PART – VII

SPECIFIC REGULATIONS FOR THE FACULTY OF MEDICINE

85.0. SHORT TITLE AND COMMENCEMENT

- 85.1 These regulations shall be called "Specific Regulations for the M.B.B.S. program of Dr. M.G.R. Educational and Research Institute University, Deemed to be University u/s 3 of UGC act 1956. These regulations are applicable to the students who are admitted to the M.B.B.S. program in this University.
- 85.2 As per the decision of the Academic Council of this university, these regulations have been prepared by adopting the regulations of the Medical Council of India.

86.0 GENERAL CONSIDERATIONS AND TEACHING APPROACH FOR THE M.B.B.S. PROGRAM

- 86.1 Graduate Medical Curriculum is oriented towards training students to the responsibilities of a physician of first contact who is capable of looking after the preventive, promotive, curative and rehabilitative aspects of medical care.
- 86.2 With 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 and training should be able to meet internationally acceptable standards.
- 86.3 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 the opportunities and be able to conduct professional requirements, the graduate shall endeavour to have acquired basic training in different aspects of medical care.
- 86.4 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. Adequate exposure to such experiences should be available throughout in all the three Phases of graduate medical education and training. This has to be further intensified by providing exposure to field practice areas and training during the internship period.

The aim of the period of rural training during internship is to enable the fresh graduates to function effectively under such settings.

- 86.5 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.
- 86.6 Enough experience must be provided for self learning. The methods and Techniques that would ensure this must become a part of the teaching learning process.
- 86.7 The medical graduate of modern scientific medicine shall endeavor to become capable of functioning independently in both urban and rural environment. He/She shall endeavour to master the fundamental aspects of the subjects taught and all common problems of health and disease avoiding unnecessary details of specialization.
- 86.8 The importance of social factors in relation to the problem of health and disease should receive proper emphasis throughout the course. 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.
- 86.9 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 analyze information and to correlate them.
- 86.10 The educational process should be placed in a historic 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.
- 86.11 Lectures alone are generally not adequate as a method of training and a means of transferring 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 first-hand experience. Students shall be encouraged to learn in small groups through sheer interactions so as to gain maximal experience through contact with patients and the communities in which they 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.

- 86.12 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 outpatient departments should be suitably planned to provide training to graduates in small groups.
- 86.13 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 skill and competence in handling of patients.
- 86.14 Proper records of the work should be maintained which will form a basis for the student's internal assessment and should be available to the inspectors at the time of inspection of the college by the Medical Council of India.
- 86.15 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.
- 86.16 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 or as a team member/leader when he begins his independent career. A discussion group should not have more than 20 students.
- 86.17 Faculty member should avail of modern educational technology while teaching the students and to attain this objective, Medical Education Units/Departments be established in all medical colleges for faculty development and providing learning resource material to teachers. The curriculum committee would plan curricula and instructional method which will be regularly updated. Integration of ICT in learning process will be implemented.
- 86.18 To derive maximum advantage out of this revised curriculum the vacation period of students in one calendar year should not exceed one month during the 4 ¹/₂ years Bachelor of Medicine and Bachelor of Surgery (MBBS) degree course.

87.0. **OBJECTIVE OF MEDICAL GRADUATE TRAINING PROGRAM**:

87.1 (1) **NATIONAL GOALS:** At the end of undergraduate program, the medical student should 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 living.
- (e) become exemplary citizen by observation of medical ethics and fulfilling social and professional obligations, so as to respond to national aspirations.
- 87.2 (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 Programmes including practical aspects of the following:
 - (i) Family Welfare and Material 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 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.
- (I) All efforts must be made to equip the medical graduate to acquire the skills as detailed in **APPENDIX A**.

88.0 ADMISSION TO THE MBBS PROGRAM - ELIGIBILITY CRITERIA

No Candidate shall be allowed to be admitted to the Bachelor of Medicine and Bachelor of Surgery (MBBS) Course until:

1. He/she shall complete the age of 17 years on or before 31 December of the year of admission to the MBBS Course.

- **2.** He/She has obtained a minimum of marks in National Eligibility-cum-Entrance Test .In order to be eligible to take National Eligibility –cum-Entrance Test, He/She has passed qualifying examination as under :-
- a) The higher secondary examination or the Indian School Certificate Examination which is equivalent to 10+2 Higher Secondary Examination after a period of 12 years study, the last two years of study comprising of Physics, Chemistry, Biology/Bio- technology and Mathematics or any other elective subjects with English at a level not less than core course of English as prescribed by the National Council of Educational Research and Training after the introduction of the 10+2+3 years educational structure as recommended by the National Committee on education;

Note: Where the course content is not as prescribed for 10+2 education structure of the National Committee, the candidates will have to undergo a period of one year pre-professional training before admission to the Medical colleges;

Or

b) The intermediate examination in science of an Indian University/Board or other recognised examining body with Physics, Chemistry and Biology/Biotechnology which shall include a practical test in these subjects and also English as a compulsory subject;

Or

c) The pre-professional/pre-medical examination with Physics, Chemistry and Biology/Bio-technology, after passing either the higher secondary school examination, or the pre-university or an equivalent Examination. The preprofessional/pre-medical examination shall include a practical test in Physics, Chemistry and Biology/Bio-technology and also English as a compulsory subject;

Or

d) The first year of the three years degree course of a recognized university, with Physics, chemistry and Biology/Bio-technology including a practical test in three subjects provided the examination is a "University Examination" and candidate has passed 10+2 with English at a level not less than a core course;

Or

e) B.Sc. examination of an Indian University, provided that he/she has passed the B.Sc. examination with not less than two of the following subjects Physics, Chemistry, Biology (Botany, Zoology)/Bio-technology and further that he/she has passed the earlier qualifying examination with the following subjects - Physics, Chemistry, Biology and English.

f) Any other examination which, in scope and standard is found to be equivalent to the intermediate science examination of an Indian University/Board, taking Physics, Chemistry and Biology/Bio- technology including practical test in each of these subjects and English.

