

**THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY,  
CHENNAI – 600 032.**

**M.B.B.S. DEGREE COURSE  
REVISED REGULATIONS - 2016**

**THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY  
CHENNAI**

**REVISED REGULATIONS FOR THE M.B.B.S DEGREE COURSE- 2016**

In exercise of the powers conferred by Section 44 of the Tamil Nadu Dr. M.G.R. Medical University, Chennai, Act, 1987 (Tamil Nadu Act 37 of 1987), the Standing Academic Board of the Tamil Nadu Dr. M.G.R. Medical University hereby makes the following regulations:

**SHORT TITLE AND COMMENCEMENT:**

These regulations shall be called "THE REVISED REGULATIONS FOR THE M.B.B.S. DEGREE COURSE- 2016 OF THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY, CHENNAI".

These regulations are applicable to the students who are admitted to the course from the academic year 2016-17 onwards.

The regulations framed are subject to modification by the Standing Academic Board from time to time.

**1 GENERAL CONSIDERATIONS AND TEACHING APPROACH**

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 & rehabilitative aspect of medicine.

1.2 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. Training should be able to meet internationally acceptable standards.

1.3 To undertake the responsibilities of 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 endeavour to have acquired basic training in different aspects of medical care.

1.4 The importance of the community aspects of health care and of rural health care services is to be recognized. This aspect of education & 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 education & training. This has to be further emphasized and 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 efficiently under such settings.

1.5 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.

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

1.7 The medical graduate of modern scientific medicine shall endeavour to become capable of functioning independently in both urban or rural environment. He/she shall endeavour to give emphasis on fundamental aspects of the subjects taught and on common problems of health and disease avoiding unnecessary details of specialization.

1.8 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 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.

1.9 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 them.

1.10 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 the rest of the world should form a part of this process.

1.11 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 will 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 they live. While the curriculum objectives often refer to areas of knowledge or science, they are best taught in a setting of clinical relevance and hands on experience for students who assimilate and make this knowledge a part of their own working skills.

1.12 The graduate medical education in clinical subjects should be based primarily on out-patient teaching, 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.

1.13 Clinics should be organised 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 improve his skill and competence in handling of the patients.

1.14 Proper records of the work should be maintained which will form the basis for the students' internal assessment and should be available to the inspectors at the time of inspection of the college by the Medical Council of India.

1.15 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 preclinical disciplines in both understanding and resolution of the problem. Every attempt be made to de-emphasize compartmentalisation of disciplines so as to achieve both horizontal and vertical integration in different phases.

1.16 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 leader when he begins his independent career. A discussion group should not have more than 20 students.

1.17 Faculty member should aware 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.

1.18 To derive maximum advantage out of this revised curriculum, the vacation period to students in one calendar year should not exceed one month, during the 4 1/2 years Bachelor of Medicine and Bachelor of Surgery (MBBS) Course.

1.19 In order to implement the revised curriculum in toto, respective authorities must ensure that adequate financial and technical inputs are provided.

1.20 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.

1.21 All medical institutions should have curriculum committee which would plan curricula and instructional method which will be regularly updated.

1.22 Integration of ICT in learning process will be implemented.

## **2. ADMISSION TO THE MEDICAL COURSE - ELIGIBILITY CRITERIA :**

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

2.1 He/she shall complete the age of 17 years on or before 31<sup>st</sup> December of the year of admission to the MBBS Course.

### **2.2 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/Bio-technology 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 pre-professional/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.

Or

(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.

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 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%. In respect of candidates with locomotory disability of lower limbs in terms of Clause 4(3) above, the minimum marks in qualifying examination in Physics, Chemistry and Biology/Bio-technology taken together in qualifying examination shall be 45% instead of 50%.

2.3 There shall be a uniform National Eligibility-cum-Entrance Test for admission to the Under-graduate courses in each academic year conducted in the manner, as prescribed by the National Board of Examination or any other authority appointed by the Central Government on their behalf. The overall superintendence, direction and control of the National Eligibility-cum-Entrance Test shall vest with the Central Council.



