

**NATIONAL MEDICAL COMMISSION
UNDERGRADUATE MEDICAL EDUCATION BOARD**

22th April 2021

DRAFT REGULATIONS FOR COMPULSORY ROTATING INTERNSHIP, 2021

No. NMC _____ In exercise of the powers conferred by Section 57 of the National Medical Commission Act, 2019 (30 of 2019), the National Medical Commission hereby makes the following regulations namely:

1. Short title and Commencement- (1) These regulations may be called the Compulsory Rotating Internship Regulations, 2021.

(2) They shall come into force from the date of publication in the Official Gazette.

2. Application- These regulations shall apply to all the medical colleges/institutions/universities conducting undergraduate medical courses (hereinafter referred to as the Medical College).

3. Goal- The goal of the internship programme is to train medical graduates to fulfill their roles as doctors of first contact in the community.

4. Objectives- At the end of the internship period, the medical graduate will possess all competencies required of an Indian Medical Graduate, namely:

(a) Independently provide preventive, promotive, curative and palliative care with compassion.

(b) Function as leader and member of the health care team and health system.

(c) Communicate effectively with patients, families, colleagues and the community.

(d) Be certified in diagnostic and therapeutic skills in different disciplines of medicine taught in the undergraduate programme.

(e) Be a lifelong learner committed to continuous improvement of skills and knowledge.

(f) Be a professional committed to excellence and is ethical, responsive and accountable to patients, community and profession.

5. Internship- Internship is a phase of training wherein a medical graduate will acquire the skills and competencies for practice of medical and health care under supervision so that he/she can be certified for independent medical practice as an Indian Medical Graduate. 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 inculcated during the MBBS course itself with larger number of hands-on-session and practice on simulators.

6. Time Distribution for Internship-

1. Community Medicine (Residential posting) - 2 months
 - (a) These postings should be in Community Health Centers (CHC) / Referral Health Centres.
 - (b) There should be no more than 3 interns in a department or a Center at a given time.
 - (c) There shall be one college at a given time allocating interns to a given Centre.
2. General Medicine including 15 days in Psychiatry- 2 months
3. Pediatrics- 1 month
4. General Surgery including 15days in Anaesthesia- 2 months
5. Obstetrics & Gynaecology including Family Welfare and Planning- 1.5 months
6. Orthopaedics including PM&R - 2 weeks
7. Otorhinolaryngology - 2 weeks
8. Ophthalmology 2 weeks
9. Casualty 2 weeks
10. Lab services - 2 weeks
11. Elective posting(each of 2 weeks) - 1 month

6.A Suggested subjects for Elective postings may be as follows:

- (i) Dermatology, Venereology & Leprosy
- (ii) Tuberculosis & Respiratory Medicine
- (iii) Radio-diagnosis
- (iv) Forensic Medicine and Toxicology
- (v) Blood bank and Transfusion Services
- (vi) Ayurvedic disciplines and Yoga

6.B Other details:

- (i) The core rotations of the internship shall be done only in the college from where the candidate is pursuing his/her graduation.
- (ii) Every candidate shall be required to undergo compulsory Rotating internship to the satisfaction of the College authorities and University concerned after passing the final MBBS

examination 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 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 upon 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 shall be suitably extended by the appropriate authorities.

(v) The intern shall be entrusted with clinical responsibilities under direct supervision of a designated supervising physician. They shall not work independently.

(vi) Interns will not issue medical certificate or death certificate or other medico-legal document under their signature.

(vii) Each medical college must ensure that the intern gets learning experience in primary/secondary and urban/rural centers in order to provide a diverse learning experience and facilitate the implementation of national health programmes/ priorities. These shall include community and outreach activities, collaboration with rural and urban community health centers, participation in government health programmes etc.

(viii) One year 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. The training in Community Medicine should fulfill the norms of the NMC as proposed above.

(ix) 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.

(x) Not more than 5% externship candidates be accommodated in any college/ institution/ hospital.

7.Assessment of Internship:

(i) The intern shall maintain a record of work in a log book, which is to be verified and certified by the medical officer under whom he/she 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 the training.