89.0 SELECTION

- 98.1 There shall be a single eligibility cum entrance examination namely 'National Eligibility-cum-Entrance Test for admission to MBBS course' in each academic year. The overall superintendence, direction and control of National Eligibility cum-Entrance Test shall vest with Medical Council of India. However, Medical Council of India with the previous approval of the Central Government shall select organization/s to conduct 'National Eligibility-cum-Entrance Test for admission to MBBS course.
- 89.2 In order to be eligible for admission to MBBS Course for a particular academic year, it shall be necessary for a candidate to obtain minimum of marks at 50th percentile in 'National Eligibility cum-Entrance Test to MBBS course' held for the said academic year. However, in respect of candidates belonging to Scheduled Castes, Scheduled Tribes, Other Backward Classes, the minimum marks shall be at 40th percentile.
- 89.3 Provided when sufficient number of candidates in the respective categories fail to secure minimum marks as prescribed in National Eligibility-cum-Entrance Test held for any academic year for admission to MBBS Course, the Central Government in consultation with Medical Council of India may at its discretion lower the minimum marks required for admission to MBBS Course for candidates belonging to respective categories and marks so lowered by the Central Government shall be applicable for the said academic year only."
- 89.4 The reservation of seats in medical colleges for respective categories shall be as per applicable laws prevailing in States/ Union Territories. An all India merit list as well as State-wise merit list of the eligible candidates shall be prepared on the basis of the marks obtained in National Eligibility- cum Entrance Test and candidates shall be admitted to MBBS course from the said lists only.
- 89.5 No Candidate who has failed to obtain the minimum eligibility marks as prescribed in clause (2) of Regulation 4.1 shall be admitted to MBBS Course in the said academic year.
- 89.6 All admissions to MBBS course within the respective categories shall be based solely on marks obtained in the National Eligibility-cum-Entrance Test."
- 89.7 To be eligible for admission to MBBS course, a candidate must have passed in the subjects of Physics, Chemistry, Biology/Bio-technology and English

individually and must have obtained a minimum of 50% marks taken together in Physics, Chemistry and Biology/Bio-technology at the qualifying examination as mentioned in clause (2) of Regulation 4.1 and in addition must have come in the merit list of "National Eligibility-cum-Entrance Test" for admission to MBBS course. In respect of candidates belonging to Scheduled Castes, Scheduled Tribes or other Backward Classes the minimum marks obtained in Physics, Chemistry and Biology/Bio-technology taken together in qualifying examination shall be 40% instead of 50%.

89.8 The Central Board of Secondary Education shall be the organization to conduct National Eligibility-cum-Entrance Test for admission to MBBS course."

90.0 **COMMON COUNSELING:**

- 90.1 There shall be a common counseling for admission to MBBS course in all Medical Educational Institutions on the basis of merit list of the National Eligibility Entrance Test.
- 90.2 The Designated Authority for counseling for the 15% All India Quota seats of the contributing States shall be the Directorate General of Health Services.
- 90.3 The counseling for all admission to MBBS Course in all Medical Educational Institutions in a State/Union Territory, including Medical Educational Institutions established by the Central Government, State Government, University, Deemed University, Trust, Society/Minority Institutions / Corporations or a Company shall be conducted by the State/Union Territory Government. Such common counseling shall be under the over-all superintendence, direction and control of the State/Union Territory Government.

91.0 CUT OFF DATES FOR ADMISSION :

Cut off dates for MBBS admission is 30th September.

However the above mentioned conditions are subject to any modification duly notified by the Medical Council of India from time to time.

92.0 MIGRATION/TRANSFER OF CANDIDATES: Migration from this university to another university or to another Medical College is not permitted.

93.0 TRAINING PERIOD AND TIME DISTRIBUTION:

93.1 Every student shall undergo a period of certified study extending over 4 ¹/₂ academic years divided into 9 semesters, (i.e. of 6 months each) from the date of commencement of his study for the subjects comprising the medical curriculum to the date of completion of the examination and followed by one

year compulsory rotating internship. Each semester will consist of approximately 120 teaching days of 8 hours each college working time, including one hour of lunch.

- 93.2 The period of 4 ¹/₂ years is divided into three phases as follows :
 - a) **Phase-1**(two semesters) consisting of Pre-clinical subjects (Human Anatomy, Physiology including Bio-Physics, Bio- chemistry and 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 Biochemistry combined (Physiology 2/3 & Biochemistry 1/3).

b) **Phase-II** (3 semesters) - consisting of para-clinical/ clinical subjects.

During this phase teaching of para-clinical and clinical subjects shall be done concurrently.

The para-clinical subjects shall consist of Pathology, Pharmacology, Microbiology, Forensic Medicine including Toxicology and part of Community Medicine.

The clinical subjects shall consist of all those detailed below in Phase III.

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

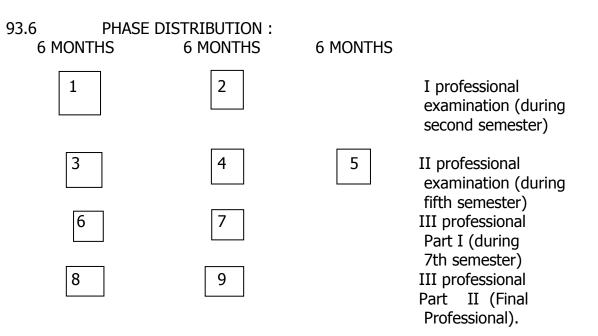
c) **Phase-III** (Continuation of study of clinical subjects for seven semesters after passing Phase-I)

The clinical subjects to be taught during Phase II & III are Medicine and its allied specialties, Surgery and its allied specialties, Obstetrics and Gynaecology and Community Medicine.

Besides clinical posting as per schedule mentioned herewith, rest of the teaching hours be divided for didactic lectures, demonstrations, seminars, group discussions etc. in various subjects. The time distribution shall be as per Appendix-B.

The Medicine and its allied specialties training will include General Medicine, Paediatrics, Tuberculosis and Chest, Skin and Sexually Transmitted Diseases, Psychiatry, Radio-diagnosis, Infectious diseases etc. The Surgery and its allied specialties training will include General Surgery, Orthopaedic Surgery including Physio-therapy and Rehabilitation, Ophthalmology, Otorhinolaryngology, Anaesthesia, Dentistry, Radio-therapy etc. The Obstetrics & Gynaecology training will include family medicine, family welfare planning etc.

- 93.3 The first 2 semester (approximately 240 teaching days) shall be occupied in the Phase I (Pre-clinical) subjects and introduction to a broader understanding of the perspectives of medical education leading to delivery of health care. No student shall be permitted to join the Phase II (Para-clinical/clinical) group of subjects until he has passed in all the Phase I (Pre-clinical subjects)
- 93.4 After passing pre-clinical subjects, 1¹/₂ year (3 semesters) shall be devoted to para-clinical subjects. Phase II will be devoted to para-clinical & clinical subjects, along with clinical postings. During clinical phase (Phase III) pre-clinical and para-clinical teaching will be integrated into the teaching of clinical subjects where relevant.
- 93.5 Didactic lectures should not exceed one third of the time schedule; two third schedule should include practicals, clinicals or/and group discussions. Learning process should include living experiences, problem oriented approach, case studies and community health care activities.



- 93.7 Passing in Ist Professional is compulsory before proceeding to Phase II training.
- 93.8 A student who fails in the IInd professional examination, should not be allowed to appear IIIrd Professional Part I examination unless he passes all subjects of IInd Professional examination.
- 93.9 Passing in IIIrd Professional (Part I) examination is not compulsory before entering for 8th & 9th semester training, however passing of IIIrd Professional (Part I) is compulsory for being eligible for IIIrd Professional (Part II) examination.
- 93.10During third to ninth semesters, clinical postings of three hours duration daily as specified in the APPENDIX B is suggested for various departments, after Introductory Course in Clinical Methods in Medicine & Surgery of two weeks each for the whole class.