2.4 Provided further that this entire exercise of admission shall be completed by each medical college/ institution as per the statutory time schedule and in no case any admission will be made in the MBBS course after 31<sup>st</sup> of August.

### **3. ELIGIBILITY CERTIFICATE:**

Candidates who have passed any qualifying examination other than the Higher Secondary course examination conducted by the Government of Tamil Nadu shall obtain an eligibility certificate from the University by remitting the prescribed fee along with the application form before seeking admission to any one of the affiliated Medical Institutions. The application form and the details for obtaining Eligibility Certificate may be downloaded from the University website: [www.tnmgrmu.ac.in](http://www.tnmgrmu.ac.in).

### **4. REGISTRATION OF CANDIDATES:**

A candidate admitted in M.B.B.S. degree course in any of the affiliated Institution of this University shall register his / her name by submitting the prescribed application form for Registration duly filled along with the prescribed fee and a declaration in the format to the Controller of Examination of this University through the Head of the affiliated Institutions within 30 days from the cut-off date prescribed for M.B.B.S. course for admission.

The University shall not register any candidate admitted beyond the cut-off date of 31<sup>st</sup> of August of respective academic year.

### **5. TRAINING PERIOD AND TIME DISTRIBUTION:**

5.1. Training Period and Time Distribution (1) Every student shall undergo a period of certified study extending over 4 ½ 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.

5.2. The period of 4 ½ 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).

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 guidelines of Medical Council of India.

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.

5.3. 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).

5.4 After passing pre-clinical subjects, 1 ½ 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.

5.5 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 live experiences, problem oriented approach, case studies and community health care activities.

5.6 The admission process in such a way that teaching in first semester starts by 1st of August each year. For this purpose, they shall follow the time schedule as per guidelines of Medical Council of India. There shall be no admission of students in

respect of any academic session beyond 31st August under any circumstances. The University shall not register any student admitted beyond the said date. Any student identified as having obtained admission after the last date for closure of admission be discharged from the course of study.

5.7 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 irrespective of the examination of the main batch.

## **6. CURRICULUM AND SYLLABUS**

The curriculum and the syllabi for the course shall be as specified in these regulations.

## **7. COMMENCEMENT OF THE COURSE:**

From 1<sup>st</sup> August of the Academic year.

## **8. MEDIUM OF INSTRUCTION:**

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

## **9. UNIVERSITY EXAMINATIONS:**

### **9.1 COMMENCEMENT OF EXAMINATION:**

- a) August 1<sup>st</sup>/February 1<sup>st</sup>.
- b) Theory examinations not to 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.

## 9.2 ESSENTIALITIES FOR QUALIFYING TO APPEAR IN PROFESSIONAL EXAMINATIONS:

### 9.2.1 ATTENDANCE

- A) No candidate shall be permitted to anyone of the parts of MBBS examinations unless he/she has attended the course in the subject for the prescribed period in an affiliated institution recognised by this University and produces the necessary attendance and progress from the Head of the Institution.
- B) 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, Primary) posting and bed side clinics etc.
- C) Attendance earned by the student should be displayed on the Notice Board of the College at the end of every 3 months and a copy of the same should be sent to the University and parents of the student concerned.

### 9.2.2 INTERNAL ASSESSMENT :

- (i) It shall be based on day to day assessment ( see note), evaluation of student assignment, preparation for seminar, clinical case presentation etc.:
- (ii) Regular periodical examinations shall be conducted throughout the course.
- (iii) Day to day records should be given importance during internal assessment :
- (iv) Weightage for the internal assessment shall be 20% of the total marks in each subject :

- (v) Student must secure atleast 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.”

Note:

Internal assessment shall relate to different ways in which students participation in learning process during semesters is evaluated.

