



## **PRAVARA INSTITUTE OF MEDICAL SCIENCES (DEEMED TO BE UNIVERSITY)**

**Loni, Tal. Rahata, Dist. Ahmednagar 413736  
NAAC Re-accredited with 'A' Grade**

### **SYLLABUS**

#### **PG Programme- MD (FORENSIC MEDICINE & TOXICOLOGY)**

**(As per MCI Regulations Governing PG Programme 2000 Amended up to May, 2018)**

#### ***I. PREAMBLE:***

The purpose of PG education is to create specialists who would provide high quality health care and advance the cause of science through research & training. This programme is meant to standardize and strengthen Forensic Medicine teaching at the postgraduate level throughout the country so that it will benefit the judiciary and the legal system of the country in providing justice which will ultimately benefit the community at large. It will also help in achieving uniformity in undergraduate teaching. The purpose of this document is to provide teachers and learners illustrative guidelines to achieve defined outcomes through learning and assessment. This document was prepared by various subject-content specialists. The Reconciliation Board of Academic Committee has attempted to render uniformity without compromise to purpose and content of the document. Compromise in purity of syntax has been made in order to preserve the purpose and content. This has necessitated retention of "domains of learning" under the heading "competencies".

#### ***II. SUBJECT SPECIFIC LEARNING OBJECTIVES***

The **Goal** of MD Forensic Medicine is to train a doctor to become a competent medico-legal expert, teacher and researcher in the subject who:

1. is aware of medico legal aspects in various settings
2. is aware of contemporary advances and developments in the field of Forensic Medicine.
3. has acquired the competencies pertaining to the subject of Forensic Medicine that are required to be practiced at all levels of health system.
4. is oriented to the principles of research methodology.
5. has acquired skills in educating and imparting training to medical, paramedical and allied professionals.

A post graduate student, upon successfully qualifying in the M.D (Forensic Medicine) examination, should be able to:

1. Become an expert in Forensic Medicine.
2. Identify and define medico-legal problems as they emerge in the community and work to resolve such problems by planning, implementing, evaluating and modulating Medico-legal services.
3. Undertake medico-legal responsibilities and discharge medico-legal duties in required settings.
4. Keep abreast with all recent developments and emerging trends in Forensic Medicine, Medical Ethics and the law.

5. Deal with general principles and practical problems related to forensic, clinical, emergency, environmental, medico-legal and occupational aspects of toxicology.
6. Deal with medico-legal aspects of Psychiatry, mental health and drug addiction.
7. Impart education in Forensic Medicine and Toxicology to under-graduate and postgraduate students with the help of modern teaching aids.
8. Assess the students' knowledge and skills in the subject of Forensic Medicine
9. Oriented to research methodology and conduct of research in the subject

### **III. SUBJECT SPECIFIC COMPETENCIES**

**By the end of the course, the student should have acquired knowledge (cognitive domain), professionalism (affective domain) and skills (psychomotor domain) as given below:**

#### **A. Cognitive domain**

1. Describe the legal and medico-legal system in India.
2. Acquire knowledge on the philosophy and guiding principles of Forensic Medicine course.
3. Describe the programme goals and objectives of the Forensic Medicine course.
4. Acquire knowledge on conduct of medico-legal autopsy independently with required physical assistance, prepare report and derive inferences.
5. Outline the principles and objectives of postmortem examination.
6. Describe the formalities and procedures of medico-legal autopsies in accordance with existing conventions and the law.
7. Identify the role of anatomy, physiology, biochemistry, microbiology, pathology, bloodbank, psychiatry, radiology, forensic science laboratory as well as other disciplines of medical science to logically arrive at a conclusion in medico-legal autopsies and examination of medico-legal cases.
8. Describe the principles of the techniques used in toxicological laboratory namely TLC (Thin Layer Chromatography), GLC (Gas Liquid Chromatography), AAS (Atomic Absorption Spectrophotometry), HPLC (High Performance Liquid Chromatography) and Breath Alcohol Analyzer.
9. Describe relevant legal/court procedures applicable to medico-legal/medical practice.
10. Describe the general forensic principles of ballistics, serology, analytical toxicology and photography.
11. Interpret, analyze and review medico-legal reports prepared by other medical officers at the time of need.
12. Describe role of DNA profile and its application in medico-legal practice.
13. Describe the law/s relating to poisons, drugs, cosmetics, narcotic drugs and psychotropic substances.
14. Describe the legal and ethical aspects of Forensic Procedures including Narco-analysis, Brain mapping and Polygraph etc.
15. Describe the medico-legal aspects of Psychiatry, addiction and mental health.

#### **B. Affective domain**

1. Should be able to function as a part of a team, develop an attitude of cooperation with colleagues, and interact with the clinician or other colleagues to provide the best possible opinion.

2. Should be able to follow ethical principles in dealings with patients, police personnel, relatives and other health personnel and to respect their rights.
3. Follow medical etiquettes in dealing with each other.
4. Develop communication skills to word reports and professional opinion as well as to interact with patients, relatives, peers and paramedical staff, and for effective teaching.

### **C. Psychomotor domain**

**At the end of the course, the student should acquire following skills and be able to:**

1. Perform medico-legal autopsy independently with required physical assistance, prepare report and derive inferences.
2. Perform medico-legal examination of users of alcohol, drugs and poisons and prepare report.
3. Perform medico-legal examination in cases of sexual offences and prepare report.
4. Interpret histo-pathological, microbiological, radiological, chemical analysis, DNA profile and other investigative reports for medico-legal purposes.
5. Perform medico-legal examination of bones, clothing, wet specimens and weapons.
6. Depose as an expert witness in a court of Law on medico-legal matters.
7. Examine, identify, prepare reports and initiate management on medico-legal cases in emergency set up.
8. Identify and discharge all legal responsibilities in medico-legal matters.
9. Plan, organize and supervise medico-legal work in general/teaching/district hospitals and in any health care set up.
10. Collect, preserve and dispatch various samples and trace evidences to the concerned authorities in appropriate manner.
11. Help and Advise authorities on matters related to medical ethics and medico-legal issues.
12. Discharge duties in respect of forensic, clinical, emergency, environmental, medico-legal and occupational aspects of toxicology.
13. Plan, organize and manage toxicological laboratory services in any health care set up.
14. Provide information and consultation on all aspects of toxicology to professionals, industry, Government and the public at large.
15. Manage medico-legal responsibilities in mass disasters involving multiple deaths like fire, traffic accident, aircraft accident, rail accident and natural calamities.
16. Do interaction with allied departments by rendering services in advanced laboratory investigations and relevant expert opinion.
17. Participate in various workshops/seminars/journal clubs/demonstration in the allied departments, to acquire various skills for collaborative research.

### **Time frame to acquire knowledge & skills:**

#### **First year of PG programme:**

1. Orientation Programme
2. Basic autopsy skills.
3. Orientation to the applied aspects of Anatomy, Physiology, Biochemistry
4. General principles of Forensic Medicine.
5. Introduction to Medical Toxicology.
6. Assisting in scheduling of teaching sessions.
7. Participation in undergraduate teaching.

