



**अखिल भारतीय आयुर्विज्ञान संस्थान (एम्स), गुवाहाटी**  
**All India Institute of Medical Sciences, Guwahati**  
स्वास्थ्य और परिवार कल्याण मंत्रालय, भारत सरकार के तत्वावधान में एक वैधानिक निकाय  
(A statutory body under the aegis of Ministry of Health and Family Welfare, Govt)  
**Changsari, Assam PIN - 781101**

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**DEPARTMENT OF FORENSIC MEDICINE & TOXICOLOGY**

**POST GRADUATE CURRICULUM**

**PREAMBLE:**

The main aim of this course is to train post – graduate students of medical sciences in the speciality of Forensic medicine and Toxicology. To impart theoretical and practical training to the candidates in various fields viz forensic medicine, toxicology, forensic pathology, ethics, forensic psychiatry, basic forensic sciences, etc. Candidates would be introduced to basic research methodology and recent advances in the field, so that they can conduct fundamental and applied research. Training would be imparted in various teaching methodology also.

**PROGRAMME AIMS**

This programme aims at training a competent expert in Forensic Medicine and Medical Toxicology.

**PROGRAMME OBJECTIVES**

This programme aims at training an expert in Forensic Medicine & Medical Toxicology who at the end of the training will be able to:

- A. Identify and define the existing as well as future Medico-legal problems as they emerge in the community and work to resolve such problems by planning, implementing, evaluating and modulating Medico-legal services.
- B. Undertake Medico-legal responsibilities and discharge Medico-legal duties, which arise in day-today general practice as well as in hospitals.
- C. Keep himself/herself abreast with all recent developments and emerging trends in the field of Medical Ethics and the Law.
- D. Evaluate his professional activities, educational needs and select appropriate learning resources periodically.
- E. Deal with general principles and practical problems related to forensic, clinical, emergency, environmental, medico-legal and occupational aspects of Toxicology.
- F. Impart education in Forensic Medicine and Toxicology to under-graduate and post-graduate students with the help of modern teaching aids.

**STUDENT ELIGIBILITY CRITERIA AND SELECTION METHOD**

1. Medical Graduates with MBBS or equivalent medical degree from a recognized University in India after the completion of their internship and who are registered with the Indian Medical Council are eligible to apply.
2. Selection of students will be as per the existing regulations of the All India Institute of Medical Sciences, Guwahati.



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## ACADEMIC CALENDER

Time in years	Name of Programme		Remarks
0 – 1 week	<ul style="list-style-type: none"> <li>Documentation</li> <li>Joining formalities</li> <li>Orientation</li> </ul>	One week	Not applicable
0 – 6 Months	Introduction to general principle of forensic medicine & toxicology. <ul style="list-style-type: none"> <li>Development of basic autopsy skills</li> <li>Thesis-topic selection and presentation and approval in front of research committee and ethics committee.</li> </ul>	Within 3 months of Registration.	Under Faculty Guidance
	Introduction to research methodology module with evaluation	Within 2 months of Registration.	
6 – 12 Months	<ul style="list-style-type: none"> <li>Clinical forensic medicine.</li> <li>Orientation to basic medical sciences.</li> <li>Autopsy work</li> <li>Attend court summons</li> </ul>		Teaching sessions Seminars Thesis
	Research paper writing workshop	Within 12 months	
END of 12 Months	ANNUAL ASSESSMENT	End of 1 <sup>st</sup> Year.	
12 months – 18 months	<ul style="list-style-type: none"> <li>DNA finger-printing</li> <li>Research, analysis and presentation of data</li> <li>Medico-legal work in casualty dept</li> <li>Toxicology lab work</li> <li>Attend court summons</li> </ul>		Teaching sessions Seminars
	MID TERM THESIS EVALUATION	End of 18 months.	
	FORMATIVE ASSESSMENT	End of 18 months.	Practical's included
18 months – 36 months	Posting for <ul style="list-style-type: none"> <li>Autopsy work</li> <li>Clinical forensic medicine</li> <li>All aspects of toxicology (Collection, preservation, transportation, analysis of biological samples)</li> </ul>		Teaching sessions Seminars



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End of Second Year	FORMATIVE ASSESSMENT	End of 18 months.	Practical's included
	FINAL THESIS SUBMISSION	6 Months prior to Final Examination.	
	PRE FINAL ASSESSMENT	2 Months prior to Final Examination.	Practical's included
End of 3 <sup>rd</sup> Year	FINAL ASSESSMENT MD/ MS Examination.		

