SANTOSH
Deemed to be University
(Established u/s 3 of the UGC Act, 1956)

SANTOSH MEDICAL COLLEGE & HOSPITAL, GHAZIABAD.

ACADEMIC CALENDER / HAND BOOK FOR MBBS COURSE

1. PREAMPLE:

The Santosh Medical College & Hospital, Ghaziabad, was established by the "Maharaji Educational Trust", registered under the Indian Trust Act, in the year 1995. The Government of India, in their Letter No.U.12012/25/95-ME (P), Ministry of Health & Family Welfare, New Delhi, dated 15th January 1996 granted permission for conducting MBBS course with 50 admissions annually. The Government of India, in their letter No.V.11015/2/2002-ME (Policy-I), Ministry of Health & Family Welfare, New Delhi, dated 31st March 2003, had recognised the MBBS qualification awarded by the Ch. Charan Singh University, Meerut in respect of students being trained at Santosh Medical College & Hospital, Ghaziabad from October 2000 onwards with an annual intake of 50 [fifty] students.

The Government of India, in their Letter No.U.12012/79/2004-ME (P-II), Ministry of Health & Family Welfare, New Delhi, dated 15th July 2005 granted permission for increase of seats in MBBS course from 50 to 100 from the academic year 2005-06. Further, the Government of India, granted annual permission for admission of MBBS students against the increased intake from 50 to 100 students every year. Thereafter, the Government of India, in their letter No.U.12012/97/2004-ME-II), Ministry of Health & Family Welfare, New Delhi, dated 21st September 2010, had recognised the MBBS qualification awarded by the Ch. Charan Singh University, Meerut in respect of students being trained at Santosh Medical College & Hospital, Ghaziabad from March 2010 onwards with an annual intake of 100 [hundred] students.

The Central Government, in their Notification No.F.9-2/2003-U.3, Ministry of Human Resource Development [Department of Higher Education], New Delhi, dated June 13, 2007, declared the Santosh Medical College, Ghaziabad, as one of the Institutions, deemed to be

University in the name and style of Santosh University. The MBBS students admitted from the academic year 2007-08 onwards comes under the ambit of the Santosh University.

This Academic Calendar / Hand Book on MBBS course at Santosh Medical College shall provide an outlook of the MBBS degree course at the Santosh University and will be useful both for the Faculty and the Students who are pursuing the MBBS course at the Santosh Medical College & Hospital.

2. ELIGIBILITY CRITERIA FOR ADMISSION:

(1) Age limit:

No candidate shall be allowed to be admitted to the Medical curriculum of First Bachelor of Medicine and Bachelor of Surgery (MBBS) Degree Course until he / she shall complete the age of 17 years on or before 31st December of the year of admission to the course.

(2) Qualifying Examination:

No candidate shall be allowed to be admitted to the First Year Bachelor of Medicine and Bachelor of Surgery (MBBS) Degree Course until he/she has passed a qualifying examination as under:

(i) For Indian Nationals:

(a) Candidates belonging to General Category, for admission to the MBBS course must have passed in the subjects of Physics, Chemistry, Biology & English individually and must have obtained a minimum of 50% marks taken together both in theory and practical in the subjects of Physics, Chemistry and Biology at qualifying examinations [Academic Stream 10+2 / HSE / ISC / Intermediate] after a period of 12 years study.

(b) Candidates belonging to SC/ST and OBC, the minimum marks for admission shall be 40% instead of 50% for General Category;

(c) Graduate candidates should have qualified for the B.Sc. degree of an Indian University recognized by the Association of Indian Universities and accepted as equivalent by the Academic Council and Board of Management of this University subject to the conditions as may be prescribed with one of the following subjects as major subject, viz. Physics, Chemistry, Botany, Zoology and another science subject of study at least up to the ancillary level; provided that such candidates shall have passed the earlier qualifying examination (HSE or an

Equivalent) with the subjects - Physics, Chemistry, Biology (Botany & Zoology) and English;

(d) Wherever the State Board / Body of appropriate authority has taken into account only the +2 level marks to determine the class of the candidate and issue the statement of marks accordingly, it alone would be taken into consideration;

(e) Wherever the State Board / Body or appropriate authority has taken into account the marks obtain at the +1 and +2 level to determine the class of the candidate and furnish the statement of marks, accordingly, the aggregate of the two shall be taken into consideration;

(f) Candidates who have passed the Senior Secondary School Examination of National Open School with minimum five subjects with any of the following groups of subjects a) English, Physics, Chemistry, Botany, Zoology; (b) English, Physics, Chemistry, Biology and any other Language (to be read with "Qualification for admission (a) & (b) above);

(g) Any criteria not covered under the above provisions, the ruling of the Eligibility Committee shall be adopted;

(ii) For Foreign Nationals:

Candidates who have studied abroad, the equivalent qualification has determined by the Association of Indian Universities, New Delhi, shall form the guidelines to determine the eligibility and should have passed the subjects of the Physics, Chemistry, Biology (Botany and Zoology) and English upto the 12th Standard level with 50% marks aggregate.

3. PROCEDURE OF SELECTION:

Students for I Year MBBS degree course shall be admitted on merit basis based on the result of the Common Entrance Examination.

4. CUT - OFF DATE FOR ADMISSION :

The candidates admitted upto 30th September shall be registered to take up their I year examination on 1st September of the next year.

All kinds of admissions shall be completed on or before 30th September of the academic year.

5. COMMENCEMENT OF THE COURSE:

The first MBBS degree course shall commence in the month of August of the every academic year.

6. REGISTRATION OF CANDIDATES:

A candidate admitted to the 1st year M.B.B.S. degree course of this University shall register his / her name by submitting the prescribed application form for Registration / Enrollment duly filled along with the copies of all the documents, prescribed fee and an Affidavit / Declarations attached with the Registration Form to the University through the Dean of the Medical College within 60 days from the cut-off date prescribed for admission to the M.B.B.S. degree course i.e. on or before 30th November of the year of admission.

7. SUBMISSION OF ANTI - RAGGING UNDERTAKING :

The candidate admitted to the course and his/her parent shall furnish an Undertaking / Affidavit to the Dean of the Medical College, as per directions of the Hon'ble Supreme Court of India and in accordance with the Anti-Ragging Regulations of the Medical Council of India and University Grants Commission in the form prescribed stating that the student is fully aware these Regulations and shall not indulge in any type of activities which construed as ragging as per above regulations during his / her period of study in this college and in case if found involved in the same to accept the consequences of such involvement at the time of joining the course.

8. DURATION OF THE COURSE OF STUDY:

(1) Every student shall undergo a period of certified MBBS degree course of study extending over 4 ½ academic years followed by one year of Compulsory Rotatory Resident Internship [CRRI].

(2) The period of 4 ½ years study is divided into three phases as follows:

(a) **PHASE - I (I MBBS) ONE YEAR consisting of Pre-clinical subjects of -**

i) Human Anatomy,

ii) Physiology including Bio-Physics,
iii) Bio-Chemistry, and
iv) Introduction to Community Medicine including Humanities.

Besides 60 hours for introduction to Community Medicine including Humanities, rest of the time shall be somewhat equally divided between Anatomy and Physiology plus Bio-chemistry combined (Physiology 2/3 and Bio-Chemistry 1/3). (PSM 60 hrs.+ Anatomy 650 hrs. + Physiology / Biochemistry 720 hrs).

(b) **PHASE - II (II MBBS) 1 ½ YEARS consisting of following para-clinical / clinical subjects -**

i) Pathology,
ii) Pharmacology,
iii) Microbiology,
iv) Forensic Medicine including Toxicology, and
v) Part of Community Medicine.

During this phase, teaching of para-clinical and clinical subjects are all those detailed under Phase III below which shall be done concurrently.

Out of the time for Para-clinical teaching, approximately equal time shall be allotted to Pathology, Pharmacology, Microbiology and Forensic Medicine and Community Medicine combined (1/3 Forensic Medicine and 2/3 Community Medicine).

(c) PHASE - III (III MBBS Part – I & II) TWO YEARS - Each Part one year of study –

The clinical subjects to be taught during Phase III are -

I. III MBBS – Part : I - 1 year :

i) Ophthalmology
ii) Oto – Rhino-Laryngology
iii) Community Medicine including Humanities.

I. III MBBS – Part : II - 1 year :

i) General Medicine and its allied specialities.
ii) Surgery and its allied specialities.
iii) Obstetrics and Gynaecology, and
iv) Paediatrics including Neonatology.

- Besides clinical posting the rest of the teaching hours should be divided between didactic lectures, demonstrations, seminars, group discussions etc. in various subjects.

- The training in Medicine and its allied specialties will include General Medicine, Paediatrics, Tuberculosis and Chest, Skin and Sexually Transmitted Diseases, Psychiatry, Radio-Diagnosis, Infectious diseases etc.
- The training in Surgery and its allied specialities will include General Surgery, Orthopaedic Surgery including Physiotherapy and Rehabilitation, Ophthalmology, Oto-Rhino-Laryngology, Anaesthesia including Emergency Medicine, Dentistry, Radio-therapy etc.
- The Obstetrics & Gynaecology training will include Family Medicine, Family Welfare Planning, etc.
- No student shall be permitted to join the Phase II [para clinical / clinical] group of subjects until he / she has passed in all the Phase I [Pre-clinical] subjects.
- After passing pre-clinical subjects 1½ years shall be devoted to para-clinical subjects. Phase II will be devoted to para-clinical and clinical subjects along with clinical postings. During clinical phase [Phase III] pre-clinical and para-clinical teaching shall be integrated into the teaching of clinical subjects wherever relevant.

9. CURRICULUM:

The Curriculum and the Syllabi for the course shall be as specified in the I, II and III MBBS degree Course Regulations.

10. MEDIUM OF INSTRUCTION :

English shall be the medium of instruction for all the subjects of study and for examinations.

11. SUBMISSION OF LABORATORY RECORD NOTE BOOKS:

At the time of practical/clinical examination each candidate shall submit to the Examiners his/her laboratory note books duly certified by the Head of the Department as a bona fide record of the work done by the candidate.

The practical record shall be evaluated by the concerned Head of the Department (Internal Evaluation) and the practical record marks shall be submitted to the University 15 days prior to the commencement of the theory examinations.

The candidate may be permitted by the examiners to refer to the practical record book during the practical examination in the subject of Biochemistry only. No other materials,

handwritten, cyclostyled or printed guides are allowed for reference during the practical examinations.

In respect of failed candidates the marks awarded for records at previous examinations will be carried over to the next examinations. If a candidate desires he/she may be permitted to improve his/her performance by submission of fresh records.

12. WORKING DAYS IN AN ACADEMIC YEAR:

Each academic year shall consist of not less than 240 teaching days of eight hours each college working time, including one hour of lunch.

13. INTERNAL ASSESSMENT:

a) The Internal Assessment should be done at the end of each four months and the Pre-Professional Examination one month prior to the University Examinations.

b) The Internal Assessment consists of the following points-

a) Theory
b) Practical / Clinical
c) Viva Voce

The average of the Theory, Practical / Clinical & Oral should be added and the aggregate must be taken and sent to the University as Internal Assessment Marks. 50% [As per MCI 35%] minimum marks and 80% [As per MCI 75%] attendance in I.A. are required to appear for the University examinations.

(i) The Internal Assessment marks and the attendance percentage must be exhibited periodically on the Notice Board of the college and a copy sent to the student and his / her parent after completion of the I.A. examination for the knowledge of the students and to his / her parent.

(ii) A failed candidate in any subject should be provided an opportunity, if need be, to improve his / her internal assessment marks by conducting a minimum of two examinations in theory and practical separately and the average, be considered for improvement.

(iii) The consolidated internal assessment marks scored out of the total marks (both in theory, practical and viva taken together) should be submitted to the University duly endorsed by the Dean of the College, at least fifteen days prior to the commencement of the theory examinations.

(iv) A candidate should obtain a minimum of 50% of marks in internal in a subject assessment to become eligible to appear for the University examination.

14. ATTENDANCE REQUIRED FOR ADMISSION TO EXAMINATION :

a) No candidate will be permitted to anyone of the parts of I MBBS Examinations unless he / she has attended the course in the subject for the prescribed period and produces the necessary certificate of study, attendance and progress from the Dean of the college.

b) A candidate is required to put in minimum 80% of attendance in both theory and practical / clinical separately in each subject before admission to the examination.

c) A candidate lacking in the prescribed attendance in any one subject in the first appearance shall be denied admission to the entire examination.

d) Failed candidates who are not promoted to the next phase of study shall be required to put in minimum 80% of attendance during the extended period of study before appearing for the next examination.

e) Attendance earned by the student will be displayed on the Notice Board of the concerned Department and college at the end of every 3 months and a copy of the same should be sent to the University and also to the parent of the student concerned.

f) The monthly attendance of the students shall be received by the Dean of the college from the HODs concerned on or before second of every month and the consolidated percentage of attendance will be displayed on the college notice board.

g) The parents of the candidate who have secured less than 80% of attendance in the first month, shall be informed. If such candidate has not improved his/her attendance in the subsequent month also, the parent concerned would be called for to meet the Dean of the college along with the student concerned to get an undertaking, both from the parent and the student concerned, that his/her ward will improve the attendance at 80%, failing which the student is not eligible to apply for the University examinations.

15. CONDONATION OF LACK OF ATTENDANCE:

The Condonation of shortage of attendance up to a maximum of 10% in the prescribed eligible attendance for admission to an examination rests with the discretionary powers of the Vice Chancellor. A candidate lacking the attendance shall submit an application in the prescribed form and remit the stipulated fee, at least 15 days prior to the commencement of theory examination. The Head of the Department and the Dean of the college should satisfy themselves on the reasonableness of the candidate's request

while forwarding the application with their recommendations to the Controller of Examinations who would obtain the Vice-Chancellor's approval for condonation of attendance and admission to the examination. No application would be reviewed if it is not recommended and forwarded through proper channel.

Condonation for lack of attendance shall be taken up for consideration under the following circumstances:

(a) Any illness afflicting the candidate. The candidate should submit to the Dean of the college a Medical Certificate from a registered Medical Practitioner soon after he/she returns to the institutions after treatment.

(b) Any unforeseen tragedy in the family. The parent / guardian should give in writing the reasons for the ward's absence to the Dean of the college;

(c) 50% [35% as MCI] of marks in Internal Assessment is compulsory for condonation of lack of attendance.

16. UNIVERSITY EXAMINATIONS:

(1) COMMENCEMENT OF EXAMINATION:

a. The University Examinations will be held twice in a year i.e. in September 1st and in March 1st.

b. Theory examinations not to be held on Sundays. If the date of commencement of the examination falls on a public holiday, the next working day will be the date of commencement of examination.

(2) TIMING OF EXAMINATIONS:

(a) Phase I - Professional examination:
At the end of one academic year in the month of August / September of the next year.

(b) Phase II - Professional examination
At the end of 1 ½ years from the commencement of Phase II in the month of March of the subsequent year.

(c) Phase III – Part I Professional examination:
At the end of one year of Phase III in the month of March of the next year.

(d) Phase III – Part II Professional (Final Professional) examination:
At the end of 2nd year of the Phase III in the month of March of the next year.

(e) Internship – 1 Year
From 1st April after passing Phase III – Part-II Examinations in March.

(3) **EXEMPTION IN PASSED SUBJECTS:**

Candidates who fails in an examination but obtain pass mark in any subject(s), shall be exempted from re-examination in that subject (s).

(4) CARRY OVER OF FAILED SUBJECTS :

(a) Passing in First MBBS Professional examination is compulsory before proceeding to Phase II training.

(b) A student who fails in the II MBBS professional examination, shall be permitted to carry the failed subjects to Phase III of the M.B.B.S. course but shall not be allowed to appear in III MBBS Professional Part I examination unless he / she passes all the subjects of the Phase II MBBS Professional examination.

(c) Passing in II MBBS Professional examination is compulsory before entering Part II of Phase III (final year) of the course.

(d) Passing in III MBBS Professional (Part I) examination is not compulsory before entering for Part II training; however passing of III MBBS Professional (Part I) is compulsory for being eligible to appear for III MBBS Professional, (Part II) examination.

17. REVALUATION OF ANSWER PAPERS:

There is no provision for revaluation of answer papers. However, re-totaling only is allowed in the failed subjects on payment of prescribed fee within 15 days from the date of receipt of Mark sheet through the Principal/Dean of the college.

18. CLASSIFICATION OF SUCCESSFUL CANDIDATES:

Distinction will be awarded to successful candidates who secure 75% marks or more as a course aggregate in the first appearance taking University theory, practical and viva alone.

19. The Salient Features of the MBBS Course as per the Medical Council of India, Regulations on Graduate Medical Education, 1997 are as follow :-

A. GENERAL CONSIDERATIONS AND TEACHING APPROACH OF THE MBBS COURSE:

(1) Graduate medical curriculum is oriented towards training students to undertake the responsibilities of a physician of first contact who is capable of looking after the preventive, promotive, curative and rehabilitative aspects of medical care.

(2) With a wide range of career opportunities available today, a graduate has a wide choice of career opportunities. The training though broad based and flexible should aim to provide an educational experience of the essentials required for health care in our country. Training should be able to meet internationally acceptable standards.

