50% marks in theory.

(d) Phase III Clinical subjects (Third M.B.B.S.).

Part – I If a candidate does not appear or appears but fails, can be taken by the candidate among with part II, Phase III Final M.B.B.S.Examination.

(a) Commodity Medicine	100 marks
(b) Written theory one paper	020 marks
(c) Oral	050 marks
(d) Practical & Clinical	<u>030 marks</u>
Internal Assessment Total	200 marks

(Terminal – 20 class work – 10)

Pass – 50% in the aggregate with minimum 50% in theory.

Rules regarding the internal evaluation.

1. There shall be one internal evaluation test examination for theory marks in each subject of examination, viz.,

(1) Pathology & Microbiology, (2) Pharmacology, (3) Forensic Medicine for those who are absent in this regular internal test examination, there shall be done special test examination.

The special test will be only for those who were absent in the regular test examination.

(2) In all subjects of examination at Second M.B.B.S. as mentioned in (1) above, the regular test examination shall be held near the end of the Second Academic Term. The special test examination (for

those who were absent at the regular test) shall be in the earlier part of the Third Academic Term.

- (3) In all the subjects of examination as specified in (1) above, the course content for the written test (internal evaluation) shall be the course completed in the First Two Academic Terms.
- (4) Repeater students appearing at Second M.B.B.S. Examination will not be required to appear in any additional Internal evaluation test examination. The same marks as they have scored earlier in the Internal evaluation test examination for Theory as well as the marks they have scored for day to day assessment/class work will be considered when they appear again at the University examination.
- (5) As a part of internal evaluation marks are reserved for the day to day assessment in subject of Pathology and Microbiology and for class work in subject of Pharmacology and Forensic Medicine. These marks will be allotted from the record of work done, which the candidates shall maintain. The record of work done will be inspected this purpose near the end of the course in the respective subjects and before the University examination.
- (6) The marks scored by the candidates at the theory Internal evaluation test (regular or special) will be displayed on the notice board by the respective Heads of the departments as early as possible after the assessment of theory papers. Similarly, the marks scored from inspection of work done will be displayed on the notice board by the respective Heads of the departments, as early as possible after the inspection of the records, is completed and the records are endorsed by the respective Heads of the department.
- (7) The theory papers of the candidates appearing in the Internal evaluation test (Regular or special) will be preserved by the respective Heads of the departments until fifteen days after the ensuing University examination is conducted and the result thereof is declared.
- (8) The marks scored by the candidates at the Internal test examination (Theory) as well as the marks scored by the candidates from their records of work done will be dispatched to South Gujarat

University by the respective Heads of the departments through the Dean of the Medical College. Fifteen days before the starting date of the Second M.B.B.S. University Examination. The University shall provide the lists of these marks, under both the categories of scoring, to the Chairman/conveyer of the Board of Examiners in the respective subjects at the University Examination.

R. 174 :

The following are the syllabuses in the subjects named below :

1. Pharmacology at 2nd M.B.B.S.

(A) A course of lectures and demonstrations, dealing with the following :

(a) History an outline, definitions, scope of Pharmacology, Drugs, Foods and Poisons. The nature and sources of drugs. Relation between Chemical structure Physical properties and actions. Types of pharmacological actions, site actions. Routes and modes of administration.

Absorption, distribution and fate, including detoxication and elimination. Sites of action Factors influencing pharmacological actions and dosage. Effect of repeated administration, Effects of combination therapy.

(b) Special pharmacology of the various physiological systems of the living panism with reference to the official I.P. B.P.U.G.P., ND OF IMPORTANT NEWER DRUGS. Instruction should include Pharmacodynamics as well as the therapeutic applications of these drugs including routine clinical toxicity. Physical properties and chemical structure and behaviours should be emphasized wherever a relationship between these and pharmacology-gical actions of the substance is of clinical significance.

(c) Standards and standardination : Principals of Physical, chemical and biological essay, with some idea of the methods and materials, A basic idea about the clinical trial of drugs.

NOTE : The overall trend of instructions should have a definite clinical bias.

(B) A course of practical exercises designed :

- (a) to acquaint the students with pharmacological methods of studying action of drugs including study in patients, co-ordination with clinical departments.
- (b) to familiarise the students with certain fundamental responses of living tissues and systems to typical and important drugs.
- (c) To teach prescription writing, posology of the drugs under study, incompatibility, techniques of generally acceptable, presentable and palatable medication.
- (d) Students would be expected to interpret at least the results of simple experiments.

DISPENSING PHARMACY

A course of Lecture – demonstrations and Exercise dealing with :

- (a) Prescription weights and measures : domestic and metric.
- (b) A Practical Course in dispensing Powders, mixtures, solutions, Suspensions, Emulsions, Ointments and Pastes.

FORENSIC MEDICINE INCLUDING TOXICOLOGY AT II M.B.B.S.

(1) **FORENSIC MEDICINE:**

A course of not less than 30 lectures in Forensic Medicine and Toxicology with demonstrations.

(1) Legal proceeding in Courts :

- (a) Inquest – 1. Coroner's Inquest
2. Police

- (b) Medical Evidence : 1. Documentary
2. Oral

Rules for giving medical evidence.

- 2. Identification of living and dead
Determination of age Medico Legal aspects of age.