(ii) Based on the record of work and objective assessment at the end of each posting, the Dean/Principal shall issue cumulative certificate of satisfactory completion of training at the end of internship, following which the University shall award the MBBS degree or declare him eligible for it.

*The Training Programs shall be implemented as per the guidelines elaborated in Appendix-1

APPENDIX-1

GUIDELINES FOR THE IMPLEMENTATION OF THE TRAINING PROGRAMME

1. DISCIPLINE

(i) Community Medicine

1. **Goal:**-The aim of teaching the undergraduate student in Community Medicine is to impart such knowledge and skills that may enable him to diagnose and treat common medical illnesses and recognize the importance of community involvement. He/she shall acquire competence 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: -

2.1 District Hospital /Community Health Centre:

A. An intern must be able to do without assistance:

1. An intern must:

- a) Be able to diagnose common ailments and advise primary care;
- b) Demonstrate knowledge on 'Essential drugs' and their usage;
- c) Recognize medical emergencies, resuscitate and institute initial treatment and refer to a suitable institution/ suggest to the patient an alternative health care facility if he/she wants to know about the same.

2. An intern must be familiar with all National Health Programmes (e.g. RCH, UIP, CDD, ARI, FP, ANC, Tuberculosis, Leprosy and others), as recommended by the Ministry of Health and Family Welfare.

3. An intern must:

- a) Gain full expertise in immunization against infectious disease;
- b) Participate in programmes related to prevention and control of locally prevalent endemic diseases including nutritional disorders;
- c) Learn skills in family welfare planning procedures;

4. An intern must:

- a) Conduct programmes on health education,
- b) Gain capabilities to use Audio visual aids,
- c) Acquire capability of utilization of scientific information for promotion of

community health

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

1. An intern should be capable of establishing linkages with other agencies as water supply, food distribution and other environmental/social agencies.
2. An intern should acquire managerial skills including delegation of duties to and monitoring the activities of paramedical staff and other health care professionals.

2.2 Taluka Hospital/ First Referral Unit/ CHC

A. An intern must be able to do without assistance:

1. An intern shall 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.

B. An intern must be able to do with supervision:

1. An intern shall attend at least one school health programme with the medical officer.

2.3 Primary Health Centre / Urban Health Centre

A. An intern must be able to do without assistance the following:

- a) Participate in family composite health care (birth to death), inventory of events.
- b) Participate in use of the modules on field practice for community health e.g. safe motherhood, nutrition surveillance and rehabilitation, diarrheal disorders etc.
- c) Participate in and maintain documents related to immunization and cold chain.
- d) Acquire competence in diagnosis and management of common ailments e.g. malaria, tuberculosis, enteric fever, congestive heart failure, hepatitis, meningitis acute renal failure etc.

B. An intern must be able to do under supervision the following:

- a) Acquire proficiency in Family Welfare Programmes (antenatal care, normal delivery, contraception etc.).
- b) Undergo village attachment of at least one week duration to understand issues of community health along with exposure to village health centres, ASHA Sub-Centres.
- c) Participate in Infectious Diseases Surveillance and Epidemic Management activities along with the medical officer.

ii. General Medicine

1. Goal:-The aim of teaching the undergraduate student in General Medicine is to impart such knowledge and skills that may enable him to diagnose and treat common medical illnesses. He/she shall acquire competence in clinical diagnosis based on history, physical examination and relevant laboratory investigations and institute appropriate line of management; this would include diseases

common in tropics (parasitic, bacterial or viral infections, nutritional disorders, including dehydration and electrolyte disturbances) and various system illnesses.

2.1 An intern must be able to PERFORM without assistance and interpret the results of the following laboratory investigations:

- a) Blood: (Routine haematology smear and blood groups),
- b) Urine: (Routine chemical and microscopic examination),
- c) Stool: (for ova/cyst and occult blood),
- d) Sputum and throat swab for gram stain or acid-fast stain,
- e) Cerebrospinal Fluid (CSF) for proteins and smear,
- f) Electrocardiogram(ECG),
- g) Glucometer recording of blood sugar,
- h) routine radiographs of chest, abdomen, skull etc.