(3) To undertake the responsibilities of various service situations, which is a changing condition and of various types, it is essential to provide adequate placement training tailored to the needs of such services as to enable the graduates to become effective instruments of implementation of those requirements. To avail of opportunities and be able to conduct professional requirements the graduate shall endeavor to have acquire basic training in different aspects of medical care.

(4) The importance of the community aspects of health care and of rural health care services is to be emphasized. This aspect of education and training of graduates should be adequately recognized in the prescribed curriculum. Its importance has been systematically upgraded over the past years and adequate exposure to such experiences should be available throughout all the three phases of MBBS education and training. This has to be further emphasized and intensified by providing exposure to field practice areas and training during the one year internship (CRRI) period. The aim of the period of rural training during internship is to enable the fresh graduates to function efficiently under such settings.

(5) The educational experience should emphasize health and community orientation instead of only disease and hospital orientation or being concentrated on curative aspects. As such all the basic concepts of modern scientific medical education are to be adequately dealt with.

(6) There must be enough experiences to be provided for self learning. The methods and techniques that would ensure this must become a part of the teaching-learning process.

(7) The medical graduate of modern scientific medicine shall endeavor to become capable of functioning independently in both urban and rural environment. He/She shall endeavor to master the fundamental aspects of the subjects taught and all common problems of health and disease avoiding unnecessary details of specialization.

(8) The importance of social factors in relation to the problem of health and diseases should receive proper emphasis throughout the course and to achieve this purpose, the educational process should also be community based rather than only hospital based. The importance of population control and family welfare planning should be emphasized throughout the period of training with the importance of health and development duly emphasized.

(9) Adequate emphasis is to be placed on cultivating logical and scientific habits of thought, clarity of expression and independence of judgment, ability to collect and analyse information and to correlate the facts.

(10) The educational process should be placed in a historical background as an evolving process and not merely as an acquisition of a large number of disjointed facts without a proper perspective. The history of Medicine with reference to the evolution of medical knowledge both in this country and in the rest of the world should form a part of this process.

(11) Lectures alone are generally not adequate as a method of training and are a poor means of transferring/acquiring information and even less effective at skill development and in generating the appropriate attitudes. Every effort should be made to encourage the use of active methods related to demonstration and on first hand experience. Students shall be encouraged to learn in small groups through peer interactions so as to gain maximal experience through contacts with patients and the communities in which the patients live. While the curriculum objectives often refer to areas of knowledge or science, they are best taught in a setting of clinical relevance with hands on experience for the students to assimilate and make this knowledge a part of their own working skills.

(12) The graduate medical education in clinical subjects should be based primarily on teaching in out-patient and emergency departments and within the community

including peripheral health care institutions. The out-patient departments should be suitably planned to provide training to graduates in small groups.

(13) Clinics should be organized in small groups of preferably not more than 10 students so that a teacher can give personal attention to each student with a view to improving his/her skill and competence in handling of patients.

(14) Proper records of the work should be maintained which will form a basis for the student's internal assessment. They should be available to the inspectors at the time of inspection of the college by the Medical Council of India.

(15) Maximal efforts have to be made to encourage integrated teaching between traditional subject areas using a problem based learning approach starting with clinical or community cases and exploring the relevance of various pre-clinical disciplines in both understanding and resolving a problem. Every attempt must be made to avoid compartmentalization of disciplines so as to achieve both horizontal and vertical integration in different phases.

(16) Every attempt is to be made to encourage students to participate in group discussions and seminars to enable them to develop personality, character, expression and other faculties which are necessary for a medical graduate to function either in solo practice of a team member/leader when he begins his independent career. A discussion group should not have more than 20 students.

(17) Faculty members should avail of modern educational technology while teaching the students. To attain this objective Medical Education Units/Departments should be established in all medical colleges for faculty development and providing learning resource material to teachers.

(18) To derive maximum advantage out of this curriculum the vacation period of students in one calendar year should not exceed one month, during the 4 ½ years Bachelor of Medicine and Bachelor of Surgery (MBBS) Degree Course.

(19) “HISTORY OF MEDICINE” – The students will be given an outline on “History of Medicine”. This will be taught in an integrated manner by subject specialists and will be coordinated by the Medical Education Unit of the College.

(20) The institutional curriculum committee would plan curricula and instructional method which will be regularly updated.

(21) To implement Integration of ICT in learing process.

B. OBJECTIVES OF MEDICAL GRADUATE TRAINING PROGRAMME.

(1) NATIONAL GOALS:

At the end of under graduate program, the medical student shall endeavor to be able to:-

(a) recognize 'Health for All' as a national goal and health right of all citizens and by undergoing training for medical profession fulfill his/her social obligations towards realization of this goal;
(b) learn every aspect of National Policies on health and devote himself/herself to its practical implementation;
(c) achieve competence in practice of holistic medicine, encompassing promotive, preventive, curative and rehabilitative aspects of common diseases;
(d) develop scientific temper, acquire educational experience for proficiency in profession and promote healthy having;
(e) become exemplary citizen by observation of medical ethics and fulfilling social and professional obligations, so as to respond to national aspirations.

(2) INSTITUTIONAL GOALS:

In consonance with the national goals each medical institution should evolve institutional goals to define the kind of trained manpower (or professionals) they intend to produce. The undergraduate students coming out of a medical institute should:

(a) be competent in diagnosis and management of common health problems of the individual and the community, commensurate with his/her position as a member of the health team at the primary, secondary or tertiary levels, using his/her clinical skills based on history, physical examination and relevant investigations;
(b) be competent to practice preventive, promotive, curative and rehabilitative medicine in respect to the commonly encountered health problems;
(c) appreciate rationale for different therapeutic modalities, be familiar with the administration of the 'essential drugs' and their common side effects;
(d) be able to appreciate the socio-psychological, cultural, economic and environmental factors affecting health and develop humane attitude towards the patients in discharging one's professional responsibilities;
(e) possess the attitude for continued self learning and to seek further expertise or to pursue research in any chosen area of medicine, action research and documentation skills;
(f) be familiar with the basic factors which are essential for the implementation of the National Health Program's including practical aspects of the following:-

i. Family Welfare and Maternal and Child Health (MCH).
ii. Sanitation and water supply.

iii. Prevention and control of communicable and non –communicable diseases,
iv. Immunization.
v. Health Education.
vi. IPHS standard of health at various level of service delivery, medical waste disposal.
vii. Organizational and institutional arrangements.

(g) acquire basic management skills in the area of human resources, materials and resource management related to health care delivery, General and Hospital management, principal inventory skills and counseling.
(h) be able to identify community health problems and learn to work to resolve these by designing, instituting corrective steps and evaluating outcome of such measures;
(i) be able to work as a leading partner in health care teams and acquire proficiency in communication skills;
(j) be competent to work in a variety of health care settings;
(k) have personal characteristics and attitudes required for professional life such as personal integrity, sense of responsibility and dependability and ability to relate to or show concern for other individuals;
(l) all efforts must be made to equip the medical graduate to acquire the skills as detailed below :-

A comprehensive list of skills recommended as desirable for Bachelor of Medicine and Bachelor of Surgery (MBBS) Graduate.

i. Clinical Evaluation:

(a) To be able to take a proper and detailed history.
(b) To perform a complete and through physical examination and elicit clinical signs.
(c) To be able to properly use the stethoscope, Blood pressure, Apparatus Auroscope, Thermometer, Nasal Speculum, Tongue Depressor, Weighing Scales, Vaginal Speculum etc.
(d) To be able to perform internal examination – Per Rectum (PR), Per Vaginum (PV) etc.
(e) To arrive at a proper provisional clinical diagnosis.

ii. Bed side Diagnosis Tests:

(a) To do and interpret Haemoglobin (Hb), Total Count (TC), Erythrocyte Sedimentation Rate (ESR), blood smear for parasites, urine examination / albumin/ sugar / ketones / miroscopic;
(b) Stool exam for ova and cysts;
(c) Gram staining and Ziehl – Nielsen staining for AFB;
(d) To do skin smear for lepra bacilli;
(e) To do and examine a wet film vaginal smear for Tricho-monas;

(f) To do a skin scraping and potassium Hydroxide (KOH) stain for fungus infections;
(g) To perform and read Montoux Test.

iii. Ability to carry out Procedures:

(a) To conduct CPR (Cardiopulmonary resuscitation) and First aid in newborns, children and adults.
(b) To give Subcutaneous (Sc)/ Intramuscular (IM) Intravenous (IV) injections and start Intravenous (IV) infusions.
(c) To pass a Nasogastric tube and give gastric lavage.
(d) To administer-oxygen-by masic / catheter
(e) To administer enema
(f) To pass a urinary catheter - male and female
(g) To insert flatus tube
(h) To do pleural tap. Ascetic tap & lumbar puncture
(i) Insert intercostals tube to relive tension pneumothorax
(j) To reneve cardiac tamponade
(k) To control external Haemorrhage.

iv. Anesthetic Procedures :

(a) Administer local anesthesia and nerve block
(b) Be able to secure airway potency, administer Oxygen by Ambu bag.

v. Surgical Procedures :

(a) To apply splints, banages and plaster of Paris (PO) labs;
(b) To do incision and drainage of abscesses
(c) To perform the management and suturing of superacial wounds;
(d) To carry on minor surgical procedures, e.g. excision of small cysts and nodules. Circumcision, reduction of para-phimosis, depridement of wounds etc;
(e) To perform vasectomy;
(f) To manage anal fissures and give injections for piles.

vi. Mechanical Procedures:

(a) To perform through antenatal examination and identify high risk pregnancies.
(b) To conduct a normal delivery;
(c) To apply low forces and perform and suture episiotomies;
(d) To insert and remove IUD's and to perform tubectomy.

vii. Paediatrics:

(a) To assess new born and recognise abnormalities and I.U. retardation.
(b) To perform Immunization;
(c) To teach infant feeding to mothers;

(d) To monitor growth by the use of 'road to health chart' and to recognise development retardation;
(e) To assess dehydration and prepare and administer Oral Rehydration Therapy (ORT);
(f) To recognise ARI clinically.

viii. ENT Procedures:

(a) To be able to remove foreign bodies;
(b) To perform nasal packing for epistaxis;
(c) To perform tracheotomy.

ix. Ophthalmic Procedures:

(a) To invert eye-lids;
(b) To give Subconjunctival injection;
(c) To perform appellation of eye-lashes;
(d) To measure the refractive error and advise correctional glasses;
(e) To perform nasolacrimal duct syringing for potency.

x. Dental Procedures:

To perform dental extraction.

xi. Community Health:

(a) To be able to supervise and motivate, community and para-professionals for corporate efforts for the health care;
(b) To be able to carry on managerial responsibilities, e.g. Management of stores, indenting and stock keeping and accounting;
(c) Planning and management of health camps;
(d) Implementation of national health programmes;
(e) To effect proper sanitation measures in the community, e.g. disposal of infected garbage, chlorination of drinking water;
(f) To identify and institute control measure for epidemics including its proper data collection and reporting;

xii. Forensic Medicine including Toxicology:

(a) To be able to carry on proper medico legal examination and documentation of injury and age reports.
(b) To be able to conduct examination for sexual offences and intoxication;
(c) To be able to preserve relevant ancillary materials for medico legal examination;
(d) To be able to identify important post-mortem findings in common un-natural deaths.

xiii. Management of Emergencies:

(a) To manage acute anaphylactic shock;
(b) To manage peripheral vascular failure and shock;
(c) To manage acute pulmonary edema and LVF:
(d) Emergency management of drowning, poisoning and seizures;

(e) Emergency management of bronchial asthma status asthmaticus;
(f) Emergency management of hyperpyrexia;
(g) Emergency management of comatose patients regarding airways, positioning prevention of aspiration and injuries;
(h) Assess and administer emergency management of burns.

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PHASE – I: MBBS : DURATION : 12 MONTHS

SUBJECT 1: ANATOMY [PAPER I & II]

1. PRESCRIBED TEACHING HOURS : - 650 Hrs.

General Anatomy	2 weeks
General Embryology	1 week
General Histology	1 week
Systemic Embryology	4 weeks
Systemic Histology	3 weeks
Upper limb	3 weeks
Throax	3 weeks
Lower extremity	4 weeks
Abdomen and Pelvis	7 weeks
Head and Neck	8 weeks
Brain & Spinal cord	4 weeks

TOTAL	40 weeks
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2. SEMESTER WISE TEACHING SCHEDULE :

Teaching Hours : Total : 650 hours including Practical : 120 hours.

Semester	Syllabus	Exams
I	1. Introduction to Anatomy 2. General Anatomy. 3. General Embryology. 4. General Histology 5. Upper Limb. 6. Thorax.	1st Terminal Examination in the 2nd week of January
II	1. Introduction to Anatomy 2. General Anatomy. 3. General Embryology. 4. General Histology 5. Upper Limb. 6. Thorax.	2nd Terminal Examination in the 2nd week of May
	Pre-Professional Examinations : I & II Terminals Syllabus	1st week of July

	University Examinations : Full Syllabus	August

3. SUBJECT 1 : – ANATOMY

Question Type / Syllabus Covered

Paper – I - Max. Marks : 100 - 3 hours (MCQ – 20 Minutes Sections B & C - 2 Hr. 40 Minutes.

Section A: MCQ 20 questions – one mark each including applied anatomy -- 20 marks

Section B: - From Syllabus - Brain, Spinal cord & Upper Limb -- 40 marks

Section C: - From Syllabus - Head, Neck, Gen. Anatomy, Embryology -- 40 marks

Total 100 marks

SECTION – A : MCQ 20 Questions – 1 mark each including applied anatomy -- 20

SECTION – B : - 3 Short Notes from Brain & Sp. Cord syllabus 5 x 3 = 15

- 3 Short Notes from Upper Limb syllabus 5 x 3 = 15

(including related Sp. Embryology & Systemic histology)

- 2 Short Notes from General Anatomy syllabus 5 x 2 = 10

Total Marks 40

SECTION – C: - 1 Long question and 4 short questions from 10 x 1 = 10

Head, Neck, Cr. Nerves etc 5 x 4 = 20

Syllabus including related Embryology & Histology

- General Embryology 5 x 2 = 10

Total Marks 40

Grand Total … 100

======

Note: *One long question 10 marks replaces two short notes in Section C.*

Paper – II - Max. Marks : 100

Section A: MCQ PBL based 20 questions – one mark each -- 20 marks

Section B: - From Syllabus - Lower Limb, Genetics, Thorax -- 40 marks

Section C: - From Syllabus - Abdomen, Abd wall, Peritoneal cavity, Pelvis etc. , Genetics, Related Sp. Embryology & Syst. Histology -- 40 marks

Total 100 marks

SECTION – A : MCQ 20 Questions – 1 mark each including applied anatomy -- 20

SECTION – B : - 4 Short Notes from Lower limb syllabus 5 x 4 = 20
- 4 Short Notes from Thorax syllabus 5 x 4 = 20
Total Marks 40

SECTION – C: - 1 Long question Abdomen 10 x 1 = 10
- 4 Short Notes from Abdomen wall, Peritoneal cavity, Pelvis etc. 5 x 4 = 20
- 2 Short Notes from Genetics related Sp. Embryology & Syst. Histology 5 x 2 = 10
Total Marks 40

Grand Total … 100

Note: *One long question 10 marks replaces two short notes in Section B/C.*

(ii) **PRACTICAL EXAMINATION** -- **80 Marks**

HISTOLOGY	Spotters	30 Marks }
	Discussion General 1]	}
	Special 1] --	10 Marks }
GROSS ANATOMY	Spotters	30 Marks }
	Discussion UL/LL/ABD 1}	}
	HN/Br/Tho 1}	10 Marks }

Two mark for each spotter and two minutes per spotter. Each spotter may have two or more structured questions.

Gross Spotters (two)	2 x 15 = 30	+	Discussion 10	=	40 Marks
Histology Spotters (two)	2 x 15 = 30	+	Discussion 10	=	40 Marks

Gross Spotters – Distribution

Upper Extremity	…	…	…	2
Lower Extremity	…	…	…	2
Thorax	…	…	…	2
Abdomen & Pelvis	…	…	…	2 + 1
Head & Neck	…	…	…	3 + 1
Brain & Spinal Cord	…	…	…	2
				15

Histology Spotters - Distribution :

General Histology	…	…	…	3
Special Histology	…	…	…	12
				15

Note: Spotters should not be pre arranged. Marks are awarded for identification as well as discussion.

VIVA EXAMINATION :

Osteology	…	…	10
Radiology	…	…	10
Surface Marking	…	…	10
Embryology (including Karyotypes)	…	…	10
		Total	40 Marks

4. UNIVERSITY EVALUATION :

(1) INTERNAL ASSESSMENT

Theory	30 marks
Practical / Oral	30 marks
Records	20 marks
TOTAL	80 marks

(2) UNIVERSITY EXAMINATION PATTERN:

(i) **THEORY - TWO PAPERS** of 3 (three) hours duration 100 marks each. 20 MCQs in each paper carrying one mark each. Each Section to be answered separately.

