

SHREE GURU GOBIND SINGH TRICENTENARY UNIVERSITY

FACULTY OF MEDICINE & HEALTH SCIENCES

Gurgaon-Farukhnagar Road, Village: Budhera, Distt. Gurgaon
(HR)-122505, Ph:-0124-2278233, Fax: 0124-2278232

**Curriculum & time bound programme for
Teaching and Training in MD Course in**

[Forensic Medicine & Toxicology]

GOALS:

The goal of the teaching of postgraduate students in Forensic Medicine is to produce a competent specialist who:

1. Is able to provide basic and specialized services in relation with medico-legal responsibilities in the practice of medicine and process of crime investigation.
2. Must be capable of setting inquiries on right track in criminal matters and connected to medico-legal problems.
3. Has acquired competency to be teacher, trainer, researcher and leader in the field.
4. Has acquired knowledge of law in relation to practice of medicine, medical negligence and investigation of crime against human beings. Respect for the codes of medical ethics consistent with national health policy and law of the land as a citizen of India is of course mandatory for them.

OBJECTIVES:

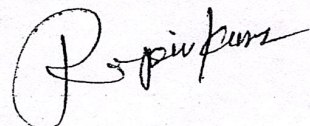
At the end of the course, the candidate shall be able to:

1. Conduct a competent medico-legal autopsy, collect appropriate evidence pertaining to cause/mode/manner of death and identification of deceased and assailant. They must also be able to understand and interpret other important medico-legal aspects of death due to natural and unnatural conditions and poisonings.
2. Must be able to visit the scene of crime and shall detect, describe, interpret the observations and conclude the procedure in a technically competent manner.
3. Have fundamental knowledge of all branches of medical disciplines related to their medico-legal applications. They must also be able to refer and understand relevant application of few other branches of science like botany, zoology, chemistry, and physics. It is also expected that they must be reasonably aware of using computer.
4. Be aware of laws in relation to medico-legal work, medical practice and be acquainted with related relevant amendments and also related judgments passed by constitutional courts.
5. Understand the important procedures and applicability of the general principals of analytical toxicology, ballistics, and immunology, occupational and environmental hazards.
6. Serve as a future teacher, trainer, researcher and leader in the field of medicolegal faculty. They must also be able to offer technically competent consultancy services to the health, home and law departments in connection with medicolegal work, crime investigation process and courts.

COURSE CONTENT

PAPER 1: BASIC MEDICAL SCIENCES, NAMELY, ANATOMY, PHYSIOLOGY, PHARMACOLOGY, PATHOLOGY AND MICROBIOLOGY AS APPLIED TO FORENSIC MEDICINE.

- Surface Land marks & regional Anatomy of medico legal significance.
- Comparative anatomical study of Male & Female skeleton.
- Anatomy of neck with special reference to violent Asphyxial deaths.
- Anatomy of reproductive organs
- Gross anatomy of heart and coronaries.
- Outline of embryonic / foetal development.
- Microscopic anatomy (histology of different organs & tissues, such as brain, heart, lungs, liver, kidneys, spleen, thyroid, adrenals, bone, skin)
- Body water & fluid balance.



- Blood grouping & RH incompatibility.
- Physiology of menses & pregnancy.
- Physiology of thermo-regulation.
- Patho-physiology of shock.
- Blood sugar regulation & diabetic coma, hypoglycaemic coma.
- Outline of the functions of circulation, respiration, and haemopoietic, and nervous, digestive, endocrine, excretory, reproductive and musculo-skeletal system. Pathophysiology of sexual functions and histopathology.
- General pathology: Pathology of cell / tissues – Degenerative changes & secondary changes (atrophy, hypotrophy, aplasia, Hyperplasia, ischemia, necrosis, infarction, cloudy swelling, amyloidosis and embolism, asphyxia deaths, electricity, gun-shot wounds, poisoning, thrombo-embolism, fat embolism, aspirations, wound healing, histological determination of time of death.
- Body's local and systemic response to trauma.
- Healing and fibrosis (Pathology of scar)
- Common general and systemic diseases and caused by physical/chemical agents.
- Disorders of infancy and old age changes relevant to forensic medicine.
- Pathology gross and microscopic in myocardial infarction, congenital heart diseases, tuberculosis, cirrhosis, malnutrition, starvation.
- Histology with important Staining Procedures
- Microbiology and serology of venereal diseases infections.
- Microbiology of Cadavers.
- Relevant General Pharmacology, Pharmacology of Important Antidotes & Drugs.
- Addiction, Anti-sera, Hormones & Anaesthetic Drugs.