Some of the examples are as follows:

- (i) Preparation of subject for students seminar.
- (ii) Preparation of a clinical case for discussion.
- (iii) Clinical case study/problem solving exercise.
- (iv) Participation in Project for health care in the community ( planning stage to evaluation). Proficiency in carrying out a practical or a skill in small research project.
- (v) Multiple choice questions (MCQ) test after completion of a system/teaching.
- (vi) Each item tested shall be objectively assessed and recorded. Some of the items can be assigned as Home work/Vacation work.

9.2.3 Practical/clinical exercises will be conducted in the laboratories or hospital wards. The objective will be to assess proficiency in skills, conduct of experiment, interpretation of data and logical conclusion.

9.2.4 Viva/oral includes evaluation of handling and management approach of emergencies. Candidate's interpretation skill of common investigative data, x-rays, identification of specimens, ECG, etc. is also to be evaluated.

9.2.5 The examinations are to be designed with a view to ascertain whether the candidate has acquired the necessary knowledge, minimum skills along with clear concepts of the fundamentals which are necessary for him to carry out his professional day to day work competently.

9.2.6 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. University Examinations shall be held as under:-

First Professional:-

In the second Semester of Phase 1 training, in the subjects of Anatomy, Physiology and Bio-Chemistry.

Second Professional:-

In the Fifth Semester of Phase II training, in the subjects of Pathology, Microbiology, Pharmacology and Forensic Medicine.

Third Professional:-

Part 1- in the Seventh Semester of Phase III, in the subjects of Ophthalmology, Otorhynolaryngology and Community Medicine.

Third Professional :-

Part II - (Final Professional) – At the end of Phase III training in the subjects of Medicine, Surgery, Obstetrics & Gynecology and Pediatrics.

## 8. Phase Distribution and Timing of Examinations:-

6 MONTHS	6 MONTHS	6 MONTHS	
1	2		Ist professional examination (during second semester)
3	4	5	IIInd professional examination (during fifth semester)
6	7		IIIrd professional Part I (during 7th semester)
8	9		IIIrd professional Part II (Final Professional).

Note:

Passing in Ist Professional is compulsory before proceeding to Phase II training.

A student who fails in the IIInd professional examination, should not be allowed to appear IIIrd Professional Part I examination unless he passes all subjects of IIInd Professional examination.

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.

During third to ninth semesters, clinical postings of three hours duration daily as specified in the Table below is suggested for various departments, after Introductory Course in Clinical Methods in Medicine & Surgery of two weeks each for the whole class.



TABLE

Total Subject:	3 <sup>rd</sup> Semester (Wks)	4 <sup>th</sup> Semester (Wks)	5 <sup>th</sup> Semester (Wks)	6 <sup>th</sup> Semester (Wks)	7 <sup>th</sup> Semester (Wks)	8 <sup>th</sup> Semester (Wks)	9 <sup>th</sup> Semester (Wks)	Total (Wks)
General***								
Medicine	6	-	4	-	4	6	6	26
Paediatrics	-	2	-	2	2	4	-	10
Tuberculosis And 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 And Throat	-	4	-	4	-	-	-	08
Obstetrics and Gynaecology 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



## **10. RE-ADMISSION AFTER BREAK OF STUDY:**

As per the procedure laid down in a common Regulation for the Under-Graduate courses of this University.

## **11. MIGRATION:**

11.1 Migration of students from one medical college to another medical college may be granted on any genuine ground subject to the availability of vacancy in the college where migration is sought and fulfilling the other requirements laid down in the Regulations. Migration would be restricted to 5% of the sanctioned intake of the college during the year. No migration will be permitted on any ground from one medical college to another located within the same city.

11.2 Migration of students from one College to another is permissible only if both the colleges are recognised by the Central Government under section 11(2) of the Indian Medical Council Act, 1956 and further subject to the condition that it shall not result in increase in the sanctioned intake capacity for the academic year concerned in respect of the receiving medical college.

11.3 The applicant candidate shall be eligible to apply for migration only after qualifying in the first professional MBBS examination. Migration during clinical course of study shall not be allowed on any ground.