2.2 An intern must perform independently the following diagnostic procedures:

- (a) Proctoscopy, Ophthalmoscopy/ Otoscopy, Indirect laryngoscopy.
- (b) Therapeutic procedures;
- (c) Urethral catheterization, Insertion of Ryle's Tube, Pleural, Ascitic fluid aspiration,
- (d) Cerebrospinal Fluid (CSF) aspiration, Air way tube installation,
- (e) Oxygen administration etc.

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

- a) **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 under supervision.

(b) Skills that an intern should be able to perform under supervision:

- (i) should be familiar with lifesaving procedures, including use of aspirator, respirator and defibrillator, cardiac monitor, blood gas analyser.
- (ii) should be able to advise about management and prognosis of acute & chronic illnesses like viral fever, gastroenteritis, hepatitis, pneumonias, myocardial infarction and angina, TIA and stroke, seizures, diabetes mellitus, hypertension renal and hepatic failure, thyroid disorders and hematological disorders. He should participate in counseling sessions for patients with non-communicable diseases and tuberculosis, HIV patients etc.
- (iii) should be able to confirm death and demonstrate understanding of World Health Organization cause of death reporting and data quality requirements.

(iv) should be able to demonstrate understanding of the coordination with local and national epidemic management plans.

(v) should be able to demonstrate prescribing skills and demonstrate awareness of pharmaco-vigilance, antibiotics policy, prescription audit and concept of essential medicines list.

Psychiatry

1. Goal:- The aim of posting of an intern in Psychiatry is to impart such knowledge and skills that may enable him/her to diagnose and treat common psychiatric illnesses. He/she shall acquire competence for clinical diagnosis based on history, physical examination and relevant laboratory investigations and institute appropriate line of management. He/she should also be able to recognize the behavioral manifestations of systemic illnesses and differentiate them from psychiatric disorders.

2. Therapeutic-

A. An intern must perform or assist in:

- (i) Diagnose and manage common psychiatric disorders,
- (ii) Identify and manage psychological reactions,
- (iii) Diagnose and manage behavioral disorders in medical and surgical patients.

B. An intern must have observed or preferably assisted at the following operations/procedures:

- (i) ECT administration,
- (ii) Therapeutic counseling and follow-up.

iii. Pediatrics and Adolescence

1. Goal:

The aim of posting of an intern in Pediatrics is to impart such knowledge and skills that may enable him/her to diagnose and treat common childhood illnesses including neonatal disorders. He/she shall acquire competence for clinical diagnosis based on history, physical examination and relevant laboratory investigations and institute appropriate line of management. This would include diseases common in tropics (parasitic, bacterial or viral infections, nutritional disorders, including dehydration and electrolyte disturbances) and various system illnesses.

2.1 An intern must be able to do without assistance:

- (i) An intern shall be able to diagnose and manage common childhood disorders including neonatal disorders and acute emergencies, examining

sick child making a record of information.

2.2. An intern shall perform:

(i) Diagnostic techniques: blood collection (including from femoral vein and umbilical cord), drainage of abscess, collection of cerebrospinal, pleural and peritoneal fluids, suprapubic aspiration of urine.

(ii) Techniques related to patient care: immunization, perfusion techniques, nasogastric tube insertion, feeding procedures, tuberculin testing & breast-feeding counseling.

(iii) Use of equipments: vital monitoring, temperature monitoring, resuscitation at birth and care of children receiving intensive care.

(iv) Institute early management of common childhood disorders with special reference to pediatric dosage and oral rehydration therapy.

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

(i) Screening of newborn babies and those with risk factors for any anomalies and steps for prevention in future; detect congenital abnormalities;

(ii) Recognise growth abnormalities; recognise anomalies of psychomotor development;

(iii) Assess nutritional and dietary status of infants and children and organize prevention, detection and follow-up of deficiency disorders both at individual and at community levels, such as:

- protein-energy malnutrition
- deficiencies of vitamins especially A, B, C and D;
- Iron deficiency

2.4. Skills that an intern should be able to perform under supervision:

(i) An intern should be familiar with life-saving procedures, including use of aspirator, respirator, cardiac monitor, blood gas analyser.