94.0 REGISTRATION OF CANDIDATES:

A candidate admitted in M.B.B.S. Program of this University shall register his/her name by submitting the prescribed application form for registration duly filled.

95.0 COMMENCEMENT OF THE I M.B.B.S. PROGRAM

From 1st August of the academic year (subject to MCI modifications).

96.0 WORKING DAYS IN AN ACADEMIC YEAR

Each academic year shall consist of not less than 240 working days.

97.0 MEDIUM OF INSTRUCTION

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

98.0 CURRICULUM AND SYLLABI

The Curriculum and Syllabi is framed as per the guidelines of Medical Council of India for the M.B.B.S program with the approval of the Academic Council of the university. Any change introduced now and then by the Medical Council of India, in the syllabi and curriculum of the M.B.B.S. program shall be followed with the approval of the standing academic Council of the university.

99.0 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 bonafide 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 and the students should be informed of the same by suitable display.

100.0. INTERNAL ASSESSMENT

100.1 INTERNAL ASSESSMENT FOR I M.B.B.S. PROGRAM.

- a) The internal assessment marks shall be 40 marks for each subject. (Practical 20 + theory 20). Totally 5 internal assessments shall be conducted at alternate months followed by a model examination before the commencement of university theory examinations.
- b) A failed candidate in any subject should be provided an opportunity to improve his/her internal assessment marks by conducting a minimum of two examinations in theory and Practical separately and average marks, be considered for improvement.
- c) Students must secure atleast 35% 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.
- d) All the details regarding Internal Assessment should be sent to the Controller of Examinations by the Head of the Department of the subject concerned before the commencement of university examinations. The aggregate of Final Internal Assessment Marks submitted shall be taken by the University as Internal Assessment Marks for permitting the candidates to appear for the examinations. The Internal Assessment marks will be exhibited periodically on the Notice Board after completion of I.A. examination for the knowledge of the students.

100.2 INTERNAL ASSESSMENT FOR II M.B.B.S. PROGRAM

a) Internal assessment for Pathology, Microbiology & Pharmacology: The internal assessment marks shall be 30 marks for each subject. (Practical 15 + theory15). Totally 7 internal assessments shall be conducted at an interval of 1 $\frac{1}{2}$ months followed by a model examination before the commencement of university theory examinations.

- b) Internal assessment for Forensic Medicine: The internal assessment marks shall be 20 marks. (Practical 10 + theory 10).Totally 5 internal assessments shall be conducted at an interval of 1 ½ months followed by a model examination before the commencement of university theory examinations.
- c) A failed candidate in any subject should be provided an opportunity to improve his/her internal assessment marks by conducting a minimum of two examinations in theory and Practical separately and average marks, be considered for improvement.
- d) Students must secure at least 35% 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.
- e) All the details regarding Internal Assessment should be sent to the Controller of Examinations by the Head of the Department of the subject concerned before the commencement of university examinations. The aggregate of Final Internal Assessment Marks submitted shall be taken by the University as Internal Assessment Marks for permitting the candidates to appear for the examinations. The Internal Assessment marks will be exhibited periodically on the Notice Board after completion of I.A. examination for the knowledge of the students
- 100.3 INTERNAL ASSESSMENT FOR III M.B.B.S. PROGRAM:
- 100.3.1 III M.B.B.S. PART I:

A) ENT, OPHTHALMOLOGY:

The internal assessment marks shall be 20 marks for each subject. (Practical 10 + Theory 10). Totally 5 internal assessments shall be conducted in alternate months followed by a model examination before the commencement of university theory examinations.

- B) COMMUNITY MEDICINE:
- <

The internal assessment marks shall be 40 marks (Practical 20+theory 20). Totally 7 internal assessments shall be conducted at an interval of 1 ¹/₂ months followed by a model examination before the commencement of university theory examinations.

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

b) Students must secure at least 35% 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.

All the details regarding Internal Assessment should be sent to the Controller of Examinations by the Head of the Department of the subject concerned before the commencement of university examinations. The aggregate of Final Internal Assessment Marks submitted shall be taken by the University as Internal Assessment Marks for permitting the candidates to appear for the examinations. The Internal Assessment marks will be exhibited periodically on the Notice Board after completion of I.A. examination for the knowledge of the students.

a) MEDICINE, SURGERY, OBSTETRICS & GYNAECOLOGY:

The internal assessment marks shall be 60 marks for General Medicine, General Surgery (Practical 30 + Theory 30) and 40 marks for OBG (Practical 20+Theory 20). Totally 5 internal assessments shall be conducted in alternate months followed by a model examination before the commencement of university theory examinations.

b) PAEDIATRICS:

The internal assessment marks shall be 20 marks (Practical 10 + Theory 10). Totally 5 internal assessments shall be conducted in alternate months followed by a model examination before the commencement of university theory examinations.

- c) A failed candidate in any subject should be provided an opportunity to improve his/her Internal Assessment Marks by conducting a minimum of two examinations each in theory and Practical separately and the average be considered for improvement.
- d) Students must secure at least 35% 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.

e) All the details regarding Internal Assessment should be sent to the Controller of Examinations by the Head of the Department of the subject concerned before the commencement of university examinations. The aggregate of Final Internal Assessment Marks submitted shall be taken by the University as Internal Assessment Marks for permitting the candidates to appear for the examinations. The I.A. marks will be exhibited periodically on the Notice Board after completion of I.A. examination for the knowledge of the students.

101.0 ATTENDANCE :

- 101.1 75% attendance in a subject for appearing in the examination is compulsory inclusive of attendance in non-lecture teaching i.e. seminars, group discussions, tutorials, demonstrations, practicals, hospital (Tertiary, Secondary and Primary) posting and bed side clinics etc.
- 101.2 A candidate lacking in the prescribed attendance in any one subject in the first appearance shall be denied admission to the entire examination.
- 101.3 Any candidate who does not appear for an examination due to lack of attendance shall be permitted to appear at the next exam session if he puts in a minimum of 75% attendance in the extended period of study.
- 101.4 Failed candidates who are not promoted to the next Phase of study are also required to put in a minimum of 75 % attendance during the extended period of study before appearing for the next examination.
- 101.5 Attendance earned by the students shall be displayed on the notice board at the end of every 3 months and a copy of the same shall be sent to the parents of the students concerned.

102.0 REGULATIONS FOR CONDONATION OF ATTENDANCE:

There shall be no condonation for lack of attendance.

103.0 UNIVERSITY EXAMINATIONS

- 103.1 COMMENCEMENT OF THE EXAMINATIONS:
- 103.1.1 Theory Examinations shall not be held on Saturdays and 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.

103.1.2 There shall be one main examination in a year and a supplementary to be held not later than 6 months after the publication of its results. Universities Examinations shall be held as specified clause 86.6.