3. Medico-Legal postmortem examination. Exhumation.
4. Examination of blood stains, seminal stains, hair, weapons and clothes.
5. Death – Its medico-legal aspects :

 Modes, signs and time of death – Rigor Mortis, Cadaveric, Spesm. Putrefaction, mummification, adipocere. Sudden death from natural cause. Presumption of death and survivorship.
6. Death from :

 (a) asphyxia, (b) Starvation, (c) Cold, (d) Heat, (e) Burns and scald's (f) lightning and electricity.
7. Mechanical injuries, classification of injuries, Medicolegal aspects of injuries.
8. Medico-Legal aspects of sex –

 (a) Importance, (b) Sterility, (c) Virginity, (d) Rape, (e) Unnatural sexual offences and perversions.
9. Medico-Legal questions relating to -

 (a) Pregnancy and delivery
 (b) Criminal abortion
 (c) Legitimacy, artificial insemination
 (d) Infanticide.
9. Insanity and its medico legal aspects, malingering, testamentary capacity.
10. Law in relation to medical men-Medical ethics. Voluntary and Compulsory duties of a medical practitioner towards the state certificates, infamous conduct, professional secrecy. Malpraxis, privileged communications contractual obligations between medical men and the patient Functions of medical council of India and of state medical councils.

(2) **TOXICOLOGY:**

- (1) Classification, symptoms diagnosis, treatment and postmortem appearances by common poisons. Rules regarding the preservation and transmission of viscera etc., chemical analysis.
- (2) Detailed study of poisons commonly used in India with regard to their signs, treatment, fetal periods, post-mortem appearances and medicolegal questions.

- (a) Acide – Sulphuric, Nitric, Hydrochloric, Oxalic Carbolic and Salicylic.
- (b) Alkalies – Sodium. Potassium and calcium hydroxides, ammonia.
- (c) Inorganic Irritant poisons
- (i) Non-Metallic – Phosphorus, Chlorine, Iodine borax and boric acid.
- (ii) Metallic-Arsenic, lead, mercury, copper, Bismuth, Zinc.

- (d) Organic Irritant Poisons –

Definition – Alkaloids, Glucosides, Toxalbumins

- (i) Organic Irritant poisons of vegetable origin-Castor, Croton, abrus precatorius, Semi-carpus anacardim, Madar, chitra, Lal chitra, chillies, ergot.
- (ii) of animal origin
Cartharides, Snake, insect bites.
- (iii) of bacterial origin
Food poisoning.
- (iv) of mechanical origin
Diamond dust, powdered glass, hair

(v) Poisons acting on the nervous system chiefly vegetable.

(a) Poisons affecting the brain (Cerebral)

(1) Neurotics : Opium & its alkaloids

(2) Inebriants : alcohol

(3) Anesthetics : Chloroform, ether, cocaine

(4) Hypnotic – Barbituric acid and its derivatives

(a) Phenobarbitone (Luminal)

(b) Veronal

Peraldehyde, chloralhydras.

(5) Deliriant

Atropine Belladonna, Datura, Cannabis Indica.

(c) Poisons affecting spinal cord :

Nux vomica, strychnine.

(d) Cardiac & cerebro-spinal poisons

(1) Depressants chiefly acting on the heart.

Digitalis, oleander, aconite, hydrocyanic acid cyanides, Tobacco.

(2) Asphyxiates :

Poisonous irrespirable gases.

Carbon monoxide, carbon dioxide, coal gas,

Sulphur gases; sulphur dioxide, hydrogen sulphide, sewer gas nitrous oxide War gases.

(3) Peripheral poisons (acting on nerve endings) Curium & Curare.

(VI) Poisoning by sulfonamide group of groups Abortifacants, cattle-poisons, arrow poisons and industrial poisons.

NOTE : A certificate of having taken training in the methods of performing an autopsy and having attended at least six medico-legal autopsies, the candidates will have to keep records of six autopsies they have attended certified by teacher in subject.

3. Pathology & Microbiology

THEORY

1. Historical
General Pathology
Degeneration and Necrosis, Disturbances of Circulation, Inflammation and repair, Derangements of body fluids, Granulomas, Collagen diseases, Autoimmune diseases, Genetics, pigment metabolism.
Neoplasia : General

Special Pathology,

Cardiosclerotic, Syphilitic, Ischaemic Heart disease, Hypertension.
Kidney : Glomerulonephritis, Pyelonephritis, Nephrosclerosis, Tumours.
2. Respiratory system Tuberculosis, Lobar Pneumonia, Bronchopneumonia, Emphysema, Pneumoconiosis, Bronchiectasis, Tumours (Carcinoma) G.I. Tract Peptic, Ulcer, Carcinoma. Stomach, Typhoid, Dysentery, Tuberculosis, Tumours Ulcerative colitis Liver-Cirrhosis, Infective hepatitis, Testis – Tuberculosis and Tumours Thyroid.

Pituitary
Adrenals
Diabetes
Haematology – Normal erythropoiesis Bone marrow,
Coagulation of Blood, Anaemias (Classification)
Leukaemias.
3. Bacteriology:
General Bacteriology :
Historical,

Morphology, Staining, Cultivation, Steritisation, (including Antiseptics, disinfectants, Chemotheraph and Antibotics) Metabolism of Baoteria, Host parasite relationship. Immunity, Hypersensitivity, Antigen & Antibody reactions, Immunity, Normal Flora, Baccterial Variation.