(ii) An intern should be able to advise about management and prognosis of acute & chronic illnesses like viral fever, gastroenteritis, hepatitis, pneumonias, congenital heart diseases, seizures, renal and hepatic diseases, thyroid disorders and hematological disorders. She/he should participate in counseling sessions with parents including HIV counseling.

iv. General Surgery

1. Goal-The aim of posting of an intern in General Surgery is to impart such knowledge and skills that may enable him to diagnose and treat common surgical ailments. He/she shall have ability to diagnose and suspect with reasonable accuracy all acute and chronic surgical illnesses.

2. Therapeutic-

A. An intern must perform or assist in:

- (i) venesection or venous access
- (ii) tracheostomy and endotracheal intubation
- (iii) catheterization of patients with acute retention or trocar cystostomy
- (iv) drainage of superficial abscesses
- (v) basic suturing of wound and wound management (including bandaging)
- (vi) biopsy of surface tumours
- (vii) perform vasectomy

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

- (i) Advise about prognosis of acute and chronic surgical illnesses, head injury, trauma, burns and cancer. Counsel patients regarding the same.
- (ii) Advise about rehabilitation of patients after surgery and assist them for early recovery.
- (iii) Should be able to demonstrate understanding of World Health Organisation cause of death reporting and data quality requirements.
- (iv) Should be able to demonstrate understanding of the use of national and state/ local cause of death statistics.

C. An intern must have observed or preferably assisted at the following operations/procedures:

- (i) Resuscitation of critical patients
- (ii) Basic surgical procedures for major and minor surgical illnesses
- (iv) Wound dressings and application of splints
- (v) Laparoscopic/ Minimally Invasive surgery
- (vi) Lymph node biopsy

v. Anesthesiology

1. Goal:- The aim of posting of an intern in anaesthesia is to impart such knowledge and skills that may enable him to understand principles of anaesthesia and recognize risk and complications of anaesthesia.

At the end of internship, he/she should be able to perform cardio-pulmonary resuscitation correctly, including recognition of cardiac arrest.

2. THERAPEUTIC-

A. An intern must perform or assist in:

- (i) Pre-anaesthetic checkup and prescribe pre-anaesthetic medications,
- (ii) Venepuncture and set up intravenous drip,
- (iii) Laryngoscopy and endotracheal intubation,
- (iv) Lumbar puncture, spinal anaesthesia and simple nerve blocks,
- (v) Simple general anaesthetic procedures under supervision,
- (vi) Monitor patients during anaesthesia and in the post-operative period,
- (vii) Maintain anaesthetic records,
- (viii)** Perform cardio-pulmonary resuscitation correctly, including recognition of cardiac arrest.

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

- (i) Counseling and advise regarding various methods of anaesthesia,
- (ii) Recognise and manage problems associated with emergency anaesthesia,
- (iii) Recognise and treat complications in the post-operative period.

C. An intern must have observed or preferably assisted at the following operations/ procedures

- (i) Anaesthesia for major and minor surgical and other procedures;

vi. Obstetrics and Gynaecology

1. **Goal-**The aim of posting of an intern in Obstetrics & Gynaecology is to impart such knowledge and skills that may enable him/ her to diagnose and manage antenatal and post natal follow up; manage labor and detect intra-partum emergencies; diagnose and treat common gynaecologic ailments.

2. THERAPEUTIC-

A. An intern must perform or assist in:

- (i)** Diagnosis of early pregnancy and provision of ante-natal care; antenatal pelvic assessment and detection of cephalo-pelvic disproportion,
- (ii) Diagnosis of pathology of pregnancy related to:

- abortion
 - ectopic pregnancy
 - tumours complicating pregnancy
 - acute abdomen in early pregnancy
 - hyperemesis gravidarum,
- (iii) Detection of high risk pregnancy cases and give suitable advice e.g. PIH, hydramanios, antepartum haemorrhage, multiple pregnancies, abnormal presentations and intra-uterine growth retardation,
- (iv) Induction of labor and amniotomy under supervision, Management of normal labor, detection of abnormalities, post-partum hemorrhage and repair of perennial tears,
- (v) Assist in forceps delivery,
- (vi) Detection and management of abnormalities of lactation,
- (vii) Evaluation and prescription oral contraceptives with counseling,
- (viii) Per speculum, per vaginum and per rectal examination for detection of common congenital, inflammatory, neoplastic and traumatic conditions of vulva, vagina, uterus and ovaries,
- (ix) Medico-legal examination in Gynecology and Obstetrics.