103.2 SUPPLEMENTARY EXAMINATIONS:

The supplementary examination for 1st Professional MBBS examination may be conducted within 6 months so that the students who pass can join the main batch and the failed students will have to appear in the subsequent year provided that the students who pass the supplementary examination shall be allowed to appear in the second professional MBBS examination only after he/she completes the full course of study of three semesters (i.e. 18 months) for the second professional MBBS examination of the main batch.

104.0 **DECLARATION OF RESULTS**

Results of university examinations shall be declared within 15 working days.

105.0 **REVALUATION OF ANSWER PAPER**

There is no provision for revaluation of answer papers. However, re-totaling is allowed in the failed subjects.

106.0 **GRACE MARKS**

The grace marks upto a maximum of five marks may be awarded at the discretion of the University to a student who has failed only in one subject but has passed in all other subject.

107.0 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 theory, Practical and Viva -Voce alone.

108.0 RE-ADMISSION AFTER BREAK OF STUDY

Every student shall attain his / her classes (theory, Practical and clinical) on all working days unless the Principles grants him/ her leave of absence. If a student absents continuously for a period of 91 days or more and seeks permission to attend the course before one year after discontinuation, his / her application shall be forwarded to Registrar while permitting the student to join. The Vice-chancellor may grant leave of absence attaching such conditions as he may deem necessary. Candidates who are absent for continuous period of one year

or more without permission shall be deemed to have forfeited the admission into the course and his/her studentship shall stand cancelled without any further notice.

109.0. SCHEME OF EVALUATION 109.1. MARKS QUALIFYING A PASS IN VARIOUS SUBJECTS:

<u>I M.B.B.S.,</u> MARKS QUALIFYING A PASS IN ANATOMY					
50 % in Theory	=	50 / 100	· · ·	50 marks each) question of 10 h paper)	
50 % in Theory + Viva	=	60 /120	(Viva – 20 Ma	arks)	
35% in Internal Assessment	=	40 Mark		ry -20 , tical – 15; rd 5 marks)	
Note : 35% of Internal Assessme	ent Ma	rk = 35/	100*40 = 14	Marks.	
50 % in Practical	=	20 / 40)		
Grand Total 50% aggregate	=	100 / 2	200		
MARKS QUAI Physiology including Biophys		IG A PAS	<u>S IN PHYSI(</u>	DLOGY	
50 % in Theory		= 5	(One ap	pers of 50 marks each) plied question of 10 in each paper)	
50 % in Theory+Viva		= 6	0 / 120 (Viva ·	– 20 Marks)	
35% in Internal Assessment		= 4	0 Marks (I.A.	– Theory -20 , Practical – 15; Record 5 marks)	
Note : 35% of Internal Assessment Mark = $35/100*40 = 14$ Marks.					
50 % in Practical		= 2	0 / 40		

MARKS QUALIFYING A PASS IN BIOCHEMISTRY

50 % in Theory	=	50 / 100 (2 papers of 50 marks each) (One applied question of 10 marks in each paper)
50 % in Theory + Viva	=	60 /120 (Viva – 20 Marks)
35% in Internal Assessment	=	40 Marks (I.A. – Theory - 20 Practical -15; Record 5 marks)
Note: 35% of Internal Assessment M	lark = 3	5/100*40 = 14 Marks.
50 % in Practical	=	20 / 40
Grand Total 50% aggregate	=	100 / 200

<u>II M.B.B.S.,</u>

MARKS QUALIFYING A PASS IN PHARMACOLOGY

50 % in Theory	=	40 / 80 (2 papers of 40 marks each) (Containing one question on clinical therapeutics)
50 % in Theory+Viva	=	47.5 / 95 (Viva – 15 Marks)
35% in Internal Assessment	=	30 Marks (I.A. – Theory- 15, Practical -10; Record 5 marks)
Note: 35% of Internal Assessment	Mark = 3	35/100*30 = 10.5 Marks.
50 % in Practical	=	12.5 / 25
Grand Total 50% aggregate	=	75 / 150

MARKS QUALIFYING A PASS IN MICROBIOLOGY

50 % in Theory	=	40 / 80 (2 papers of 40 marks each) (One applied question of 10 marks in each paper)
50 % in Theory+ Viva	=	47.5 / 95 (Viva – 15 Marks)
35% in Internal Assessment	=	30 Marks (I.A. – Theory - 15 Practical - 10; Record 5 marks)
Note: 35% of Internal Assessment Ma	ark = 3	35/100*30 = 10.5 Marks.
50 % in Practical	=	12.5 / 25
Grand Total 50% aggregate	=	75 / 150
MARKS QUALIFYI	NG A F	PASS IN PATHOLOGY
50 % in Theory	=	40 / 80 (2 papers of 40 marks each) (One applied question of 10 marks in each paper)
50 % in Theory +Viva	=	47.5 / 95 (Viva – 15 Marks)
35% in Internal Assessment	=	30 Marks (I.A. – Theory - 15 Practical -10; Record 5 marks)
Note : 35% of Internal Assessment Ma	ark = 3	35/100*30 = 10.5 Marks.
50 % in Practical	=	12.5 / 25
Grand Total 50% aggregate	_	

Grand Total 50% aggregate = 75 / 150

MARKS QUALIFYING A PASS IN FORENSIC MEDICINE

50 % in Theory	=	20 / 40 (One paper)
50 % in Theory+Viva	=	25 / 50 (Viva – 10 Marks)
35% in Internal Assessment	=	2 0 Marks (I.A. – Theory -10 Practical -5; Record 5 marks)
Note: 35% of Internal Assessment Ma	ırk = 3	5/100*20 = 7 Marks.
50 % in Practical	=	15 / 30
Grand Total 50% aggregate	=	50 / 100

III M.B.B.S., (Part I) MARKS QUALIFYING A PASS IN COMMUNITY MEDICINE

50 % in Theory	=	60 / 120 (2 papers of 60 marks each) (includes problem solving, applied aspects of management at primary level including essential drugs, occupational (agro based) diseases, rehabilitation and social aspects of community).
50 % in Theory + Viva	=	65 /130 (Viva – 10 Marks)
35% in Internal Assessment	=	40 Marks (I.A. – Theory - 20 Practical -15; Record 5 marks)
Note : 35% of Internal Assessment	Mark = 3	35/100*40 = 14 Marks.
50 % in Practical	=	15 / 30
Grand Total 50% aggregate	=	100 / 200

MARKS QUALIFYING A PASS IN OTO-RHINO-LARYNGOLOGY

50 % in Theory	=	20 / 40 (One paper) (should contain one question on pre-clinical and para-clinical aspects, of 10 marks)
50 % in Theory + Viva	=	25 /50 (Viva – 10 Marks)
35% in Internal Assessment	=	20 Marks (I.A. – Theory -10 Practical -5; Record 5 marks)
Note: 35% of Internal Assessment Ma	ark = 3	5/100*20 = 7 Marks.
50 % in Practical	=	15 / 30
Grand Total 50% aggregate	=	50 / 100