11.4 For the purpose of migration an applicant candidate shall first obtain "No Objection Certificate" from the college where he is studying for the present and the university to which that college is affiliated and also from the college to which the migration is sought and the university to which that college is affiliated. He/She shall submit his application for migration within a period of 1 month of passing (Declaration of result of the 1<sup>st</sup> Professional MBBS examination) alongwith the above

cited four “No Objection Certificates” to: (a) the Director of Medical Education of the State, if migration is sought from one college to another within the same State

(or )

(b) the Medical Council of India, if the migration is sought from one college to another located outside the State

11.5 A student who has joined another college on migration shall be eligible to appear in the IInd professional MBBS examination only after attaining the minimum attendance in that college in the subjects, lectures, seminars etc. required for appearing in the examination prescribed under Regulation 12(1)

## 12. CUT-OFF DATES FOR ADMISSION :

The candidates admitted upto 31<sup>st</sup> August shall be registered to take up their First year examination during August of the next year and the next examination.

All kinds of admissions shall be completed on or before 31<sup>st</sup> August of the academic year. There shall not be any admissions after 31<sup>st</sup> August even if seats are vacant.

## **13, INTERNSHIP**

### 13.1 General

(1) In order to make trained work force available, it may be considered as a phase of training wherein the graduate is expected to conduct actual practice under the supervision of a trained doctor. The learning methods and modalities have to be done during the MBBS course itself with larger number of hands on session, practice on simulators including zoes models.

### (2) SPECIFICE OBJECTIVES

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

i. diagnose clinical common disease conditions encountered in practice and make timely decision for referral to higher level;

ii. use discreetly the essential drugs, infusions, blood or its substitutes and laboratory services.

iii. Manage all type of emergencies-medical, surgical obstetric, neonatal and paediatric, by rendering first level care;

iv. Demonstrate skills in monitoring of the National Health Programme 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 organised to deliver the health and family welfare service in existing socio-economic, political and cultural environment;

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

(3) 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 skill 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 intern experience to maximize intern's opportunities to practice skills in patient care in rough approximation of the time allocation suggested.

#### COMPULSORY

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
Casualty	15 days
Elective Posting (1x15 days)	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.

#### (5) 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 medicolegal 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:

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;

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

ix) 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;

x) 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,





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.

(7) 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 its declaration that the candidate is eligible for it.

(8) Some guidelines in the implementation of the training programme are given below.

(9) 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: -

(I) 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 bedside 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.

(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 Programmes (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 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 programmes on health education, (b) gain capabilities to use 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, delegation of duties to paramedical staff and other health professionals.

## (II) TALUQA HOSPITAL

Besides clinical skill, in evaluation of patient in 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 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 programme.

### (III) 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 Programmes (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.

(IV) Conduct following diagnostic procedures:

(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.

(V) 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.

(VI) (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.

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

(VIII) 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), abscess, 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 anaphylactic 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, hydramnios, 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, post-partum hemorrhage and repair of perineal 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) earsyringing 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 trachesotomy;

(4) an item 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 ENT rehabilitative programmes.

#### (viii) OPHTHALMOLOGY

An intern shall acquire following skills: -

(1) 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 electrolysis;
- (5) Corneal foreign body removal;
- (6) Cauterization of corneal ulcers;
- (7) Chalazion removal;
- (8) Entropion correction;
- (9) Suturing conjunctival tears;
- (10) Lids repair
- (11) Glaucoma surgery (assisted);
- (12) 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 skills that may enable him to diagnose and treat common ailments. He 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).

(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 Colles's fracture;

(c) Manual reduction of common dislocations – interphalangeal, 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 medicolegal problem in a hospital and general practice;
- (2) to identify and learn medicolegal 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 medicolegal situations
- (6) to learn various medicolegal post-mortem procedures and formalities during its performance by police.

#### (xvii) 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 donors; 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.