8. Posting for autopsy work, clinical forensic medicine and toxicology.
9. Participation in departmental activities
10. Participation in seminar, CME, workshop etc.
11. Orientation to organization and functioning of toxicology/research laboratory.
12. Preparation of thesis protocol.
13. Being self-updated with recent advances in the subject

#### **Second year of PG programme:**

1. Conduct of autopsy examination without supervision in routine autopsy cases
2. Conduct of autopsy examination with supervision in expert opinion cases.
3. Conduct of theory and practical sessions for undergraduates
4. Thesis and other research work
5. Clinical forensic medicine work for practical experience in medico-legal procedures and on-the-job practical training in medico-legal aspects of emergency medicine, radiology and other clinical disciplines.
6. Orientation to the applied aspects of Microbiology, Pathology, Blood Bank, Psychiatry as related to forensic sciences.
7. Posting for autopsy work, clinical forensic medicine and toxicology laboratory.
8. Attend court summons for cases conducted by themselves or where deputed to attend in cases where an expert is required to depose by Court of Law

#### **Third year of PG programme:**

1. Organize teaching sessions and thesis work.
2. Submission of thesis six months prior to examination.
3. Posting for autopsy work, clinical forensic medicine and toxicology laboratory to continue.
4. The PG trainee shall be required to conduct minimum of 100 autopsy cases and minimum of 100 clinical cases during the entire training period.
5. Attend Court summons for cases conducted by themselves or when deputed where an expert is required to depose by the Court of Law.
6. The PG trainee shall be required to attend or accompany an expert to attend a minimum of 20 court summons, of which at least 5 should pertain to clinical cases.

## **IV. SYLLABUS**

### **Course contents:**

#### **I. General Principles of Forensic Medicine and Toxicology**

- i. Identify the role of anatomy, physiology, biochemistry, microbiology, pathology, blood bank, psychiatry, radiology, forensic science laboratory as well as other disciplines of medical science to logically arrive at a conclusion in medico-legal autopsies and examination of medico-legal cases.
- ii. Describe the basic principles of techniques used in toxicological laboratory namely TLC, GLC, ASS, HPLC and Breath Alcohol Analyzer.
- iii. Execute the skills and knowledge expected at undergraduate level.

#### **II. Basic Sciences and allied Subjects**

**A. Anatomy:** Anatomy of parts and organs of the body which are important from the medico-legal aspect.

- i. Describe surface and regional anatomy of head, neck, chest and abdomen.

- ii. Describe gross anatomy and blood supply of heart, brain, lungs, spleen, liver and kidneys.
- iii. Describe gross anatomy of male and female genitalia.
- iv. Describe the comparative anatomy of male and female skeleton.
- v. Perform histological examination of various tissues.
- vi. Describe the development of foetus.

**B. Physiology and Biochemistry:** Mechanism of phenomena that are important in the body from the medico-legal viewpoint.

- i. Describe mechanism of fluid and electrolyte balance, thermoregulation in newborn and adults, endocrine functions.
- ii. Describe physiology of sexual behavior.
- iii. Describe physiological functioning of circulatory system, digestive system, respiratory system, haemopoietic system, central nervous system and reproductive system including pregnancy.

**C. Pathology:** Pathophysiology of vital processes and response mechanisms that modulate tissue and organ reaction to all forms of injury and have a bearing on antemortem and postmortem appearance in medico-legal cases, assessment of the duration of injuries and correlate trauma and disease.

- i. Describe pathology of inflammation and repair, immunity and hypersensitivity,
- i. Thrombosis and embolism, electric and ionizing radiation injuries, genetic factors in disease, deficiency disorders and malnutrition.
- ii. Describe pathology of myocardial infarction, congenital heart diseases, tuberculosis of lungs, cirrhosis of liver, diseases of glomeruli and tubules and interstitial; tissues of Kidney, tumours, endocrine disorders, venereal diseases, spontaneous intracranial hemorrhages.
- iii. Describe the pathology of sudden death.
- iv. Describe local and systemic response to trauma and patho-physiology of shock.
- v. Describe pathology of common infections and infestations of medico-legal significance.

**D. Dentistry:** Adequate knowledge of dentistry for solution of medico-legal problems like, injuries, age determination and identification

**E. Radiology:** Adequate knowledge of radiological procedures for solution of medico-legal problems.

#### **F. Fundamentals of Forensic Medicine:**

- i. Describe the general forensic principle of ballistics, serology, analytical toxicology and photography.
- ii. Interpret the scene of crime.
- iii. Describe role of DNA profile and its application in medico-legal practice.
- iv. Examine bloodstains for blood grouping, nuclear sexing, HLA typing, seminal stains and hair for medico-legal purpose.
- v. Describe ethical aspects of Forensic Procedures including Narco-analysis, Brainmapping and Polygraph

### **III. Medical Ethics and Law (Medical Jurisprudence)**

- i. Describe the history of Forensic Medicine.
- ii. Describe the legal and medico-legal system in India.

- iii. Describe medical ethics and the law in relation to medical practice, declarations, oath, etiquette, Medical Council of India, disciplinary control, rights and duties of a registered medical practitioner's professional misconduct, consent, confidentiality, medical negligence (including all related issues) and Consumer Protection Act.
- iv. Describe medical ethics and law in relation to organ transplantation, biomedical human research and experimentation, human rights, cloning, genetic engineering, human genome, citizen's charter and International codes of medical ethics.
- v. Describe the ethics and law in relation to artificial insemination, abortion, antenatal sex, foetus, genetics and euthanasia.
- vi. Interpret the ethics and law applicable to the human (clinical trials) and animal experimentation.
- vii. Describe ethics in relation to elderly, women and children.
- viii. Describe medical ethics and law in relation to nursing and other medical services/practices.
- ix. Understanding about bio-ethics
- x. Bio medical waste management
- xi. Right to information Act
- xii. AIDS – ethical, legal and social aspects
- xiii. PCPNDT Act
- xiv. Consumer protection Act
- xv. Anatomy Act
- xvi. Human organ transplantation
- xvii. Medicare Service Person & Medicare Service Institution (Prevention of Violence and damage or loss to Property), Act.

#### **IV. Clinical Forensic Medicine**

- i. Examine, assess legal implications and prepare report or certificate in cases of physical assault, suspected drunkenness, sexual offences, consummation of marriage and disputed paternity.
- ii. Collect, preserve and dispatch the specimen/material to the concerned authority and interpret the clinical and laboratory findings which are reported.
- iii. Examine injured person, prepare medico-legal report and initiate management.
- iv. Determine the age and establish identity of an individual for medico-legal purpose.
- v. Examine a person and assess disability in industrial accidents and diseases.
- vi. Perform examination and interpret findings for medico-legal purposes in cases pertaining to pregnancy, delivery, artificial insemination, abortion, sterilization, Impotence, AIDS and infectious disease.
- vii. Describe normal and abnormal sexual behavior and its medico-legal implications.
- viii. Examine and assess the medical fitness of a person for insurance, government service, sickness and fitness on recovery from illness.
- ix. Examine medico-legal problems related to clinical disciplines of medicine and allied subjects, Pediatrics, Surgery and allied subjects, ENT, Ophthalmology, Obstetrics and Gynecology, Dermatology and Anesthesiology.



- x. Examine medico-legal problems related to children, women and elderly.
- xi. Identify the cases of torture and violation of human rights and issues thereto
- xii. **CHILD ABUSE**  
Scope of Child Abuse in India and abroad. Diagnosis and medicolegal evaluation of child abuse. Socioeconomic aspects of child abuse, Autopsy protocol in cases of death due to child abuse, Laws related to child abuse
- xiii. **VIOLENCE AGAINST WOMEN**  
Scope of Violence against women in India, Diagnosis and medicolegal evaluation of violence against women, Socioeconomic aspects of Violence against women, Autopsy protocol in cases of death due to violence against women, Laws related to Violence against women
- xiv. **THE PROTECTION OF CHILDREN FROM SEXUAL OFFENCES ACT, 2012**  
An overview of the act with its Provisions & guidelines in child sexual offence case, Examination protocol in cases of child sexual offence

## V. Forensic Pathology

- i. Apply the principles involved in methods of identification of human remains by race, age, sex, religion, complexion, stature, hair, teeth, anthropometry, dactylography, footprints, hairs, tattoos, poroscopy and superimposition techniques.
- ii. Perform medico-legal postmortem and be able to exhume, collect, preserve and dispatch specimens or trace evidence to the appropriate authority.
- iii. Diagnose and describe the pathology of wounds, mechanical and regional injuries, ballistics and wound ballistics, electrical injuries, lightning, neglect and starvation, thermal injuries, deaths associated with sexual offences, pregnancy, delivery, abortion, child abuse, dysbarism and barotraumas.
- iv. Describe patho-physiology of shock and neurogenic shock.
- v. Describe patho-physiology of asphyxia, classification, medico-legal aspects and postmortem findings of different types of asphyxial deaths.
- vi. Diagnose and classify death, identify the signs of death, postmortem changes, interpret autopsy findings, artifacts and results of the other relevant investigations to logically conclude the cause, manner (suicidal, homicidal and accidental) and time of death.
- vii. Manage medico-legal responsibilities in mass disasters involving multiple deaths like fire, traffic accident, aircraft accident, rail accident and natural calamities.
- viii. Demonstrate postmortem findings in infant death and to differentiate amongst live birth, still birth and dead born.
- ix. Perform postmortem examination in cases of death in custody, torture and violation of human rights.
- x. Perform postmortem examination in cases of death due to alleged medical negligence in operative and anesthetic deaths.