MARKS QUALIFYING A PASS IN OPHTHALMOLOGY

Grand Total 50% aggregate	=	50 / 100
50 % in Practical	=	15 / 30
Note : 35% of Internal Assessment	Mark $= 3$	5/100*20 = 7 Marks.
35% in Internal Assessment	=	20 Marks (I.A. – Theory -10 Practical -5; Record 5 marks)
50 % in Theory+Viva	=	25 /50 (Viva – 10 Marks)
50 % in Theory	=	20 / 40 (One paper) (should contain one question on pre-clinical and para-clinical aspects, of 10 marks)

III M.B.B.S., (Part II)

MARKS QUALIFYING A PASS IN GENERAL MEDICINE

50 % in Theory (Shall contain	•	60 / 120 (2 papers of 60 Marks each) Paper 1- General Medicine Paper II- General Medicine including Psychiatry, Dermatology and S.T.D.) stion on basic sciences and allied subjects)
50 % in Theory + Viva	=	70 /140 (Viva – 20 Marks)
35% in Internal Assessment	=	60 Marks (I.A. – Theory- 30 Practical - 30 marks)
Note: 35% of Internal Assessment	Mark = 3	5/100*60 = 21 Marks.
50 % in Clinical (Bed side)	=	50 / 100
Grand Total 50% aggregate	=	150 / 300

MARKS QUALIFYING A PASS IN GENERAL SURGERY

50 % in Theory	=	60 / 120 (2 papers of 60 Marks each) Paper-1-General Surgery (Section 1) Orthopaedics (Section 2) Paper II-General Surgery including Anaesthesiology, Dental diseases and Radiology. (shall contain one question on basic sciences and allied subjects)
<50 % in Theory + Viva	=	70 /140 (Viva – 20 Marks)
35% in Internal Assessment	=	60 Marks (I.A. – Theory - 30 Practical -30 marks)
Note: 35% of Internal Assessment M	ark =	35/100*60 = 21 Marks.
50 % in Clinical (Bed side)	=	50 / 100
Grand Total 50% aggregate	e =	150 / 300

Paper 1 of Surgery shall have one section in Orthopaedics. The questions on Orthopaedic Surgery be set and assessed by examiners who are teachers in the Orthopaedic surgery.

MARKS QUALIFYING A PASS IN OBSTETRICS & GYNAECOLOGY

50 % in Theory 50 % in Theory+Viva	=	40 / 80 (2 papers of 40 Marks each) Paper I- Obstetrics including social obstetrics. Paper II – Gynaecology, Family Welfare and Demography (Shall contain one question on basic sciences and allied subjects) 55 /110 (Viva – 30 Marks)
35% in Internal Assessment	=	40 Marks (I.A. – Theory – 20 Practical - 15 Record 5 marks)
Note: 35% of Internal Assessment	Mark $= 3$	85/100*40 = 14 Marks.
50 % in Clinical (Bed side)	=	25 / 50
Grand Total 50% aggregate	=	100 / 200

MARKS QUALIFYING A PASS IN PAEDIATRICS (INCLUDING NEONATOLOGY)

Grand Total 50% aggregate	=	50 / 100
50 % in Practical	=	15 / 30
Note: 35% of Internal Assessment Mar	k = 35/	100*20 = 7 Marks.
35% in Internal Assessment	=	20 Marks (I.A. – Theory 10 Practical – 5; Record 5 marks)
50 % in Theory + Viva	=	on basic sciences and allied subjects) 25 /50 (Viva – 10 Marks)
50 % in Theory	=	20 / 40 (One paper) (should contain one question

110.0. APPOINTMENT OF EXAMINERS :

- 110.1 No person shall be appointed as an examiner in any of the subjects of the Professional examination leading to and including the final Professional examinations for the award of the MBBS degree unless he has taken at least five years previously, a doctorate degree of a recognized university or an equivalent qualification in the particular subject as per recommendation of the Council on teachers' eligibility qualifications and has had at least five years of total teaching experience in the subject concerned in a college affiliated to a recognized university at a faculty position.
- 119.2 There shall be at least four examiners for 100 students, out of whom not less than 50% must be external examiners. Of the four examiners, the senior most internal examiner will act as the Chairman and coordinator of the whole examination program so that uniformity in the matter of assessment of candidates is maintained. Where candidates appearing are more than 100, one additional examiner, for every additional 50 or part thereof candidates appearing, be appointed.
- 110.3 Non medical scientists engaged in the teaching of medical students as whole time teachers, may be appointed examiners in their concerned subjects provided they possess requisite doctorate qualifications and five year teaching experience of medical students after obtaining their postgraduate qualifications. Provided further that the 50% of the examiners (Internal & External) are from the medical qualification stream
- 110.4 External examiners shall not be from the same university and preferably be from outside the state.
- 110.5 The internal examiner in a subject shall not accept external examiner ship for a college from which external examiner is appointed in his subject.
- 110.6 External examiners shall rotate at an interval of 2 years.
- 110.7 There shall be a Chairman of the Board of paper-setters who shall be an internal examiner and shall moderate the questions.

111.0 COMPULSORY ROTATORY RESIDENTIAL INTERNSHIP (CRRI)

Every student who passed the 4 **1/2** years M.B.B.S. program shall undergo Compulsory Rotating Resident Internship for a period of one Year MBBS degree shall be awarded, only after the completion of CRRI.

111.1 GENERAL OBJECTIVE

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

111.2 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 Program 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.

111.3 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:-

Community Medicine	2 months
Medicine including 15 days of Psychiatry	2 months
Surgery including 15 days Anaesthesia	2 months
Obst./Gynae. including Family	
Welfare Planning	2 months
Paediatrics	1 month
Orthopaedics including PMR	1 month
ENT	15 days
Ophthalmology	15 days

Casualty15 daysElective Posting (1x15 days)15 daysSubjects for Elective posting will be as follows:15 daysi) Dermatology and Sexually Transmitted Diseases.ii) Tuberculosis and Respiratory Diseases.iii) Radio-Diagnosisiv) Forensic Medicinev) Blood Bankvi) PsychiatryNote: Structure internship with college assessment at the end of the Internship.