PAPER 2: FORENSIC MEDICINE INCLUDING OTHER CLINICAL SUBJECTS AS APPLIED TO IT

1. Identification of the living and dead, determination of race and religion, sex, age, external peculiarities such as moles, birth marks, occupational marks, anthropometry, finger prints, and foot prints handwriting etc. and their medico legal aspects.
2. Evaluation of evidence from the skeleton. Problems of reconstruction, superimposition technique.
 - Medico legal aspects of allergy and anaphylaxis.
 - Evidence from trace elements like hair and biological stains of blood, semen, sweat, saliva, milk, sputum etc.
 - Laboratory investigations as required in medico legal situations like unconsciousness, sudden death from unknown causes, therapeutic misadventures, industrial exposures and the like.
 - Outlines of analytical and Histopathological techniques as applied to forensic medicine.
 - Injuries and Thermal death from cold coma, heat coma, electricity coma, lightning and radiation.
 - Death from starvation.
 - Mechanical injuries & their medico legal aspects in relation to nature of injuries, accidental, suicidal, homicidal distinction between injuries caused during life and after death. Medico legal examination of injured person. Regional and Transportation injuries.
 - Examination of weapon in relation to inflicted injuries.
 - Firearm and Thermal injuries.
 - Causes of death from wounds.

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- Forensic radiology in identification, pathology, dentistry, child abuse, trauma, medico legal implications of radiological procedures.

Forensic Psychiatry:

Various Acts in relation to Forensic psychiatry,

- Classification of mental disorders and abnormal human behaviours. Medico legal aspects of INSANITY and abnormal human behaviour as regards to civil & criminal responsibilities and rules regarding admission, treatment and discharge of mentally ill person in the Menta Hospitals, Feigned insanity, Juvenile delinquency in the juvenile court. Restraint of mentally ill person.
- Biology of behaviour, emotion, stress, attitudes, normal & abnormal personalities.
- Psychological assessment & testing personality and its disorders, abnormal psychology, health psychology, assessment strategies in medical education.
- Study of suicide, production of personality and circumstances. Post mortem analysis of suicide notes and circumstances
- Counselling in normal sexual behavior and sex related disorders.
- Medico legal aspects of emergency & resuscitation intensive care, medical negligence death.
- Trauma, Work Stress & Disease.
- Torture medicine: Medico legal aspects & duties of physician in cases of torture.

Type of personalities.

- Mass disasters.
- Bombs and other explosives. Biological and chemical warfare and barotrauma.
- Impotence, Sterility, Artificial insemination, sterilization. Test tube babies & their medico legal aspects.
- HIV and AIDS.
- Virginity, Pregnancy, Delivery in relation to suit of nullity of marriage, divorce, and legitimacy affiliation cases etc.
- Abortion – Criminal & Justifiable, Laws in relation to criminal abortion. Duties of medical persons when called to treat a case of criminal abortion. MTP Act 1971.
- Sexual Offences – Rape, Incest, unnatural sexual offences such as sodomy,
- Tribadism, Bestiality & Buccal Coitus, Sexual perversions.
- Infanticide.