B. Skills that an intern should be able to perform under supervision:

- (i) Dilatation and curettage and fractional curettage,
- (ii) Endometrial biopsy,
- (iii) Endometrial aspiration,
- (iv) Pap smear collection,
- (v) Intra Uterine Contraceptive Device (IUCD) insertion,
- (vi) Mini-lap-ligation,
- (vii) Urethral catheterization,
- (viii) Suture removal in post-operative cases,
- (ix) Cervical punch biopsy.

C. An intern must have observed or preferably assisted at the following operations/procedures:

- (i) Major abdominal and vaginal surgery cases,
- (ii) Second trimester Medical Termination of Pregnancy (MTP) procedures e.g. Emcredyl Prostaglandin instillations, Caesarean section.

vii. Orthopaedics

1. Goal:- The aim of posting of an intern in Orthopaedics and Physical Medicine and Rehabilitation is to impart such knowledge and skills that may enable him to diagnose and treat common ailments. He/she shall have ability to diagnose and suspect presence of fracture, dislocation, actual osteomyelitis, acute poliomyelitis and common congenital deformities such as congenital talipes equinovarus (CTEV) and dislocation of hip (CDH).

2. THERAPEUTIC-

A. An intern must assist in:

- (i) Splinting (plaster slab) for the purpose of emergency splintage, definitive splintage and post-operative

splintage and application of Thomas splint,

- (ii) Manual reduction of common fractures – phalangeal, metacarpal, metatarsal and Colles' fracture,
- (iii) Manual reduction of common dislocations – interphalangeal, metacarpo-phalangeal, elbow and shoulder dislocations,
- (iv) Plaster cast application for un-displaced fractures of arm, fore arm, leg and ankle,
- (v) Emergency care of a multiple injury patient,
- (vi) Transport and bed care of spinal cord injury patients.

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

- (i) Advise about prognosis of poliomyelitis, cerebral palsy, CTEV and CDH,
- (ii) 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:

- (i) Drainage for acute osteomyelitis,
- (ii) Sequestrectomy in chronic osteomyelitis,
- (iii) Application of external fixation,
- (iv) Internal fixation of fractures of long bones.

vii. Physical Medicine And Rehabilitation

1.Goal:-The aim of posting of an intern in Physical Medicine & Rehabilitation is to impart such knowledge and skills that may enable him/ her to diagnose and treat common rheumatologic, orthopedic and neurologic illnesses requiring physical treatment. He/she shall acquire competence for clinical diagnosis based on history, physical examination and relevant laboratory investigations and institute appropriate line of management.

2. THERAPEUTIC-

A. An intern must perform or assist in:-

- (i) Diagnosing and managing with competence clinical diagnosis and management based on detailed history and assessment of common disabling conditions like poliomyelitis, cerebral palsy, hemiplegia, paraplegia, amputations etc.
- (ii) Participation as a team member in total rehabilitation including appropriate follow up of common disabling conditions,
- (iii) Procedures of fabrication and repair of artificial limbs and appliances.

B. An intern must have observed or preferably assisted at the following operations/ procedures:

- (i) Use of self-help devices and splints and mobility aids
- (ii) Accessibility problems and home-making for disabled
- (iii) Simple exercise therapy in common conditions like prevention of deformity in polio, stump exercise in an amputee etc.
- (iv) Therapeutic counselling and follow-up

viii. Otorhinolaryngology (ENT)-

1. Goal:- The aim of posting of an intern in ENT is to impart such knowledge and skills that may enable him to diagnose and treat common otorhinolaryngological conditions such as ear pain, foreign bodies and acquire ability for a comprehensive diagnosis of common Ear, Nose and Throat (ENT) diseases including emergencies and malignant neoplasms of the head and neck.