**VI. Toxicology**

- i. Describe the law relating to poisons, drugs, cosmetics, narcotic drugs and psychotropic substances.
- ii. Examine and diagnose poisoning cases and apply principles of general management and organ system approach for the management of poisoning cases.
- iii. Describe the basic principles of pharmacokinetics and pharmacodynamics of poisonous substances.
- iv. Describe the toxic hazards of occupation, industry, environment and the principles of predictive toxicology.
- v. Collect, preserve and dispatch material/s for analysis, interpret the laboratory findings and perform the Medico-legal formalities in a case of poisoning.
- vi. Demonstrate the methods of identification and analysis of common poisons
- vii. Describe the signs, symptoms, diagnosis and management of common acute and chronic poisoning due to:
  - a. Corrosives
  - b. Nonmetallic substances
  - c. Insecticides and weed killers
  - d. Metallic substances
  - e. Vegetable and organic irritants
  - f. Somniferous compounds
  - g. Inebriant substances
  - h. Deliriant substances
  - i. Food Contamination/adulteration.
  - j. Substances causing spinal and cardiac toxicity
  - k. Substances causing asphyxia (Asphyxiants)
  - l. Household toxins
  - m. Toxic envenomation
  - n. Biological and chemical warfare
  - o. Environmental intoxicants
  - p. Occupational intoxicants

**VII. Forensic Psychiatry**

- i. Explain the common terminologies of forensic importance in Psychiatry.
- ii. Describe the medico-legal aspects of Psychiatry and mental health.
- iii. Describe medico-legal aspects of drug addiction.
- iv. Describe role of Psychiatry in criminal investigation, punishment and trial.
- v. Describe the civil and criminal responsibilities of a mentally ill person.
- vi. Describe the role of Psychology in criminal investigation, punishment and trial
- vii. Rules regarding admission, treatment and discharge of mentally ill person to the mental hospitals, feigned insanity, juvenile delinquency in the juvenile court, restraint of mentally ill person.
- viii. Mental health Act 1987.



## **V. TEACHING AND LEARNING METHODS**

### **Teaching methodology**

#### **1. Lectures:**

Lectures are to be kept to a minimum. They may, however, be employed for teaching certain topics. Lectures may be didactic or integrated. The course shall be of three years, organized in six units (0-5). This modular pattern is a guideline for the department, to organize training. Training programme can be modified depending upon the work load and academic assignments of the department.

#### **2. Journal Club & Subject seminars:**

Both are recommended to be held once a week. All the PG students are expected to attend and actively participate in discussion and enter in the Log Book relevant details. Further, every PG trainee must make a presentation from the allotted journal(s), selected articles and a total of 12 seminar presentations in three years. The presentations would be evaluated and would carry weightage for internal assessment.

#### **3. Case Presentations:**

Minimum of 5 cases to be presented by every PG trainee each year. They should be assessed using check lists and entries made in the log book

#### **4. Clinico-Pathological correlation \ Conference:**

Recommended once a month for all post graduate students. Presentation is to be done by rotation. If cases are not available, it could be supplemented by published CPCs.

#### **5. Inter-Departmental Meetings:**

These meetings should be attended by post graduate students and relevant entries must be made in the Log Book.

#### **6. Teaching Skills:**

The postgraduate students shall be required to participate in the teaching and training programme of undergraduate students and interns.

7. Undertake audit, use information technology tools and carry out research, both basic and clinical, with the aim of publishing his work and presenting his work at various scientific fora.

#### **8. Continuing Medical Education Programmes (CME):**

At least two CME programmes should be attended by each student in 3 years.

**9. Conferences:** The student to attend courses, conferences and seminars relevant to the speciality.

10. A postgraduate student of a postgraduate degree course in broad specialities/superspecialities would be required to present one poster presentation, to read one paper at a national/state conference and to present one research paper which should be published/accepted for publication/sent for publication during the period of his postgraduate studies so as to make him eligible to appear at the postgraduate degree examination.

**11. Rotation:**

Other than the Department of Forensic Medicine, student may be posted for training in the following clinical disciplines for a given period of time on rotational basis:

12. Department should encourage e-learning activities.

|    | Place of posting   | First Year | Second Year | Third Year | Assignment/ Contents of posting   |
|----|--|------------|-------------|------------|---|
| 01 | Anatomy  | 15 days    | -           | -          | Dissection techniques, Gross & Histological appearance of Vital Organs & Endocrines. Forensic Osteology, Anthropometry, embalming & Relevant Embryology.  |
| 02 | Physiology & Biochemistry (CCL)                              | 7 days     |             |            | Functional aspect of vital organs & Endocrines, Physiology & Biochemistry of blood, semen, saliva, sweat, CSF, PM Biochemistry of body fluids.  |
| 03 | Trauma & Emergency/ Casualty / Emergency medicine department | 1 month    | 15 days     | 15 days    | First Aid, Examination, Diagnosis & Medical + Medical legal Management of Clinical Medicolegal cases, dying declaration, Gastric Lavage, Parenteral injection, Emmegency tray, Casualty administration in mass Disasters.   |
| 04 | Medicine + Paediatrics + Pharmac                             |            | 7 days      | 7 days     | Awareness of Diagnosis, Medicolegal aspect & Management of critical care, Poisoning cases, Visit to MICU setup, Important paediatric procedures, NICU Setup, Pharmacology & detection of drugs of dependence.   |
| 05 | Radiology  | 7 days     | 5 days      | 3 days     | Radiological findings in organ / soft tissue / bony trauma cases, Age determination   |
|    | Surgery + Orthopedics + Anaesthesiology                      | 7 days     | 7 days      | 7 days     | Awareness regarding Examination, Diagnosis, Medical + Medicolegal Management of cases of Regional injuries ( Poly Trauma & Burns), Injury certification & Disability evaluation, bony injuries, Visit to Surgical ICU & Operation Theater, Awareness of important Anaesthetic procedures. Important OT Instruments & Equipments |

|    |                             |        |         |              |   |
|----|-----------------------------|--------|---------|--------------|---|
| 06 | Dentistry                   |        | 7 days  |              | Dentures, Important dental procedures   |
|    | Obstetrics & Gynaecology    | 7 days |         | 7 days       | Abortion, Sterilization Techniques, Introduction to major Obstetrics & Gynaecology procedures, diagnostic techniques.   |
| 07 | Psychiatry                  | 5 days | 3 days  | 2 days       | Medicolegal aspect of various psychiatric cases & its management.   |
|    | Medical Record Section      | 4 days | 3 days  |              | Documentation & Maintenance, ICD Coding,  |
| 08 | Forensic Science Laboratory | 7 days | 15 days | Not required | Introduction to various sections of the FSL Setup & Instrumentation, Introduction to & relevant awareness of important Qualitative & quantitative detection & Analytical Techniques. Introduction to & relevant awareness of Identification, Biology, Chemistry, Toxicology, & Ballistic Divisions. |
| 09 | Histopathology              | 7 days | 5 days  | 3 days       | Grossing & block making techniques, functioning of Automatic Tissue Processing, Histopathological interpretations of major illnesses, enzyme histochemistry, immunohistochemistry.  |

The purpose of posting to other departments is to learn practical aspect of those subject.