PAPER 3: FORENSIC TOXICOLOGY & MEDICAL JURISPRUDENCE

- General & Forensic Toxicology including Classification, Mechanism of Action, Clinical Features, Diagnosis, Management, Autopsy appearances & Medico-legal Importance of Poisons.
- Addiction, de-addictions and drug abuse.
- Important Toxicological Analytical Techniques.
- Forensic Science: Recent Advances & Modern Trends.
- Introduction & working of various Wings of Forensic Science Laboratory..
- Immunology, Examination of Biological Trace material Evidence. Ballistics,
- Identification. Crime Laboratory, Forensic Photography.
- Definition of Medical Jurisprudence.
- Introductory remarks, Criminal Courts & their powers, inquests and legal procedures, procedure in court, medical evidence, various medical certificates, medico legal reports, dying declaration & dying deposition, witness, conducts and duties of the doctor in the witness box, professional secrecy.

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- Regulation of medical profession, various governing bodies, their constitution & functions. Laws in relation to medical man.
- Rights, duties & privileges of a registered medical practitioner.
- Informed consent in medical practice. Infamous conduct. Medical malpraxis.
- Physician duties under various public health & medical Acts.
- Problems of privileges and confidentiality etc. Physician in the Witness Box.
- Liabilities of Hospitals, nursing home and public dispensaries to patients.
- Medical practice in relation to Insurance.
- Relevant parts of Indian Penal Code of criminal procedure, Indian Evidence Act, Suppression on Immoral Trafficking Act. Workman's Compensation Act and other Laws related to medical practice.
- Law & Procedures related to Organ Transplantation.
- Legal & Ethical aspects of Family planning procedures.
- Therapeutic trial & human experimentation etc.
- Medico legal aspects of Organ & Tissue transplantation.
- Euthanasia.
- Supreme Court and High Court Landmark judgments related to Forensic Medicine and Medical Jurisprudence.
- Relevant Laws, Legal Procedures & Psych General Medical Jurisprudence including MCI, MMC, Ethics & Bio Med Research, Consent, Negligence, Relevant Sections, Courts & their powers, Evidence & Recording of Evidence,
- Relevant Sections of IPC, Cr Pc, IEA, Acts Like CPA, MTP, PCPNDT, NDPS, OT, NHRC
- Medical certification of cause of death and relevant vital statistics..
- Day-to-day MLC problems in hospitals.
- Recent Laws applicable to medical man.
- Value of medical opinion in the court of law.

PAPER 4 : FORENSIC PATHOLOGY INCLUDING FORENSIC IMMUNOLOGY & RECENT ADVANCES

- Medico legal autopsy of dead body, decomposed and mutilated body or its fragments / skeleton, bones, exhumation & rules regarding it.
- Death, manner of death, modes of death, cause of death, sudden death, signs of death and changes following death. Estimation of post mortem interval, Forensic Entomology, Post mortem chemistry of body fluid like blood, CSF and vitreous humour, presumption of death and presumption of survivorship. Violent asphyxia deaths: Hanging, Strangulation, Suffocation and Drowning.
- Death from sudden violent, suspicious, unknown and unnatural cause, disease following trauma.
- Basic concepts of immunology and serology.
- Principles of various immune-serological tests, precipitin test, pregnancy test, sperm antibody test.
- Role of immunological techniques in crime investigation and exclusion of parentage.
- Incompatibility and adverse reaction of drugs commonly used in therapy etc.
- Anaphylaxis and hypersensitivity reactions.
- Different types of teaching aids, methods of teaching & question paper formation of different types (MCQs, Structures, Traditional, Short, and Essay Types).
- DNA & Finger Print System, Lie Detector & Polygraph, Norco-analysis.
- National Health policies.
- Life saving maneuvers and pre-hospital first aid.

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- Routine and advanced Imaging Techniques and equipments.
- Medico-legal record keeping.
- Basics of medical education technology and research methodology.
- Computer and its use and its applicability in the specialty.
- Medical auditing.

Note: The project syllabus is minimal and may require further improvement time to time as per requirements of MCI and the advances in the specialty of forensic medicine & toxicology.