2. THERAPEUTIC

A. An intern must perform or assist in:

- (i) Ear syringing, antrum puncture and packing of the nose for epistaxis,
- (ii) Nasal douching and packing of the external canal,
- (iii) Removing foreign bodies from nose and ear,
- (iv) Observing or assisting in various endoscopic procedures and tracheostomy.

B. Skill that an intern should be able to perform under supervision-

- (i) Intern shall have participated as a team member in the diagnosis of various ENT- related diseases and be aware of National programme on prevention of deafness,
- (ii) Intern shall acquire knowledge of various ENT related rehabilitative programmes.

C. An intern must have observed or preferably assisted at the following operations/ procedures:

- (i) Intern 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.

ix. Ophthalmology

1.Goal:- The aim of posting of an intern in ophthalmology is to impart such knowledge and skills that may enable him to diagnose and treat common ophthalmological conditions such as Trauma, Acute conjunctivitis, allergic conjunctivitis, xerosis, entropion, corneal ulcer, iridocyclitis, myopia, hypermetropia, cataract, glaucoma, ocular injury and sudden loss of vision.

2. THERAPEUTIC-

A. An intern must perform or assist in:

- (i) Sub-conjunctival injection
- (ii) Ocular bandaging
- (iii) Removal of concretions
- (iv) Epilation and electrolysis
- (v) Corneal foreign body removal
- (vi) Cauterization of corneal ulcers
- (vii) Chalazion removal
- (viii) Entropion correction
- (ix) Suturing conjunctival tears
- (x) Lids repair
- (xi) Glaucoma surgery (assisted)
- (xii) Enucleation of eye in cadaver.

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

- (i) Advise regarding methods for rehabilitation of the blind.

C. An intern must have observed or preferably assisted at the following operations/procedures:

- (i) Assessment of refractive errors and advise its correction,
- (ii) Diagnose ocular changes in common systemic disorders,
- (iii) Perform investigative procedures such as tonometry, syringing,
- (iv) direct ophthalmoscopy, subjective refraction and fluorescein staining of cornea.

x. Casualty services

1. Goal:-The aim of posting of an intern in casualty is to impart such knowledge and skills that may enable him/her to diagnose and treat common acute surgical /medical ailments. He/she shall have ability to diagnose and suspect, with reasonable accuracy, acute surgical illnesses including emergencies, resuscitate

critically injured patient and a severely burned patient, control surface bleeding and manage open wounds and monitor and institute first-line management of patients of head, spine, chest, abdominal and pelvic injury as well as acute abdomen.

2. THERAPEUTIC-

A. An intern must perform or assist in:

- (i) Identification of acute emergencies in various disciplines of medical practice,
- (ii) Management of acute anaphylactic shock,
- (iii) Management of peripheral-vascular failure and shock,
- (iv) Management of acute pulmonary edema and Left Ventricular Failure (LVF),
- (v) Emergency management of drowning, poisoning and seizure,
- (vi) Emergency management of bronchial asthma and status asthmaticus,
- (vii) Emergency management of hyperpyrexia,
- (viii) Emergency management of comatose patients regarding airways, positioning, prevention of aspiration and injuries,
- (ix) Assessment and administering emergency management of burns,
- (x) Assessing and implementing emergency management of various trauma victims,
- (xi) Identification of medico-legal cases and learn filling up of forms as well as complete other medico-legal formalities in cases of injury, poisoning, sexual offenses, intoxication and other unnatural conditions.

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

- (i) Advise about prognosis of acute surgical illnesses, head injury, trauma and burns. Counsel patients regarding the same.

C. An intern must have observed or preferably assisted at the following operations/ procedures:

- (i) Resuscitation of critical patients
- (ii) documentation medico legal cases
- (iii) management of bleeding and application of splints;

xi. Dermatology, Venereology & Leprosy

Goal:-The aim of posting of an intern in Dermatology, Venereology & Leprosy is to impart such knowledge and skills that may enable him to diagnose and treat common dermatological infections and leprosy. He/she shall acquire competence for clinical diagnosis based on history, physical examination and relevant laboratory investigations and institute appropriate line of management; this would include

diseases common in tropics (parasitic, bacterial or viral infections, and cutaneous manifestations of systemic illnesses.