Monitoring – By concerned Head of the departments who certifies the work diary / logbook maintained by the students at the end of the posting.

## VI. ASSESSMENT

### **FORMATIVE ASSESSMENT, ie., during the training General Principles**

Internal Assessment should be frequent, cover all domains of learning and used to provide feedback to improve learning; it should also cover professionalism and communication skills.

The Internal Assessment should be conducted in theory and clinical examination.

Quarterly assessment during the MD training should be based on following educational activities:

1. **Journal based / recent advances learning**
2. **Patient based /Laboratory or Skill based learning**
3. **Self directed learning and teaching**
4. **Departmental and interdepartmental learning activity**
5. **External and Outreach Activities / CMEs**

**The student to be assessed periodically as per categories listed in postgraduate student appraisal form (Annexure I).**

### **SUMMATIVE ASSESSMENT, ie., assessment at the end of training**

The Postgraduate examination shall be in three parts:

The summative examination would be carried out as per the Rules given in POSTGRADUATE

MEDICAL EDUCATION REGULATIONS, 2000.

#### **The examination shall be in three parts:**

##### **1. Thesis**

Thesis shall be submitted at least six months before the Theory and Clinical / Practical examination. The thesis shall be examined by a minimum of three examiners; one internal and two external examiners, who shall not be the examiners for Theory and practical examination. A PG trainee shall be allowed to appear for the Theory and Practical/Clinical examination only after the acceptance of the Thesis by the examiners.

##### **2. Theory:**

The examinations shall be organized on the basis of 'Grading' or 'Marking system' to evaluate and to certify PG trainee's level of knowledge, skill and competence at the end of the training. Obtaining a minimum of 50% marks in 'Theory' as well as 'Practical' separately shall be mandatory for passing examination as a whole. The examination for M.D. shall be held at the end of 3rd academic year. An academic term shall mean six months' training period.

There shall be four papers each of three hours duration. These are:

#### **2. Theory Examination:** There shall be four theory papers.

**Paper I** : Basic of Forensic Medicine, basic sciences and allied subjects.

**Paper II** : Clinical Forensic Medicine and medical jurisprudence.

**Paper III** : Forensic pathology and toxicology.

**Paper IV** : Recent advances in Forensic Medicine, Forensic Psychiatry and Medical Toxicology, applied aspects of clinical disciplines and forensic sciences

## SCHEME OF EXAMINATION

### Written

Assessment of candidates on completion of MD course will be carried out in accordance with the Existing rules and regulations of the PIMS (Deemed University), Loni.

All candidates will be examined and evaluated under the following Heads:

Theory - Will consist of four papers as under:

- Q. Paper 1. Basic Medical sciences and allied subjects as applicable to forensic medicine and toxicology syllabus**
- Q. Paper 2. Clinical forensic medicine, forensic psychiatry, medical ethics and law (medical jurisprudence)**
- Q. Paper 3 Forensic pathology, Toxicology, Anthropology**
- Q. Paper 4. Forensic science and recent advances in forensic medicine and toxicology**

Each Paper will be:

Full Question : 3 X 20 Marks each = 60 Marks

Short Notes : 4 X 10 Marks each = 40 Marks

**Total Marks = 100 Marks**

### **Practicals –**

|  |            |
|--|------------|
| <b>01. Post Mortem Examination</b>                                 | <b>100</b> |
| 1. Adult Autopsy and/or Foetal Autopsy                             |            |
| <b>02. Clinical forensic medicine (Any four)</b>                   |            |
| I) Age Certificate   | 20         |
| II) Alcoholic Certification  | 20         |
| III) Injury Report   | 20         |
| IV) Insanity Certification   | 20         |
| V) Impotency Certificate   | 20         |
| <b>03. Examination of Exhibit (Min.-1 &amp; Max. -2 from each)</b> |            |
| A) Weapon report   | 10         |
| B) Photographs of M.L. Importance                                  | 10         |
| C) X ray Examination   | 10         |
| D) Examination of bones  | 10         |
| E) Poisons   | 10         |
| <b>04. Forensic Pathology (Min.-1 &amp; Max. -2 from each)</b>     |            |
| A) Histo-Pathological Slides                                       | 10         |
| B) Morbid Specimens  | 10         |
| C) Examination of Blood / Semen/ Saliva                            | 10         |
| D) Gram Stain  | 10         |
| E) H & E Stain   | 10         |

**05. Communication and Teaching Skills**

|  |    |
|--|----|
| Thesis Presentation to evaluate teaching ability | 25 |
|--|----|

**06. Expert Opinion**

|                        |    |
|------------------------|----|
| Case File / Case Study | 25 |
|------------------------|----|

**07. Grand Viva-voce**

|          |    |
|----------|----|
| Table 1. | 25 |
|----------|----|

|          |    |
|----------|----|
| Table 2. | 25 |
|----------|----|

|        |     |
|--------|-----|
| -----  |     |
| Total- | 400 |

**Practical Examination (Two days)**

Practical examination would be spread over two days and should be as follows:

- **Clinical Cases** - (any 4) Age estimation, injury report, examination of an insane person
- to evaluate criminal/civil responsibility, examination of an intoxicated person, examination of a suspected case of poisoning (acute/chronic), disputed paternity case and sexual offences (accused and victim).
- **Spots** - (10) Histopathology slides, photographs, exhibit material, X-rays, mounted specimens, bones, poisons and weapons, charts etc.
- **Toxicology Exercises** - (02) Identification and details of common poisons or chemical tests etc.
- **Laboratory Tests** - (01) Identification of biological stains (Semen, Blood, Body fluids), Histopathology slides of medico legal relevance, gram and acid fast staining etc.
- **Postmortem Examination.**
- **Thesis/Seminar Presentation** - For assessment of research/teaching ability
- **Discussion on a case for expert opinion**
- **Grand Viva Voce.**

**Day 1**

- **Clinical Cases** - Age estimation, Injury report, Examination of an insane person to evaluate criminal/civil responsibility, Examination of an intoxicated person, Examination of a suspected case of poisoning (Acute/Chronic), Disputed paternity case, Sexual offences.
- **Thesis Presentation** - For assessment of research capability
- **Presentation of a Topic (Seminar)** - To evaluate teaching ability
- **Spots** - Histopathology slides, Photographs, ligature material, X-Rays, Soft tissue specimens, Bones, Poisons and Weapons.
- **Spot tests** - For common poisons and identification of stains (Semen, Blood, Saliva)

**Day 2**

- **Postmortem Examination.**
- **Expert Second Opinion.**
- **Grand Viva Voce**



## VII. MANDATORY COMPLIANCE

- 1 The Model Weekly Time Table for Teaching learning activities is enclosed as : **Annexure – I**
- 2 Mandatory compliance of a PG student in T.L. process and CIA during the three year of study are given in : **Annexure – II**
- 3 The units for Quarterly assessment for CIA is given in : **Annexure – III**
- 4 Post Graduate student Quarterly Appraisal form for CIA is enclosed as : **Annexure – IV**
- 5 Mandatory Requirements to be eligible to appear for the University Summative Evaluation Examination is given in : **Annexure – V**
- 6 The Proforma of the Certificate on Attendance, Training Completion, Publication and Presentation Research / Poster / oral submission of Dissertation and present of all theory practical fee to be duly filled in and duly signed by PG Guide HOD, Finance Officer, Dean of faculty an HOI to be submitted to university COE before the issue of Hall Ticket for final exam is given us : **Annexure – VI**
- 7 The model QP pattern of paper I/II/III/IV, each of 100 marks and of 3 hours duration is enclosed as : **Annexure – VII**
- 8 The model Blue print for setting of Question papers and proper verbs/ phrases to be used in QP setting is given in : **Annexure – VIII**
- 9 The model marks list for practical and Vivavoce for PG medical MD/MS/ examination is enclosed as. : **Annexure – IX**