(ii) **Pattern of Question paper** :

Section A:			
20 MCQs	(20 x 1)	= 20 marks	(20 minutes)
Section – B :			
8 Short Notes	(8 x 5)	= 40 marks	
Section C :			
1 Long Question	(1 x 10)	= 10 marks	(2.40 hours)
6 Short Notes	(6 x 5)	= 30 marks	
Maximum		100 marks	3.00 hours

(iii) MARKS QUALIFYING FOR A PASS

50% in Theory	=	100/200
50% in Theory + IA+ including Viva	=	140/280

50% in Practical + IA = 60/120

Grand Total : 200/400

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PHASE – I: MBBS – DURATION : 12 MONTHS

1. SUBJECT – 2 : HUMAN PHYSIOLOGY

2. TEACHING HOURS : - 480 Hrs.

Total time for teaching Biophysics … … : 5 hours

Out of which 1) Didactic lectures : 3 hours

2) Tutorial/group discussion : 1 hour

3) Practical : 1 hour

3, SEMESTER WISE TEACHING SCHEDULE :

Teaching Hours : Total : 480 hours including 120 hours Practical

Semester	Syllabus	Exams
I	1. General Physiology - 4 Topics 2. Blood 3. G.I.T. 4. Respiratory system. 5. C.V.S. 6. Kidney.	1st Terminal Examination in the 2nd week of January
II	7. Endocrines 8. Reproduction. 9. Nerve, Muscle – a. Skeletal b. smooth c. Cardiac. 10. Special senses. 11. Nervous system.	2nd Terminal Examination in the 2nd week of May
	Pre-Professional Examinations : I & II Terminals Syllabus	1st week of July
	University Examinations : Full Syllabus	August

3. PHYSIOLOGY - QUESTION TYPE / SYLLABUS COVERED

(1) PAPER – I - Max. Marks : 100 - 3 hours (MCQ – 20 Minutes Sections B & C - 2 Hr. 40 Minutes)

SECTION – A : MCQ 20 Questions – 1 mark each -- 20

SECTION – B : - 2 Short Notes from General Physiology Biophysics (Bio-potentials, Memb. Transport Blood Flow, Viscocity PV Resistance etc.) 5 x 2 = 10

- 2 Short Notes from Blood, Hematology, 5 x 2 = 10

Hematocrit Hb etc.

- 2 Short Notes from Digestive system 5 x 2 = 10
- 2 Short Notes from Excretory system GFR Urine formation C.C Distribution Auto-regulation. ACE RFT 5 x 2 = 10 40

SECTION – C: - 1 Long question from Cardiac Physiology, Card. Cycle, Cadiac Output, ECG, Car. Circulation, Card Cath. Vascular Physiology. Reg. of Blood Pressure etc. 10 x 1 = 10

- 3 Short Notes on Cardiovascular System 5 x 3 = 15
- 3 Short Notes on Resp. Physiology Ox & CO Transport. PFT Pulm. Circulation Hypoxia, Dyspnoea Cyanosis, High Altitude Physiology 5 x 3 = 15 40

Grand Total … 100

Note: *One long question 10 marks shall replace two short notes, in Section B/C at the discretion of the paper setter.*

(2) PAPER – I I : Max. Marks : 100 - 3 hours (MCQ – 20 Minutes Sections B & C - 2 Hr. 40 Minutes)

SECTION – A : MCQ 20 PBL based Questions – 1 mark each -- 20

SECTION – B : - 3 Short Notes from Endocrine system Ant Pituitary /Post Pit Hormones, Thyroid/Para Thyroid, Pancreas, Adrenal, Gonad, Renal Hormones 5 x 3 = 15

- 3 Reproductive System, Reproductive Physiology Maternal Physiol Preg/Lactation, Contraceptives IVF etc. 5 x 3 = 15
- 2 Nerve – Muscle Physiology 5 x 2 = 10

Total Marks 40

SECTION – C: - 5 Short Notes from Nervous system, Brain / Brain Stem / Limbic system; Spinal cord; Spinal Cord : Asc & Desc Tracts. 5 x 5 = 25

- 3 Short Notes on Special Senses Eye/Ear/ Taste/Smell. 5 x 3 = 15

Total Marks … 40

Grand Total … 100

Note: One long question 10 marks shall replace two short notes, in Section B/C at the discretion of the paper setter.

(3) Oral … … … 40 marks (10 Per Examiner)

(4) PRACTICAL EXAMINATION **80 MARKS**

(a) Practical – 1 (1 ½ hrs., Haematology) … 40 Marks

Haematology :

1. Spotting of Haematology instruments	:	10
2. Haematology Practical	:	15
3. Table Viva ..	:	5
4. Graphs/Charts – Amphibian graphs/ ECG/ Lungs Volumes/Blood Cells	:	10
Total		40

(b) Practical – 2 (1 ½ hrs., Clinical Physiology) … 40 Marks

1. Spotting Human instruments ..	10 Marks
2. Human Practicals ..	15 Marks
3. Table Viva ..	5 Marks
4. Clinical	10 Marks
Total	40 Marks

4. UNIVERSITY EVALUATION

(1). **INTERNAL ASSESSMENT**

Theory	30 marks
Practical / Oral	30 marks
Records	20 marks
TOTAL	80 marks

(2) **UNIVERSITY EXAMINATION PATTERN:**

(i) **THEORY - TWO PAPERS** of 3 (three) hours duration 100 marks each. 20 MCQs in each paper carrying one mark each. Each Section to be answered separately.

(a) **Pattern of Question paper** :

Section A:

20 MCQs	(20 x 1)	= 20 marks	(20 minutes)

Section – B :

8 Short Notes	(8 x 5)	= 40 marks	

Section C :

1 Long Question	(1 x 10)	= 10 marks	(2.40 hours)
6 Short Notes	(6 x 5)	= 30 marks	
	Maximum	100 marks	3.00 hours

(3) MARKS QUALIFYING FOR A PASS

50% in Theory	=	100/200
50% in Theory + IA+ including Viva	=	140/280
50% in Practical + IA	=	60/120
Grand Total :		200/400

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PHASE – I: MBBS : 12 MONTHS DURATION

SUBJECT – 3 : BIOCHEMISTRY

TEACHING HOURS: TOTAL 240 HOURS including 90 Hours Practical

SEMESTER WISE TEACHING SCHEDULE

Semester	Syllabus		Exams
I	Paper - I	Paper – II	1st Terminal Examination in the 2nd week of January
	1. Importance of Biochemistry. 2. Cell Biology. 3. Bio molecules. 4. Serum protein. 5. Enzymes. 6. Vitamins. 7. Minerals. 8. Metabolism of carbohydrates. 9. Clinical Teaching based on above topics	1. Nutrition. 2. Acid base balance. 3. Immunology. 4. Nucleotide metabolism	
II	Paper - I	Paper - II	2nd Terminal Examination in the 2nd week of May
	1. Protein metabolism 2. Bilirubin Metabolism 3. Lipid Metabolism 4. Lipo proteins 5. Atherosclerasis 6. Antioxidants & free radicals.	1. Organ function tests. 2. Molecular Biology. 3. Cancer, AIDS 4. Xenobiotics 5. Quality control. 6. Mechanism of Hormone action.	
	Pre-Professional Examinations : I & II Terminals Syllabus		**1st week of July**
	University Examinations : Full Syllabus		**August**

Biochemistry Question Type / Syllabus Covered

PAPER – I - Max. Marks : 100 - 3 hours (MCQ – 20 Minutes Sections B & C - 2 Hr. 40 Minutes)

Section A: MCQ 20 questions – one mark each. -- 20 marks
Section B: - From Syllabus - General Biochemistry -- 40 marks

Section C: - From Syllabus - Gen. Biochemistry & Metabolism -- 40 marks
Total 100 marks

SECTION – A : MCQ 20 Questions – 1 mark each -- 20

SECTION – B : - 2 Short Notes from Cell Biochemistry 5 x 2 = 10
Free Radicals, Anti-Oxidants, Homeostasis etc.
- 2 Short Notes from Enzymes-Kinetics / Mech. of action of enzymes, Enzyme inhibition. 5 x 2 = 10
- 2 Short Notes from Vitamins/Minerals/Electrolytes 5 x 2 = 10
- 2 Short Notes from Energy/Mitochondrial metabolism 5 x 2 = 10
Balanced Diet / Malnutrition ----------
Total Marks 40

SECTION – C: -2 Short Notes from Carbohydrate Metabolism, Catabolic & Anabolic Pathways 5 x 2 = 10
-2 Short Notes from Protein Structure & Met Urea cycle , Ammonia Metabolism 5 x 2 = 10
-3 Short Notes from Lipo-Proteins, Fatty Acida & cholesterol Metabolism, Atherosclerosis 5 x 3 = 15
-1 Short Notes from Hb Metabolism including Heme synthesis, Bilirubin metabolism & porphyrins 5 x 1 = 5

Total Marks … 40
Grand Total … 100
=======

Note: One long question 10 marks shall replace two short notes, in Section B/C at the discretion of the paper setter.

PAPER – I I - Max. Marks : 100 - 3 hours (MCQ – 20 Minutes Sections B & C - 2 Hr. 40 Minutes)

Section A: MCQ 20 questions – one mark each. -- 20 marks
Section B: - From Syllabus - Clinical / Diagnostic Biochemistry -- 40 marks
Section C: - From Syllabus - Molecular Biology -- 40 marks
Total 100 marks

SECTION – A : MCQ 20 PBL based Questions – 1 mark each -- 20

SECTION – B : - 2 Short Notes from Endocrines – Peptide / Steroid Hormones, Insulin/Pro-Insulin. Reg of Blood Glucose etc. 5 x 2 = 10
- 2 Short Notes from Diagnostic Biochemistry / GTT / Lipid Profile LET, KFT, TFT / CFT 5 x 2 = 10
- 1 Short Notes from Cancer Biology 5 x 1 = 5

	- 2 Short Notes from Immunology, HIV	5 x 2 = 10
	- 1 Short Notes from Quality Control	5 x 1 = 5
	(Pre-analyt/Analy/Post analyt) Int QC / Ext QC	----------
	Total Marks	40
SECTION – C:	- 2 Short Notes from RNA / DNA & Nucleotide Metabolism	5 x 2 = 10
	- 2 Short Notes from Replication. Transcription, Translation Mech	5 x 2 = 10
	- 2 Short Notes from Gen Mutation, Gen Engineering Gene Mapping, cloning, Human Genome	5 x 2 = 10
	- 1 Short Notes from Mol. Biol techniques	5 x 1 = 5
	- 1 Shot Notes from Xenobiotics	5 x 1 = 5

	Total Marks …	40
	Grand Total …	100
		======

Note: One long question 10 marks shall replace two short notes, in Section B/C at the discretion of the paper setter.

Oral … … … 40 marks (10 Per Examiner)

(ii) PRACTICAL EXAMINATION **80 MARKS**

Practical Exercise – I	Major experiment with case discussion			40 Marks – 90 Minutes
Practical exercise – II	Minor experiment			20 Marks
Spotters	--	--	--	10 Marks
Charts	--	--	--	10 Marks

		Total		80 Marks

UNIVERSITY EVALUATION

1. **INTERNAL ASSESSMENT**

Theory	30 marks
Practical / Oral	30 marks
Records	20 marks

TOTAL	80 marks
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2. **UNIVERSITY EXAMINATION PATTERN:**

(i) **THEORY - TWO PAPERS** of 3 (three) hours duration 100 marks each. 20 MCQs in each paper carrying one mark each. Each Section to be answered separately.

Pattern of Question paper :

Section A:			
20 MCQs	(20 x 1)	= 20 marks	(20 minutes)
Section – B :			
8 Short Notes	(8 x 5)	= 40 marks	
Section C :			
1 Long Question	(1 x 10)	= 10 marks	(2.40 hours)
6 Short Notes	(6 x 5)	= 30 marks	
		==========	========
	Maximum	100 marks	3.00 hours
		----------	----------

(iii) MARKS QUALIFYING FOR A PASS

50% in Theory	=	100/200
50% in Theory + IA+ including Viva	=	140/280
50% in Practical + IA	=	60/120

Grand Total :		200/400

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PHASE : I : M.B.B.S.

TEACHING HOURS … … … **60 HOURS**

SUBJECT – 4: INTRODUCTION TO HUMANITES AND COMMUNITY MEDICINE - SYLLABUS

It would be desirable to ensure that teaching of Community Medicine is community oriented and community based learning experience will be more rewarding if problem solving opportunities are incorporated and teaching is carried out in an integrated fashion.

LIST OF TOPICS .

1. Introduction to Community Medicine.
2. Concept of Health and disease.
3. Seminar on above topic.
4. Mode of transmission of disease and dynamics of diseases.
5. Natural history of disease and concept of prevention.
6. Seminar on above topics.
7. Introduction to health delivery system in rural and urban area in India, social factors related to health, disease & disability in context of urban and rural area.
8. Concept of primary health care – compounds of primary health care – Health for all.
9. Seminar on above topics.
   (Dynamics of community behaviour).
10. Demography and demographic level in India and other countries.
11. National demographic goal.
12. Seminar on the above topics.
    (Principles of Sociology including demographic population dynamics).
13. Social factors and morbidity pattern in rural area and urban area.
14. Seminar on the above topic.
15. Behavioural Science and Psychology

I & II Semester – List of visits to Institutions

1-3. Primary Health Centres – 3 centres
4-6. Urban Health Posts - 3 centres
7. Water works

8. Sewage farming
9. Water & Food analysis Laboratory
10. Institute/Department of Mental Health
11. Institute of Rehabilitation
12. Milk Diary
13. Nutrition Rehabilitation Centre.

Suggested Time-Table

As per Medical Council of India

(i) Theory, Seminars, Practical	- 30 Hours
(ii) Visits to Institutions of Health	- 30 Hours (Field Visit)

Adapted Time /Table

Starting from August . two continuous Hours of classes per week (11.00 A.M. to 1.00 P./M.) on any day of the week for 15 weeks (2 Hours x 15 weeks = 30 Hours as per recommendation of Medical Council of India) should be conducted upto the end of November.

Also 5 field visits of 6 Hours duration (7.00 A.M. to 1.00 P.M.) Forenoon should be organized once in a month from September to January.

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ANNEXURE III

(REGULATION 14)

I MBBS DEGREE COURSE - MODEL TIME – TABLE

First six months

Days / Time	8-9	9-10	10-11	11-12	12-1	1-2	2-3	3-4
Mon	Anat	Anat	Anat	Anat	L	Phys	Phys	Phys
Tues	Anat	Anat	Anat	Anat	U	Phys	Phys	Phys
Wed	Anat	Anat	Anat	Bioch	N	Bioch	Bioch	Bioch
Thurs	Anat	Anat	Anat	Phys	C	Phys	Phys	Phys
Fri	Anat	Anat	Anat	Anat	H	Bioch	Bioch	Bioch
Sat	Anat	Anat	Anat	Phys		Phys	Phys	Phys

Second six months

Days / Time	8-9	9-10	10-11	11-12	12-1	1-2	2-3	3-4
Mon	Phys	Phys	Phys	Anat	L	Anat	Anat	Anat
Tues	Phys	Phys	Phys	Anat	U	Anat	Anat	Anat
Wed	Bioch	Bioch	Bioch	Bioch	N	Anat	Anat	Anat
Thurs	Phys	Phys	Phys	Phys	C	Anat	Anat	Anat
Fri	Bioch	Bioch	Bioch	Anat	H	Anat	Anat	Anat
Sat	Phys	Phys	Phys	Phys		Anat	Anat	Anat

Note:-

During the second six months, 60 hours for introduction to Community Medicine including Humanities, rest of the time shall be somewhat equally divided between Anatomy and Physiology plus Bio-chemistry combined (Physiology 2/3 and Bio-Chemistry 1/3).

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PHASE II : M.B.B.S. COURSE – 18 MONTHS COURSE

SUBJECT: 1 - PATHOLOGY :

PRESCRIBED TEACHING HOURS - 300 hrs.

SEMESTER WISE TEACHING SCHEDULE

Teaching Hours : Total : 300 hours including 120 hours.Practical

Semester	Syllabus	Exams
III	**General Pathology:** ➢ Cell Injury – Reversible Irreversible ➢ Inflammation – Acute, Chronic. ➢ Repair and Regeneration ➢ Haemostasis ➢ Circulatory disturbances. **Haematology:** ➢ Bone Marrow ➢ RBC Disorders ➢ Transfusion Medicine ➢ Lymph Node Spleen Thymus **Neoplasia** **Immunopathology, Environmental & Nutritional**	**1st Terminal Examination in the 2nd week of January**
IV	**Haematology: (Contd.)** ➢ WBCs Disorder ➢ Coagulation disorders **Systemic Pathology:** ➢ Vascular System. ➢ Pathology of Heart ➢ GIT ➢ Liver Biliary Tract and Pancrease ➢ Kidney ➢ Bones	**2nd Terminal Examinations in the 2nd week of July**
V	**Systemic Pathology :** ➢ Lung Pathology ➢ Female Genital system – Uterus, Ovary, Placenta,….. ➢ Male Genital System ➢ Breast ➢ Endocrine ➢ Musculoskeletal system ➢ Joints ➢ Skin **Genetics:**	**3rd Terminal Examinations in the 1st week of January.**

	Pre-Professional Examinations : I & II Terminals Syllabus	**1st week of Feb.**
	University Examinations : Full Syllabus	**1st March**

EVALUATION

INTERNAL ASSESSMENT : : : 60 Marks

Theory	:	**30 Marks**
Practical	:	**20 Marks**
Record	:	**5 Marks**
Assignment	:	**5 Marks**

(Any one of the following is compulsory)
- a) Symposium/Seminar
- b) Short project work
- c) Problem based learning
- d) Quiz on prescribed topics

Total : **60 Marks**

UNIVERSITY EXAMINATION PATTERN

THEORY : TWO PAPERS OF 3 HOURS DURATION - 80 MARKS EACH

PAPER-I - General Pathology & Hematology	–	80 marks
PAPER- II - Systematic Pathology	–	80 marks

Note : Both papers to be set by the same examiner to avoid repetition of questions.