111.4 OTHER DETAILS

- i. All parts of the internship shall be done as far as possible in institutions of India. In case of any difficulties, the matter may be referred to the Medical Council of India to be considered on individual merit.
- ii) Every candidate will be required after passing the final MBBS examination to undergo compulsory rotational internship to the satisfaction of the College authorities and University concerned 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 (MBBS) and full registration.
- iii) The University shall issue a provisional MBBS pass certificate on passing the final examination.
- iv) The State Medical Council will grant provisional registration to the candidate on production of the provisional MBBS pass certificate. The provisional registration will be for a period of one year. In the event of the shortage or unsatisfactory work, the period of provisional registration and the compulsory rotating internship may be suitably extended by the appropriate authorities.
- v) The intern shall be entrusted with clinical responsibilities under direct supervision of senior medical officer. They shall not be working independently.
- vi) Interns will not issue a medical certificate or a death certificate or a medico legal document under their signature.
- vii) In recognition of the importance of hands-on experience, full responsibility for patient care and skill acquisition, internship should be increasingly scheduled to utilize clinical facilities available in District Hospital, Taluka Hospital, Community Health Centre and Primary Health Centre, in addition

to Teaching Hospital. A critical element of internship will be the acquisition of specific experiences and skill as listed in major areas:

- i. The internee should commence the internship as per the postings given by the university immediately on the due date without any delay.
- ii. The internee should undergo the internship continuously without any break in each specialty and to avoid piece meal training. The internee should have completed not less than 50 % of the internship continuously as per the postings order by the University 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. 500 /- and condonation fee of Rs. 1000/- 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 specialty in which he/she has not completed and discontinued,
- iii. 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 specialty.
 - d. Not completed the 50 % of postings before the break and the break are 90 days and above.
- viii) 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 certificate of satisfactory completion of training shall be obtained from the relevant administrative authorities which shall be countersigned by the Principal/Dean of College;

- ix) Adjustment to enable a candidate to obtain training in elective clinical subjects may be made.
- x) 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 Dean of the medical college;

- xi) 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 staff, 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 Program at the Community level. One month of primary care training may be in the form of preceptorship with a practicing family physician or voluntary agency or other primary health care provider.
- xii) One year's approved service in the Armed Forces Medical Services, after passing the final MBBS 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.

111.5 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 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.
- ii. Satisfactory completion of each posting shall be determined on the basis of the following.
- 1. Proficiency of knowledge required for each case
- SCORE0-5
- 2. The competency in skills expected to manage each case:
 - a) Competency for performance of self performance,
 - b) of having assisted in procedures,
 - c) of having observed.

SCORE 0-5

- 3. Responsibility, punctuality, work up of case, involvement in treatment, follow-up reports. SCORE 0-5
- 4. Capacity to work in a team (Behaviour with colleagues, nursing staff and relationship with paramedicals). SCORE 0-5
- 5. Initiative, participation in discussions, research aptitude. SCORE 0-5 Poor / Fair / below average / average / above average / excellent 0 1 2 3 4 5

A Score of less than 3 in any of above items will represent unsatisfactory completion of internship.

iii) 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.

iv) Some guidelines in the implementation of the training program are given below.

111.6 INTERNSHIP - DISCIPLINE RELATED

(i) 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 and primary health Centre. The details are as under: -

Community Health Centre/District Hospital/Attachment to General Practitioner:

- (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) recognize medical emergencies, resuscitate and institute initial treatment and refer to suitable institution.
- (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 all National Health Programs (e.g. child survival and safe motherhood-EPI, CDD, ARI, FP, ANC, safe delivery, Tuberculosis, Leprosy and others as recommended by Ministry of Health and Family Welfare:-
 - (a) gain full expertise in immunization against infectious disease;
 - (b) participate in programs 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 Programs;
- (3) Be capable of conducting a survey and employ its findings as a measure towards arriving at a community diagnosis.

- (a) conduct programs on health education,
- (b) gain capabilities to use Audiovisual aids,
- (c) acquire capability of utilization of scientific information for promotion of community health
- (4) Be capable of establishing linkages with other agencies as water supply, food distribution and other environmental/social agencies.
- (5) Acquire quality of being professional with dedication, resourcefulness and leadership.
- (6) Acquire managerial skills, delegation of duties to paramedical staff and other health professionals.
- (7) (I) TALUQA HOSPITAL

Besides clinical skill, in evaluation of patient in the environment and initiation of primary care, an Intern shall: -

- 1. effective 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 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, use of appropriate contraceptives;
 - c) applied nutrition and care of mothers and children;
 - d) immunization;
 - e) participation in school health program.

II) PRIMARY HEALTH CENTRE

1. Initiate or participate in family composite health care (birth to death), Inventory of events;

- 2. Participation in all of the modules on field practice for community health e.g. safe motherhood, nutrition surveillance and rehabilitation, diarrhea disorders etc.
- 3. Acquire competence in diagnosis and management of common ailments e.g. malaria, tuberculosis, enteric fever, congestive heart failure, hepatitis, meningitis acute renal failure etc.;
- 4. Acquire proficiency for Family Welfare Program (ante natal care, normal delivery, contraception care etc.)
- 5. A village attachment of atleast one week to understand issues of community health along with exposure to village health centres, ASHA Sub Centres should be added.

(ii) **GENERAL MEDICINE**

- (I) Interns shall acquire following training during their term.
 - 1. acquire competence for clinical diagnosis based on history physical examination and relevant laboratory investigation and institute appropriate line of management;
 - 2. this would include diseases common in tropics (parasitic, bacterial or viral infections, nutritional disorders, including dehydration and electrolyte disturbances) and system illnesses
- (II) The intern shall have assisted as a care team in intensive care of cardiac, respirator, hepatic, neurological and metabolic emergencies.
- (III) 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 and
 - (e) Cerebro Spinal Fluid (CSF) for smear.

(a) Urethral catheterisation; Proctoscopy; Ophthalmoscopy/Otoscopy; Indirect laryngoscopy;

(b) therapeutic procedures; Insertion of Ryles Tube; Pleural, ascetic tap, Cerebro Spinal Fluid (CSF) tap, installing or air way tube, Oxygen administration etc.

(IV) 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.

(V) (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.

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

(iii) **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 sick child 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: blood (including from femoral vein and umbilical cord), obscess, cerebrospinal fluid, urine, pleura and peritoneum and common tissue biopsy techniques;
 - (b) techniques related to patient care: immunization, perfusion techniques, feeding procedures, tuberculin testing & breast feeding counselling;
 - (c) use of equipment: vital monitoring, temperature monitoring, resuscitation at birth and care of children receiving intensive care;
- (3) screening of newborn babies and those with objective risk factors for any anomalies and steps for prevention 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 organise 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 Paediatrics dosage and oral rehydration therapy.
- (7) Participate actively in public health programme oriented towards children in the community

(iv) GENERAL SURGERY

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

- (A) Diagnose with reasonable accuracy all surgical illnesses including emergencies
- (B) (a) resuscitate a critically injured patient and a severe burns patient;(b) control surface bleeding and manage open wound;
- (C) (a) monitor patients of head, spine, chest abdominal and pelvic injury;(b) institute first-line management of acute abdomen;
- (D) (a) perform venesection;
 - (b) perform tracheostomy and endotracheal intubation;
 - (c) catheterise patients with acute retention or perform trocar cystostomy,
 - (d) drain superficial abscesses,
 - (e) suturing of wound,
 - (f) perform circumcision,
 - (g) biopsy of surface tumours,
 - (h) Perform vasectomy

(v) CASUALTY

The intern after training in Casualty must be able to:

- (1) identify acute emergencies in various disciplines of medical practice;
- (2) manage acute anaphylatic shock;
- (3) manage peripheral-vascular failure and shock;
- (4) manage acute pulmonary oedema and Left Ventricular failure (LVF);
- (5) undertake emergency management of drowning poisonings and seizures;
- (6) undertake emergency management of bronchial asthma and status asthematicus;
- (7) undertake emergency management of hyperpyrexia;
- (8) undertake emergency management of comatose patients regarding airways positioning, prevention of aspiration and injuries;
- (9) assess and administer emergency management of burns;
- (10) assess and do emergency management of various trauma victims;
- (11) identify medicolegal cases and learn filling up forms as well as complete other medicolegal formalities in cases of injury, poisoning, sexual offenses, intoxication and other unnatural conditions.