Special Bacteriology :

Staphyio, Stropto, Pncumo meningo, Gonococai-Diphteris, Tuborculosis Hemophilus, Enteric, gram negative bacilli, Cholera, Plague, Brucellosis, Anthrax, Clostridio, Spirochates, Rickettesis (general) well felix Test and Noil Mooser Reactions.

Viruses-General

Special reference to smallpox Rabies and poliviorus, Immunisection against viruses.

Parasitology :

Protozoa-E. Histolytica, Trypansomes & Leishmania & Giardia, Trichomonis Malaria, Balantidium coli.

Protozoa-E. Histolytica, Trypansomes and Leishmania and Giardia, Trichomonis Malaria, Balantidium coli.

Platyhemiothes : Tape works
Fluke Blood
Liver,
Lung,
Intestinal

Nemathelminthes : Ascaries. Hook warm. Trichinela.
Entelobine. Stronglyloides. Dracanculus.
Filaria.

Pathology
Practical

Nos. SUBJECT

1. Methods of study of cells and Tissues
2. Study of cells in tissue
3. Degeneration and infiltration

4. Degeneration and infiltration
5. Degeneration
6. Necrosis and Gangrene
7. Circulatory Disturbance (Hyperaemia, Haemorrhage & Oedema).
8. Circulatory Disturbance – Thrombosis – Infarct
9. Acute-Fulminant-Pneumonia-Broncho Pneumonia.
10. Acute inflammation Appendicitis
11. Chronic inflammation
12. Repair
13. Tuberculosis and Sarcoid
14. Syphilis
15. Common infections Granuloma
16. Hyperplasia, Hypertrophy & Neoplasm
17. Papilloma & Carcinoma
18. Benign Mesenchymal tumour
19. Angioma
20. Benign tumours
21. Squamous cell carcinoma & Basal cell carcinoma
22. Glandular carcinoma
23. Tumours of Liver like hepatoma
24. Tumours of lymphoid tissue like lymphoma and leukaemia
25. Tumours of kidney, Bladder & Prostate, like Renal Cell Carcinoma
26. Tumours of testis, like seminoma
27. Diseases, of the thyroid gland like colloid goitre
28. Malignant Tumours arising from Mesenchymal tissue like sarcoma

Clinical Pathology Practial.

Nos.

1. Routine Examination of Urine
 2. Estimation of Amount of Sugar & Albumin In Urine
 3. Estimation of Red Blood Cells, Haemoglobin and Blood Indice.
 4. W.B.C. Court-Total-Differential Clinical evaluation
 5. Normal & Abnormal Bone Marrow study (Demonstration)
 6. Determination of Erythrocyte Sedimentation rate and fragility of red blood cells.
 7. Determination of Retioulacyte Count & Laboratory Methods for the study of Disturbances of Homeostatic Function. (Demonstration)
 8. Examination of Sputum
 9. Examination of Stool.
 10. Examination of Seminal Flud
 11. Study of C.S.P. & other serous fluids (Demonstration)
 12. Castric Analysis
 13. Blood Grouping matching and (Blood transfusion theory)
 14. Chemical Examination of blood (Urea, N.P.N. Sugar Demonstration)
 15. Liver function – Do (Demonstration)
 16. Kidney function test (Demonstration)
- 4 : Important 5 at least by Std.

Bacteriology

Practical

Nos.

1. Microscopy
2. Morphology of Bacteria
3. Micro-organism
4. Cultivation of Microorganisms & uses of Media
5. Sterillisation
6. Isolation of Micro-Organism (Demonstration)
7. Cultural characters
8. Sero-logical reactions (Demonstration)
9. Fmmunity (Demonstration)
10. Identification & staining
11. Staphylococci
12. Streptococci
13. Pneumococci
14. Neisseria
15. Coryne Bacterium-diphtheriae
16. Mycobacterium
17. Bacterium coli & Demonstration
18. Salmonella Enteric Infection & food poisoning
19. The shigellae & Bacillary dysentery
20. Vibrio cholerae
21. Pasteurella pestis
22. Spore-Forming Aerobes: Bacillus Anthracis & enteritidis
23. Clostridium
24. Spirochaetes
25. The viruses & Rickettsiae

Parasitology Practical

Nos.

Bhixopda

2 & 3 Sproxoda

4. Helminths
5. Mematodos (cond)
6. Mematoes (Tissue)
7. Costodes
8. Cestodes
9. Trematodos
10. Arthropods

175 :

To pass Second M.B.B.S. Examination, a candidate must obtain minimum 50% of the marks in the aggregate (marks of Internal evolution and marks at the University examination being taken together) in each subject of examination separately Provided that he gets minimum 50% marks in theory examination.

This rule also applies to subject of community Medicine of Phase III, Part I M.B.B.S. Examination.

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The subject or subjects in whom successful candidates may have distinguished them will be shown on the list. In order to obtain distinction in any subject, the candidate should pass the examination at the first attempt in all the subjects and obtain 75% of the full marks in the subjects.

Only those candidates who have passed the whole examination at the first attempt will be eligible for distinction or for any prize or scholarship to be awarded at the examinant. Nothing herein shall be deemed to render a candidate ineligible for any prize, scholarship or distinction on the ground that he has availed himself of the concessions in the matter of keeping terms, available to holder of the L.C. P.S. Diploma.