9. PATTERN OF QUESTION PAPER :

	Marks		Time/Minutes
Section A:			
20 M.C.Qs (20 x 1)	20	..	(20 minutes)
Section B:			
6 Short Notes (6 x 5)	30		
Section C:			2 hours
6 Short Notes (6 x 5)	30	..	40 minutes)
	---		---
Total :	80	..	3 hours
	---		---

Note: ***One long question 10 marks shall replace two short notes, in Section B/C at the discretion of the paper setter.***

PRACTICAL EXAMINATION : 50 Marks

Practical - I	**- 25 Marks**	**Practical-II**	**- 25 Marks**
Spotters (7+2+1) (7+2+1) (Slides + Specimen +)	10 *	Problem base learning case Urine & Physical Chemical examination)	05 05
DC/PS Study	05	Special HP Slides (2 slides)	10
Hb/Blood grouping	05	Cytology slide	
C.S.F.	05	(FNA / PAP / Haematology)	05
Total :	25 Marks	Total :	25 Marks

[* 1. Gross Specimen. 2. Spot Diagnosis Histopathology. 3. Spot diagnosis Haematology. 4. BM study. 5. R/C. 6. Needles 7. Histopatho Instruments. 8. Haematology equipment. 9. Clinical path equipment. 10. Tumor markers.]

VIVA: 30 MARKS :

1. General Pathology
2. Hematology and Lymph reticular system
3. C.V.S. RS G.I.T; & Liver
4. G.U.T. Bone, Muscle, Skin, Endocrine, Breast & C.N.S.

} 30 marks

MARKS QUALIFYING FOR A PASS :

50% in Theory	:	80 / 160
50% in Theory +IA+ including Viva	:	110 / 220
50% in Practical + IA	:	40 / 80
Total 50% aggregate	:	150 / 300

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PHASE II MBBS – 18 MONTHS DURATION

SUBJECT – 2: MICROBIOLOGY

SEMESTER WISE TEACHING SCHEDULE

Teaching Hours : Total 250 hours including …….. hours Practical

Semester	Syllabus	Exams
III	**1. Parasitology** **2. General Bacteriology** **3. Immunology.**	**1st Terminal Examination in the 2nd week of January**
IV	**1. Systemic Bacteriology.** **2. Mycology.**	**2nd Terminal Examinations in the 2nd week of July**
V	**1. Virology** **2. Applied Clinical Microbiology**	**3rd Terminal Examinations in the 1st week of January.**
	Pre-Professional Examinations : I & II Terminals Syllabus	**1st week of Feb.**
	University Examinations : Full Syllabus	**1st March**

EVALUATION

INTERNAL ASSESSMENT : 60 Marks

Theory	**:**	**30 Marks**
Practical	**:**	**20 Marks**
Record	**:**	**5 Marks**
Assignment	**:**	**5 Marks**

Any one of the following is compulsory -

a) Symposium/Seminar
b) Short project work
c) Problem based learning
d) Quiz on prescribed topics

Total : 60 Marks

UNIVERSITY EXAMINATION PATTERN

(1) THEORY :

Two papers of 3 (three) hours duration - 80 marks each.

Paper I – General Bacteriology, Systematic Bacteriology & Applied Clinical Microbiology – 80 marks

Paper II – Parasitology Immunology, Mycology & Virology – 80 marks

Note : Both papers to be set by the same examiner to avoid repetition of questions.

(2) PATTERN OF QUESTION PAPER :

	Marks	Time/Minutes
Section A:		
20 M.C.Qs (20 x 1)	20 ..	(20 minutes)
Section B:		
6 Short Notes (6 x 5)	30	2 hours
Section C:		
6 Short Notes (6 x 5)	30 ..	40 minutes)
	---	---
Total :	80 ..	3 hours
	---	---

Note: ***One long question 10 marks shall replace two short notes, in Section B/C at the discretion of the paper setter.***

Practical Examination : .. **50 Marks**

1. Bacteriology - Gram Staining (Pus/Urine/CSF) : 10 Marks
   - Sputum for AFB : 10 Marks
2. Parasitology (Stool) + MP : 10 Marks
3. Spotters (10x2) * : 10 Marks

   * (2 Marks per spotter i.e. one mark for identification and one mark for two salient features about the spotter)

4. Applied / PBL - 2 ½ Marks
   Immunology/ Serology - 2 ½ Marks
   Mycology - 2 ½ Marks

Virology	- 2 ½ Marks		10 Marks
	Total	:	50 Marks

Viva : .. .. **30 Marks**

MARKS QUALIFYING FOR A PASS :

50% in Theory	:	80 / 160
50% in Theory +IA+ including Viva	:	110 / 220
50% in Practical + IA	:	40 / 80
Total 50% aggregate	:	150 / 300

****

PHASE II MBBS – 18 MONTHS DURATION

SUBJECT: 3 - PHARMACOLOGY

SEMESTER WISE TEACHING SCHEDULE

Teaching Hours : Total 300 hours including 120 hours Practical.

Semester	Syllabus	Exams
III (50 Hours)	1. General Pharmacology 2. Drugs Acting on ANS 3. Drugs Acting on Respiratory system 4. Drugs for cough and Br. Asthma 5. Skeletal Muscle Relaxants 6. Neuro-muscular Blocking drugs	**1st Terminal Examination in the 2nd week of January**
IV (80 Hours)	1. Drugs Acting on CVS, CNS 2. Diuretics & Anti-diuretics 3. Ocular Pharmacology 4. Endocrines.	**2nd Terminal Examinations in the 2nd week of July**
V (50 Hours)	1. Drugs Acting on GI System. 2. Analgesics 3. Anto-Inflammatory drugs. 4. Drugs for – - Rheumatoid arthritis and Gout anemias. - Anemias - Coagulatin disorders - Hyperlipidemia 5. Chemotherapeutic Drugs. 6. Antibiotics 7. Drugs for Cancer chemotherapy.	**3rd Terminal Examinations in the 1st week of January.**

PRACTICAL

Semester	Syllabus	Exams
III (35 Hours)	1. General Introduction. 2. Drugs Regulations, Acts and Schedules. 3. Prescription of Drugs / Controlled Drug Schedules. 4. Proprietary Drugs / OTC Drugs. 5. Essential Drug List.	**1st Terminal Examination in the 1st week of January**

	6. Common Drug Formulations. Dosage formulation. 7. Prescription writing and Editing. 8. Pharmacy / Dispensing 9. ORS, Saline Purg. Carminative Mixtures etc.	

PRACTICAL

Semester	Syllabus	Exams
IV (50 Hours)	1.Objective Structured Practical. 2. Exercise (OSPE) : Simulated IV Drip Setting Dose Calculation & Setting for Infusion Pump. Drug Sensitivity testing. 4. Drug administration : I.M. / Intra Dermal / S.C. / Iv 6. Experimental Pharmacology: Rabbit Intestine Experiments Rabbit Eye Experiments Frog Rectus Abdominis Experiments	**2nd Terminal Examinations in the 2nd week of July**
V (35 Hours)	1. C1. Pharmacology. 2. PBL Exercises based on short Cl. Case histories. 3. Therapeutic Problems. 4. Drug Interactions.	**3rd Terminal Examinations in the 1st week of January.**

	Pre-Professional Examinations : I & II Terminals Syllabus [Theory & Practical]	**1st week of Feb.**
	University Examinations : Full Syllabus	**1st March**

PHARMACOLOGY PRACTICAL EXAMINATION DESIGN:

PRACTICAL : 50 Marks

(A) PRACTICAL - I – 90 MINUTES **Marks**

1. Prescription writing 5
2. Clinical Pharmacology (problem solving exercises 10
   (Therapy oriented problems of adverse reaction and interaction of commonly used drugs - 5 x 2)
3. Dosage calculation including Pharmaco-economics 5
4. OSPE 10
   Simulated IV Drip setting
   Dose Calculation & Setting for Infusion Pump
   Use of Inhaler & Canulas

Drug administration I.M. / Intra Dermal / SC / Iv.

5. Pharmacy / Dispensing (Ors /saline Purg. Etc.) 5
6. Drug Identification By Recorded Rabbit Intestine Tracings 5
7. Spottings 10

Total .. .. 50 Marks

(B) PRACTICAL - II – 90 MINUTES

1. Objective Structural Practical Exercise (OSPE) 20
   Designed to test the knowledge in Selection, administration and effects of drugs/Observation of Experiments designed for study of effects of drugs in animals.
2. Qualitative/Quantitative experimental pharmacology charts 5
3. Interpretation of Clinical pharmacology problems/data 5

30 Marks

Grand Total 80 Marks

EVALUATION

(1) INTERNAL ASSESSMENT : 60 Marks

Theory	**:**	**40 Marks**
Practical	**:**	**20 Marks**
Record	**:**	**5 Marks**
Assignment	**:**	**5 Marks**

(Any one of the following is compulsory) @

a) Symposium/Seminar
b) Short project work
c) Problem based learning
d) Quiz on prescribed topics

Total : 60 Marks

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(2) UNIVERSITY EXAMINATION PATTERN

Two papers of 3 (three) hours duration - 80 marks each.

Paper – I : Pharmacology I - 80 Marks

(Syllabus: General Pharmacology
Drugs Acting on –
ANS, CNS, Respiratory system,

Somatic Nervous system, Sk. Muscles
Anti-Inflammatory drugs
Drug therapy for Gout
Local Anaesthetics
Ocular Pharmacology.

Paper – II : Pharmacology II - 80 Marks
(Syllabus: Drugs Acting on -
CVS, GI system
Drugs acting on Hemopoietic system
Chemotherapeutic drugs
Antibiotics etc.
Cancer Chemotherapy
Endocrines
Perinatal, Paediatric & Geriatric Pharmacology
Dermatological Pharmacol.

Note : Both papers to be set by the same examiner to avoid repetition of questions.

(3) PATTERN OF QUESTION PAPER :

	Marks		Time/Minutes
Section A:			
20 M.C.Qs (20 x 1)	20	..	20 minutes
Section B:			
6 Short Notes (6 x 5)	30		
Section C:			2 hours
6 Short Notes (6 x 5)	30	..	40 minutes
	---		---
Total :	80	..	3 hours
	---		---

Note: ***One long question 10 marks shall replace two short notes, in Section B/C at the discretion of the paper setter.***

(5) PRACTICAL EXAMINATION : 80 Marks.

(6) VIVA (Oral) : 40 Marks.

(6) MARKS QUALIFYING FOR A PASS :

50% in Theory	:	80 / 160
50% in Theory +IA+ including Viva	:	110 / 220
50% in Practical + IA	:	40 / 80

Total 50% aggregate	:	150 / 300

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PHASE II MBBS : 18 MONTHS DURATION

SUBJECT 4 - FORENSIC MEDICINE

(Including Medical Jurisprudence And Toxicology)

PRESCRIBED TEACHING HOURS – 100 including 45 Hrs. Practical.

METHODOLOGY OF TEACHING

1. Lecturers/Demonstration 2. Tutorials/Seminars

SEMESTER WISE TEACHING SCHEDULE

(1) METHODOLOGY OF TEACHING

(a) THEORY

Semester	Syllabus	Exams
III **15 hours**	**Forensic Pathology** **Forensic Science** Legal Procedures in India Identification Thantology Injuries Starvation and Neglect	**1st Terminal Examination in the 2nd week of January**
IV - **30 hours**	**Clinical Forensic Medicine** **Medical Jurisprudence** - Asphyxial deaths - Sudden & Unexpected death - Anaesthetic and Operative Deaths - Infanticide & Foeticide - Thermal death – Heat, Cold, Electrocution - Sexual Offences - Impotence, Sterlity, Artificial - Insemination, & Surrogate - Mother-hood - Virginity & Pregnancy - Delivery, legitimacy MLI - Paternity disputes - Abortion MTP Act evidence of abortion - Batered baby syndrome.	**2nd Terminal Examinations in the 2nd week of July**

V **15 hours**	**Toxicology** **Forensic psychiatry.** - General Toxicology. - Corrosive poisons - Phosphorus & Organo-phosphorous - Metallic Poisons - Animal poisons. - Somniferous poisons - Delirient poisons - Spinal & Peripheral nerve poisons - Alcohol poisoning - Drunkenness & its MLA - Report of Drunken subject. - Barbiturate Poisoning - Cardiac Poisons - Asphyxiant Poisons - Food Adulteration.	**3rd Terminal Examinations in the 1st week of January.**

(b) PRACTICAL

Semester	Syllabus	Exams
III **10 hours**	**Age Estimation** - By Dental Exam - By Radiological Exam **Identification of the Accused By** - By ABO, Rh Blood Grouping - Hair Exam / Fingerprints - By Locard Exch Protocol - DNA Exam of Bloo / Biofluid / Hairs / Semen . - Examination of skeletal remains - **Examination in case of Foetal Deaths**	**1st Terminal Examination in the 2nd week of January**
IV - **20 hours**	**Ante Mortem Injury reporting** **Post Mortem examination** **P.M. Reporting in cases of –** - Road side Accidents. - Assaults - Electrocution - Burn - Ballistic / Fire Arm Injury - Asphyxia - Natural deaths & Medical Negligence	**2nd Terminal Examinations in the 2nd week of July**
V **10 hours**	**Poisoning & Toxicology** **Medical Jurisprudence** **Will / Contracts Medical Laws & Ethics.**	**3rd Terminal Examinations in the 1st week of January..**

	- MTP / PNDT / Consumer Protection Acts - Duties of Medical Practitioners - Human Organ transplant & Brain Death. - Poisonings.. - Forensic Science Sample Collection / Sealing & Transport of samples to Forensic Science Lab for DNA Examination.	

	Pre-Professional Examinations : I & II Terminals Syllabus [Theory & Practical]	**1st week of Feb.**
	University Examinations : Full Syllabus	**1st March**

EVALUATION :

(1) INTERNAL ASSESSMENT : 40 Marks.

		Marks
Theory	:	20
Practical	:	20
Total	:	40 Marks

(2) UNIVERSITY EXAMINATION PATTERN

(a) THEORY :

One paper of -

Forensic Medicine 3 (three) hours duration - 80 marks each.

(b) PATTERN OF QUESTION PAPER :

	Marks		Time/Minutes
Section A:			
20 M.C.Qs (20 x 1)	20	..	(20 minutes)
Section B:			
6 Short Notes (6 x 5)	30		2 hours 40 minutes)
Section C:			
6 Short Notes (6 x 5)	30		
Total :	80	..	3 hours

Note: ***One long question 10 marks shall replace two short notes, in Section B/C at the discretion of the paper setter.***

(c) Final Practical Examination : 60 Marks

Practical Exercise	Marks
Injury Report (PBL Exercise) - Injury Description	**5**

		Homicide / suicide	**5**
Age Determination	**-**	**Radiological + P.E.**	**5**
		Dental + P.E.	**5**
Post Mortem Death reporting	**-**	**RSA**	**10**
	-	**Asphyxial Deaths**	**10**

SPOTTINGS	**Marks**
Identification of the Accused by - ABO / Blood groups / Hairs / Semen / Finger Prints (Dactylography) Locard Exch. Protocol DNA Examination	**5**
ACTS : MTP / PNDT / Consumer Protection / Med. Negligence Will Documents Fire Arms / Weapons Viscera Foetal Examination	**5**
Sexual Offences / Rape	**5**
Poisonings Identification of poison MLI / Toxic. dose	**5**
Total	**60**

TOTAL PRACTICAL = 60 Marks.

VIVA : = 20 Marks

(3) MARKS QUALIFYING FOR A PASS :

50% in Theory	:	40 / 80
50% in Theory +IA+ including Viva	:	60 / 120
50% in Practical + IA	:	40 / 80
Total 50% aggregate	:	100 / 200

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PHASE II MBBS – SUBJECT 5: COMMUNITY MEDICINE
PRESCRIBED TEACHING HOURS – 200 Hrs.
(Including 8 weeks postings of 3 hrs. each)

SYLLABUS SEMESTER 3 TO 5

	Lectures	Practical		Total
1. **CONCEPTS IN COMMUNITY HEALTH**	**4 hrs.**	**-**	**=**	**4 hrs.**

Health Dimensions. Positive Health. Determinants Of Health, Ecology of Health. Right to Health. Indicators of Health. Health situation in India.