(vi) OBSTETRICS AND GYNAECOLOGY :

Technical skills that interns are expected to learn:

- (1) diagnosis of early pregnancy and provision of ante-natal care;
- (2) diagnosis of pathology of pregnancy related to
 - (a) abortions;
 - (b) ectopic pregnancy;
 - (c) tumours complicating pregnancy;
 - (d) acute abdomen in early pregnancy;
 - (e) hyperemesis gravidarum;
- (3) detection of high risk pregnancy cases and suitable advise e.g. PIH, hydramanios, antepartum haemorrhage, multiple pregnancies, abnormal presentations and intra-uterine growth retardation;
- (4) antenatal pelvic assessment and detection of cephalo pelvic disproportion;
- (5) induction of labour and amniotomy under supervision;
- (6) management of normal labour, detection of abnormalities, post-partum hemorrhage and repair of perennial tears;
- (7) assist in forceps delivery;

- (8) assist in caesarean section and postoperative care thereof;
- (9) detection and management of abnormalities of lactation;
- (10) 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 Gynecology and obstetrics.
- (13) To perform the following procedures:-
 - (a) dilation 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 catheterisation;
 - (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 follow-up postoperative cases of obstetrics and gynaecology such as:
 - (a) Colposcopy;
 - (b) Second trimester Medical Termination of Pregnancy (MTP) procedures e.g. Emcredyl Prostaglandin instillations;
- (16) To evaluate and prescribe oral contraceptive.

(vii) OTO RHINO LARYNGOLOGY (ENT):

- (1) Interns shall acquire ability for a comprehensive diagnosis of common Ear, Nose and Throat (ENT) diseases including the emergencies and malignant neoplasma 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 (ENT) problems;

- (3) he/she shall be able to carry out minor surgical procedures such as:
 - (a) ear syringing antrum puncture and packing of the nose for epistaxis,
 - (b) nasal douching and packing of the external canal,
 - (c) Remove the foreign bodies from the nose and ear
 - (d) Observed or assisted in various endoscopic procedures and tracheostomy; an item shall have participated as a team member in the community diagnosis e.g. Chronic Suppurative Otitis Media (CSOM) and beware of national program on prevention of deafness he/she shall possess knowledge of various ENT rehabilitative program.

(viii) OPHTHALMOLOGY

An intern shall acquire following skills: -

- he/she shall be able to diagnose and manage common ophthalmological conditions such as:-Trauma, Acute conjunctivitis, allergic conjunctivitis, xerosis, entropion, corneal ulcer, iridocyclitis, myopia, hypermetropia, catarct, glaucoma, ocular injury and sudden loss of vision;
- (2) he shall be able to carry out assessment of refractive errors and advise its correction;
- (3) he shall be able to diagnose ocular changes in common systemic disorders;
- (4) he/she shall be able to perform investigative procedures such as:-Tonometry, syringing, direct ophthalmoscopy, subjective refraction and fluorescein staining of cornea.
- (5) he/she shall have carried out or assisted the following procedures:
 - (1) Subconjunctival injection;
 - (2) Ocular bandaging;
 - (3) Removal of concretions;
 - (4) Epilation and electroysis;
 - (5) Corneal foreign body removal;
 - (6) Cauterization of corneal ulcers;
 - (7) Chalazion removal;
 - (8) Entropion correction;
 - (9) Suturing conjunctival tears;

- (10) Lids repair
- (10) Glaucoma surgery (assisted);
- (11) Enucleation of eye in cadaver;
- (6) he/she shall have full knowledge on available methods for rehabilitation of the blind.

(ix) ORTHOPAEDICS

GOAL

The aim of teaching the undergraduate student in Orthopaedics and Rehabilitation is to impart such knowledge and shills that may enable him to diagnose and treat common ailments. He shall have 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).

(A) **THERAPEUTIC-** 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 Colle's fracture;
- (c) Manual reduction of common dislocations inter phalangeal, metacarpophalangeal, elbow and shoulder dislocations;
- (d) Plaster cast application for undisplaced fractures of arm, fore arm, leg and ankle;
- (e) Emergency care of a multiple injury patient;
- (f) Precautions about transport and bed care of spinal cord injury patients.

(B) Skill that an intern should be able to perform under supervision:

- (1) Advise about prognosis of poliomyelitis, cerebral palsy, CTEV and CDH;
- (2) Advise about rehabilitation of amputees and mutilating traumatic and leprosy deformities of hand;
- (C) An intern must have observed or preferably assisted at the following operations:

- (1) drainage for acute osteomyelitis;
- (2) sequestrectomy in chronic osteomyelitis;
- (3) application of external fixation;
- (4) internal fixation of fractures of long bones.

(x) DERMATOLOGY AND SEXUALLY TRANSMITTED DISEASES

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 scraping for fungus, preparation of slit smears and staining for AFB for leprosy patient and for STD cases;
- (3) Take a skin biopsy for diagnostic purpose;
- (4) Manage common diseases recognizing the need for referral for specialized care in case of inappropriateness of therapeutic response.

(xi) **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.

(xii) TUBERCULOSIS AND RESPIRATORY DISEASES:

An intern after training must be able to: -

- (1) Conducting 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 etiological organism like AFB, interpretation of chest X-rays and respiratory function tests;

- (3) Interpret and manage various blood gases and pH abnormalities in various respiratory diseases;
- (4) Manage common diseases recognizing need for referral for specialized care in case of inappropriateness of therapeutic response;
- (5) Perform common procedures like laryngoscopy, pleural aspiration, respiratory physiotherapy, laryngeal intubation and pneumo-thoracic drainage aspiration.

(xiii) ANAESTHESIA :

After the internship in the department of Anesthesiology an intern shall acquire knowledge, skill and attitude to:

- (1) perform pre-anaesthetic check up and prescribe pre-anaesthetic medications;
- (2) perform venepuncture and set up intravenous drip;
- (3) perform laryngoscopy and endotracheal intubation;
- (4) perform lumbar puncture, spinal anaesthesia and simple nerve blocks;
- (5) conduct simple general anaesthetic procedures under supervision;
- (6) monitor patients during anaesthesia and post operative period;
- (7) recognise and manage problems associated with emergency anaesthesia;
- (8) maintain anaesthetic records;
- (9) recognise and treat complication in post operative period;
- (10) perform cardio-pulmonary brain resuscitation (C.P.B.R.) correctly, including recognition of cardiac arrest.