2. THERAPEUTIC-

A. At the end of internship an intern must be able to:

- (i) Conduct proper clinical examination; elicit and interpret physical findings, and diagnose common disorders and emergencies,
- (ii) 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,
- (iii) Manage common diseases recognizing the need for referral for specialized care in case of inappropriateness of therapeutic response.

B. An intern must have observed or preferably assisted at the following operations/ procedures:

- (i) Skin biopsy for diagnostic purpose

xii. Respiratory Medicine-

Goal:-The aim of posting of an intern in Respiratory Medicine is to impart such knowledge and skills that may enable him/her to diagnose and treat common respiratory illnesses. He/she shall acquire competence for clinical diagnosis based on history, physical examination and relevant laboratory investigations and institute appropriate line of management.

2. THERAPEUTIC –

A. An intern must perform or assist in:

- (i) Diagnosing and managing common respiratory disorders and emergencies,
- (ii) Simple, routine investigative procedures required for making bed side diagnosis, especially sputum collection, examination for etiological organism like AFB, interpretation of chest X-rays and respiratory function tests,
- (iii) Interpreting and managing various blood gases and pH abnormalities in various illnesses.

B. An intern must have observed or preferably assisted at the following operations/ procedures:

- (i) Laryngoscopy,
- (ii) Pleural aspiration, respiratory physiotherapy, laryngeal intubation and pneumo-thoracic drainage aspiration,
- (iv) Therapeutic counseling and follow up.

xiii. Radio-Diagnosis

1. Goal:-The aim of posting of an intern in radio-diagnosis is to impart such knowledge and skills that may enable him/ her to understand principles of imageology and recognize risk and complications of radiologic procedures and the need for protective techniques. At the end of internship, he/she should be able to counsel and prepare patients for various radiologic procedures.

A. An intern must acquire competency in:

- (i) Identifying and diagnosing acute abdominal conditions clinically and choose appropriate imaging modality for diagnosis,
- (ii) Identifying and diagnosing acute traumatic conditions in bones and skull using X rays / CT Scans with emphasis on fractures and head injuries,
- (iii) Recognising basic hazards and precautions in radio-diagnostic practices specially related to pregnancy,
- (iv) Demonstrating awareness of the various laws like PC PNDT Act.

xiv. Forensic Medicine And Toxicology

1. Goal:- The aim of posting of an intern in Forensic Medicine is to impart such knowledge and skills that may enable him to manage common medico-legal problems in day to day practice. He/she shall acquire competence for post-mortem diagnosis based on history, physical examination and relevant observations during autopsy.

A. An intern must perform or assist in:

- (i) Identifying and documenting medico-legal problems in a hospital and general practice,
- (ii) Identifying the medico-legal responsibilities of a medical man in various hospital situations,
- (iii) Diagnosing and managing with competence basic poisoning conditions in the community,
- (iv) Diagnosing and managing with competence and documentation in cases of sexual assault,

(v) Preparing medico-legal reports in various medico-legal situations.

A. An intern must have observed or preferably assisted at the following operations/ procedures:
 (i) Various medico legal / post-mortem procedures and formalities during their performance by police.

Table 11: Certifiable Procedural Skills:

A Comprehensive list of skills recommended as desirable for Bachelor of Medicine and Bachelor of Surgery (MBBS) – Indian Medical Graduate that should be included in log books

Specialty	Procedure
General Medicine	<ul style="list-style-type: none"> • Venipuncture (I) • Intramuscular injection (I) • Intradermal injection (D) • Subcutaneous injection (I) • Intra Venous (IV) injection(I) • Setting up IV infusion and calculating drip rate (I) • Blood transfusion (O) • Urinary catheterization (D) • Basic life support (D) • Oxygen therapy (I) • Aerosol therapy / nebulization (I) • Ryle’s tube insertion (D) • Lumbar puncture (O) • Pleural and ascitic aspiration (O) • Cardiac resuscitation (D) • Peripheral blood smear interpretation (I) • Bedside urine analysis (D)
General Surgery	<ul style="list-style-type: none"> • Basic suturing (I) • Basic wound care (I)