PRACTICAL:

1. Medico-legal autopsies.
2. Age estimation
3. Medico-legal Injury report preparation.
4. Medico-legal examination of an Alcoholic and other drugs;
5. Medico-legal examination in cases of Sexual offences
6. Medico-legal examination of Poisoning cases
7. Psychiatric assessment of patient.
8. Medico-legal examination of bones, weapons, clothing, wet specimens, poisons.
9. Detection of common poisons in Toxicology Laboratory.
10. Medico-legal examination of Photographs.
11. Medico-legal examination of X-rays.
12. Laboratory examination of Biological trace material evidence.
13. Court evidence / attendance.
14. Awareness of various intensive care setups & Operation Theatre setups.
15. Awareness of medico legal & crime Laboratory instruments & Equipments.
16. Attending CME/Workshops/Conference; involvement in UG Teaching.

Teaching Program:

General Principles:

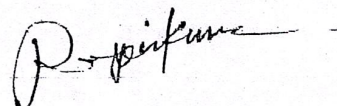
Acquisition of practical competencies being the keystone medical education, postgraduate is skills oriented. Learning in postgraduate program is essentially self-directed and primarily emanating from academic and experimental work. The formal sessions are merely meant to supplement this core effort.

Teaching sessions:

In addition to undergraduate teaching by postgraduate students, there are daily sessions of formal teaching. Each MD student has to present Seminars, Journal clubs, perform medicolegal autopsies, prepare medico.legal reports. They are also allotted time for doing work related to thesis. Candidates must actively participate in Postmortem Examination, Clinical Medico legal cases, Laboratory work, Clinico-pathological Conferences, Seminars, Journal Clubs, Group Discussions, Visit to Scene of crime, Court Evidence & Research work. The facilities offered by other Clinical & Basic Science Departments are made available to them. The postgraduate Student shall be required to actively participate in the Teaching / Training programmes of undergraduates, nursing students, interns. The candidates are also expected to be aware of basics of medical education teaching technology principles and use of audiovisual aids in the same. The postgraduate Student should maintain a Log Book of the work assigned to him. This log book will be assessed by the postgraduate Guide of the Student and will be jointly evaluated by the Guide & Head of the Department.

Teaching Schedule:

The suggested departmental teaching schedule is as follows:-



- Monday: Thesis work reporting to guide and to the department
- Tuesday: Journal club
- Wednesday: Autopsy report presentation
- Thursday: Presentation of clinical forensic medicine cases
- Friday: Seminar
- Saturday: Statistics
- End of each month: Theory test
- 6 monthly: Grand viva

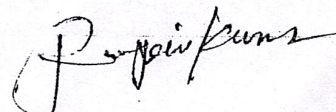
Note: All sessions are to be attended by the faculty members. All PGs are supposed to attend the sessions. All the teaching sessions are assessed by the consultants at the end of session and marks are given out of 10 (for participant) & 100 (for presenter) and kept in the office for internal assessment. Attendance of the residents at various sessions has to be at least 75%.

Posting:

The postgraduate student shall rotate through the following department and acquire the relevant knowledge as follows:

- a. **Anatomy:** Dissection techniques, Gross & Histological appearances of Vital Organs & Endocrines. Forensic Osteology, Anthropometry, Embalming & Relevant Embryology.
- b. **Physiology & Biochemistry:** Functional aspects of Vital Organs & endocrines, Physiology & Biochemistry of Blood, Semen, Saliva, Sweat, CSV, P.M. Biochemistry of Body Fluids.
- c. **Pathology & Microbiology:** Injury, Inflammation, Repair, Thrombus-Embolism, Shock, Gross & Microscopic Appearances of Vital Organs and histopathology in cases of sudden death e.g. Myocardial infarctions and other related diseases e. g, which can cause sudden death by complications e.g. tuberculosis, renal failure etc.& Endocrines Imp. Staining techniques, Museum Procedures, Infection, Immunology, HIV, Anaphylaxis, Insulin, Penicillin, Observation-Collection-Preservation & Forwarding Of Pathological & Microbial Evidence.
- d. **Medicine+Paediatrics +Psychiatry+Pharmac +Medical Record Section:** Awareness of Diagnosis, Evaluation of ECG in cases of Myocardial Infarctions Medicolegal Aspects & Management of Critical Care, Poisoning & Psychiatry cases, Visit to MICU Set Up, important Paediatric procedures + NICU Set Up, Pharmacology & Detection Of Drugs of Dependence, Casualty: First Aid, Examination, Diagnosis & Medical + Medico Legal Management of Clinical Medico-legal cases, Dying Declaration and Dying deposition, Gastric Lavage, Parental Injections, Emergency Tray, Casualty Administration in Mass Disasters.
- e. **Surgery + Orthopaedics +Dentistry + Radiology + Anaesthesiology:** Awareness regarding Examination, Diagnosis & Medical + Medico Legal Management of cases Of Imp. Regional Injuries (Poly trauma & Burns), Injury certification & Disability Evaluation, X-ray findings in Bony Trauma Age determination cases Intracranial hemorrhages with the help of MRI and CT Scans Visit to Surgical ICU & Operation Theatre, Awareness of imp Anaesthetic, Procedures and complications, Important OT Instruments & Equipments.
- f. **Obstetrics & Gynaecology:** Abortion, Sterilization Techniques, Introduction to Major Obs. & Gyn. Procedures, Prenatal Diagnostic Techniques. Study of fetuses and placenta. Forensic Science Laboratory: Introduction to various sections of the FSL Setup & Instrumentation, Introduction to & relevant awareness of imp Qualitative & Quantitative. Detection & Analytical Techniques. Introduction to & relevant awareness of Identification, Biology, Chemistry, Toxicology & Ballistics Divisions.

Note:- The Casualty Posting should be split in to two periods. The initial posting during First Year is introductory type. The Second Casualty posting is during Second year. This posting is major one



5. American Journal of Of Law & Medicine.
6. American Journal of Forensic Medicine.
7. Forensic Science International.
8. Journal of Clinical Forensic Medicine.
9. Medicine Science & Law.
10. Science & Justice.
11. Journal of Indian Academy of Forensic Medicine. Journal of Punjab Academy of Forensic
Medicine and Toxicology
12. Journal of Forensic Medicine & Toxicology, (Medico-legal Society.)
13. Medico-legal Update, An International Journal.
14. Journal of Clinical Forensic Medicine.
15. Journal of Forensic and Legal Medicine

Paper for

& it is expected that students must be exposed to maximum quantity & variety of cases. Their ability to manage the casualty in major casualties can be observed during this period.

Dissertation:

Every candidate shall carry out work on an assigned research project under the guidance of a recognized Postgraduate Teacher and submit dissertation as per schedule given in the Ordinance of the M.D. Courses.

Assessment:

All the PG residents are assessed daily for their academic activities and also periodically.

General principles:

The assessment is valid, objective, and reliable. It covers cognitive, psychomotor and affective domains. Formative, continuing and summative (final) assessment is also conducted in theory as well as practicals/clinical. In addition, thesis is also assessed separately.

Formative:

The formative assessment is continuous as well as end-of-term. The former is based on the feedback from the senior residents and the consultants concerned. End-of-term assessment is held at the end of each semester (up to the 5th semester). Formative assessment will not count towards pass/fail at the end of the program, but will provide feedback to the candidate.

Internal Assessment:

The performance of the Postgraduate student during the training period should be monitored throughout the course and duly recorded in the log books as evidence of the ability and daily work of the student.

Personal attributes:

Availability: Punctual, available continuously on duty, responds promptly to calls and takes proper permission for leave.

Sincerity and motivation: Dependable, honest, admits mistakes, does not falsify information, exhibits good moral values, loyal to institution, has initiative, takes on responsibilities, goes beyond routine work, exhibits keen desire to learn.

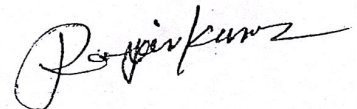
Diligence and performance: Dedicated, hardworking, does not shirk duties, leaves no work pending, does not sit idle, competent in clinical case work up and management (Where applicable), skilled in procedures, proficient in record keeping and file work.