VEER NARMAD SOUTH GUJARAT UNIVERSITY

T.Y.M.B.B.S.

PHASE III (Continuation of study of clinical subjects for three years after passing Pre-clinical study).

The course shall comprise of :

MEDICINE:

A course of systematic instruction in the principles and practice of medicine; including medical diseases of infancy and childhood;

Lecture-demonstrations, seminars and conferences in clinical medicine during the 3 years shall run concurrently with other clinical subjects.

Instructions in comprehensive medical care;

Instructions in applied anatomy and physiology and pathology throughout the period of clinical studies;

Instructions in dietetics, nutrition and principles of nursing, Medical rehabilitation and in simple ward procedures e.g. infusion, transfusion, aracentesis, etc. should be imparted during clinical posting concurrently.

SURGERY including ORTHOPAEDICS

A course of systematic instructions in the principles and practice of surgery., including orthopedics and Surgical diseases in infancy and childhood.

Lecturer demonstrations, seminars and conference in clinical surgery during the 3 years, shall run concurrently with other clinical subjects;

Practical instruction in minor surgical techniques including first aid;

Instruction in the administration of anesthetics.

A course of practical instruction in common operative techniques including decompression, bandaging, splintings, plasters, etc.

Instruction in applied anatomy, physiology and pathology throughout the period of clinical studies.

A period of clinical clerkship of 1 month in Orthopaedics should be lectures and lecture demonstrations.

One month of clinical clerkship in the casualty and emergency department which should preferably be of the in service type. Duty should be round

The clinical clerkship in surgery shall consist of both out patient and in-patient training. The details of clinical clerkship are given separately.

OBSTETRICS & GYNAECOLOGY, FAMILY PLANNING & NUTRITION.

Course of systematic instruction in principles and practice of Obstetrics and Gynecology and care of the new born, maternal health and family Planning including applied anatomy, Physiology and Pathology.

Lecture-demonstrations in clinical obstetrics, gynecology, care of new born and maternal health.

Attendance at a maternity hospital or the maternity wards of a general hospital including (i) antenatal care (ii) the management of the puerperium and (iii) inpatient and out-patient practice for a period of 5 months, including family planning.

(This period should be devoted exclusively to instruction in these subjects and should be subsequent to medical and surgical clerkships. Not less than two thirds of the hours of clinical instruction shall be given to obstetrics, including antenatal care and care of new born and maternal health).

Of this period of clinical instruction, not less than one month shall be spent as a resident pupil either in a maternity hospital or in a hospital attached to a maternity hospital or to the maternity wards of a general hospital.

During this period, the student shall conduct atleast 10 cases of labour under adequate supervision and assist in 10 other cases.

A certificate showing the number of cases of labour attended by the student in the maternity hospital and/or in patients homes respectively, should be signed by a responsible medical officer on the staff of the hospital and should state:-

- (a) that the student has been present during the course of labour and personally conducted each case; making the necessary abdominal and other examinations under the supervision of the certifying officer who should describe his official position;
- (b) that satisfactory written histories of the cases conducted, including where possible antenatal and postnatal observations, were presented by the student and initialed by the supervising officer.

4. PAEDIATRICS : including Social Paediatrics and Neonatology and Nutrition. The course of Systematic instructions in growth and development, management of Medical Diseases of infancy and Childhood, paediatrics Surgery, Social paediatrics and Nutrition. (Ophthalmology and Otorhinolaryngology).

EYE AND E.N.T.

The Course should cover the common diseases of the Eye, and E.N.T. including rehabilitation, Blind, Deaf and Dumb.

6. COMMUNITY MEDICINE POSTING : The students shall either be posted in the Health Training Centre unit or in one of the primary Health Centres attached to a Medical College or Rural Hospital or such posting shall be given by visits to the field practice area according to the facilities available and the students shall participate during this period in various activities of preventive and promotional health programmes at the centre. Where sufficient facilities for taking these students to rural areas are not yet developed, urban field practicing area (slums) may be used for this purpose in the initial stages. Such posting should be arranged without detriment to the regular college training programmes in other subjects. If necessary, this position may be done in the final clinical year.

N.B. : (1) For developing community posting facilities each Medical College should be in total charge of three Primary Health Centres where the teachers from all disciplines Medical Colleges should be posted by rotation. The number of primary Health Centres gradually should be increased so as to cover the entire district in a period of 3 years.

(2) It is necessary to pool the resources of the medical colleges, district and sub-divisional level hospitals and primary health centres in the referral services complex with required augmentation in respect of transportation, equipment, drugs etc. and for providing residential accommodation at district, sub-divisional hospital and primary health centres.

6. PRACTICAL SKILLS : Due stress should be laid on the student requiring practical skills in the following procedures :

(i) Simple laboratory techniques, e.g. Block examination, urine-analysis, stools and Sputum examinations.

(ii) Recording of Blood pressure.

(iii) Injections i.e. Subcutaneous, intramuscular & Intravenous.

(iv) Infusions and transfusions.

(v) Venesection

(vi) Paracentesis

(vii) Lumbar puncture

(viii) Immunisation techniques

(ix) Pre-operative preparation of patient

(x) Incision and Drainage of abscesses.