Residents would be participating in Institutional programme as and when held.

To attend minimum ONE National Conference. Presentation of paper/ poster to be done.

## MODULE

### **UNIT 0 (UPTO 6 MONTHS)**

A. 1. Orientation Programme

2. Basic autopsy skills.

3. General Principles of Forensic Medicine.

4. Introduction to Medical Toxicology.

B. Organised Teaching Session. 1. Attend and participate in undergraduate classes.

C. Posting for autopsy work, Clinical Forensic Medicine and Toxicology

D. Orientation to Organisation and functioning of Toxicology Lab.

E. Preparation of Thesis protocol.

F. Introduction to advanced techniques – DNA Fingerprinting.

### **UNIT 1 (6 – 12 MONTHS)**

A. Clinical Forensic Medicine work for practical experience in Medico legal procedures and on the job practical training in the Medico-legal aspects of emergency medicine, radiology and other clinical disciplines.

B. Orientation to the applied aspects of Anatomy, Physiology Biochemistry, Microbiology, Pathology, Blood Bank, Psychiatry and Central Forensic Science Laboratory.

C. Organized teaching session.

1. Undergraduate classes (Attend & participate)

2. Journal review/Review of latest advances - once a fortnight

3. Autopsy case discussion & Gross Autopsy Conference - once a fortnight

4. Clinical forensic medicine case discussion - once a fortnight

5. Seminars - once a week

6. Toxicology seminar - once in a month

D. Thesis Work and other research work.

E. Posting for Autopsy work, Clinical Forensic Medicine and Toxicology Laboratory.



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F. Attend Court summons for cases conducted by themselves or when deputed where an expert is required to depose by Court of Law.

## UNIT 2 (12-36 MONTHS)

A. Organized teaching session.

1. Attend and participate in undergraduate classes.
2. Journal review - once a fortnight
3. Autopsy case discussion - once a fortnight
4. Clinical forensic medicine case discussion - once a fortnight
5. Seminars - once a fortnight
6. Toxicology discussion - once in a month

B. Submission of Thesis six months prior to examination.

C. Posting for autopsy work, Clinical Forensic Medicine and Toxicology laboratory to continue.

D. Attend court summons for cases conducted by themselves or when deputed where an expert is required to depose by Court of Law.

## SUBJECT CONTENT

### I. ORIENTATION PROGRAMME

- A. Familiarization with the philosophy and guiding principles of MD Forensic Medicine and Toxicology course at AIIMS Guwahati.
- B. Identify the programme goals, specific objectives and conceptual framework for his/ her course.

### II. BASIC AUTOPSY SKILLS

- A. Outline & demonstrate the principles and objectives of postmortem examination, formalities and procedures of medico-legal autopsies in accordance with existing conventions and the law.
- B. Describe and demonstrate the methods of preservation of viscera.

### III. General principle of Forensic Medicine and Toxicology

- A. Identify the role of anatomy, physiology, biochemistry, microbiology, pathology, blood bank, psychiatry, radiology, forensic science laboratory and other disciplines of medical science to logically conclude in Medico-legal autopsies and examination of Medico-legal cases.
- B. Describe the basic principles of the techniques used in toxicological laboratory namely TLC, GLC, ASS, HPLC, and Breath Alcohol Analyzer.
- C. Process biological samples for DNA fingerprinting.
- D. Execute the skills and knowledge mentioned in objectives of Forensic Medicine for MBBS course at AIIMS.

### IV. MEDICAL ETHICS & LAW (MEDICAL JURISPRUDENCE)

- A. Describe the history of Forensic Medicine
- B. Describe the Legal and Medico-legal system in India.
- C. Describe medical ethics and the law in relation to medical practice, various declarations, National Medical Commission, disciplinary control, duties of a registered medical practitioner, consent, confidentiality, medical negligence and consumer protection act.