Academic ability: Intelligent, shows sound knowledge and skills, participates adequately in academic activities, and performs well in oral presentation and departmental tests
Inter-personal skills: Has compassionate attitude towards patients, gets on well with colleagues and paramedical staff, respectful to seniors.

Job Responsibilities:

The junior residents should:

1. Maintain log book on daily basis
2. Maintain daily record of post graduate activities including:
 - i. Practical exercises
 - ii. Statistics exercises
 - iii. PG teaching schedule
3. Prepare for undergraduate and postgraduate practical



4. Provide the basic medico-legal services in relation to practice of medicine.
5. Must be able to conduct, interpret and report common medico-legal autopsies.
6. Identify diagnose and manage common acute and chronic poisonings.
7. Be able to examine , interpret , report and if required give expert opinion in various clinical medico-legal matters like age estimation, alcoholics, sexual offences, injuries, abortion, sex determination, paternity, disability evaluation etc.
8. Teach the practical undergraduate medical students the subject of forensic medicine and also to actively participate in the training and re-orientation programmes of interns.

Suggested Readings:

Core Books:

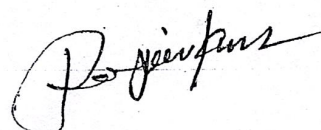
1. Modi's Textbook of Medical Jurisprudence & Toxicology.
2. Reddy, K.S.N. The Essentials of Forensic Medicine & Toxicology.
3. Mukharjee, J.B. The Textbook of Forensic Medicine. Vol. 1 & 2.
4. Nandy, A. Principles of Forensic Medicine.
5. Vij, Krishan. Textbook of Forensic Medicine & Toxicology: Principles & Practice.
6. Pillay, V.V. Textbook of Forensic Medicine & Toxicology.
7. Pillay, V.V. Modern Medical Toxicology.
8. Knight, Bernard. Forensic Pathology.
9. Vincent J.M. Di Maio & Suzzanna E. Dana. Handbook of Forensic Pathology.

Reference Books:

1. Knight, Bernard et. All. Cox's Medical Jurisprudence & Toxicology.
2. Fisher, Russel S. and Charles S. Petty. Forensic Pathology.
3. Keith Simpson's Forensic Medicine.
4. Ludwig, Jurgen. Current Methods of Autopsy Practice.
5. Camps F.E. Gradwohls. Legal Medicine.
6. Simpson's A Doctors Guide to Court.
7. Polson C.J. The Essentials of Forensic Medicine.
8. Adelson, L. The Pathology of Homicide.
9. Watanabe, Tomio. Atlas of Legal Medicine.
10. Spitz, W.U., & R.S. Fisher R.S. Medico- Legal Investigation of Death.
11. A. Keith Mant. Taylor's Principles & practice of Medical Jurisprudence. Churchill Livingstone.
12. Hidayatullah, M. and V.R. Manohar. Ratanlal & Dhirajlal The Indian Penal Code.
13. Hidayatullah, M. and S.P. Sathe. Ratanlal & Dhirajlal The Code of Criminal Procedure.
14. Hidayatullah, M. and V.R. Manohar. Ratanlal & Dhirajlal The Law of Evidence.
15. Mehta, H.S. Medical Law & Ethics in India.
16. Code of Medical Ethics, Medical Council of India , approved by Central Govt. U/S 33(m) of IMC Act 1956 (Oct. 1970).
17. Krogman, W.M. : The Human Skeleton in-Legal Medicine.
18. Camps, F.E and J.M. Cameren. David Lanham's Practical Forensic Medicine.
19. Subrahmanyam, B.V. Textbook of Forensic Medicine & Toxicology.
20. Lele, R.D. The Medical Profession & Law.

Journals:

1. Journal of Forensic Sciences.
2. Journal of Legal Medicine (Of American College Medicine.).
3. Journal of Forensic Science Society.
4. Medico-legal Journal.