(xi) Wound suturing

(xii) Application of splints, bandages, slabs and Plasters.

(xiii) Episiotomy & Suturing

(xiv) Vasectomy and I.U.D. insertion.

The clinical postings will be according to the following schedule and students will be posted for a period of not less than 3 hours per day. Within this broad

frame work clinical posting will be decided by Govt. Medical College, Surat according to time available.

(Total period 11 months)

Medicine	:	3 months
Surgery	:	3 months
Obst. & Gynae	:	2 ½ months
Dentistry		
Anaesthesia		
Psychiatry	:	(15 days each)
Tuberculosis	:	Total 2 ½ months.
Radiology		

II nd CLINICAL YEAR (i.e. II M.B.B.S. III term & III M.B.B.S. I term)

Total period 10 months)

- O.P.D.

Infectious Diseases

Paediatrics

Orthopaedics

E.N.T. (Otorhinolary-Dermatology ngology) : One month each

Community postings Casualty

Family planning : 15 days

Ophthalmology 1 ½ months

N.D. * Out patient Department:

These posting b in addition to or part of the posting at the out patient Department when the unit where the student has been posted to conduct his regular clinical term. The intention of this posting is to expose the student to a General practitioner out patient system which needs to be developed all Medical College Hospitals.

IIIrd CLINICAL YEAR (i.e. III M.B.B.S. II & III term)
(Total period 10 months)

Medicine

Surgery

Obst. & Gynao. : 2 ½ months each.

Paediatrics

(8) **PROFESSIONAL EXAMINATIONS:**

The examinations are to be conducted with a view to ascertain whether the candidate has acquired the necessary minimum skills along with clear concepts of the fundamentals, which are necessary for him to carry out his professional day to day work completely. Examination of details shall be avoided.

There should not be more than two examination in a academic year i.e. one regular and the other supplementary, with an interval of 4 to 6 months between the examinations.

Special classes, Seminars, practical etc., shall be arranged for the repeaters in the subject in which they have failed before they are allowed to appear at the next supplementary or regular examination, for which attendance shall be compulsory.

It is desirable to introduce semester system during training and Examination for the 1st (Pre-clinical) and 2nd phase (Para clinical) of training.

GENERAL

- (1) 50% of the total marks value of the questions in the Theory papers should preferably be of short structure/objective type.
- (2) The candidates must pass in pathology, Microbiology of II Professional before Forensic Medicine, Pharmacology they are allowed to appear in the Final M.B.B.S. examination.
- (3) The candidates who has passed in one subject need not appear in that subject again in any subsequent examination.

2. Phase III Clinical Subjects

Part I : to be done not less than 6 months prior to Part II.

(a) Community Medicine	
Written theory one paper	100 marks
Oral	020 marks
Practical & Clinical	050 marks
Internal Assessment (Terminal 20, class work 10)	030 marks
Total	<u>200 marks</u>

Pass 50% in the aggregate provided candidate gets 50% in oral practical and clinical.

(Passed by respective authorities)

(b) Eye and E.N.T. (Ophthalmology and Otorhinolaryngology one paper of two parts.

Part A Ophthalmology written	40 marks
Oral	25 marks
Clinical	25 marks
Internal Assessment	10 marks
Part B (Oto Written)	40 marks
Oral	25 marks
Clinical	25 marks
Intrnal Assessment	<u>10 marks</u>
Total	<u>200 marks</u>

For a pass, a minimum of 50% in the aggregate to a minimum of 40% in each of the subjects.

If a candidate gets 50% in one of the subjects, he may be declared pass in that subject and would not be required to repeat the same. However, for passing in the remaining subject, he must get not lesws than 50% in that subject.

Part – II

Each paper should have two sections, Questions requiring essay type answers may be avoided.

Medicine

Paper I – General Medicine (Section) Paediatrics
(Section 2)

Paper – II General Medicine (including Psychiatry, Dermatology, Leprosy and V.D. Radiology and Electro therapeutics nd applied to Medicine).

Written 2 Papers of 80 marks each	160 marks
Oral	040 marks
Clinical	150 marks
Internal Assessment Theory	040 marks
Internal Assessment Clinical	<u>010 marks</u>
	<u>400 marks</u>

Pass – 50% in the aggregate, provided the candidate obtains 50% in the oral and the clinical examination.

Surgery

Paper – I General Surgery, (Section 1) Orthopaedics (Section 2)

Paper – II General Surgery, including Anaesthesiology, Dental diseases and Radiology and Electro Thrapeutics in their application to surgery.

Written – 2 papers of 80 marks each	160 marks
Oral	040 marks
Clinical	150 marks
Terminal Examination	040 marks
(20 marks to be added to theory paper0	
Day to day assessment of clinical work	<u>010 marks</u>
	<u>400 marks</u>

Pass – 50% in the aggregate provided the candidate obtains 50% in Oral and the Clinical Examination.

Obstertrics nd Gynaecology :

Written – One paper of	080 marks
Oral 40 plus record 10	050 marks
Clinical	050 marks
Terminal Examination	<u>020 marks</u>
	<u>200 marks</u>

At least one question must be on Family Planning and Population dynamics and one on Social Obstrics.

Pass – 50% in the aggregate provided the candidate obtains 50% in oral and the clinical examination.