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D. Describe medical ethics and law in relation to organ transplantation, biomedical human research and experimentation, human rights and citizen charter.

E. Describe the ethics and law in relation to artificial insemination, abortion, antenatal sex, fetus, genetics, and euthanasia.

F. Interpret the ethics and law applicable to animal experimentation.

G. Describe ethics in relation to aged, women and children.

H. Describe medical ethics and law in relation to nursing and other medical services.

## V. CLINICAL FORENSIC MEDICINE

A. Examine, assess legal implications and prepare report or certificate in cases of physical assault, suspected drunkenness, sexual offences, consummation of marriage and disputed paternity. Collect, preserve & despatch the specimen/material to the concerned authority and interpret the clinical and laboratory findings which are reported.

B. Examine injured person, prepare Medico-legal report and initiate management.

C. Determine the age of a person for medico-legal purpose.

D. Examine a person and assess disability in industrial accidents and diseases.

E. Perform examination and interpret findings for medico legal purposes in cases pertaining to pregnancy, delivery, artificial insemination, abortion, sterilization, impotence & AIDS.

F. Describe normal and abnormal sexual behaviour and its medico-legal implications.

G. Examine and assess the medical fitness of a person for insurance, government service, sickness and fitness on recovery from illness.

H. Examine medico-legal problems related to clinical disciplines of Medicine & allied subjects, Paediatrics, Surgery & allied subjects, ENT, Ophthalmology, Obstetrics & Gynaecology, Dermatology and Anesthesiology.

## VI. FORENSIC PSYCHIATRY

A. Explain the common terminologies of Forensic importance in Psychiatry.

B. Describe the Medico-legal aspects of Psychiatry and mental health.

C. Describe medico-legal aspects of Drug addiction.

D. Describe role of Psychiatry in crime investigation, punishment and trial.

E. Describe the civil and criminal responsibilities of an insane person.

## VII. MEDICAL TOXICOLOGY

A. Describe the law relating to poisons, drugs, cosmetics, narcotic drugs and psychotropic substances.

B. Examine & diagnose the poisoning cases and apply principles of general management and organ system approach for the management of poisoning cases.

C. Describe the basic principles of toxicokinetics and toxicodynamics of poisonous substances.

D. Describe the toxic hazards of occupation, industry, environment and the principles of Predictive Toxicology.

E. Collect, preserve and despatch the material for analysis, interpret the laboratory findings and perform the Medico-legal formalities in a case of poisoning.



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F. Demonstrate the functioning of TLC (Thin Layer Chromatography), GLC (Gas Liquid Chromatography), AAS (Atomic Absorption Spectrophotometry), HPLC (High Performance Liquid Chromatography) and Breath Alcohol Analyzer.

G. Demonstrate the methods of identification and analysis of common poisons prevalent in this region.

H. 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) Substance causing Spinal and cardiac toxicity
- (k) Substances causing Asphyxia (Asphyxiants)
- (l) Household toxins
- (m) Toxic envenomation
- (n) Biological and Chemical warfare.

## VIII. FORENSIC PATHOLOGY

A. Apply the principles involved in methods of identification of human remains by race, age, sex, religion, complexion, stature, hair, teeth, anthropometry, dactylography, foot prints, hairs, tattoos, poroscopy and superimposition techniques.

B. Perform medico-legal postmortem and be able to exhume, collect, preserve and despatch specimens or trace evidence to the appropriate authority.

C. Diagnose and describe the pathology of wounds, mechanical and regional injuries, ballistics and wound ballistics, electrical injuries, neglect and starvation, thermal injuries, deaths associated with sexual offences, pregnancy, delivery, abortion, child abuse, dysbarism and barotraumas.

D. Describe patho-physiology of shock & neurogenic shock.

E. Describe the patho-physiology of asphyxia, classification, medico legal aspects and postmortem findings of different types of asphyxial deaths.

F. Diagnose and classify death, identify the signs of death, postmortem changes, interpret the autopsy findings, artefacts and results of the other relevant investigations to logically conclude the cause, manner (suicidal, homicidal and accidental) and time of death.

G. Manage medico-legal responsibilities in mass disasters involving multiple deaths like fire, traffic accident, aircraft accident, rail accident and natural calamities.