## VIII. RECOMMENDED READING BOOKS -(LATEST EDITION)

1. Subramanyam BV. Modi's Medical Jurisprudence and Toxicology. Butterworths India, New Delhi.
2. Nundy A. Principles of Forensic Medicine, New Central Book Agency Calcutta.
3. Lyon's Medical Jurisprudence for India. Delhi Law House, Delhi.
4. Reddy KSN. The Essentials of Forensic Medicine and Toxicology, K. Saguna Devi Publishers, Hyderabad.
5. Parikh CK. Parikh's Textbook of Medical Jurisprudence, Forensic Medicine and Toxicology, CBS Publishers and Distributors, New Delhi.
6. Bernard Knight. Forensic Pathology. Arnold Publishers London.
7. Di Maio VJ, Di Maio D. Forensic Pathology. CRC Press New York.
8. Camps FE. Gradwohl's legal Medicine. Bristol: John Wright and Sons Ltd.
9. American College of Legal Medicine Textbook Committee. Legal Medicine Mosby Publishers, USA.
10. Di Maio VJM. Gunshot Wounds, CRC Press USA.
11. Gordon I, Shapiro HA, Berson SD. Forensic Medicine – A Guide to Principle. Churchill Livingstone New York.
12. Mant AK. Taylor's Principles and Practice of Medical Jurisprudence, Churchill Livingstone, New York.
13. Parikh CK. Medicolegal Postmortems in India. Medical Publications, Bombay.
14. Gresham GA, Turner AF. Postmortem Procedures An illustrated Text Book. Wolfe Medical Publications.
15. Ludwig J. Current Methods of Autopsy Practice. WB Saunders Company, London.

16. Gordon I, Turner R. Medical Jurisprudence E and S Livingstone Ltd. London.
17. Spitz WU, Fisher RS. Medico-legal Investigation of Death. Charles Thomas Publishers.
18. Schroeder O.C. Dental Jurisprudence. PSG Publishing Company, Littleton, Massachussetts.
19. Stark MM. A Physicians Guide to Clinical Forensic Medicine. Humana Press Totowa, New Jersey.
20. Olshakar JS, Jackson JS, Jackson MC, Smock WS. Forensic Emergency Medicine. Lippincott William and Wilkins, Philadelphia.
21. Norah Rudin, Keith Inman. An introduction to Forensic DNA Analysis. CRC Press, London.
22. Robertson J, Ross AM, Burgoyne LA. DNA in Forensic Science - Theory, Technique and Application. Ellis Horwood, UK
23. Curry AS. Method of Forensic Science Vol. I-III. Inter-science Publishers London.
24. Clement JG, Ranson DL. Craniofacial Identification in Forensic Medicine. Arnold Publishers, London.
25. Sellier GK, Kneubuechl BP. Wound Ballistics and the scientific background. Elsevier, Amsterdam.
26. Bernard Knight. Simpson's Forensic Medicine. Arnold Publishers London.
27. Bernard Knight. Legal aspects of Medical Practice. Churchill Livingstone New York.
28. Gunn and Taylor. Forensic Psychiatry Clinical, Legal and Ethical issues. Butterworth Heinemann
29. G Gustafson. Forensic Odontology. Staples Press.
30. Gonzalez TA. Legal Medicine, Pathology and Toxicology- Appleton Century-Crofts Inc. New York.
31. Hirsch CS, Morris RC, Moritz AR. Handbook of Legal Medicine. CV Mosby Company London.
32. Lincoln PJ, Thomas J. Forensic DNA Profiling Protocols. Methods in Molecular Biology, Vol. 98, Humana Press, Totowa, New Jersey.
33. Lee HC, Gaensslen RE. DNA and other polymorphism in Forensic Science. Yearbook Medical Publishers, London.
34. Bergaus G, Brinkmann B, Rittner C, Staak M. (Eds.). DNA Technology and its Forensic Application. Springer- Verlag. Berlin
35. Beveridge A. Forensic Investigation of Explosions. Taylor and Francis USA.
36. Jay Dix. Colour Atlas of Forensic Pathology. CRC Press New York.
37. Bernard Knight. (ed.) The Estimation of Time since Death in the early Post Mortem Period. Arnold Publishers London.
38. Mant AK. Modern Trends in Forensic Medicine 1-3. Butterworth, London.
39. Luntz and Luntz. Handbook for Dental Identification. JB Lippincott. Toronto.
40. Buttler JM. Forensic DNA Typing. Academic Press New York.
41. Mason JK. Forensic Medicine- an illustrated reference. Chapman and Hall, London.
42. Mason JK. Paediatric Forensic Medicine and Pathology. Chapman and Hall, London.
43. Patnaik VP. MKR Krishnan's handbook of Forensic Medicine. Paras Publishing.
44. Lundquist Frank. Methods of Forensic science, vol. II, Interscience publishers.
45. Mehta HS. Medical, Law and Ethics in India. The Bombay Samachar Pvt. Ltd.
46. Gaur's firearms, Forensic Ballistics, Forensic Chemistry and Criminal Jurisprudence. Law Publishers (India) Pvt. Ltd. Allahabad.
47. Tedeschi Eckert. Forensic Medicine Vol. I -IV, WB Saunders Company.

48. Polson, Gee, Knight. The Essentials of Forensic Medicine. Pergomann Press, UK.
49. Redsicker DR. Forensic Photography, CRC Press USA.
50. Krogmann. Human skeleton in Forensic Medicine.
51. Abdullah Fateh. Handbook of Forensic Pathology
52. Simpson K. Taylor's Principle and Practice of Medical Jurisprudence. Vol. I-II.
53. Krishan Vij. Textbook of Forensic Medicine and Toxicology, ChurchillLivingstone.
54. Pillay VV. Textbook of Forensic Medicine and Toxicology, Paras Publishing, Hyderabad.
55. Mukherjee JB. Textbook of Forensic Medicine and Toxicology, Arnold'sPublishers, London.
56. Henry J, Wiseman H. Management of Poisoning. Published by WHO, UNEP and ILO.
57. Flanagan RJ et al. Basic Analytical Toxicology. Published by WHO, UNEP and ILO.
58. Guidelines for Poison Control. Published by WHO, UNEP and ILO
59. Genetics in Medicine – J. S. Thompson and M.W. Thompson.
60. Research – How to plan, speak and write about it – C. Hawkins and M. Sorgi.
61. Polson, Clinical Toxicology, Pittman Books, 3<sup>rd</sup> Edition.
62. Allen Moritz, Pathology of Tranuma
63. Keith Simpson, Modern Trends in Forensic Medicine Vol- I and II
64. V.V. Pillay, Modern Medical Toxicology, Jaypee brothers
65. J. B. Mukherjee, Forensic Medicine and Toxicology, Vol I, II, and III
66. J. K. Mukherjee, Forensic Medicine and Pathology, Chorpman and Hall Medical.
67. V. P. Patnaik, Krishnan's Hand Book of Forensic Medicine, Paras Publishing.
68. Apurbh Nandy, Principles of Forensic Medicine, Chopman and Hall Medicine.