NOTE :

- (i) One half of paper I in Medicine should be related to Paediatrics and the other half to Medicine.
- (ii) Paper I of Surgery should have 2 sections one for Orthopedics and General Surgery.
- (iii) The Paediatrics, Orthopaedics, part of theory papers in Medicine and Surgery should be set and assessed by examination who are teachers in the specialty concerned.
- (iv) The Otorhinolaryngology and Ophthalmology examinations shall be conducted by the teachers in the specialty concerned.
- (v) Separate answer books should be provided for each part of any one paper.
- (vi) There will be no separate clinical and viva examination in Pediatrics, Orthopedics. These shall form part of a common clinical and oral examination, but at least one of the examiner in Medicine/Surgery shall be a teacher in Paediatrics/Orthopaedics.

Internal Assessment

Regular periodical examination should be conducted throughout the course. By the teacher not below the rank of an Assistant Tonchor. The question of number of examination is left to the institution.

Marks may be allotted for the terminal examination and day to the day assessment to be carried over to the university examinations indicated.

- (a) The results of such terminal examination be decided within one month of completion of such examination.
- (b) 10 marks may be awarded to day to day records including record of case sheets etc.

- (c) The records of such examination should be made available to the council if and when required and the records of assessment may be retained till six months after the candidate finishes his course of training.
- (d) Results of such periodical examinations and assessment of a particular subject are made available by the university only to the Board of Examiners at the time of final tabulation.

Percentage of attendance for appearing in any examination:

75% of clinical /practical and 75% of the theory in each subject in each year.

R.177-Rules regarding Internal Evaluation

Rules concerning Third M.B.B.S. Part-I subjects:-

- (1) There shall be one Internal evaluation test examination for Theory marks in each of the subjects of Third M.B.B.S. Part I examination ,viz., (1) Community Medicine and (2) ophthalmology and otorhino laryngology for those who are absent in this regular test examination, there shall be one special test examination The special test will be only for those who were absent in the regular test examination.
- (2) In all subjects of examination at Third M.B.B.S. part-I as specified in (1) above, the regular test examination shall be held near the end of the Fourth Academic Term of the clinical studies The special test examination (for those who were absent at the regular test examination) shall be in the earlier part of the Fifth Academic Term of clinical studies.
- (3) In the subjects of examination as specified in (1) above, the course content for the written test (internal evaluation shall be the course completed in the first Four Academic Terms of the clinical studies.
- (4) Repeater students appearing at the Third M.B.B.S. part-I examination will not be required to appear in any additional Internal evaluation test examination The same marks as they have scored earlier for theory as well as the marks they have scored for Class work in community Medicine be considered when they appear again at the University Examination.

- (5) As a part of Internal evaluation marks are reserved for Class work in Community Medicine These will be allotted from record of work done, which the candidate should maintain, The record shall be inspected for this purpose near the end of the course in the subject and before the University examination.
- (6) The marks scored by the candidates at the Theory Internal Evaluation test (regular or special) will be displayed on notice board by the respective Heads of the Departments as early as possible after assessment of theory papers. Similarly, the marks scored from the inspection of work done will be displayed on notice board by Head of Department of Community Medicine as early as possible after inspection is completed and the records are endorsed by the Head of the Department.
- (7) The Theory papers of the candidate in the Internal evaluation tests (regular or special) will be preserved by the respective Heads of the Departments until fifteen days after the ensuing University examination is conducted and the result there of is declared.
- (8) The marks scored by the candidates at the Internal Test examination (Theory) as well as the marks scored from record of work done will be dispatched to South Gujarat University by the respective Heads of the Departments through the Dean of the Medical College fifteen days before the starting date of Third M.B.B.S. Part-I University examination The university shall provide the list of these marks under both the categories of scoring to the chairman/convenor of the Board of Examiners in the respective subjects at the University examination.

Rules concerning Third M.B.B.S. Part-II Subjects

- (1) There shall be one Internal evaluation test examination for Theory marks in each of the subjects of examination viz., (1) Medicine (2) Surgery and (3) Obstetrics and Gynaecology. For/those who are absent in this regular test examination, there shall be one special test examination The special test will be only for those who were absent in the regular test examination.
- (2) In all the three subjects of examination at Third M.B.B.S. as specified in (1) above, the regular test examination shall be held in the earlier part of the sixth Academic Terms of the clinical studies 2-4 weeks after the regular test examination.
- (3) In all the subjects of examination as specified in above, the content for the written test (internal evaluation) shall be the course completed in the first Five Academic Terms of the clinical studies.
- (4) Repeater students appearing at the Third M.B.B.S. examination will not be required to appear in any additional Internal evaluation test examination The same marks as they have scored earlier for theory as well as the marks they have scored for internal assessment clinical day to day assessment of clinical work/record (as the case may be) will be considered when they appear again at the University examination.
- (5) As a part of Internal evaluation marks are reserved for internal assessment of clinical work in surgery and for record in Obstetrics & Gynecology These marks will be allotted from the record of work done which the candidate shall maintain The record of work done shall be inspected for this purpose near the end of the course in the respective subjects and before the University Examination.
- (6) The marks scored by the candidates at the Theory Internal evaluation test (regular or special) will be displayed on the notice board by the respective Heads of the department as early as possible after the assessment of theory papers similarly, the marks scored from the inspection of done will be displayed on the notice board by the respective Heads of the departments as early as possible after the inspection in completed and the records are endorsed by the respective Heads of the departments.
- (7) The Theory papers of the candidates appearing in the Internal evaluation tests (regular or special) will be preserved by the respective Heads of the departments untill fifteen days after the ensuing University examination is conducted and the result there of is declared.