H. Demonstrate postmortem findings in infant death to differentiate amongst live birth, still birth and dead born.

I. Perform postmortem examination in cases of death in custody, torture and violation of human rights.

J. Perform postmortem examination in cases of death due to alleged medical negligence as in Operative and Anaesthetic Deaths.





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## IX. FUNDAMENTALS OF FORENSIC SCIENCES

- A. Describe the general Forensic principle of ballistics, serology, analytical toxicology and photography.
- B. Interpret the scene of crime.
- C. Examine – bloodstains for blood grouping, seminal stains & hair for medico-legal purpose.

## X. BASIC SCIENCES AND ALLIED SUBJECTS

- A. Anatomy- Anatomy of parts and organs of the body which are important from the medico-legal aspect.
- B. Physiology & Biochemistry- Mechanism of phenomenon that are important in the body from the medico legal viewpoint.
- 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 ante mortem and postmortem appearance in Medico legal cases, assessment of the duration of injuries and co-relate trauma and disease.
- D. Dentistry- Adequate knowledge of dentistry for solution of Medico legal problems like age determination.
- E. Radiology- Adequate knowledge of Radiological procedures for solution of medico legal problems.

## TEACHING AND LEARNING METHODS

### Teaching methodology

1. Maintenance of Log book: Every PG trainee must maintain a record/ log book of any work/ training activity carried out by them during the training period. The log book will be checked and assessed regularly by the Head of department / Faculty in charge (Forensic Medicine & Toxicology, AIIMS Guwahati).
2. 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.
3. 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 minimum of 12 seminar presentations in three years. The presentations would be evaluated and would carry weightage for internal assessment.
4. 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
5. 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.
6. Inter-Departmental Meetings: These meetings should be attended by post graduate students and relevant entries must be made in the Log Book.
7. Teaching Skills: The postgraduate students shall be required to participate in the teaching and training programme of undergraduate students and interns.
8. Undertake audit, use information technology tools and carry out research, both basic and clinical, with the aim of publishing and presenting his work at various scientific fora.
9. Continuing Medical Education Programmes (CME): At least two CME programmes should be attended by each student in 3 years.



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10. Conferences: Student to attend courses, conferences and seminars relevant to the speciality.

11. A postgraduate student of a postgraduate degree course 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.

## ROTATIONS/POSTINGS

**Rotation postings:** Other than the Department of Forensic Medicine & Toxicology, student will be posted for training in the following clinical disciplines for a given period of time on rotational basis:

S.N	Department (Internal/External)	Duration & Timing			Rotation objectives
		1 <sup>st</sup> year	II <sup>nd</sup> year	III <sup>rd</sup> year	
1	Trauma & Emergency/ Casualty / Emergency medicine department	1 mon th	15 days	15 days	<ul style="list-style-type: none"><li>• Medicolegal case management</li><li>• Basics of poisoning emergencies</li></ul>
2	Radiology	7 days	5 days	3 days	<ul style="list-style-type: none"><li>• Determine age estimation &amp; medicolegal opinion findings on X-Rays, CT scan, MRI &amp; USG</li></ul>
3	Psychiatry	5 days	3 days	2 days	<ul style="list-style-type: none"><li>• Psychiatric evaluation in criminal cases/civil Cases</li></ul>
4	Forensic science laboratory	7 days	15 days	--	<ul style="list-style-type: none"><li>• Basics of DNA technology</li><li>• Recent advances in FSL</li><li>• Basics of techniques of analytical toxicology like HPLC, GC-MS, etc.</li></ul>
5	Pathology	7 days	15 days	15 days	<ul style="list-style-type: none"><li>• Basics of tissue processing and staining techniques</li><li>• Reporting of autopsy-based histopathology slides</li></ul>





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**TEACHING – LEARNING EXPERIENCES**

- A. Undergraduate classes
- B. Posting for
  - 1. Autopsy work
  - 2. Clinical Forensic Medicine
  - 3. Clinical toxicology
  - 4. Allied subjects
- C. Journal review
- D. Autopsy - Case Discussion
- E. Clinical Forensic Medicine - Case Discussion
- F. Seminar on Clinical & Autopsy case problems
- G. Problem solving discussion on cases for expert opinion.