2. **ENVIRONMENT AND HEALTH**	**10 hrs.**	**12 hrs.**	**=**	**22 hrs.**

Introduction to environment. Sources of Water Pollution. Water Purification. Water quality. WHO – Standards. Surveillance of Drinking Water quality. Harrock's Test. Water sampling. Air Pollution. Indices of Thermal Comfort, Monitoring Air Pollutants. Control and prevention of pollution. Standards of ventilation. Good Lighting and standards, Noise pollution and control. Radiation sources and control. Air temperature Measurement. Heat streets Indices, effects and Control cold streets. Humidity precipitation. Housing standards. Solid wastes. Disposal Excreta disposal methods. Modern sewage treatment

3. **MEDICAL ENTOMOLOGY & PARASITOLOGY**	**2 hrs.**	**9 hrs.**	**=**	**11 hrs.**

Anthropoid Borne Diseases and transmission. Bionomics of Mosquito. Mosquito Control

Measures. Housefly, Tse-tse fly. Lice. Fleas.
Flea indices. Ticks and Mites. Cyclops.
Control measure. Insecticides.
Rodents and Disease. Control measures.
Entomology demonstrations.

4. NUTRITION AND HEALTH **10 hrs. 9 hrs. = 19 hrs.**

Definitions & concepts. Proximate Principles,
Nutrients. Deficiency Diseases. Assessment.
Prevention, Sources. Requirements.
Nutrition Profile of Foods. Energy and
Requirements. Recommended Daily
Allowance. Protein assessment.
Dietary Goals. Community Nutrition
Problems. LBW, PEM, IDD. Fluresis.
Anemia. Nutritional Status Assessment.
Nutritional Surveillance. Growth
Monitoring. Nutritional Status indicatory.
Ecology of malnutrition. Prevention.
Food Surveillance. Food toxicants. Food
Borne diseases. Food adult iteration
National Nutrition Programmes Nutrition
Assessment schedule. Nutrition problem
Exercises.

5. HEALTH EDUCATION & COMMUNICATION **2 hrs. 3 hrs. = 5 hrs.**

Definition, Objectives, Approaches and
Principles of Health Education Practices
Of Health Education. Planning & Evaluation.
Administrations and Organizations in India.
Health Education Demonstration in a community.

6. PRIMARY HEALTH CARE **4 hrs. 6 hrs. = 10 hrs**.

Concepts, Health care systems. Levels
of Health Care. PHC-Elements.
Principles. Health for All Goals. Health
Problems of India. National Health
Policy. Primary Health care in India.
PHC-Community Health Centre. Health
Insurance. Voluntary Health Agencies.
National Health Programmes

7. INTERNATIONAL HEALTH SYSTEMS **2 hrs.** **-** **= 2 hrs**.

Historical development of Health Organisations. WHO-objective. Structure, Functions. U.N. Agencies. Bilateral Agencies, N.G. Agencies.

8. PRINCIPLES OF EPIDEMIOLOGY **8 hrs.** **15 hrs.** **= 23 hrs**

Aims. Disease frequency. Distribution, Determinants. Clinical epidemiology. Basic measurements in Epidemiology, Rates and Ratios Standardisation. Epidemiological methods. Description, Analytical, experimental Epidemiology. Association and causation. Uses of Epidemiology Immunity. Infectious Diseases Epidemiology. Investigation of epidemic. Disinfection. Disease prevention and Control. Immunizing Agents. Epidemiological problems.

9. **SCREENING FOR DISEASES** **2 hrs.** **9 hrs.** **= 11 hrs**.

Concepts. Uses, Criteria, Sensitivity Specificity. Borderline problems. Epidemiological problems.

10. **MEDICAL STATISTICS** **2 hrs.** **18 hrs.** **= 20 hrs**.

Health information systems. Components, uses, services. Population Health Data Surveys. Elementary Statistical Methods. Tabulation. Charts, Statistical Averages, Measures of dispersion, Normal Distribution. Chi-Square Test. Correlation and progression. Statistical problems.

11. **EPIDEMIOLOGY OF COMMUNICABLE DISEASES** **10 hrs.** **21 hrs.** **= 31 hrs**.

Chicken Pox. Measles, Influenza, Diphtheria, Pertusis, Menigitis, Tuberculosis, Mumps, Rubella, Acute

Respiratory infections. Small Pox Eradication. Poliomyelitis, Cholera. Viral Hepatitis. Amoebiasis, Ascariasis Ancylostamiosis. Dracunculosis. Food Poisoning, Typhoid, Acute diarrhoea Diseases. Malaria, Filaria, Dengue, Rabies, Yellow fever, Japanese Encephalitis, KFD, Brucellosis, Plague. Human Salmonellosis, Trachoma Tetanus, Leprosy, STD, AIDS, Yaws, Leishmaniasis. Hytatid Diseases, Typhus Ricke tsiat, Zoonosis, Taeniasis. Emerging Infectious Diseases, Epidemiological exercises.

Clinic-Social Case studies	-	**21 hrs.**	**21 hrs**.
Family Health Survey, Survey * and Community diagnosis	-	**21 hrs.**	**21 hrs**.
		56 hrs.	**144 hrs. = 200 hrs.**

12. BLOCK POSTINGS – I (III SEMESTER) – TOTAL 72 HOURS

Sl.No	Exercises		Hours
01.	Environment Health Model and Demonstration	..	6 hours
02.	Entomology specimens demonstration	..	6 hours
03.	Parasitology, Bacteriology specimens	..	6 hours
04.	Insecticides, Disinfectants and Rodenticides.	..	3 hours
05.	Nutrition specimens	..	6 hours
06.	Meteorological instruments	..	3 hours
07.	Environment Health and statistical problems	..	3 hours
08.	Water and Nutrition problems	..	3 hours
09.	Epidemiological exercises	..	6 hours
10.	Introduction to Clinico-Social case studies	..	6 hours
11.	Family Health Survey, Methodology and Community diagnosis	..	6 hours
12.	Community Survey	..	6 hours
13.	Pure statistics methodology	..	6 hours
14.	End posting evaluation – Theory	..	3 hours
15.	End post evaluation – Practicals	..	3 hours
	Total Block Posting I	..	**72 hours**

13. BLOCK POSTING – II (IV SEMESTER) - TOTAL 72 HOURS

01.	Demography and statistical problems	..	6 hours
02.	Demonstration – Vaccines cold chain equipment	..	6 hours
03.	Statistical and Epidemiological problems	..	6 hours
04.	Visit to a P.H.C.	..	3 hours
05.	Visit to a sub-centre	..	3 hours
06.	Health education demonstration in urban slum population	..	3 hours
07.	Community Survey in urban population	..	6 hours
08.	Data Analysis and write up	..	6 hours
09.	Clinic Social Case studies – ANC., PNC., Medical termination of pregnancy case, protein-energy malnutrition, Scabies, Fungal infection, Diarrhoeal disease, Upper respiratory infection, leprosy, Tuberculosis, STD, Filariasis, Obesity, Post Polio Paralysis Hypertension, Diabetes, Cancer early stage, family planning case counseling	..	15 hours.
10.	Project report analysis and preparation	..	12 hours
11.	End posting evaluation – Practicals	..	3 hours
12.	End posting evaluation – Theory	..	3 hours
	Total Block posting – II	**..**	**72 hours**

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TEACHING SCHEDULE FOR CLINICAL SUBJECTS: (Phases II and III).

A. THEORY CLASSES :

Didactic lectures, demonstrations and seminars etc. in addition to clinical postings as under. The Clinical lectures should be held from 4th Semester onwards. Lectures in Community Medicine, E.N.T. and Ophthalmology shall be conducted in III M.B.B.S. Part – I.

- General Medicine : .. .. 300 Hours.
- Paediatrics : .. .. 100 Hours.
- T.B. and Chest : .. .. 20 Hours.
- Psychiatry : .. .. 20 Hours.
- Skin and S.T.D. : .. .. 30 Hours.
- Community Medicine : .. .. 50 Hours.
- Anaesthesia : .. .. 20 Hours.
- General Surgery : .. .. 300 Hours.
- Orthopaedics : .. .. 100 Hours
  [Including Physical Medicine]
- Ophthalmology : .. .. .. 100 Hours.
- E.N.T. : .. .. 70 Hours.
- Radiology : .. .. 20 Hours.
- Dentistry : .. .. 10 Hours.
- Obstetrics & Gynaecology : .. 300 Hours.
  [Inclusive of Family Welfare]

NOTE:

This period of training is the approximate minimum suggested. Adjustments may be made as required depending on availability of time. Extra time available may be devoted to other sub-specialities.

This period of training does not include the University examination period.

B. CLINICAL POSTINGS :

The clinical posting shall be for 3 hours daily during the forenoons.

At the beginning of the clinical course, i.e. on entry into Phase II, the whole batch shall be given an introductory course in clinical methods of 2 weeks each in Medicine and Surgery.

Subsequently, in each of the 7 semesters (half years) of the 3 ½ years clinical course (i.e. Semesters 3, 4 and 5 in II M.B.B.S., 6 and 7 in III M.B.B.S. Part I and 8 and 9 in III M.B.B.S. part II), the students shall be posted in small batches by rotation in various clinical departments as per the chart below :

PERIOD OF CLINICAL POSTINGS IN WEEKS

SUBJECTS	3rd Sem.	4th Sem.	5th Sem.	6th Sem.	7th Sem.	8th Sem.	9th Sem.	Total Weeks
01. General Medicine***	6	-	2	-	4	6	6	24
02. Paediatrics	-	2	-	2	2	4	-	10
03. T.B. & Chest Diseases	-	2	-	-	-	-	-	2
04. Skin & S.T.D.	-	2	-	2	-	2	-	6
05. Psychiatry	-	-	4	-	-	-	-	4
06. Radiology*	-	-	-	-	2	-	-	2
07. General Surgery ****	6	-	4	-	2	6	6	24
08. Anaesthesiology	-	-	-	-	-	-	2	2
09. Orthopaedics**	-	-	4	4	-	-	2	10
10. Ophthalmology	-	4	-	4	2	-	-	10
11. Ear, Nose & Throat	-	4	-	4	-	-	-	8
12. Obst. & Gynae. Including Family Welfare Planning *****	2	4	4	-	4	4	6	24
13. Community Medicine	4	4	-	4	-	-	-	12
14. Casualty	-	-	-	2	-	-	-	2
15. Dentistry	-	-	-	-	2	-	-	2
Total (in weeks)	**18**	**22**	**18**	**22**	**18**	**22**	**22**	**142**

NOTE: Clinical methods in Medicine & Surgery for whole class will be for 2 weeks each respectively at the start of 3rd Semester.

* The posting includes training in Radio Diagnosis and Radio-therapy where existent.

** This posting includes exposure to Rehabilitation & Physiotherapy.

*** This posting includes exposure to Laboratory Medicine & Infectious diseases.

**** This posting includes exposure to dressing.

***** This includes Maternity Training & Family Medicine and the 3rd Semester posting shall be in Family Welfare Planning.

Phase II: MBBS - Community Medicine

Terminal wise Teaching Schedule for MBBS Students

Total Teaching Hours : Theory 110 Hrs : Practical / Field Training - 200 hours

	1st six month 15 hrs	2nd six months 15 hrs	Internal Assessment Exam.
I Professional MBBS	Introduction	Social Science & Health	1st Internal Assessment Exam at the end of 1st year i.e. in July.
	Public Health & Community Health	Drug abuse	
	Concept of Health & Disease	Introduction to national Health	
	Indices of health	Environment Health	
	Preventive Medicine	Environmental pollution	
	WHO & International Classification of Diseases		
	Maternity & Child Health		

	3rd Semester – 20 hours	4th Semester - 24 hours	5th Semester - 16 hours	
II Professional MBBS	Principles of Epidemiology methods	Nutrition	Epidemiology of Intestinal Inspection	2nd Internal Assessment Exam at the end of 2nd year i.e. in August
	Screening of diseases	Demography	Epidemiology of Zoonotic Disease	
	Health care of Community	Medical Biostatistics	Viral Bacterial	
	6th Semester 12 hrs	7th Semester 12 hrs		Internal Assessment Exam.

	Arthropod Bone Disease	Health planning Management & Administration	3rd Internal Assessment Exam at the end of the 8th Semester
	Rickettsial Diseases	Family Planning	
	Parasitic Disease	Health programme in India	
	Surface Infection	Essential and Counterfeit Medicine	
	Emerging and re-emerging disease	Disaster Management	
	Hospital acquired Infection	Genetics and Health	
	Epidemiology of non-communicable diseases	Mental Health	
	RCH	Communication for Health Education	
	Hospital waste Management	International Health	

Syllabus – Paper-I	Syllabus – Paper –II
Public Health & Community Health	Epidemology Non & Commun. Diseases
Concept of Health & Disease	Health Plg. Mgm. & Adm.
WHO – International Classification of diseases	Essential & Counterfeit Medicine
Social Science & Health	Diasaster Mgm.
Drug Abuse	Genetics & Health
Environment & Health	Health prog in india
Demography & Family Plg.	Mental Health
Principles of Epidemology & Epidemol methods	RCH, Geriatrics
Screening of disease	Prev. Med.
Health care of the community	Biomedical waste Management
Occupational Health	Communication for health education
Nutrition	International Health
Medical Biostatistics	Health information system

15. University Examination

(a) Theory - Question Pattern

THEORY **Two Papers 240 marks (120 Marks Each)**	**PRACTICAL** **60 Marks**
Section A- MCQ 20 Marks	Family Study - 20
Section B – 50 Marks (10 Short notes, 5 Marks Each)	Spottings 15
Section C – 50 Marks (10 Short notes, 5 Marks Each)	Biostatistics 10
Oral Exam 20 Marks	PBL Exercises (3) 15

Int. Assessment Theory 40 Marks	Int. Assessment 40
Total 300 Marks	**Total 100 Marks**
All the three Sections to be answered in separate answer books	

(b) Practical Examination

Family Study Exercise (20 Marks) Based on	**Spotting (15)**	**Biostatistics (10)**	**PBL Exercise (15) Based on**
Environment & Entomology With insecticides & Pesticides		Vital Statistics	PEM
Medico- social & socio-Medical problems		Fertility statistics	Nutritional Def.
Personal Hygiene		Demography	Family Plg,MCH
Rch. Related Health Problems		Res Methodology etc.	Breast Feeding
Nutritional Health Problems			IMNCI prog.
Anthropometry			Immuniosation etc.
Family Plg.			
Communicalble & Non- Comm. Diseases.			
Related Health Problems etc.			

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PHASE III M.B.B.S. : PART – I : 12 MONTHS DURATION

SUBJECT : 1 : OPHTHALMOLOGY – 80 MARKS.

CLINICAL POSTING:

4 weeks in II MBBS course period.
6 weeks in Pre-final MBBS course period.

Preceding University Examination.

(1) First 4 Weeks: Basic Sciences related to Ophthalmology like ocular, Anatomy, Physiology, Biochemistry, Neurology, Examination Technique and orientation to Minor O.T.
(2) Next 6 Weeks: Clinical Ophthalmology, including ward & Theatre postings Community Ophthalmology.

TERMINAL-WISE TEACHING SCHEDULE

Teaching Hours : 100 hours:

Terminal	Syllabus	Exams
VI	**Ophthalmology:** **Theory Lectures:** Anatomy of Eye Physiology of Eye Conjunctiva Cornea Lens Uvea Glaucoma	**1st Terminal Examination in August**

VII	**Ophthalmology:** Lids Lacrimal System Injury Orbit Retina Optic Nerve Community Ophthalmology	**2nd Terminal Examinations in the 1st week of January**

	Pre-Professional Examinations : I & II Terminals Syllabus [Theory & Practical]	**1st week of Feb.**
	University Examinations : Full Syllabus	**1st March**

EVALUATION :

(1) INTERNAL ASSESSMENT : : : 40 Marks

Theory	**:**	**20 Marks**
Practical	**:**	
Record	**:**	**20 Marks**
Assignment	**:**	
Total	**:**	**40 Marks**

UNIVERSITY EXAMINATION PATTERN:

(1) THEORY : OPTHALMOLOGY : ONE PAPER OF 3 HOURS DURATION - 80 MARKS

(2) PATTERN OF QUESTION PAPER :

	Marks		Time/Minutes
Section A:			
20 M.C.Qs (20 x 1)	20	..	(20 minutes)
Section B:			
6 Short Notes (x 5)	30		
Section C:			2 hours
6 Short Notes (6 x 5)	30	..	40 minutes)
Total :	80	..	3 hours

Note: ***One long question 10 marks shall replace two short notes, in Section B/C at the discretion of the paper setter.***

(3) PRACTICAL EXAMINATION : 60 Marks

Long Case 1 x 20 = 20
Short Case 2 x 20 = 40

Note: 1. A maximum of 30 candidates / day of practical exam is desirable.
2. There shall be four Examiners (Two External and Two Internal) to conduct the Practical/Viva Examinations.
3. Two sets of examiners shall examine separately on different portions of the Syllabus.