Model Question Paper

Roll No.: _____

M.D. (FORENSIC MEDICINE & TOXICOLOGY)
PAPER 1 – BASIC MEDICAL SCIENCES
Paper Code: _____

Time: 03 hrs.

Maximum Marks : 100

- Note: 1. Write your Roll No. on the Question Paper.
2. Attempt all the questions.
3. Parts of a question should be attempted in sequential order.
4. Illustrate your answer with diagram wherever required.

- Q.1 Describe blood supply of the heart. What are the histopathological changes in MI? (10)
Q.2 Describe anatomy of skull from medico-legal point of view. (10)
Q.3 Describe the physiology of muscle contraction & rigor mortis. (10)
Q.4 How can you identify the sex of a person microscopically? (10)
Q.5 Enumerate the medico-legal importance of examination of blood. (10)
Q.6 Describe the age changes in pubic symphysis and its medico-legal significance. (10)
Q.7 Discuss the patho-physiology of hypovolemic shock. (10)
Q.8 Describe the Circle of Willis and its medico-legal importance. (10)
Q.9 Describe the process of healing of wound and determination of age of the wound. (10)
Q.10 Describe the dissection of neck and its blood vessels in context to asphyxia Deaths. (10)

R. Jeyaraj

M.D. (FORENSIC MEDICINE & TOXICOLOGY)

SCHEME OF EXAMINATIONS

The examination shall consist of (1) Dissertation, (2) Theory, and (3) Practical/Clinical and Oral examination. The plan for submission of dissertation is given in the M.D. Courses Ordinance.

1. Theory Examinations – 400 marks:

Paper Code	Nomenclature of Paper	Marks
01240101	Basic Medical Sciences	100
01240102	Forensic Medicine including Other Related Clinical Subjects	100
01240103	Forensic Toxicology & Medical Jurisprudence	100
01240104	Forensic Pathology including Forensic Immunology & Recent Advances	100
01240105	Practical/ Viva Voce	400
Total		800

Practical Examinations – 400 marks:

Distribution of Practical Marks including Viva shall be as follows:

1	Post Mortems	100
2	Histology & Histopathology	50
3	Hematology & serology	50
4	ML problem & case discussion	100
5	Oral/ Viva Voce	100
Total		400

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Model Question Paper

Roll No.: _____

M.D. (FORENSIC MEDICINE & TOXICOLOGY)
PAPER 2 – FORENSIC MEDICINE INCLUDING OTHER CLINICAL SUBJECTS AS APPLIED TO IT
Paper Code: _____

Time: 03 hrs.

Maximum Marks : 100

- Note: 1. Write your Roll No. on the Question Paper.
2. Attempt all the questions.
3. Parts of a question should be attempted in sequential order.
4. Illustrate your answer with diagram wherever required.

- Q.1 Describe the examination procedure and findings in a 16 year old victim of rape. (10)
Q.2 Explain therapeutic misadventure with examples. (10)
Q.3 Discuss the role of radiological examination in clinical forensic medicine. (10)
Q.4 Discuss the medico-legal aspects of artificial insemination. (10)
Q.5 Describe elementary ballistic principles and their medico-legal significance. (10)
Q.6 What are the medico-legal aspects of insanity? (10)
Q.7 Discuss medico-legal aspects of treatment including iatrogenic disease and industrial hazards. (10)
Q.8 Enumerate the medico-legal importance of Ultrasound and CT scan. (10)
Q.9 Discuss the medico-legal aspect of AIDS. (10)
Q.10 What is the role of clinical forensic medicine in prevention of torture? (10)

P. J. Kumar

Model Question Paper

Roll No.: _____

M.D. (FORENSIC MEDICINE & TOXICOLOGY)
PAPER 3 – FORENSIC TOXICOLOGY & MEDICAL JURISPRUDENCE
Paper Code: _____

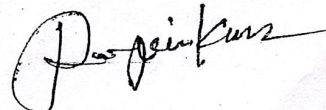
Time: 03 hrs.