**THESIS FOR FORENSIC MEDICINE & TOXICOLOGY**

**Objectives**

- 1. The student should be able to demonstrate capability in research by planning and conducting systematic scientific inquiry & data analysis and deriving conclusion.
- 2. Communicate scientific information for health planning.

**Guide for Thesis**

- 1. Chief guide should be from the Department of Forensic Medicine & Toxicology.
- 2. Co-guide(s) can be from other disciplines related to the thesis.

**Submission of Thesis Protocol**

It should be submitted within four months after admission in the course.

- 1. Protocol in essence should consist of:
  - (a) Introduction and objectives of the research project.
  - (b) Brief review of literature.
  - (c) Suggested materials and methods, and
  - (d) Bibliography
- 2. The protocol must be presented in the Department of Forensic Medicine & Toxicology before being forwarded to the office of the Dean.
- 3. Protocol will be approved in accordance with the existing regulations of the AIIMS, Guwahati.

**Submission of Thesis**

- 1. Thesis will be submitted six months prior to examination.



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2. Thesis in essence should consist of

- (a) Introduction
- (b) Review of literature
- (c) Aims and objectives
- (d) Material and methods
- (e) Results
- (f) Discussion
- (g) Summary and Conclusions
- (h) Bibliography

## Evaluation of Thesis

Thesis will be evaluated in accordance with the existing regulations of the AIIMS, Guwahati.

## ASSESSMENT

Assessment of candidates on completion of MD course will be carried out in accordance with the existing rules and regulations of the AIIMS, Guwahati.

### FORMATIVE ASSESSMENT:

#### 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).



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

## Theory

Will consist of four papers as under:

Paper I - Basic Sciences and allied subjects as applicable to Forensic Medicine & Toxicology.

Paper II - Clinical Forensic Medicine, Forensic Psychiatry and Medical ethics & law (Medical jurisprudence).

Paper III - Forensic Pathology & Medical Toxicology.

Paper IV - Applied aspects of clinical disciplines, Forensic Sciences and recent advances in Forensic Medicine and Toxicology.

## Practical Examination (Two days)

### Day 1

A. Clinical Cases - (first two and any two of the rest of the following)

- ☐ Age estimation
- ☐ Injury report
- ☐ Examination of mentally ill 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).

B. Spots –comprising of the following

- ☐ Histopathology slides - 2 No.
- ☐ Photographs - 2 No.
- ☐ Exhibit material - 2 No.
- ☐ X-rays - 2 Sets
- ☐ Mounted specimens - 2 No.
- ☐ Bundle of Bones - 2 Sets
- ☐ Poisons - 2 No.
- ☐ Weapons - 2 No.
- ☐ Models - 2 No.
- ☐ Charts - 2No.

C. Toxicology Exercises –

Identification and details of poisons / chemical tests for the poisons - 2No.



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## D. Laboratory Tests -

☐ Identification of biological stains (any two) - (Semen, Blood or Body fluids)

☐ Histopathology slides of medico legal relevance – gram stain, H&E and acid fast staining etc. -

2 No.

## Day 2

☐ Autopsy.

☐ Assessment of research & teaching ability:

▪ Thesis Presentation

▪ Seminar/micro teaching Presentation

☐ Discussion on a case for expert opinion

☐ Grand Viva Voce.

N.B. The day wise schedule may be changed according to the availability of the cases.

## Formative Assessment

### Theory

S.N.	Schedule	Marks
1.	At end of First year	100 (1 Paper)
2.	At end of Second year	100 (1 Paper)
3.	Pre-professional	400 (4 Papers of 100 marks each)
	<b>Total</b>	<b>600 Marks</b>

### Practical

S.N.	Schedule	Marks
1.	At end of First year	100
2.	At end of Second year	100
3.	Pre-professional	400 (Practical 300 + Viva 100)
	<b>Total</b>	<b>600 marks</b>

## Eligibility for Professional assessment:

- Candidate should secure a minimum of 40% marks in Theory and Practical separately in formative assessments, in order to be eligible to appear for Professional Examination
- At least four out of six monthly progress report should be satisfactory



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- Acceptance of Dissertation is mandatory
- Successful completion of Research Methodology Programme at induction.
- The post graduate students would be required to present one poster presentation, to read one paper at a national/state conference and to submit one research paper for publication/ during period of their postgraduate studies.