(4) VIVA: 20 MARKS :

1. Instruments & Dark Room 6 marks
2. Refraction 6 marks
3. Community Ophthalmology 4 marks
4. Systemic Ophthalmology 4 marks

(5) MARKS QUALIFYING FOR A PASS :

50% in Theory	:	40 / 80
50% in Theory +IA+ including Viva	:	60 / 120
50% in Practical + IA	:	40 / 80
Total 50% aggregate	:	100 / 200

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PHASE III M.B.B.S. : PART – I : 12 MONTHS DURATION

SUBJECT 2: – OTO-RHINO-LARYNGOLOGY - (80 marks)

TERMINAL-WISE TEACHING SCHEDULE

Teaching Hours : 70 hours:

Terminal	Syllabus	Exams
VI	***Oto-Rhino-Laryngology*** Anatomy, Physiology, Congenital Diseases, Disease of External Ear, Nose, Throat.	**1st Terminal Examination in the 2nd week of August**
VII	***Oto-Rhino-Laryngology*** I. Inflamatory Diseases of Nose, Ear & Throat. II. Complications of ENT Disease. III. Benign & Malignant Disease. **IV.** Operative Procedure.	**2nd Terminal Examinations in the 1st week of January**

	Pre-Professional Examinations : I & II Terminals Syllabus [Theory & Practical]	**1st week of Feb.**
	University Examinations : Full Syllabus	**1st March**

6. EVALUATION

INTERNAL ASSESSMENT : : : 40 Marks

Theory	**:**	**20 Marks**
Practical	**:**	
Record	**:**	**20 Marks**
Assignment	**:**	
Total	**:**	**40 Marks**

7. UNIVERSITY EXAMINATION PATTERN

(1) THEORY : ONE PAPER OF 3 HOURS DURATION - 80 MARKS EACH

Oto-Rhino-Laryngology

(2) PATTERN OF QUESTION PAPER :

	Marks		Time/Minutes
Section A:			
20 M.C.Qs (20 x 1)	20	..	(20 minutes)
Section B:			
6 Short Notes (x 5)	30		
Section C:			2 hours
6 Short Notes (6 x 5)	30	..	40 minutes)
Total :	80	..	3 hours

Note: ***One long question 10 marks shall replace two short notes, in Section B/C at the discretion of the paper setter.***

(3) PRACTICAL EXAMINATION : 60 Marks

Long Case 1 x 20 = 20
Short Case 2 x 10 = 20
Instruments = 20

(4) VIVA: 20 MARKS :

Note: 1. A maximum of 30 candidates / day of practical exam is desirable.
2. There shall be four Examiners (Two External and Two Internal) to conduct the Practical/Viva Examinations.
3. Two sets of examiners shall examine separately on different portions of the Syllabus.

(5) MARKS QUALIFYING FOR A PASS :

50% in Theory	:	40 / 80
50% in Theory +IA+ including Viva	:	60 / 120

50% in Practical + IA	:	40 / 80
Total 50% aggregate	:	100 / 200

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PHASE III M.B.B.S. : PART – I : 12 MONTHS DURATION

SUBJECT 3 : COMMUNITY MEDICINE – 120 Marks each Paper

Paper I & II

TERMINAL-WISE TEACHING SCHEDULE

Teaching Hours during Phase III : 100 hours:

Terminal	Syllabus	Exams
VI	***Community Medicine*** - Man & Medicine. - Concept of health & disease. - International classification of diseases. - Social Sciences & Medicine. - Meteorological Environment - Medicine Entomology - Principal of Epidemiology - Epidemiological Methods - Screening for diseases	**1st Terminal Examination in the 2nd week of August**
VII	***Community Medicine*** - Nutrition & Health - Health care of the community. - Metal Health – Demography - Health Information system - International Health - Hospital Waste management - Occupational Health - Epidemiology communicable diseases	**2nd Terminal Examinations in the 1st week of January**

(Pre-Prof.)	- Health Educational & Communication - Health Planning of Management - Preventive Medicine in obstetric, Pediatrics &Geriatrics. - Family Planning - School Health , - Urban Health - Health Programme in India - Disaster management, - Medical Bio – statistics. - Topics of 1st & 2nd Terminal.	**1st week of Feb.**

	Pre-Professional Examinations : I & II Terminals Syllabus [Theory & Practical]	**1st week of Feb.**
	University Examinations : Full Syllabus	**1st March**

EVALUATION :

(1) INTERNAL ASSESSMENT : 80 marks

Theory … 40 marks
Practical … 40 marks

Total … 80 marks

According to MCI notification, New Delhi, the 15th October,2003, No.MCI- 26(3) 2003- med./20958, student must secure at least 35% marks of the total marks fixed for Internal Assessment in a particular subject in order to be eligible to appear in final university examination of that subject published in the Gazette of India. Extra ordinary page-2, part-III- sec.A.

(2) PATTERN OF EXAMINATIONS:

(a) THEORY : TWO PAPERS OF THREE HOURS DURATION – 120 MARKS EACH

Paper I shall cover those topics of the syllabus serially numbered from I to VII under course contents.

Paper II shall cover those topics of the syllabus which are serially numbered from VIII TO XIX under course contents.

(3) QUESTION PATTERN & MARKS :

	Marks	Time/Minutes
Section A:		
20 M.C.Qs (20 x 1)	20 ..	(20 minutes)
Section B:		
5 Short Notes (5X10)	50	
Section C:		2 hours
	63	

5 Short Notes (5 x10)	50	..	40 minutes)
1 Long Question & 3 Short Notes	------		--------
Total :	120	..	3 hours
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Note: ***One long question 20 marks shall replace two short notes, in Section B/C at the discretion of the paper setter.***

(4) (a) PRACTICAL: I

Clinical Social Case Discussion	-	30

(b) PRACTICAL: II

Statistical/Epidemiological Exercises	2 x 5	= 10
Spotters & Specimen	10 x 2	= 20

		60
		----------

(5) VIVA … … … … = 20

(6) (a) Theory (Paper I & II) … …	120 x 2	= 240	
Viva …. …. …		20	
Internal Assessment …. …		40	

		300	

Passing Marks in Theory …. …		150/300	
(b) Practical (I & II) … … …		60	
Internal Assessment … …		40	

		100	

Passing Marks in Practical …. …			50/100
Grand Total Theory + Practical … ….		400	
Passing Marks … …		200	

(7) GUIDELINES FOR PRACTICAL EXAMINATION :

1) In all the subjects of III M.B.B.S Part-I, the No. of candidates examined per day shall not normally exceed 30.
2) There shall be Four examiners (2 External & 2 Internal) to conduct the Clinical & Viva Examinations.
3) For Viva : Two sets of examiners shall examine for theoretical & Practical Viva.

(6) MARKS QUALIFYING FOR A PASS :

50% in Theory	:	120 / 240
50% in Theory +IA+ including Viva	:	150 / 300
50% in Practical + IA	:	50 / 100
Total 50% aggregate	:	200 / 400

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PHASE III M.B.B.S. : Part – II : 12 MONTHS DURATION

SUBJECT 1 : MEDICINE AND ITS ALLIED SPECIALITIES

STERMINAL-WISE TEACHING SCHEDULE

Teaching Hours : 300 +20+20+30 hours:

Terminal	Syllabus	Exams
VIII	***General Medicine*** 1. Clinical Methods in the Practice of Medicine 2. Common Symptoms of Disease. 3. Nutrition / Exposure to Physical and Chemical Agents. 4.Infections. 5. Haematology.	**1st Terminal Examination in the 2nd week of August**
IX	***General Medicine*** 6. Respiratory System. 7. Cardiovascular System. 8.Gastrointestinal Tract. 9. Emergency Medcine. 10. Nervous System. 11. Urinary System. 12. Connective Tissue Disorders. 13. Endocrines. 14. Geriatrics. 15. Dermatology. 16. Phychiatry 17. Radio Diiagnosis.	**2nd Terminal Examinations in the 1st week of January**
Pro-Professional	1st & 2nd Terminal Syllabus	**1st week of Feb.**

	University Examinations : Full Syllabus	1st March

EVALUATION : INTERNAL ASSESSMENT : 120 Marks

Theory	…	60 Marks
Clinical	…	40 Marks
Record & Assignments..		20 Marks
Total I.A.	…	120 marks

UNIVERSITY EXAMINATION :

(1) THEORY : Two Papers of three hours duration of 100 marks each.

Paper I – General Medicine. … … 100 Marks

Paper II – General Medicine … … 100 Marks
(including Psychiatry, Dermatology, S.T.D., Tuberculosis & Chest Diseases).

(2) PATTERN OF QUESTION PAPER :

	Marks	Time/Minutes
Section A:		
20 M.C.Qs (20 x 1)	20	20 minutes
Section B:		
5 Short Notes (5 x 10)	50	2 hours 40 Minutes
Section C:		
5 Short Notes (5 x 10)	50	
Total :	120 ..	3 hours

Note: ***One long question 10 marks shall replace two short notes, in Section B/C at the discretion of the paper setter.***

(3) PRACTICAL/CLINICAL EXAMINATION…… ……. 200 Marks

It should consist of :

1. Long Case - One	80 Marks
2. Short Case - Two	80 Marks
3. Spotter – Two	40 Marks
Total :	200 Marks

(4) VIVA …… **20 Marks**

Charts…….. ……..	10 Marks
Instruments ……	10 Marks
X-ray …… ….	10 Marks
Drug/ECG/CT/VSG…	10 Marks

Total …	40 marks
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(6) MARKS QUALIFYING FOR A PASS :

50% in Theory	:	120 / 240
50% in Theory +IA+ including Viva	:	170 / 340
50% in Practical + IA	:	130 / 260

Total 50% aggregate	:	300 / 600

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PHASE III M.B.B.S. : Part – II : 12 MONTHS DURATION

SUBJECT: 2: SURGERY & ITS ALLIED SPECIALITIES

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1. SURGERY :

TERMINAL-WISE TEACHING SCHEDULE

Teaching Hours : 300 General Surgery + 100 Orthopedics + 20 Radiology Hours

Terminal	Syllabus	Exams
VIII	***General Surgery :*** **Part – I:** 1. General Principles – History of Surgery 2. Resuscitation. 3. Common Skin & Subcutaneous conditions. 4. Arterial Disorders. 5. Venous Disorders. 6. Lymphatics and Lymph Nodes. 7. Burns8. Scalp, Skull and Brain. 9. Oral Cavity, Jaw, Salivary Glands. 10. Neck. 11. Thyroid Gland. 12. Parathyroid and Adremal Glands. 13. Breast. 14. Thorax. 15. Heart and Pericardium. ***Orthopaedics:*** 1. Trauma. 2. Diagnosis, First Aid and Referral.	**1st Terminal Examination in the 2nd week of August**

	3. Infections of Bones and Joints. 4. Tumours. 5. Degenerative Diseases 6. Congenital Anomalies. 7. Bone Dysplasia. 8. Neuro-Muscular Disorders. 9. Osteochondroses. 10. Deformities. 11. Preventive Orthopaedics 12. Basic Principles of Physiotherapy, Occupational Therapy and Orthotics / Prosthetics. ***Radiotherapy:*** ***Anaesthesiology:***	
Terminal	Syllabus	Exams
IX	***General Surgery :*** **Part – II:** 16. Oesophagus. 17. Stomach and Duodenum. 18. Liver. 19. Spleen. 20. Gall Bladder and Bile Ducts. 21. Pancreas. 22. Peritoneum, Omentum, Mesentery & Retroperitoneal space. 23. Small and Large Intestines. 24. Rectum. 25. Anal Canal. 26. Hernias. 27. Genito-Urniary System.	**2nd Terminal Examinations in the 1st week of January**

	Pre-Professional Examinations : I & II Terminals Syllabus [Theory & Practical]	**1st week of Feb.**
	University Examinations : Full Syllabus	**1st March**

EVALUATION:

INTERNAL ASSESSMENT : **120 Marks**

Theory … 60 Marks
Clinical … 40 Marks

Record & Assignments..		20 Marks
Total I.A.	…	120 marks

(2) UNIVERSITY EXAMINATIONS:

(1) PATTERN OF EXAMINATIONS : Theory :

THEORY : Two Papers of three hours duration 100 marks each :

Paper I – Section A : General Surgery.
Section B : Orthopaedics.

Paper II – Section A : General Surgery.
Section B : Anaesthesiology, Dentistry & Radiology.

(2) PATTERN OF QUESTION PAPER :

	Marks		Time/Minutes
Section A:			
20 M.C.Qs (20 x 1)	20	..	(20 minutes)
Section B:			
5 Short Notes (5 x 10)	50		
Section C:			2 hours
5 Short Notes (5 x 10)	50	..	40 minutes)
Total :	100	..	3 hours

Note: ***One long question 10 marks shall replace two short notes, in Section B/C at the discretion of the paper setter.***

(3) GUIDELINES FOR CLINICAL AND VIVA :

In all subjects of III M.B.B.S. Part – II, the number of candidates examined daily in clinical and viva shall not normally exceed 25.

(a) CLINICAL :- … … **200 Marks**

Clinical – I (General Surgery) :

One Long case	…	45 minutes	80 Marks

Clinical – II :

Two short cases (One General Surgery +	…	30 minutes	80 Marks

One Ortho) [40+40]

Two Spotting : (One General Surgery + One Ortho) [30+10]	…	30 minutes	40 Marks
	Total	…	120 Marks

Six Examiners: Four General Surgery, Two Ortho i.e. Two External & Two Internal Examiners for General Surgery + One External & One Internal in Ortho

(b) VIVA ... ... **40 marks**

(4) MARKS QUALIFYING FOR A PASS :

50% in Theory	:	120 / 240
50% in Theory +IA+ including Viva	:	170 / 340
50% in Practical + IA	:	130 / 260
Total 50% aggregate	:	300 / 600

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PHASE III M.B.B.S.: PART-II – 12 MONTHS DURATION

SUBJECT: 3 : OBSTETRICS AND GYNAECOLOGY – PAPER I & II

TERMINAL-WISE TEACHING SCHEDULE

Teaching Hours : 300

Terminal	Syllabus	Exams
VIII	***I. Obstetric :*** **1. Anatomy of female reproductive tract.** **2. Physiology of conception.** **3. Development of fetus and placenta.** **4. Diagnosis of Pregnancy.** **5. Maternal changes in pregnancy.** **6. Antenatal care.** **7.Complications of early pregnancy.** **8. Antepartum Haemorrhage.** ***II. Gynaecology*** **1. Vaginal Discharge – Physiological & Pathological.** **2. Abnormal & Excessive Menstrual bleeding.** **3. Amenorrhoea.** **4. Dysfunctional Uterine Bleeding.** **5. Fertility and infertility.**	**1st Terminal Examination in the 2nd week of August**

Terminal	Syllabus	Exams
IX	***I. Obstetric :*** **1. Abnormal Presentations and contracted pelvis.** **2. Multiple pregnancies.** **3. Anaemia in pregnancy.** **4. Other medical disorders.** **5. Normal labour** **6. Management of third stage of labour.** ***II. Gynaecology*** **1. Endometriosis & Allied states.** **2. Genital Injuries & Fistulae.** **3. Genital infections.** **4. Displacements of Uterus.** **Pre-professional Examinations syllabus :** ***I. Obstetric :*** **1. Syllabus of 1st & 2nd Terminals PLUS** **2. Uterine Dysfunction.** **3. Foetal Distress and Foetal death.** **4. Haemolytic disease including Rh ISO** **5. Puerperium.** **6. Breast feeding.** **7. Care of Newborn.** **8. Medical Termination of Pregnancy** **9. Contraception.** **10. Operative Obstetrics.** **11. Post-caessrean pregnancy.** ***II. Gynaecology*** **1. Syllabus of 1st & 2nd Terminals PLUS** **2. Benign tumours of pelvic organs.** **3. Malignancy of Genital Tract.** **4. Operative Gyanaecology.**	**2nd Terminal Examinations in the 1st week of January** **1st week of February**

	University Examinations : Full Syllabus	**1st March**

EVALUATION:

1. INTERNAL ASSESSMENT : **120 marks**

Theory … 60 Marks

Clinical	…	40 Marks
Record & Assignments..		20 Marks
Total I.A.	…	120 marks

2. UNIVERSITY EXAMINATION :

(1) PATTERN OF EXAMINATIONS :

THEORY : Two Papers of three hours duration 80 marks each :

Paper I – Obstetrics including Social Obstetrics.

Paper II – Gynaecology and Family Welfare.

(2) PATTERN OF QUESTION PAPER :

	Marks		Time/Minutes
Section A:			
20 M.C.Qs (20 x 1)	20	..	(20 minutes)
Section B:			
6 Short Notes (8 x 5)	30		
Section C:			2 hours
6 Short Notes (8 x 5)	30	..	40 minutes)
Total :	80	..	3 hours

Note: ***One long question 10 marks shall replace two short notes, in Section B/C at the discretion of the paper setter.***

(3) GUIDELINES FOR CLINICAL AND VIVA :

In all subjects of III M.B.B.S. Part – II, the number of candidates examined daily in clinical and viva shall not normally exceed 25.

(a) CLINICAL :-

There shall be two pairs of Examiners for two batches of students.