- (8) The marks scored by the candidate at the Internal test examination (Theory) as well as the marks scored by the candidate from their records of work done will be dispatched to south Gujarat University by the respective Heads of the departments through the dean of the Medical College fifteen days before the starting date of the Third M.B.B.S. examination. The University shall provide the lists of these marks under both the categories of scoring to the Chairman/Convener of the Board of examiners in the respective subjects at the University Examination.

R. 179 (New Course):

To pass the Third M.B.B.S. Examination a student must obtain 50% of the marks obtainable in aggregate provided the candidate obtain 50% in Clinical and Oral examination taken together. Percentage of attendance for appearing in any examination 75% each in Theory, Clinical/Practical.

R.180

A candidate passing in any of the subjects of the examination in accordance with R.179 will be entitled to claim exemption from appearing in that subjects at subsequent attempts.

R.181:

These regulations shall be applied in cases of candidates who do not come under Ordinance 139-40:

1. The cases of candidates who fail in more than one head of passing in not more than two subjects will be placed before the final meeting of the senior Examiners and condensation up to the extent given below may be given if a majority of the Examiners present at the meeting agree.
 - (a) If a candidate is failing in two heads of passing of 100 marks each up to 2 marks in each head.
 - (b) If a candidate is failing two heads of 200 marks each., condonation up to 3marks in each head.
2. If a candidate is failing only in one head of passing in a single subject by not more than 10 marks his failure in that subject shall be condoned by majority of Examiners present at the meeting by adding as many marks as the

difference between the total percentage of the marks obtained by him on excess of the standard of passing This will only apply to candidates who have appeared in all subjects of the examination.

R.182:

The subjects or subjects in which successful candidates may have distinguished themselves will be shown on list. In order to obtain distinction in any subjects the candidate should pass the examination at the first attempt in all subjects and obtain 75 per cent of the full marks in the subject.

R.183:

The subject or subjects in which successful candidates may have distinguished themselves will be shown on the list. In order to obtain distinction in any subjects the candidate should pass the examination at the first attempt in all the subject and obtain 75 percent of the full marks in the subject.

Only those candidates who have passed the whole examination at the first attempt will be eligible for distinction or for any prize or scholarship to be awarded in the examination. Nothing here in shall be deemed to render a candidate ineligible for any prize scholarship or distinction on the ground that he has availed himself of the concessions in the matter of keeping terms available to holders of the L.C.P.S.

O.272 (In force for students admitted in second M.B.B.S. in November 1983 and after:

The scheme of Compulsory Horsemanship (Internship) for post-examination training prescribed for the students after passing the Final M.B.B.S. Examination shall be as under:

1. Every student shall, after passing the Third M.B.B.S. Examination and before the degree of M.B.B.S. is conferred on him, undergo compulsory rotating Housenmanship to the satisfaction of the principal of the medical college affiliated to this University for a period of one year.

2. After the results of the Third or Final M.B.B.S. Examination are declared the successful candidates shall within a fortnight of the declaration of the results fill in the prescribed form for the compulsory Housemanship and submit to the principal of the medical college from which he has passed his Third or Final M.B.B.S. Examination.

3. The principal of the College concerned will them communicate to each such student the name of the hospital and /or the institution where he has to do the compulsory rotating Housemanship/Internship in consultation with the authorities of the Hospital and /or the institution concerned.
4. The students will be deputed by the principal of the college concerned to the Hospitals recognised for the purpose of Compulsory Housemanship will be rotated in different institutions recognised for the purpose in different subjects, viz. Medicine, Surgery, Obstetrics and Gynecology and public Health work for three months each.
5. The syndicate will recognize Hospitals and public Health Institutions for the purpose of Compulsory Housemanship in consultation with the director of Medical services and Health. The name of these Hospitals and public Health Institutions recognised will be communicated to the principals of Medical Colleges and Heads of recognised Hospitals and Institutions.
6. The minimum number of beds per compulsory Houseman will be five.
7. The houseman shall during his period of compulsory Housemanship be under the disciplinary control of the Head of the Hospitals or the Institution where he is posted for Compulsory Housemanship.
8. On completion of the period of Housemanship, the student shall report to the principal of the Medical College concerned their upon the principal shall obtain a certificate each from Heads of the Hospitals and the heads of the public Health Institutions that the Houseman has his carried out his Compulsory Housemanship prescribed under No.4 above to their satisfaction. There upon the principal shall report to the University in prescribed form certifying that the student concerned has done the necessary period of Compulsory Housemanship to the formers satisfaction.
9. Not with standing what is stated above in case of a candidate joining the Armed Forces Medical Services, their corresponding period of Military Services will be counted towards the compulsory Housemanship In that case the candidate will have to produce a certificate of this services in Armed Forces Medical Services directly to the University for being admissible to the degree of M.B.B.S. of this University.

In case his period of services in Armed Forces Medical Services is less than one year, he shall be required to the Compulsory Housemanship for the remaining period in accordance with the elevant regulations.