## Final Professional Assessment

A	Theory	4 Papers each of 100 marks = 400 marks
B	Practical	Practical/ Clinical Case + Viva = 400 marks

Note:

(A) Minimum 40% marks in each paper and aggregate of 50% marks in order to be declared pass in theory exam

(B) Minimum 50% marks required in Theory & Practical separately, in order to be declared successful in summative exam

## RECOMMENDED READING BOOKS (LATEST EDITION)

1. Subramanyam BV. Modi's Medical Jurisprudence and Toxicology. Butterworths India, New Delhi.
2. Nandy 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. Mahanta P. Modern Text Book of Forensic medicine & Toxicology, Jaypee, New Delhi.
6. Parikh CK. Parikh's Textbook of Medical Jurisprudence, Forensic Medicine and Toxicology, CBS Publishers and Distributors, New Delhi.
7. Bernard Knight. Forensic Pathology. Arnold Publishers London.
8. Di Maio VJ, Di Maio D. Forensic Pathology. CRC Press New York.
9. Camps FE. Gradwohl's legal Medicine. Bristol: John Wright and Sons Ltd.
10. American College of Legal Medicine Textbook Committee. Legal Medicine Mosby Publishers, USA.
11. Di Maio VJM. Gunshot Wounds, CRC Press USA.
12. Gordon I, Shapiro HA, Berson SD. Forensic Medicine – A Guide to Principle. Churchill Livingstone New York.
13. Mant AK. Taylor's Principles and Practice of Medical Jurisprudence, Churchill Livingstone, New York.
14. Parikh CK. Medicolegal Postmortems in India. Medical Publications, Bombay.



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15. Gresham GA, Turner AF. Postmortem Procedures An illustrated Text Book. Wolfe Medical Publications.
16. Ludwig J. Current Methods of Autopsy Practice. WB Saunders Company, London.
17. Gordon I, Turner R. Medical Jurisprudence E and S Livingstone Ltd. London.
18. Spitz WU, Fisher RS. Medico-legal Investigation of Death. Charles Thomas Publishers.
19. Schroeder O.C. Dental Jurisprudence. PSG Publishing Company, Littleton, Massachusetts.
20. Stark MM. A Physicians Guide to Clinical Forensic Medicine. Humana Press Totowa, New Jersey.
21. Olshakar JS, Jackson JS, Jackson MC, Smock WS. Forensic Emergency Medicine. Lippincott William and Wilkins, Philadelphia.
22. Norah Rudin, Keith Inman. An introduction to Forensic DNA Analysis. CRC Press, London.
23. Robertson J, Ross AM, Burgoyne LA. DNA in Forensic Science - Theory, Technique and Application. Ellis Horwood, UK
24. Curry AS. Method of Forensic Science Vol. I-III. Inter-science Publishers London.
25. Clement JG, Ranson DL. Craniofacial Identification in Forensic Medicine. Arnold Publishers, London.
26. Sellier GK, Kneubuehl BP. Wound Ballistics and the scientific background. Elsevier, Amsterdam.
27. Bernard Knight. Simpson's Forensic Medicine. Arnold Publishers London.
28. Bernard Knight. Legal aspects of Medical Practice. Churchill Livingstone New York.
29. Gunn and Taylor. Forensic Psychiatry Clinical, Legal and Ethical issues. Butterworth Heinemann
30. G Gustafson. Forensic Odontology. Staples Press.
31. Gonzalez TA. Legal Medicine, Pathology and Toxicology- Appleton Century Crofts Inc. New York.
32. Hirsch CS, Morris RC, Moritz AR. Handbook of Legal Medicine. CV Mosby Company London.
33. Lincoln PJ, Thomas J. Forensic DNA Profiling Protocols. Methods in Molecular Biology, Vol. 98, Humana Press, Totowa, New Jersey.
34. Lee HC, Gaensslen RE. DNA and other polymorphism in Forensic Science. Yearbook Medical Publishers, London.
35. Bergaus G, Brinkmann B, Rittner C, Staak M. (Eds.). DNA Technology and its Forensic Application. Springer-Verlag. Berlin
36. Beveridge A. Forensic Investigation of Explosions. Taylor and Francis USA.
37. Jay Dix. Colour Atlas of Forensic Pathology. CRC Press New York.
38. Bernard Knight. (ed.) The Estimation of Time since Death in the early PostMortem Period. Arnold Publishers London.
39. Mant AK. Modern Trends in Forensic Medicine 1-3. Butterworth, London.
40. Luntz and Luntz. Handbook for Dental Identification. JB Lippincott. Toronto.