Maximum Marks : 100

- Note: 1. Write your Roll No. on the Question Paper.
2. Attempt all the questions.
3. Parts of a question should be attempted in sequential order.
4. Illustrate your answer with diagram wherever required.

- Q.1 Describe in detail the set up of Modern poison control centre. (10)
- Q.2 Classify insecticides/Organophosphorus compounds. (10)
- Q.3 What is Therapeutic misadventure? Explain with examples. (10)
- Q.4 What is professional negligence? Give some examples. (10)
- Q.5 What are medico-legal issues pertaining to Plumbism? (10)
- Q.6 Discuss the ethical considerations for Human experimentation. (10)
- Q.7 Enumerate the salient features of NDPS Act. (10)
- Q.8 Describe the signs and symptoms, fatal dose, treatment, and postmortem changes in case of Alphas poisoning. (10)
- Q.9 Describe the differential diagnosis of dilated and constricted pupils from forensic viewpoint. (10)
- Q.10 Describe Professional Misconduct. Give some examples. (10)

Model Question Paper



Roll No.: _____

M.D. (FORENSIC MEDICINE & TOXICOLOGY)
PAPER 4 – FORENSIC PATHOLOGY INCLUDING FORENSIC IMMUNOLOGY & RECENT ADVANCES
Paper Code: _____

Time: 03 hrs.

Maximum Marks : 100

- Note:**
1. Write your Roll No. on the Question Paper.
 2. Attempt all the questions:
 3. Parts of a question should be attempted in sequential order.
 4. Illustrate your answer with diagram wherever required.

- Q.1 Enumerate the Tissues/materials preserved for DNA analysis. (10)
- Q.2 Discuss to substantiate that applied aspects of Forensic Pathology & Odontology have much to help the system of Penology, law & order and to assure justice. (10)
- Q.3 Discuss the medico-legal aspects of Human organ transplantation. (10)
- Q.4 Discuss the scope of Entomology in determination of time since death. (10)
Quote recent famous cases where this technique proved of significant value.
- Q.5 Discuss the ethical issues related to Cloning. (10)
- Q.6 Discuss ML applications of DNA fingerprinting. Also discuss the probative value of this evidence. (10)
- Q.7 Discuss the ethical issues pertaining to Renting of Womb. (10)
- Q.8 What are the liabilities of a doctor in case of mismatched blood transfusion? (10)
- Q.9 Discuss the medico-legal issues related to Euthanasia. What is the legal status of Euthanasia in India? (10)
- Q.10 Enumerate the salient features of ART Act. (10)

Rajiv Kumar

Appendix I (LOG BOOK)

Log Book Details

Sr. No	Date	Time	Topic/Activity	Teacher	Remarks and sign of PG Teacher

- Topic- Topic of Lecture/Demonstration attended
- Topic of Lecture/Demonstration thought
- Fortnightly submission of the logbook to the concerned PG teacher signature obtained

P. Jeyapalan

Appendix II

Direction-Please tick the statement, which most closely corresponds to your observation.

Name of teacher : _____

Topic : _____

Date : _____

Sr no	Skill		Teacher Action	Yes	To Some extent	No
1	Set Induction	a)	Aroused interest at the beginning			
		b)	Specified objectives of presentation			
2	Planning	A)	Organised material in a logical sequence			
		b)	Used relevant content matter			
3	Presentation	a)	Fluency in language			
		b)	Used non verbal cues, eye contact etc			
4	Interaction	a)	Allowed questions from students			
		b)	Asked Questions			
		c)	Rewarded pupil effort			
		d)	Clarified doubts			
5	Use of A V aids	a)	Used proper A V aids			
		b)	Used the aid effectively			
6	Summarization	a)	Summarized the important points at the end			
		b)	Checked that all the students understood the points			
		c)	Lesson on the whole was effective			
7			Any suggestions for the speaker to improve the teaching /learning exercise			

P. Raju