(xiv) RADIO-DIAGNOSIS:

An intern after training must be able to identify and diagnose:

- (1) all aspects of 'Emergency Room' Radiology like -
 - (a) all acute abdominal conditions;
 - (b) all acute traumatic conditions with emphasis on head injuries;
 - (c) differentiation between Medical and surgical radiological emergencies;
- (2) Basic hazards and precautions in Radio-diagnostic practices.

(xv) PHYSICAL MEDICINE AND REHABILITATION:

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

- (1) competence for clinical diagnosis based on details history an assessment of common disabling conditions like poliomyelitis, cerebral palsy, hemiplegia, 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 disabled;
- (7) ability to demonstrate simple exercise therapy in common conditions like prevention of deformity in polio, stump exercise in an amputee etc.;

(xvi) 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 problem 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.

112.0. TRANSFER OF CRRI:

Transfer of CRRI is generally not permitted. However, it may be considered for a maximum of 5% of students on special grounds.

APPENDIX - A

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 thorough 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 Diagnostic Tests

- (a) To do and interpret Haemoglobin(HB), Total Count (TC), Erythrocytic Sedimentation Rate (ESR), Blood smear for parasites, Urine examination /albumin /sugar /ketones /microscopic.:
- (b) Stool exam for ova and cysts;
- (c) Gram, staining and Siehl-Nielsen staining for AFB;
- (d) To do skin smear for lepra bacilli
- (e) To do and examine a wet film vaginal smear for Trichomonas
- (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 leavage.
- (d) To administer oxygen-by masic/eatheter
- (e) To administer enema
- (f) To pass a ruinary catheter- male and female
- (g) To insert flatus tube
- (h) To do pleural tap, Ascitic tap & lumbar puncture
- (i) Insert intercostal tube to relieve tension pneumothorax
- (j) To control external Haemorrhage.

IV. Anaesthetic Procedure

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

V. Surgical Procedures

- (a) To apply splints, bandages and Plaster of Paris (POP) slabs;
- (b) To do incision and drainage of abscesses;
- (c) To perform the management and suturing of superficial wounds;
- (d) To carry on minor surgical procedures, e.g. excision of small cysts and nodules, circumcision, reduction of paraphimosis, debridement of wounds etc.
- (e) To perform vasectomy;
- (f) To manage anal fissures and give injection for piles.

VI. Mechanical Procedures

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

VII. Paediatrics

- (a) To assess new borns 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 recognize development retardation;
- (e) To assess dehydration and prepare and administer Oral Rehydration Therapy (ORT)
- (f) To recognize ARI clinically;

VIII. ENT Procedures:

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

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

a) 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. Magangement 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 and institute control measures for epidemics including its proper data collecting and reporting.

XII. Forensic Medicine Including Toxicology

- (a) To be able to carry on proper medicolegal 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 material for medico legal examination;
- (d) To be able to identify important post-mortem findings in common un-natural deaths.

XIII. Management of Emergency

- (a) To manage acute anaphylactic shock;
- (b) To manage peripheral vascular failure and shock;
- (c) To manage acute pulmonary oedema and LVF;
- (d) Emergency management of drowning, poisoning and seizures
- (e) Emergency management of bronchial asthma and 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

APPENDIX - B

PRESCRIBED TEACHING HOURS AND TIME TABLES

I) Following minimum teaching hours are prescribed in various disciplines:

A. **PRE-CLINICAL SUBJECTS :** (Phase-1-First and Second Semester)

Anatomy	650 Hrs.
Physiology	480 Hrs.
Biochemistry	240 Hrs.
Community Medicine	60 Hrs.

B. PARA-CLINICAL SUBJECTS: (Phase-II-5th to 7th Semester)

Pathology	300 Hrs.
Pharmacology	300 Hrs.
Microbiology	250 Hrs.
Forensic Medicine	100 Hrs.

Community Medicine 200 Hrs. (including 8 weeks postings of 3 hrs each)

Teaching of Para-clinical subjects shall be 4 hrs per day in 3rd Semester and 3 hrs per day in 4th and 5th Semesters (See attached Time Table)

C. CLINICAL SUBJECTS (Phase II & III)

A. THEORY CLASSES:

Didactic lectures, demonstrations and seminars etc. in addition to clinical postings as under. The Clinical lectures should be held from 3rd semester onwards. Lectures in the 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
Ophthalmology :	100 Hours
E.N.T.	70 Hours
Radiology :	20 Hours
Dentistry :	10 Hours
Obstetrics & Gynaecology : Inclusive of Family Welfare	300 Hours

This period of training is minimum suggested. Adjustments where required depending on availability of time be made.

This period of training does not include university examination period.

Extra time available be devoted to other Sub-specialities.

During semesters 3 to 9 following clinical postings for each student, of 3 hrs. duration is suggested for various departments after introductory course in Clinical Methods in Medicine and surgery of 2 weeks each for the whole class.

B. CLINICAL POSTINGS:

The Clinical posting shall be for 3 hours daily during the forenoon. 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 3-1/2 year 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

Total Subjects	3 rd Sem. Weeks	4 th Sem. weeks	5 th Sem. weeks	6 th Sem. weeks	7 th Sem. weeks	8 th Sem. weeks	9 th Sem. weeks	Total
General*** Medicine	6	-	4	-	4	6	6	26
Paediatrics	-	2	-	2	2	4	-	10
TB & Chest Diseases	-	2	-	-	-	-	-	02
Skin & STD	-	2	-	2	-	2	-	06
Psychiatry	-	-	2	-	-	-	-	02
Radiology*	-	-	-	-	2	-	-	02
General Surgery****	6	-	4	-	4	6	6	26
Orthopaedics**	-	-	4	4	-	-	2	10
Ophthalmology	-	4	-	4	-	-	2	10
Ear, Nose & Throat	-	4	-	4	-	-	-	08

TIME TABLE

Obst. & Gynae Including Family Welfare Planning*****	2	4	4	-	4	4	6	24
Community Medicine	4	4	-	4	-	-	-	12
Casualty	-	-	-	2	-	-	-	02
Dentistry	-	-	-	-	2	-	-	02
Total in weeks	18	22	18	22	18	22	22	142

- Clinical methods in Medicine and Surgery for whole class will be for 2 weeks each respectively at the start of 3^{rd} semester

* This posting includes training in Radiodiagnosis and Radiotherapy where existant. ** This posting includes exposure to Rehabilitation and Physiotherapy. *** This posting includes exposure to laboratory medicine and infectious diseases. **** This posting includes exposure to dressing and Anesthesia. **** This includes maternity training and Family medicine and the 3rd semester posting shall be in Family Welfare Planning.