**Journals:**[03-05 international Journals and 02 national (all indexed) journals – As Per MCI]

- Journals of Indian Academy of Forensic Medicine
- Journal of Karnataka Medico- Legal Society
- Journal of Forensic Medicine and Toxicology
- Journal of Forensic Sciences – American Academy of Forensic Sciences.
- Medicine, Science and Law – British Academy of Forensic Sciences.
- Journal of Indian Academy Society of Toxicology
- American Journal of Forensic Pathology & Legal Medicine
- Journal of Clinical Toxicology.
- Journal of Forensic & Legal Medicine
- Medical Law Cases for Doctors
- Journal of Medicolegal Association of Maharashtra

## Annexure - I

**P.G. Teaching Time Table – Model**

Clinical postings (OPD – IPD Duties Ward Rounds, Casualty posting, ICU posting, posting to support Departments like Radiology, Anesthesia CCL , Pathology, FMT, Postings to field work and PHCs Camps and other postings as per provisions of MCI, are mandatory on all week Day as per posting.

| <b>Day of the week</b>  | <b>Time 03 to 5 PM</b>                                     |
|-------------------------|--|
| Monday                  | Journal Club   |
| Tuesday                 | Case presentation / Micro Clinic- Patient based Training   |
| Wednesday               | Seminar / GD / Panel Discussion                            |
| Thursday                | Lecture by Faculty on select Topics                        |
| Friday                  | Clinical Meet / CPC / CME                                  |
| Saturday                | Guest Lecture by Experts / Skill Lab or Simulation Lab     |
| Sunday<br>(Select ones) | Medical Camps / Blood Donation Camp / Other types of Camps |

## Note

1. The Dept may select suitable days for a particular task assigned. But all of 7 tasks per week are a must
2. All the PG Teachers, PG students must attend these PG TLE Activities.
3. Attendance for these activities shall be maintained at the Department and Institutions. Implementation of the MCI Regulations, Syllabus and Time Table is the responsibility of HOD / HOI.

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## Annexure – II

**Mandatory Compliance of a PG student in Teaching – Learning Activities**  
**As per MCI Regulations Syllabus and Advisory**

| Sr. No. | Activities to be carried at by a PG student                               | Number per I <sup>st</sup> year (Minimum) | Number Per II <sup>nd</sup> Year (Minimum) | Number per III <sup>rd</sup> year (Minimum) | Total Number (Minimum) For 3 years |
|---------|---|---|--|---|------------------------------------|
| 1       | Presentation of Journal Articles in Journal club                          | 12  | 12   | 6   | 30                                 |
| 2       | a Case Presentation / Clinic  | 4   | 8  | 8   | 20                                 |
|         | b Skill Lab & Simulation  | 4   | 4  | 4   | 12                                 |
| 3       | a Presentation of Seminars  | 4   | 4  | 4   | 12                                 |
|         | b Leading a Group Discussion on a select Topic                            | 4   | 4  | 4   | 12                                 |
|         | c Assignment submission   | 4   | 4  | 4   | 12                                 |
| 4       | a Lectures / Tutorials to UG students /panel Discussion                   | 4   | 4  | 4   | 12                                 |
|         | b Clinical meeting CMC/ CPC   | 12  | 12   | 12  | 36                                 |
|         | c BLS   | 1   | --   | --  | 1                                  |
|         | d ACLS  | 1   | --   | --  | 1                                  |
| 5       | Medical Camps Health Checkup at Villages / Schools/ Blood Donation / etc. | 6   | 6  | 6   | 18                                 |
| 6       | a Orientation Programme   | 1   | 1  | 1   | 3                                  |
|         | b Research Methodology Workshop   | 1   | --   | --  | 1                                  |
|         | C Presentation of synopsis of the Thesis / Dissertation                   | 1   | --   | --  | 1                                  |
|         | d Presentation of Mid Term work of Thesis / Dissertation                  | --  | 1  | --  | 1                                  |
|         | e Presentation of final Draft of Dissertation / Thesis                    | --  | --   | 1   | 1                                  |
|         | f Presentation of Research Article  | --  | 0 or 1                                     | 0 or 1                                      | 1                                  |
|         | g Publication of an Article   | --  | 0 or 1                                     | 0 or 1                                      | 1 or 2                             |
| 7       | LOG Book  | 1 (a)                                     | 1 (b)                                      | 1 (c)                                       | 1 a+b+c                            |
| 8       | CIA   | 4   | 4  | 4   | 12                                 |
| 9       | Any other Activity Specified by Dept.                                     |   |  |   |                                    |

- Note :- 1. The Department may conduct periodic preparatory tests in Theory / Practical/Clinicals and Vivavoce. Quiz and MCQ test may to be adopted
2. The 12<sup>th</sup> CIA may also include a preparation examination on the model of university examination as a training cum assessment

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**Annexure – III**

**Units of Quarterly Assessment of Every student (Internal)**  
**Formative Assessment – Quarterly Assessment** (Total 12 CIAs)  
 As per Annexure III.

**1. Journal Based / Recent Advances learning**

(Bases on Journal Clubs / Select Article Presentation , Review Article preparation and presentation)

**2. Patient Based and Laboratory Based and skill Based learning**

(Based on clinical Posting – OPD / IPD Ward Rounds/ casualty/ Case Examination/ presentation /Diagnosis / Interpretation /of Clinical Diagnostics/ Differential Diagnosis, Prognosis/ Morbidity/ Mortality/ Community Medicine/ Promotion/ prevention/ Control/ Prophylaxis/ Epidemiology/ Simulation Studies/ Skill Based Studies and so on)

**3. Self Directed Learning and Teaching**

(Seminars Panel Discussion Group Discussion, Assignments, Case studies, Preparation of Charts and Models etc. , Role Play, Debates, Moot courts, etc)

**4. Departmental and Inter Departmental Learning Activities.**

(Participation in UG/PG teaching / Horizontal and Vertical Integrated Lectures, Clinical meeting / CPC / CME)

**5. External and out research Activities**

(Participation in Camps, Posting and Visit to PHCs, Satellite clinics, Mobile Clinics, Health checkup Camps, Blood Donation Camps, Immunization Camps school Visits. Crisis / Disaster Management, Celebration of Commemorative Days and soon)

**6. Thesis / Dissertation Research Work related to selected Topic****7. a) Log Book maintenance/ Portfolio management - To maintain LOG Book or portfolio management of all the TL Activities**

b) Presentation / Publications of Research Article

| No. | Particulars  | Minimum for 3 months   |
|-----|--|--|
| 1   | Journal based Recent Advance Learning- Presentation of select Article in Journal clubs | 3  |
| 2   | a Patient Based laboratory or Skill based learning- Case presentation / Clinic         | 1 (1 <sup>st</sup> year)<br>2 (2 <sup>nd</sup> & 3 <sup>rd</sup> year) |
|     | b Skill Lab / Simulation Lab Work  | 1  |
| 3   | a Self Directed Learning & Teaching- Presentation of Seminar                           | 1  |
|     | b Leading a Group Discussion on select Topic in GD                                     | 1  |
|     | c Assignment Submission  | 1  |
| 4   | a Lecture / Tutorials / Panel Discussions with UG students                             | 1  |
|     | b Clinical Meetings (CME's) CPC/Dept. meeting  | 3  |
| 5   | Medical Camps  | 1  |
| 6   | Dissertation Work Research methodology workshop  | Yes / No   |
| 7   | Log Book & Attendance  | Yes / No   |
| 8   | Any other Activity Prescribed (T/P/Viva)   | Yes / No   |