10. No student who is not duly certified by the principal of the Medical College as required under No.8 above shall be considered admissible to the degree of M.B.B.S. of this University.

11. Additional guidelines for a Compulsory Rotating Housemanship internship

(i) All parts of the Internship shall be done as far as possible institutions in India.

(ii) Every candidate will be required after passing the Final M.B.B.S. Examination to undergo compulsory rotating internship to the satisfaction of the University for a period of 12 months so as to be eligible for the award of the degree of M.B.B.S. and full registration.

(iii) The University shall issue a provisional M.B.B.S. pass Certificate on passing the final examination.

(iv) The state Medical Council will grant provisional registration to the candidate on production of the provisional M.B.B.S. pass certificate. The provisional registration will be for a period of one year. In the event of shortage or unsatisfactory work the period of the provisional registration and the compulsory rotating internship may be suitably extended by the appropriate authorities.

(v) The intern shall be entrusted with the clinical responsibilities and his work shall be supervised by the senior medical officer.

(vi) The compulsory Rotating Internship for 12 months should be done in teaching and non-teaching approved hospitals like District Hospitals and Rural Health Training Centre/Upgraded primary Health Centres attached to the teaching institutions. Satisfactory collaboration must exist between such hospitals/rural centres and the medical college. The Compulsory Rotating Internship shall include training in Medicine, Surgery and Obstetrics & Gynaecology and in Community Health work. There should be a minimum period of six months. The student should be placed for inservice training in Family planning clinics for a period of one month. In the task oriented training the responsibility of the interns as participants in the institutional and dominilary service programme should receive due attention. For this purpose all necessary input should be provided like accommodation, transport, adequate clinical facilities etc.

Provided also that for such trainee a certificate of satisfactory completion of training should be obtained from the relevant administrative authorities which shall be countersigned by the principal/Dean of the College.

Adjustments to enable a candidate to obtain training in elective clinical subjects may be made.

- (vii) One year's approved service in the Armed Force Medical Services, after passing the final M.B.B.S. examination shall be considered as equivalent to the pre-registration training detained above, such training should as far as possible be at the General Hospitals.
- (viii) The Intern shall maintain a record of work which is to be verified and certified by the medical officer under whom he works Apart from scrutiny of the record of work assessment and evaluation of the training may be under taken by an objective approach using situation tests in knowledge, skills and attitude during at the end of the training Based on the record of work and date of the evaluation, the Dean/Principal shall issue certificate of satisfactory completion of training following which the University shall award the M.B.B.S. Degree of declare him eligible for it.
- (ix) Full registration shall only be given by the state Medical Council on the award of the M.B.B.S. degree by the university or its declaration that the candidate is eligible for it.
- (x) Some more detailed guide-lines in the implementation of the training programme are given below:-

DEPARTMENT OF MEDICINE:

- (i) Opportunity for doing minor ward procedures e.g. paracentesis lumbar puncture administration of transfusion etc.
- (ii) Exposure to work in the clinical pathological laboratory to enable him to acquire his skill to do independently procedure like estimation of Haemoglobin RNC & WBC count including differential count blood smear for parasites sputum examination and urine examination.
- (iii) Opportunity to participate in inter protation of laboratory and radiological data alongwith the clinical findings to arrive at a diagnosis and observe the treatment given.

- (iv) They should be required to attend out patient section for at least two weeks to familiarise with diagnosis and management of common ailments and to be on first call attend to medical emergencies.

DEPARTMENT OF SURGERY:

- (i) Acquaintance with the management of surgical emergencies including fractures.
- (ii) Exposure to work in the intensive care unit with particular reference to resuscitation procedures.
- (iii) The practical implementation of aseptic techniques including preparation of operation theatres and sterilization.
- (iv) Work in the Casualty department. Surgical emergencies should be tackled by an intern strictly under expert supervision only.

DEPARTMENT OF OBSTETRICS, GYNAECOLOGY & FAMILY PLANNING

- (i) Antenatal care with particular reference to the nutritional factors involved.
- (ii) Practical experience in Contraceptive technology and operative techniques in sterilization must be emphasised.

Minimum experience recommended as follows:-

- (a) Vasectomy - 10
- (b) Tubectomy - 5
- (c) I.U.D. - 10
- (d) M.T.P. - 2

and attempt should be made to comply with the same far as possible.

- (iii) Management of normal and abnormal labours.
- (iv) Care of the new born.
- (v) Exposure to well baby clinic to the working of the well baby clinic.

- (vi) Provision be made for a training in paediatrics for 4 to 6 weeks during the posting to this department. Every intern must work at a well baby clinic, A.N.C., P.N.C., F.P., Clinic & immunisation centre.

COMMUNITY HEALTH-RURAL POSTING

Rural experience should train the doctor to become the leader of the health team. It should involve.

- (i) Supervisory Responsibility-Administrative-Technical
- (ii) Community based health activities organisation implementation.

Control of communicable diseases (special emphasis on Tuberculosis, leprosy and V.D.)

Implementation of P.Health programme Applied Nutrition

M.C.H. F.P. School Health and Nutrition.

Health Education etc.

MEDICO LEGAL WORK

During the period of internship in Medicine and Surgery the medic-legal aspects should also be emphasis and co-operation of the Forensic Medicine Department be sought.