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Changsari, Assam PIN - 781101

41. Buttler JM. Forensic DNA Typing. Academic Press New York.
42. Mason JK. Forensic Medicine- an illustrated reference. Chapman and Hall, London.
43. Mason JK. Paediatric Forensic Medicine and Pathology. Chapman and Hall, London.
44. Patnaik VP. MKR Krishnan's handbook of Forensic Medicine. Paras Publishing.
45. Lundquist Frank. Methods of Forensic science, vol. II, Interscience publishers.
46. Mehta HS. Medical, Law and Ethics in India. The Bombay Samachar Pvt. Ltd.
47. Gaur's firearms, Forensic Ballistics, Forensic Chemistry and Criminal Jurisprudence. Law Publishers (India) Pvt. Ltd. Allahabad.
48. Tedeschi Eckert. Forensic Medicine Vol. I-IV, WB Saunders Company.
49. Polson, Gee, Knight. The Essentials of Forensic Medicine. Pergomann Press, UK.
50. Redsicker DR. Forensic Photography, CRC Press USA.
51. Krogmann. Human skeleton in Forensic Medicine.
52. Abdullah Fateh. Handbook of Forensic Pathology
53. Simpson K. Taylor's Principle and Practice of Medical Jurisprudence. Vol. III.
54. Krishan Vij. Textbook of Forensic Medicine and Toxicology, Churchill Livingstone.
55. Pillay VV. Textbook of Forensic Medicine and Toxicology, Paras Publishing, Hyderabad.
56. Mukherjee JB. Textbook of Forensic Medicine and Toxicology, Arnold's Publishers, London.
57. Henry J, Wiseman H. Management of Poisoning. Published by WHO, UNEP and ILO.
58. Flanagan RJ et al. Basic Analytical Toxicology. Published by WHO, UNEP and ILO.
59. Guidelines for Poison Control. Published by WHO, UNEP and ILO
60. Genetics in Medicine – J. S. Thompson and M.W. Thompson.
61. Research – How to plan, speak and write about it – C. Hawkins and M. Sorgi.

## Recommended Journals:

### International

1. American Journal of Forensic Medicine and Pathology. Publisher: Dan Pasquarello
2. Forensic Science International. An international journal dedicated to the applications of medicine and science in the administration of justice. Publisher: Elsevier.
3. Medicine Science and Law. Official journal of the British Academy for Forensic Sciences (BAFS). Publisher: SAGE Publications.
4. Journal of Forensic and Legal Medicine. Official journal of the Faculty of Legal and Forensic Medicine. Publisher: Elsevier.



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5. Journal of Medical Toxicology. Official journal of the American College of Medical Toxicology. Publisher: Springer Science + Business Media

### National

1. Journal of Indian Academy of Forensic Medicine. Official journal of the Indian Academy of Forensic Medicine. Publisher: Indian Academy of Forensic Medicine.

2. Journal of Indian Society of Toxicology. Publisher: The Indian Society of Toxicology

3. Indian Journal of Medical Ethics. Publisher: Forum For Medical Ethics Society

4. Medicolegal Update. Publisher: Institute of Medico-Legal Publications.



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## Annexure 1

### POSTGRADUATE STUDENTS APPRAISAL FORM

#### Pre / Para / Clinical Disciplines

Name of the Department/Unit: \_\_\_\_\_

Name of the PG Student: \_\_\_\_\_

Period of Training: From \_\_\_\_\_ To \_\_\_\_\_

Sl. 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