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## Annexure IV

**Postgraduate Students Appraisal Form**  
**Pre / Para /Clinical Disciplines – MD/MS Degree**

**Name of the Department/Unit** : **Roll No.:**  
**Name of the PG Student** :  
**Period of Training** : **FROM.....TO.....**  
**Quarterly Assessment (1/2/3/4/5/6/7/8/9/10/11/12)**

| Sr. No. | PARTICULARS  | Not Satisfactory |   |   | Satisfactory |   |   | More Than Satisfactory |   |   | Remarks |
|---------|--|------------------|---|---|--------------|---|---|------------------------|---|---|---------|
|         |  | 1                | 2 | 3 | 4            | 5 | 6 | 7                      | 8 | 9 |         |
| 1.      | Journal based / Recent advances learning             |                  |   |   |              |   |   |                        |   |   |         |
| 2.      | Patient based/Laboratory or Skill based learning     |                  |   |   |              |   |   |                        |   |   |         |
| 3.      | Self-directed learning and teaching                  |                  |   |   |              |   |   |                        |   |   |         |
| 4.      | Departmental and interdepartmental learning activity |                  |   |   |              |   |   |                        |   |   |         |
| 5.      | External and Outreach Activities / CMEs              |                  |   |   |              |   |   |                        |   |   |         |
| 6.      | Thesis / Research work                               |                  |   |   |              |   |   |                        |   |   |         |
| 7.      | Log Book Maintenance                                 |                  |   |   |              |   |   |                        |   |   |         |
| 8.      | Performance in Theory/Practical/Viva voce Tests      |                  |   |   |              |   |   |                        |   |   |         |
|         | <b>Overall Assessment</b>                            |                  |   |   |              |   |   |                        |   |   |         |

- **Publications of Research Article** Yes/ No
- **Presentation of Research Article**
- **The student has complied with mandatory requirement for quarterly assessment & presentation of Research Profile** Yes/No

**Remarks\*** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**\*REMARKS:** Any significant positive or negative attributes of a postgraduate student to be mentioned. For score less than 4 in any category, remediation must be suggested. Individual feedback to postgraduate student is strongly recommended.

SIGNATURE OF ASSESSEE

SIGNATURE OF HOD

\_\_\_\_\_  
**HEAD OF THE INSTITUTION**

**Annexure - V**

**Mandatory Requirements to be eligible to appear for  
university Summative Examination / Evaluation – As per MCI Regulations.  
(As per MCI Medical Education Regulation 2000,  
amended from time to time till date)**

1. Minimum percent of Attendance as per MCI Regulations.
2. Satisfactory performance in 12 CIA conducted and certified by HOD HOI and PG Guide.
3. Certificate from F.O. stating that all the fees due from the student are paid and credited to PIMS-DU A/c
4. Presentation of a Research Article / Poster in a national / state level conference / Seminar / Workshop.
5. Publication of a Research Articles as first – author in (indexed in Scopus or Web of Science or as fixed by MCI Regulations and visited by UGC (ARE list).
6. a) Thesis – Finalisation of Topic and Title – submission of Synopsis following IEC clearance within 6 months of Adm. Topics  
b) After II year of a Admission or 3 terms Midterm Review .  
c) Thesis to be submitted at least 6 months before final examination.  
d) Thesis to be examined by 3 Examiners. (1 Internal and 2 External PG Examiners)  
e) Its Acceptance is a must for appearing for University T & P Exam

Note :- HOD & HOI shall ensure provisions of 1,2,3,4,5,6 a,b,c. The COE shall ensure provisions of 1,2,3,4,5,6 a,b,c ,d,e & e as per MCI Regulations

**HEAD OF DEPARTMENT**

**HEAD OF INSTITUTION**

**DEAN OF FACULTY**

**REGISTRAR**

## Annexure - VI

Ref. No. \_\_\_\_\_

Date: \_\_\_\_\_

**Compliance to MCI's Regulations Governing Post Graduate Programme in Medical Faculty**

Department of \_\_\_\_\_ PG Programme: MD/ MS in \_\_\_\_\_

Name of Candidate: \_\_\_\_\_, JR-III

PRN No. \_\_\_\_\_ Date of Admission \_\_\_\_\_

**Certification on**  
**Attendance and Training Completion**  
**Publication & Presentation of Research Articles (Poster/ Oral)**  
**Submission of Dissertation & Payment of All types of prescribed fees**

It is hereby certified that the said candidate JR-III in the Dept. of \_\_\_\_\_ at Rural Medical College has completed 6 academic terms/ 3 academic years and fulfilled the prevailing provisions of the MCI Regulations governing MD/MS PG programmes and the rules of PMT, PIMS-DU. Details are as under.

| 1. | Attendance Fulfillment *  | % Attendance | Remark – Eligibility      |
|----|---|--------------|---------------------------|
|    | I Academic Term   |              |                           |
|    | II Academic Term  |              |                           |
|    | III Academic Term   |              |                           |
|    | IV Academic Term  |              |                           |
|    | V Academic Term   |              |                           |
|    | VI Academic Term  |              |                           |
|    | Overall fulfillment   |              | Fulfilled / Not Fulfilled |
|    | * Fulfillment of a minimum of 80% of attendance/ academic term, for 6 terms/ 3 years including imparted training, assignment, fulltime responsibilities and participation in all facets of PG education process including periodic assessment and so on as per MCI Regulations. |              |                           |
| 2. | Log Book maintained as per MCI Regulations & Fulfilled the graded responsibilities in the management and treatment of patients entrusted for their care<br>Verified by Dr. _____ Certified by Dr. _____   |              | Yes/<br>No                |
| 3. | Successful participation in teaching and training programmes organized by the department for UG and Interns   |              |                           |
| 4. | Presented and Participated in Seminars, Journal Clubs, Case Presentations, Group Discussions, Clinical Meetings, CME Ward Round, CPC, Practicals organized by the Department as per the timetable.  |              |                           |
| 5. | Participated in training sessions in diagnostics, medical/ surgical training, in basic/ applied medical and allied clinical specialties and Medical Camps as per the timetable  |              |                           |
| 6. | The Performance of the PG students in 12 CIAs (Conducted quarterly) are satisfactory as per appraisal proforma as per MCI Regulations.  |              |                           |
| 7. | Presented one research poster and one research article (oral) in a Seminar/   |              |                           |

|     |  |  |
|-----|--|--|
|     | Symposia/ Workshop/ Conference (National/State). The certificates for presentation of paper/ poster are enclosed.            |  |
| 8.  | Published one research article in a scientific journal as per norms. The copy of the published research article is enclosed. |  |
| 9.  | Submitted a Dissertation entitled _____<br>_____<br>_____ under the guidance of Dr. _____                                    |  |
| 10. | Paid all the fees (tution fees and other fees) vide receipt No. _____ for all 3 years.                                       |  |
| 11. | Produced NOC from all the sections of PMT PIMS-DU concerned about "NO DUES"  |  |
| 12. | Paid Examination fees of Rs. _____ vide Challan/ Receipt No. _____ dated _____ issued by Finance Officer PIMS-DU.            |  |

It is hereby declared that the all the duly certified and verified documents, related to the aspects mentioned above, are in the custody of department concerned and student section of Rural Medical College with due authentication and signature of concerned HOD/ Dean/ Principal/ Dean of Faculty) and will be made available for any MCI inspection as per norms and Regulations.

Accordingly He/She is eligible/ not eligible for appearing in final year PG examination as per the MCI Regulations governing PG Programmes.

**PG Guide**

Dr. \_\_\_\_\_

Seal

**Head of the Department**

Dr. \_\_\_\_\_

Verified and certified that all types of prescribed fees and fines PMT, PIMS-DU, College, Hostel & Others mentioned at sl.no. 10, 11, 12 are paid by the student and credited to the accounts of PMT & PIMS-DU.

Seal

**Finance Officer**  
PIMS-DU

Verified the relevant documents and certify that the candidate is eligible to appear for final year PG Examination as per MCI Regulations and rules of PIMS-DU.

**Dean**

Faculty of Medicine

Seal

**Dean**

Rural Medical College

Ref \_\_\_\_\_

**For Officer Use Only**

Date: \_\_\_\_\_

The HOD, HOI and Dean have certified that the

- Candidate is eligible to appear for PG Theory and Practical/ Clinical Examination as per MCI Regulations. F.O. has certified that all the fees has been credited to PMT, PIMS-DU Accounts.

- b. The Dissertation submitted has been evaluated by external examiners and then have approved the same for acceptance as per MCI Regulations.
- c. Hence the candidate be permitted to appear for the PG examinations (Theory & Practical/ Clinical) scheduled in the month of \_\_\_\_\_ year \_\_\_\_\_.