	<ul style="list-style-type: none"> • Basic bandaging(I) • Incision and drainage of superficial abscess(I) • Early management of trauma (I) and trauma life support(D)
Orthopedics	<ul style="list-style-type: none"> • Application of basic splints and slings(I) • Basic fracture and dislocation management (O) • Compression bandage (I)
Gynecology	<ul style="list-style-type: none"> • Per Speculum (PS) and Per Vaginal (PV) examination(I) • Visual Inspection of Cervix with Acetic Acid (VIA) (O) • Pap Smear sample collection & interpretation (I) • Intra- Uterine Contraceptive Device (IUCD) insertion & removal(I)
Obstetrics	<ul style="list-style-type: none"> • Obstetric examination(I) • Episiotomy(I) • Normal labor and delivery (including partogram) (I)
Pediatrics	<ul style="list-style-type: none"> • Neonatal resuscitation(D) • Setting up Pediatric IV infusion and calculating drip rate (I) • Setting up Pediatric Intraosseous line (O)
Forensic Medicine	<ul style="list-style-type: none"> • Documentation and certification of trauma (I) • Diagnosis and certification of death(D) • Legal documentation related to emergency cases (D) • Certification of medical-legal cases e.g. Age estimation, sexual assault etc.(D) • Establishing communication in medico-legal cases with police, public health authorities, other concerned departments, etc (D)
Otorhinolaryngology	<ul style="list-style-type: none"> • Anterior nasal packing (D) • Otoscopy (I)

Ophthalmology	<ul style="list-style-type: none"> • Visual acuity testing (I) • Digital tonometry(D) • Indirect ophthalmoscopy (O) • Epilation (O) • Eye irrigation(I) • Instillation of eye medication (I) • Ocular bandaging(I)
Dermatology	<ul style="list-style-type: none"> • Slit skin smear for leprosy(O) • Skin biopsy(O) • Gram's stained smear interpretation (I) • KOH examination of scrapings for fungus (D) • Dark ground illumination (O) • Tissue smear (O) • Cautery - Chemical and electrical (O)
Pathology and Blood Banking	<ul style="list-style-type: none"> • Peripheral blood smear preparation, staining and interpretation (I) • Manual blood sugar estimation (I) • CSF examination (I) • Blood grouping (I) • Saline cross match method (I)
Microbiology	<ul style="list-style-type: none"> • Gram's stained smear interpretation (I) • KOH examination of scrapings for fungus (I) • Dark ground illumination (O) • ZN stained smear interpretation (I) • Wet mount examination of stool for ova and cysts (I) • Identification of blood parasites on PBS (I)

Pharmacology	<ul style="list-style-type: none"> • Writing a prescription (D) • Audit of a given prescription (D) • Recognize an adverse drug reaction (I) • Be able to prepare a list of essential drugs for a healthcare facility
Anatomy	<ul style="list-style-type: none"> • Identification of structures on cadaver material or sketches/X-rays/ ultrasound
Physiology	<ul style="list-style-type: none"> • Perform, analyze, and interpret pulmonary function (eg FVC, MVV) (O) • Perform, analyze, and interpret measurements of cardiac and vascular function (eg HR, BP, ECG) (D) • Interpret blood parameters (eg hematocrit/red blood cell count, lactate, glucose) (I) • Perform, analyze, and interpret CNS function (eg nerve conduction velocity, EMG, cranial nerve examination) (D)
Biochemistry	<ul style="list-style-type: none"> • Estimate glucose, creatinine, urea and total proteins, A:G ratio in serum (D) • Estimate serum total cholesterol, HDL cholesterol, triglycerides(D) • Estimate serum bilirubin, SGOT/SGPT/alkaline phosphatase (D) • Estimate calcium and phosphorous(D)

I- Independently performed on patients,

O- Observed in patients or on simulations,

D- Demonstration on patients or simulations and performance under supervision in Patients

Certification of Skills:- Any faculty member of concerned department can certify skills. For common procedures, the certifying faculty may be decided locally.