Clinical – I : Obstetrics – One long case – 1 hr.	-	30 Marks
Clinical – II : Gynaecology – One long case – 1 hr.	-	30 Marks
Total		**6**0 Marks

(b) Viva – I : Obstetrics	…	…	30 Marks
Viva – II : Gynaecology and Family Welfare	…		30 Marks

Total		60 Marks

(4) MARKS QUALIFYING FOR A PASS :

50% in Theory	:	80 / 160
50% in Theory +IA+ including Viva	:	140 / 280
50% in Practical + IA	:	60 / 120
Total 50% aggregate	:	200 / 400

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Subject: 4 : PAEDIATRICS Including Neonatology - Single Paper

TERMINAL-WISE TEACHING SCHEDULE

Teaching Hours : 100

Terminal	Syllabus	Exams
VI	***Paediatrics :*** **1. Normal growth and its duration.** **2. Normal and abnormal development.** **3. Adolescent health.** **4. Fluid and electrolytes.** **5. Nutrition** **6. Micronutrients** **7. New Born infant.**	**1st Terminal Examination in the 2nd week of August**
VII	***Paediatrics :*** **1. Immunology and Immunization.** **2. Infections & Infestation.** **3. Disorders of G.I.T.** **4. Haemological disorders.** **5. Diseases of ear, nose & throat.** **5. Diseases of Respiratory Infections**	**2nd Terminal Examinations in the 1st week of January**

Pre-Professional Exams	**1. 1st & 2nd Terminal portions Plus** **2. Disorders of C.V.S.** **3. Disorders of Kidney & Urinary track** **3. CNS disorders.** **4. Neuro Muscular disorders.** **5. Childhood Malignancis.** **6. Rheumatological disorders.** **7. Gender disorders.**	**1st week of February**

	University Examinations : Full Syllabus	**1st March**

EVALUATION: INTERNAL ASSESSMENT : **40 Marks**

Theory	…	20 Marks
Clinical	…	10 Marks
Record & Assignments..		10 Marks
Total I.A.	…	40 Marks

8. UNIVERSITY EXAMINATIONS :

(1) THEORY : One Paper of three hours duration 80 Marks :

(2) PATTERN OF QUESTION PAPER :

	Marks		Time/Minutes
Section A:			
20 M.C.Qs (20 x 1)	20	..	(20 minutes)
Section B:			
6 Short Notes (6 x 5)	30		
Section C:			2 hours
6 Short Notes (6 x 5)	30	..	40 minutes)
	---		---
Total :	80	..	3 hours
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Note: ***One long question 10 marks shall replace two short notes, in Section B/C at the discretion of the paper setter.***

(3) GUIDELINES FOR CLINICAL AND VIVA :

In all subjects of III M.B.B.S. Part – II, the number of candidates examined daily in clinical and viva shall not normally exceed 25.

(a) CLINICAL / PRACTICAL AND VIVA : **.. 60 Marks**

Four examiners shall conduct the examination in two pairs for two batches of students. Two pairs of Examiners shall conduct the Viva voce Examination.

		One Hour
1 Long Case ……..	: 30 Marks	40 Minutes .
1 Short Case ……..	: 15 Marks	20 Minutes
1 New born case	: 15 Marks	20 Minutes.

Total	: 60 Marks	

(b) VIVA VOCE : **.. 20 Marks**

Viva–voce – I : Instruments, Drugs, X-rays, Vaccines, Nutrition.
Viva-voce – II : Theory + Neonatal Resuscitation.

(4) MARKS QUALIFYING FOR A PASS :

50% in Theory	:	40 / 80
50% in Theory +IA+ including Viva	:	60 / 120
50% in Practical + IA	:	40 / 80

Total 50% aggregate	:	100 / 200

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COMPULSORY ROTATING RESIDENT INTERNSHIP – [C.R.R.I.]

DURATION – 12 MONTHS

1. GENERAL OBJECTIVE :

Internship is a phase of training wherein a graduate is expected to learn methods and modalities for actual practice of medical and health care and acquire skills under supervision so that he / she may become capable of functioning independently.

2. SPECIFIC OBJECTIVES :

At the end of the internship training, the student shall be able to :

i. Diagnose clinically common disease conditions encountered in practice and make timely decision for referral to higher level:

ii. Use appropriately the essential drugs, infusions, blood or its substitutes and laboratory services;

iii. Manage all types of emergencies – medical, surgical, obstetric, neonatal and paediatric by rendering primary level care;

iv. Demonstrate skills in monitoring of the National Health Programmes and Schemes, oriented to provide preventive and promotive health care services to the community.

v. Develop leadership qualities to function effectively as a leader of the health team organized to deliver the health and family welfare service in existing socio-economic, political and cultural environment;

vi. Render services to the chronically sick and disabled (both physical and mental) and to communicate effectively with the patient and the community.

3. INTERNSHIP TIME DISTRIBUTION:

Time allocation to each discipline is approximate and shall be guided more specifically by the actual experience obtained. Thus a student serving in a district or taluk hospital emergency room may well accumulate skills in Surgery, Orthopaedics, Medicine, Obstetrics and Gynaecology and Paediatrics during even a single night on duty. Responsible authorities from the medical college shall adjust the experience to maximize the intern's opportunities to practice skills in patient care in rough approximation to the time allocation suggested below :-

(1) COMPULSORY POSTINGS:

Sl. No.	DISCIPLINE	DURATION
01	Community Medicine	2 Months
02	Medicine including 15 days Psychiatry	2 Months
03	Surgery including 15 days Anesthesia	2 Months
04	Obstetrics & Gynaecology including Family Welfare	2 Months
05	Paediatrics	1 Month
06	Orthopedics including PMR	1 Month
07	ENT	15 days
08	Ophthalmology	15 days
09	Casualty	15 days

(2) ELECTIVE POSTING – [1 X 15 DAYS] :

Subjects for Elective Posting will be as follows:

i. Dermatology and Sexually Transmitted Diseases.

ii. Tuberculosis and Respiratory Diseases.
iii. Radio -Diagnosis.
iv. Forensic Medicine.
v. Blood Bank.
vi. Psychiatry.

Note: Structure internship with college assessment at the end of the internship.

4. OTHER DETAILS :

(1) All parts of the internship shall be done as far as possible in institutions within India, recognized for this purpose by the Medical Council of India.

(2) Every candidate will be required after passing the final M.B.B.S. examination to undergo compulsory rotational resident internship to the satisfaction of the college authorities and the medical university for a period of 12 months so as to be eligible for the award of the degree of Bachelor of Medicine and Bachelor of Surgery (M.B.B.S.) and full registration with the Medical Council.

(3) The University shall issue a Provisional M.B.B.S. Pass Certificate - I on passing the final examination.

(4) The State Medical Council will grant provisional registration to the candidate on production of the Provisional M.B.B.S. Pass Certificate - I. The provisional registration will be for a period of one year. In the event of shortage or unsatisfactory work, the period of provisional registration and the Compulsory Rotating Resident Internship may be suitably extended by the appropriate authorities.

(5) The intern shall be entrusted with clinical responsibilities under the direct supervision of Senior Medical Officers. They shall not be working independently.

(6) Interns will not issue a medical certificate or a death certificate or a medicolegal document.

(7) In recognition of the importance of hands-on-experience, responsibility for patient care and skill acquisition, internship should be increasingly scheduled to utilize clinical facilities available in the District Hospital, Taluk Hospital, Community Health Centre and Primary Health Centre in addition to the Teaching Hospital.

(8) The internee should commence the internship as per the postings given by the Dean / Principal of the College immediately on the due date without any delay.

(9) The internee should undergo the internship continuously without any break in each speciality and to avoid piecemeal training. The internee should have completed not less than 50% of the internship continuously as per the postings ordered by the Dean / Principal of the college concerned initially without any break. If the internee fulfills the above criteria and had a break in internship for

the reasons of marriage / maternity and on genuine medical illness supported with documentary evidence for 90 days and above, necessary condonation proposal along with a processing fee of Rs. 1000 /- and condonation fee of Rs. 3000 /- per year or part thereof shall be sent to this University and orders obtained therefore before permitting the internee to commence the internship from the beginning of the posting in the speciality in which he / she has not completed and discontinued.

(10) The following criteria are being fixed for the cases for which the University shall condone the break and to order for redoing the full period of internship :-

a. Late commencement of internship with a break for less than 90 days,

b. If the break is for more than two spells of three months each,

c. Piecemeal completion in each speciality,

d. Not completed the 50% of postings before the break and the break is 90 days and above.

(11) No internship transfer is permissible for the CRRI and training has to be undergone in the same College / Institution or Hospital where they have undergone the course.

Provided that where an intern is posted to District / Sub-Divisional Hospital for training, there shall be a committee consisting of representatives of the College / University, the State Government and the District administration who shall regulate the training of such trainee;

Provided further that for such trainee a certification of satisfactory completion of training shall be obtained from the relevant administrative authorities which shall be countersigned by the Principal / Dean of college.

(12) Adjustment to enable a candidate to obtain training in elective clinical subjects may be made.

(13) Each medical college shall establish links with one entire district extending out-reach activities. Similarly, Re-orientation of Medical Education (ROME) scheme may be suitably modified to assure teaching activities at each level of district health system which will be coordinated by the Dean of the medical college.

(14) Out of one year, 6 months shall be devoted to learning tertiary care being rendered in teaching hospital / district hospital suitably staffed with well

qualified personnel, 3 months of secondary care in a small District or Taluk Hospital / Community Health Centre and 3 months in Primary Health care out of which 2 months should be in Primary Health Centre with full attention to the implementation of National Health Programmes at the Community level. One month of primary care training may be in the form of preceptorship with a practicing family physical or voluntary agency or other primary health care provider.

(15) One year's approved service in the Armed Forces Medical Services, after passing the final M.B.B.S. examination shall be considered as equivalent to the pre – registration training detailed above; such training shall, as far as possible be at the Base / General Hospital.

5. ASSESSMENT OF INTERNSHIP :

(i) The Intern shall maintain a record of work which is to be verified and certified by the medical teacher under whom he works. Apart from scrutiny of the record of work, assessment and evaluation of training shall be undertaken by an objective approach using situation tests in knowledge, skills and attitude during and at the end of each period of posting. Based on the record of work and periodic assessment the Dean / Principal shall issue a certificate of satisfactory completion of training, following which the University shall award the M.B.B.S. degree or declare him eligible for it. The graduate is then qualified for full registration with the State Medical Council.

(ii) Satisfactory completion of each posting shall be determined on the basis of the following :

1. Proficiency of knowledge … … SCORE 0-10
2. Competency in skills as acquired by :
   a. Performing procedures
   b. Assisting in procedures
   c. Observing procedures … … SCORE 0-10
3. Responsibility, punctuality, work up of case, involvement in treatment; follow – up reports SCORE 0-10
4. Capacity to work in a team (Behaviour with colleagues Nursing staff and relationship with paramedicals) SCORE 0-10
5. Research aptitude, Initiative, participation in discussions SCORE 0-10

Performance may be graded under each head as follows :

Poor /	Below average /	Average	/ Above average /	Excellent
<3	<5	5 & above	7 & above	9 to 10.

An intern shall be required to have a minimum score of 5 in each of the three heads mentioned above failing which the concerned posting shall be taken as unsatisfactory. Each area of unsatisfactory score (below 5) shall result in the repetition of one third of the total period of posting in the concerned subject.

Full Registration shall only be given by the State Medical Council/Medical Council of India on the award of the MBBS degree by the University or it declaration that the candidate is eligible for it.

6. INTERNSHIP - DISCIPLINE RELATED :

Some guidelines in the implementation of the training programme are given below for each discipline.

(1) COMMUNITY MEDICINE :

Interns shall acquire skills to deal effectively with an individual and the community in the context of primary health care. This is to be achieved by hands on experience in the district hospital, taluk hospital and primary health care. The details of training are as under :-

(a) COMMUNITY HEALTH CENTRE / DISTRICT HOSPITAL :

1. During this period of internship, an intern must acquire :

   a) Clinical competence for diagnosis of common ailments, use of bed side investigation and primary care techniques.
   b) Gain information on 'Essential drugs' and their usage.
   c) Recognise medical emergencies, resuscitate and institute initial treatment and refer to suitable institution / department.

2. Undergo specific Government of India / Ministry of Health and Family Welfare approved training using Government of India prescribed training manual for Medical Officers in National Health Programmes e.g., child

survival and safe mother hood. EPI, CDD, ARI, FP, ANC, Safe delivery, Tuberculosis, Leprosy and others as recommended by the Ministry of Health and Family Welfare :

a) gain full expertise in immunization against infectious disease.

b) participate in programmes in prevention and control of locally prevalent endemic diseases including nutritional disorders.

c) learn skills first hand in family welfare planning procedures.

d) learn the management of National Health Programmes.

3. Be capable of conducting a survey and employ its findings as a measure towards arriving at a community diagnosis.
4. a) conduct of programmes on health education.
   b) gain capabilities of using Audiovisual aids.
   c) acquire capability of utilization of scientific information for promotion of community health.
5. Be capable of establishing linkages with other agencies as water supply, food distribution and other environmental / social agencies.
6. Acquire quality of being professional with dedication, resourcefulness and leadership.
7. Acquire managerial skills by delegation of duties to paramedical staff and other health professionals and their supervision.

(b) TALUQA HOSPITAL :

Besides acquiring clinical skill in the evaluation of the patient with the environment and initiation of primary care, an intern shall :

1. effectively participate with other members of the health team with qualities of leadership;
2. make a community diagnosis in specific situations such as epidemics and institute relevant control measures for communicable diseases;
3. develop capability for analysis of hospital based morbidity and mortality statistics;
4. use of essential drugs in the community with the awareness of availability, cost and side effects;
5. provide health education to an individual / community on :

   a. tuberculosis.

b. small family spacing by use of appropriate contraceptives,
c. applied nutrition and care of mothers and children,
d. Immunization,
e. participation in school health programme.
f. HIV/AIDS.

(c) PRIMARY HEALTH CENTRE :

1. Initiate or participate in Family composite health care (birth to death), Inventory of events;
2. Participate in all the modules on field practice for community health e.g., safe motherhood, nutritional surveillance and rehabilitation, diarrohea disorders, etc.,
3. acquire competence in diagnosis and management of common ailments e.g., malaria, tuberculosis, leprosy, enteric fever, rheumatic heart disease, congestive heart failure, hepatitis, meningitis, acute renal failure etc.,
4. acquire proficiency for Family Welfare Programmes (antenatal care, normal delivery, contraception care of newborn and under five including immunesation).

(2) GENERAL MEDICINE:

1) Interns shall acquire the following training during their term :
   a) Acquire competence for clinical diagnosis based on history, physical examination and relevant laboratory investigation and institute appropriate line of management;
   b) This would include diseases common in tropics (parasitic, bacterial or viral infections, nutritional disorders, including dehydration and electrolyte disturbances) and system illnesses.
2) The intern shall have assisted as care team in intensive care of cardiac, respiratory, hepatic, neurological and metabolic emergencies.
3) The intern shall be able to conduct the following laboratory investigations:
   a) Blood : (Routine haematology smear and blood groups);
   b) Urine : (Routine chemical and microscopic);
   c) Stool : (for ova / cyst and occult blood);
   d) Sputum and throat swab for gram stain or acid fast stain;
   e) Cerebrospinal Fluid (CSF) for smear.
4) Conduct following diagnostic procedures :

a) Urethral catheterization;
b) Proctoscopy;
c) Ophthalmoscopy; Otoscopy;
d) Indirect laryngoscopy.
e) Therapeutic procedures;
f) Insertion of Ryle's Tube;
g) Pleural and ascitic tap, Cerebro Spinal Fluid (CSF) tap, by lumbar puncture; installing of airway tube, Oxygen administration, etc.

5) Biopsy Procedures :

Liver, Kidney, Skin, Nerve, Lymph node and muscle – biopsy, Bone marrow aspiration; Biopsy of malignant lesions on surface, Nasal / nerve / skin smear for leprosy.

6) a) Familiarity with usage of life saving procedures including use of aspirator, respirator and defibrillator.

b) Competence in interpretation of different monitoring devices such as cardiac monitor, blood gas analysis, etc.

7. Participate as a team member in total health care of an individual including appropriate follow-up and social rehabilitation.
8. Other competencies as indicated in general objectives.

(3) PAEDIATRICS :

The details of the skills that an intern shall acquire during his / her tenure in the department of Paediatrics are as follows :

The intern shall be able to :

1) Diagnose and manage common childhood disorders including neonatal disorders and acute emergencies (enquiry from parents of sick children), examining a sick child and making a record of information;
2) Carry out activities related to patient care such as laboratory work, investigative procedures and use of special equipments. The details are given as under :

a) diagnostic techniques : (including from femoral vein and umbilical cord) abscess, cerebrospinal fluid, urine, pleura and peritoneum and common tissue biopsy techniques;

b) techniques related to patient care : immunization, perfusion techniques, feeding procedure, tuberculin testing and breast feeding counselling;

c) Use of equipment : vital monitoring, temperature monitoring, resuscitation at birth and care of children receiving intensive care;

3) Screening of new born babies and those with objective risk factors for any anomalies and steps for preventive measures in future.
4) Plan in collaboration, with parents and individual; collective surveillance of growth and development of new born babies, infants and children so that he / she is able to :
   a) recognise growth abnormalities;
   b) recognise anomalies of psychomotor development;
   c) detect congenital abnormalities.
5) Assess nutritional and dietary status of infants and children and organize prevention, detection and follow up of deficiency disorders both at individual and community level such as :
   a) protein – energy malnutrition;
   b) Deficiencies of vitamins especially A, B, C, and D;
   c) Iron deficiency.
6) Institute early management of common childhood disorders with special reference to paediatric dosage and oral rehydration therapy.
7) Participate actively in public health programme oriented towards children in the community.