**Controller of Examinations**



**Submitted for perusal and approval**

**Vice Chancellor**

## Annexure – VII

**PRAVARA INSTITUTE OF MEDICAL SCIENCES**  
(Deemed to be University)

**Post Graduate Degree in Forensic Medicine and Toxicology (MD)**

**Examination \_\_\_\_\_ 20\_\_**

**Paper – I/ II/ III/ IV**

**Paper Title :** \_\_\_\_\_

**Date:**     /     /20

**Marks : 100**

**Time:**

**Instructions to candidate:**

- 1) All questions are compulsory
- 2) Answer written in illegible handwriting will not be assessed.
- 3) Write answers on both sides of answer paper.
- 4) Neat diagrams must be drawn wherever necessary.
- 5) Write prescription where indicated, and in the use of drugs their doses should be given.

|               |                      |                    |
|---------------|----------------------|--------------------|
| <b>Que. 1</b> |                      | Marks 20           |
| <b>Que. 2</b> |                      | Marks 20           |
| <b>Que. 3</b> |                      | Marks 20           |
| <b>Que. 4</b> | Write Short notes on | Marks 40<br>(10x4) |
|               | a                    |                    |
|               | b                    |                    |
|               | c                    |                    |
|               | d                    |                    |



## Annexure – VIII

**Table 1: Showing BLUEPRINTING for theory paper setting**

The number of Questions & their distribution of marks shall be as per MCI model Question Paper [only Illustration]

**LAQ/ SAQ and their Marks**

| LEVEL         | Q    | Q    | Q    | Q    | Q    | Q    | Q    | Total       |
|---------------|------|------|------|------|------|------|------|-------------|
|               | Mark | Mark | Mark | Mark | Mark | Mark | Mark |             |
| Knowledge     |      |      |      |      |      |      |      |             |
| Comprehension |      |      |      |      |      |      |      |             |
| Application   |      |      |      |      |      |      |      |             |
| Analysis      |      |      |      |      |      |      |      |             |
| synthesis     |      |      |      |      |      |      |      |             |
| Evaluation    |      |      |      |      |      |      |      |             |
| <b>TOTAL</b>  |      |      |      |      |      |      |      | <b>1000</b> |

The Questions (Whether LAQ or SAQ) Must aim at assessing all the 6 domains

**Note:** This is only an illustration. Actual Number of Questions and their distribution of marks shall be as per model Question Paper of MCI. (i.e. regarding the number of LAQ / SAQ and their marks distribution)

**Table 2: Showing appropriate verbs suitable to level of knowledge for theory paper setting**

| Level                | Suggested Verbs   |
|----------------------|---|
| <b>Knowledge</b>     | Define, Describe, Draw, Find, Enumerate, Cite, Name, Identify, List, label, Match, Sequence, Write, State   |
| <b>Comprehension</b> | Discuss, Conclude, Articulate, Associate, Estimate, Rearrange, Demonstrate understanding, Explain, Generalize, Identify, Illustrate, Interpret, Review, Summarize |
| <b>Application</b>   | Apply, Choose, Compute, Modify, Solve, Prepare, Produce, Select, Show, Transfer, Use  |
| <b>Analysis</b>      | Analyze, Characterize, Classify, Compare, Contrast, Debate, Diagram, Differentiate, Distinguish, Relate, Categorize   |
| <b>Synthesis</b>     | Compose, Construct, Create, Verify, Determine, Design, Develop, Integrate, Organize, Plan, Produce, Propose, rewrite  |
| <b>Evaluation</b>    | Appraise, Assess, Conclude, Critic, Decide, Evaluate, judge, Justify, Predict, Prioritize, Prove, Rank  |

**Table 3: Showing examples of theory questions**

| Sr. No. | Type                | Explanation   | Examples |
|---------|---------------------|---|----------|
| 1       | Long essay question | <ul style="list-style-type: none"> <li>✓ Question should pose clinical problem that will require student to apply knowledge along with integration with disciplines</li> <li>✓ Avoid one liner as question</li> <li>✓ Question stem should be structured</li> <li>✓ Marking distribution should be provided</li> <li>✓ Use of proper verbs from higher domains as given in this document</li> <li>✓ Avoid recall based questions</li> </ul> |          |
| 2       | Short notes         | <ul style="list-style-type: none"> <li>✓ Sample a wider content</li> <li>✓ Questions should be task oriented</li> <li>✓ Reasoning questions provide opportunity for testing integration, clinical reasoning and analytical ability of the student</li> </ul>  |          |

**Table 4: Showing Objective structured clinical examination [OSCE] typical station**

| Sr. No. | Type of station | Time allotted | Example | Evaluation |
|---------|-----------------|---------------|---------|------------|
| 1       | Procedure       |               |         |            |
| 2       | Response        |               |         |            |

## Annexure – IX

**University Examination  
Model Marks Sheet  
For Practical / Clinical Examination and Viva voce**

Duration \_\_\_\_\_

Max Mark – 400

## Illustration only

| No. | Type of Examination  | Marks Allotted | Scored |
|-----|--|----------------|--------|
| 1   | Long Cases   |                |        |
| 2   | a) Short cases (No. of small cases and Marks for each cases)<br>1/2/3/4-----<br>b) Ward Round<br>c) Any other                                |                |        |
| 3   | Spotter / OSPE/ Oral / Vivavoce<br>Sub Divisions<br>i)                      iv)<br>ii)                     v)<br>iii)                    vi) |                |        |
|     | Ground Total   | 400            |        |

| PG Examiners | Name              | Signature |
|--------------|-------------------|-----------|
| 1            | Chairman Name     |           |
| 2            | Internal Examiner |           |
| 3            | External Examiner |           |
| 4            | External Examiner |           |

Date:-

Place :-

- Note:- 1) The Number of cases, type of cases and type of practical and orals / vivavoce and their distributions of marks shall be as per MCI Regulations / Syllabi.
- 2) The HOD / Chairman / Co Chairman BOS shall ensure at this proforma is prepared as per the MCI Regulations / Syllabi.

## Annexure I

# **Postgraduate Students Appraisal Form** **Pre / Para /Clinical Disciplines**

Name of the Department/Unit :

Name of the PG Student:

Period of Training: FROM.....TO.....

| Sr. No. | PARTICULARS  | Not Satisfactory |   |   | Satisfactory |   |   | More Than Satisfactory |   |   | Remarks |
|---------|--|------------------|---|---|--------------|---|---|------------------------|---|---|---------|
|         |  | 1                | 2 | 3 | 4            | 5 | 6 | 7                      | 8 | 9 |         |
| 1.      | Journal based / recent advances learning             |                  |   |   |              |   |   |                        |   |   |         |
| 2.      | Patient based /Laboratory or Skill based learning    |                  |   |   |              |   |   |                        |   |   |         |
| 3.      | Self directed learning and teaching                  |                  |   |   |              |   |   |                        |   |   |         |
| 4.      | Departmental and interdepartmental learning activity |                  |   |   |              |   |   |                        |   |   |         |
| 5.      | External and Outreach Activities / CMEs              |                  |   |   |              |   |   |                        |   |   |         |
| 6.      | Thesis / Research work                               |                  |   |   |              |   |   |                        |   |   |         |
| 7.      | Log Book Maintenance                                 |                  |   |   |              |   |   |                        |   |   |         |

Publications Yes/ No

 Remarks\* \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\*REMARKS: Any significant positive or negative attributes of a postgraduate student to be mentioned. For score less than 4 in any category, remediation must be suggested. Individual feedback to postgraduate student is strongly recommended.

SIGNATURE OF ASSESSEE

SIGNATURE OF CONSULTANT

SIGNATURE OF HOD



*h. d. d. d. d. d.*  
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