(4) GENERAL SURGERY :

An intern is expected to acquire following skills during his / her posting :

1) Diagnose with reasonable accuracy all surgical illnesses including emergencies.
2) a) Resuscitate a critically injured patient and a sever burns patient,
   b) control surface bleeding and manage open wound.
3) a) monitor patients of head, spine, chest, abdominal and pelvic injury;
   b) institute first – line management of acute abdomen.
4) a) perform venesection,
   b) perform tracheostomy and endotracheal intubation,
   c) catheterize patients with acute urinary retention or perform trocar cyctostomy,
   d) drain superficial abscesses,
   e) suturing of wound,
   f) perform circumcision,

g) biopsy of surface tumours,
h) perform vasectomy.

(5) EMERGENCY DEPARTMENT (CASUALTY) :

The student intern should be provided adequate experience and trainings to manage the common emergency conditions which are encountered in the casuality department of the hospital. These are :

1) Accident & Trauma – mostly from road traffic accident and industrial hazards causing injury to the soft tissues of the body, fracture of bones, partial or total loss of limbs, injury to the nerves / blood vessels, chest injuries leading to rib fracture with or without pneumothorax or haemothorax, head injuries, crush injuries, etc.
2) Medical emergency conditions – which include acute shock and cardio – respiratory insufficiency, heart attack, cerebrovascular accident, convulsions, acute renal shut down, bronchial asthma with spasmodic bronchitis, acute endocrinal insufficiencies, hyperpyrexia, coma, etc.
3) Surgical emergency conditions – which include acute abdominal conditions like ruptured internal organs / blood vessels, acute appendicitis, pancreatitis, obstructed hernia, torsion, strangulation, urinary obstruction, intestinal obstruction, etc.
4) Intoxication and poisoning with drugs, chemicals, etc., allergic reactions.
5) Burns.
6) Obstetrical and Gynaecological conditions – like normal labour pain, abnormal labour, obstructed labour, spontaneous abortion, bleeding pv in pregnancy, other acute pelvic conditions like torsion, rupture, bleeding, etc.
7) Paediatric conditions like low birth weight, severe dehydration, hyperpyrexia, convulsions, foreign body intrusion in body orifices, epistaxis, colic, etc.
8) Ophthalmic conditions – like injury to eye, raised intraocular pressure, sudden blurring of vision, etc.
9) E.N.T. conditions – like foreign bodies in nose / ear, injury to nose / ear, bleeding from nose / ear, airway obstruction, etc.
10) Miscellaneous conditions – like drowning, snake bites, arthropod bites, electrical injuries, heat stroke, cold injury, blast injury, acute dental conditions, etc.
11) Medico legal conditions – like attempted suicide, homicides, gunshot injury, penetrating injury, etc.
12) Psychiatric conditions – acute states of mental illnesses.

CPR : In addition to the above, during the four weeks of posting in the Casualty / Emergency Department, the intern should be trained in the techniques of Cardio Pulmonary Resuscitation.

(6) OBSTETRICS AND GYNAECOLOGY:

Technical skills that interns are expected to learn :

1. Diagnosis of early pregnancy and provision of antenatal care;
2. Diagnosis of pathology of pregnancy related to :-
    a. abortions;
    b. ectopic pregnancy;
    c. tumours complicationing pregnancy;
    d. acute abdomen in early pregnancy;
    e. hyperemesis gravidarum;
3. Detection of high risk pregnancy cases and suitable advice e.g., PIH, hydramanios, antepartum haemorrhage, multiple pregnancies, abnormal presentations and intra-uterine growth retardation;
4. Antenatal pelvic assessment and detection of cephalopelvic disproportion;
5. Induction of labour and amniotomy under supervision;
6. Management of normal labour, detection of abnormalities, postpartum haemorrhage and repair of perineal tears;
7. To assist in forceps delivery;
8. To assist in caesarean section and postoperative care thereof;
9. Detection and management of abnormalities of lactation;
10. To perform non-stress test during pregnancy;
11. Per speculum, per vaginum and per rectal examination for detection of common congenital, inflammatory, neoplastic and traumatic conditions of vulva, vagina, uterus and ovaries;
12. Medicolegal examination in Gynaecology and Obstetrics;
13. To perform the following procedures :-
    a. Dilatation and curettage and fractional curettage.
    b. Endometrial biopsy.
    c. Endometrial aspiration.
    d. Pap smear collection.

e. Intra Uterine Contraceptive Device (IUCD) insertion.
f. Minilap ligation.
g. Urethral catheterization.
h. Suture removal in postoperative cases.
i. Cervical punch biopsy.

14. To assist in major abdominal and vaginal surgery cases in Obstetrics and Gynaecology.

15. To assist in followingup post-operative cases of Obstetrics and Gynaecology such as :-
    a. Colposcopy.
    b. First trimester MTP- procedures including manual vacuum aspiration (MVA).
    c. Second trimester Medical Termination of Pregnancy (MTP) procedures, Emcredyl, Prostaglandine Instillation.
16. To evaluate and prescribe oral contraceptive.

(7) OTO RHINO LARYNGOLOGY (E.N.T.) :

1. Interns shall acquire ability for a comprehensive diagnosis of common Ear, Nose and Throat (E.N.T.) diseases including the emergencies and malignant neoplasms of the head and neck.
2. He / she shall acquire skills in the use of head mirror, Otoscope and indirect laryngoscopy and first line of management of common Ear, Nose and Throat (E.N.T.) problems.
3. He / she shall be able to carry out minor surgical procedures such as -
    a) Antrum puncture and packing of the nose for epistaxis;
    b) Nasal douching and packing of the external canal;
    c) Remove foreign bodies from the nose and the ear; syringing of the ear;
    d) Observe or assist in various endoscopic procedures.
    e) Tracheostomy.
4. An intern shall have participated as a team member in the community diagnosis e.g., Chronic Suppurative Otitis Media (CSOM) and be aware of national programme on prevention of deafness.
5. He / she shall possess knowledge of various E.N.T. rehabilitative programmes.

(8) OPHTHALMOLOGY :

An intern shall be able to :-

1. Diagnose and manage common ophthalmological conditions such as :-

   Trauma, Acute conjunctivitis, allergic conjunctivitis, xerosis, entropion, corneal ulcer, iridocyclitis, myopia, hypermetripia, cataract, glaucoma, ocular injury and sudden loss of vision;
2. Carry out assessment of refractive errors and advise its correction;
3. Diagnose ocular changes in common systemic disorders;
4. Perform investigative procedures such as -

   Tonometry, syringing, direct ophthalmoscopy, subjective refraction and fluorescein staining of cornea.
5. Carry out or assist in the following procedures;

   1. Sub-conjunctival injection.
   2. Ocular bandaging.
   3. Removal of concretions.
   4. Epilation and electrolysis.
   5. Corneal foreign body removal.
   6. Cauterization of corneal ulcers.
   7. Chalazion removal.
   8. Entropion correction.
   9. Suturing conjuctival tears.
   10. Lids repair.
   11. Glaucoma surgery (assisted).
   12. Enucleation of eye in cadaver.

6. He / she shall have full knowledge of the available methods for rehabilitation of the blind.

(9) ORTHOPAEDICS :

GOAL:

The aim of teaching the undergraduate student in Orthopaedics and Rehabilitation is to impart such knowledge and skills that may enable him to diagnose and treat common ailments. He / She shall have the ability to diagnose and suspect presence of fracture, dislocation, actual asteomyelitis, acute poliomyelitis and common congential deformities such as congentail talipes equinovarus (CTEV) and dislocation of hip (CDH).

The intern must acquire the knowledge and skills that will enable him / her to diagnose and treat common ailments.

A. Diagnosis :

He / she shall have ability to diagnose and suspect presence of fracture, dislocation, acute osteomyelitis, acute poliomyelitis and common congenital deformities such as congenital talipes equinovarus (CTEV) and dislocation of hip (CDH).

B. Therapy : An intern must know –

a. Splinting (plaster slab) for the purpose of emergency splintage, definitive splintage and post operative splintage and application of Thomas splint;

b. Manual reduction of common fractures – phalangeal, metacarpal, metatarsal and Colles's fracture;

c. Manual reduction of common dislocations – interphalangeal, metacarpophalangeal, elbow and shoulder dislocations;

d. Plaster cast application for undisplaced fractures of arm, forearm, leg and ankle;

e. Emergency care of a multiple injury patient;

f. Precautions about transport and bed care of spinal cord injury patients.

C. Counselling :

An intern should be able to advice about -

(i) Prognosis of poliomyelitis, cerebral palsy, CTEV and CDH;
(ii) Rehabilitation of amputees and mutilating traumatic and leprosy deformities of hand.

D. Surgery :

An intern must have observed or preferably assisted at the following operations :

(i) drainage for acute osteomyelitis;
(ii) sequestrectomy in chronic osteomyelitis;

(iii) application of external fixation;
(iv) internal fixation of fractures of long bones.

10. ELECTIVE POSTINGS :

An Intern shall chose any one of the subjects as the Elective postings are for 15 days during his/ her internship.

(1) DERMATOLOGY, VENIROLOGY & LEPROSY:

An intern must be able to :-

1. conduct proper clinical examination, elicit and interpret physical findings and diagnose common disorders and emergencies.
2. perform simple, routine investigative procedures for making bedside diagnosis, specially the examination of scrapings for fungus, preparation of slit smears and staining or AFB for leprosy patient and for STD cases.
3. take a skin biopsy for diagnostic purpose.
4. manage common disease recognizing the need for referral for specialized care in case of inappropriateness of therapeutic response.

(2) PSYCHIATRY :

An intern must be able to –

1. diagnose and manage common psychiatric disorders,
2. identify and manage psychological reaction and psychiatric disorders in medical and surgical patients in clinical practice and community setting.

(3) TUBERCULOSIS AND RESPIRATORY DISEASES :

An intern after training must be able to :-

1. conduct proper clinical examination, elicit and interpret clinical findings and diagnose common respiratory disorders and emergencies.
2. perform simple, routine investigative procedures required for making bed side diagnosis, specially sputum collection examination for aetiological organism like AFB, interpretation of chest X-rays and respiratory function tests.

3. interpret and manage various blood gas changes and pH abnormalities in various respiratory diseases.
4. manage common diseases recognizing need for referral for specialized care in case of in-appropriateness of therapeutic response.
5. perform common procedures like laryngoscopy, pleural aspiration, respiratory physio-therapy, laryngeal intubation and pneumo-thoracic drianage aspiration.

(4) ANAESTHESIOLOGY :

After the internship in the department of Anaesthesiology, an interns shall acquire knowledge, skill and attitude to :-

1. perform pre-anaesthetic check up and prescribe preanesthetic medications.
2. perform venepuncture and set up intravenous drip.
3. perform laryngoscopy and endotracheal intubatin.
4. perform lumbar puncture, spinal anaesthesia and simple nerve block.
5. conduct simple general anaesthetic procedures under supervision.
6. monitor patients during anaesthesia and post-operative period.
7. recognize and manage problems associated with emergency anaesthesia.
8. maintain anaesthetic records.
9. recognize and treat complications in post operative period.
10. perform cardio pulmonary resuscitation correctly, including recognition of cardiac arrest.

(5) RADIO – DIAGNOSIS :

An intern after training must know –

1. All aspects of Emergency Room Radiology like -
   a. all acute abdominal conditions,
   b. all acute traumatic condition with emphasis on head injuries,
   c. differentiation between Medical and Surgical Radiological emergencies.
2. Basic hazards and precautions in Radio-diagnostic practices.

(6) PHYSICAL MEDICINE AND REHABILITATION :

An intern is expected to acquire the following skills during his / her internship:-

1. Competence for clinical diagnosis based on detailed history and assessment of common disabling conditions like poliomyelitis, cerebral palsy, haemiplegia, paraplegia, amputations, etc.

2. Participation as a team member in total rehabilitation including appropriate follow up of common disabling conditions.
3. Principles and procedures of fabrication and repair of artificial limbs and appliances.
4. Various therapeutic modalities.
5. Use of self help devices and splints and mobility aids.
6. Familiarity with accessibility problems and home making for the disabled.
7. Ability of demonstrate simple exercise therapy in common conditions like prevention of deformity in polio, stump exercise in an amputee, etc.

(7) FORENSIC MEDICINE AND TOXICOLOGY :

The intern is to be posted in the casualty department of the hospital while attached under Forensic Medicine Department with the following objectives :-

1. To identify medico-legal problems in a hospital and general practice.
2. To identify and learn medico-legal responsibilities of a medical man in various hospital situations.
3. To be able to diagnose and learn management of basic poisoning conditions in the community.
4. To learn how to handle cases of sexual assault.
5. To be able to prepare medico-legal reports in various medico-legal situations.
6. To learn various medico-legal post-mortem procedures and formalities during its performance by police.

(8) BLOOD BANK AND TRANSFUSION DEPARTMENT :

During the two weeks of elective posting, the intern shall learn –

1. Blood grouping in OAB and Rh systems – typing, cross matching;
2. Selection of blood donor; Screening for diseases;
3. Collection of blood; Separation of blood components;
4. Storage of blood and blood components – changes during storage;
5. Transfusion of blood and blood components;
6. Transfusion reactions – management;
7. Infections spread by transfusion.

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PROFORMA – I

ASSESSMENT OF INTERNSHIP FOR – MBBS INTERN

CERTIFICATE OF SATISFACTORY COMPLETION OF POSTING IN THE DEPARTMENT OF ……..

1. Name of the Student .. .. : Mr./Ms.
2. Batch .. .. : 20 - 20
3. Month of passing the MBBS Phase III – Part II Exams .. .. : : March 201 - 201
4. (a) Name of the Discipline /Specialty :
   (b) Duration : From …… to ……....

5. Satisfactory completion of each posting shall be determined on the basis of the following :

SCORED out of 10

(1) Proficiency of knowledge … … :

(2) Competency in skills as acquired by : … :

a. Performing procedures

b. Assisting in procedures

c. Observing procedures … … :

(3) Responsibility, punctuality, work up of case, involvement in treatment; follow – up reports … … :

(4) Capacity to work in a team (Behaviour with colleagues Nursing staff and relationship with paramedicals) :

(5) Research aptitude, Initiative, participation in discussions :

Performance may be graded under each head as follows :

Poor	Below average	Average	Above average	Excellent
<3	<5	5 & above	7 & above	9 to 10.

An intern shall be required to have a minimum score of 5 in each of the three heads mentioned above failing which the concerned posting shall be taken as unsatisfactory. Each area of unsatisfactory score (below 5) shall result in the repetition of one third of the total period of posting in the concerned subject.

Date : Signature of H.O.D./Head of the Institution

(Office date seal). (Seal).

PROFORMA – II

FOR RE-ADMISSION AFTER CONDONING THE C.R.R.I. BREAK

1. NAME OF THE STUDENT .. .. :

2. NAME OF THE COURSE / PERIOD OF STUDY : .. .. :

3. NAME OF THE COLLEGE : .. .. :

4. DATE OF JOINING THE COURSE : .. :

5. DATE OF COMPLETION OF THE COURSE : .. .. :

6. DATE OF COMMENCEMENT OF C.R.R.I. : .. .. :

7. DATE OF COMPLETION OF 50% OF C.R.R.I. : .. .. :

8. DATE OF DISCONTINUANCE OF C.R.R.I. : .. .. :

9. REASONS FOR THE DISCONTINUANCE OF THE C.R.R.I. : .. :

10. DETAILS OF BREAK OF C.R.R.I. : .. :
(PREVIOUS BREAK IF ANY, THE DETAILS OF SPELL AND THE PERIOD OF BREAK OF STUDY MAY BE FURNISHED INCLUDING THE PERIOD OF LATE COMMENCEMENT).

11. WHETHER ANY DISCIPLINARY : CASE IS PENDING FOR DISCLOSED i.e., PRODUCING FALSE CERTIFICATES / RAGGING ETC. :

12. IF ANY CORRESPONDENCE WAS MADE IN IN THE PAST, FURNISH THE COPIES OF RELEVANT RECORDS FOR PERUSAL. :

13. RECOMMENDATION OF THE DEAN/: PRINCIPAL CONCERNED.

CERTIFIED THAT THE DETAILS FURNISHED ABOVE IN RESPECT OF (Shri / Smt. /Selvi. / ----------
---------- ARE TRUE TO THE BEST OF MY KNOWLEDGE AND FOUND TO BE CORRECT.

Date: ***SIGNATURE OF THE DEAN / PRINCIPAL***
[Office Seal]