



PRAVARA INSTITUTE OF MEDICAL SCIENCES
(DEEMED TO BE UNIVERSITY)

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

SYLLABUS

UG Programme- Forensic Medicine and Toxicology

Phase III Part 1 (Third MBBS Part One)

(Competency Based Undergraduate Curriculum will be implemented from August 2019, i.e. MBBS batch admitted for first year in 2019)

Course Code : Theory Paper - MU 19305

Teaching Hours : 141 hours

1. GOALS

The broad goal of the teaching of undergraduate students in Forensic Medicine is to produce a physician who is well informed about medico legal responsibilities in practice of medicine. He /She will also be capable of making observations and inferring conclusions by logical deductions to set enquiries on the right track in criminal matters and connected medico legal problems. He /She acquires knowledge of law in relation to medical practice, medical negligence and respect for codes of medical ethics.

2. OBJECTIVES

a. Knowledge:

At the end of the course, the student should be able to:

1. Identify the basic medico legal aspects of hospital and general practice.
2. Define the medico legal responsibilities of a general physician while rendering community service either in a rural primary health center or an urban health center.
3. Appreciate the physician's responsibilities in criminal matters and respect for the codes of medical ethics.
4. Diagnose, manage and identify also legal aspects of common acute and chronic poisonings.
5. Describe the medico legal aspects and findings of post-mortem examination in case of death due to common natural conditions & poisonings.
6. Detect occupational and environmental poisoning, prevention and epidemiology of common poisoning and their legal aspects particularly pertaining to Workmen's Compensation Act.
7. Describe the general principles of analytical toxicology.
8. Medical jurisprudence in view of the Consumer Protection Act- where in doctors have been covered under its ambit. They have both rights as well as responsibilities. Under medical insurance acts of negligence covered as well as rights for effective service delivery.

b. Skills

At the end of the course, the student should be able to:-

1. Make observations and logical inferences in order to initiate enquiries in Criminal matters and medico legal problems.
2. Diagnose and treat common emergencies in poisoning and manage chronic toxicity.
3. Make observations and interpret findings at postmortem examination.
4. Observe the principle so medical ethics in the practice of his profession.

c. Integration

Department shall provide an integrated approach towards allied disciplines like Pathology, Radiology, Forensic Sciences, Hospital Administration etc. to impart training regarding medico legal responsibilities of physicians at all levels of health care. Integration with relevant disciplines will provide scientific basis of clinical toxicology e.g., medicine, pharmacology etc.

3. DISTRIBUTION OF TEACHING HOURS

Total duration for Forensic Medicine and Toxicology

Semesters	:	Total 4 Semesters	
		Minimum Teaching Hours	141 hours
Third & Forth Semester (Phase II)	:	i. Lectures : 15 hours ii. Self-Directed learning(SDL) : 5 hours iii. Small group teachings/ tutorials/ Integrated teaching/ Practical : 30 hours	50 hours
	:	iv. AETCOM Module 2.5 <ul style="list-style-type: none"> • Introducing and group formation - 1 hour • Case introducing - 1 hour • Self - Directed learning - 2 hours • Anchoring lecture - 1 hour • Case Resolution - 1 hour 	06 hours
Fifth & Six Semester (Phase III Part I)	:	i. Lectures : 25 hours ii. Self-Directed learning (SDL) : 5 hours iii. Small group teachings/ tutorials/ Integrated teaching/ Practical : 45 hours	75 hours
	:	iv. AETCOM Module 3.2 <ul style="list-style-type: none"> • Introducing of case - 1 hour • Self-Directed learning (SDL) : 2 hours • Anchoring lecture - 1 hour • Discussion and Closure of case - 1 hour v. AETCOM Module 3.4 <ul style="list-style-type: none"> • Introducing of case - 1 hour • Self-Directed learning (SDL) : 2 hours • Anchoring lecture - 1 hour • Discussion and Closure of case - 1 hour 	10 hours

4. SYLLABUS

- a. Learning methods: Lectures, tutorials, practical demonstrations, Small group teachings, integrated teaching, Self-Directed learning (SDL), ATECOM
- b. Distribution of teaching hours :
Didactic lectures should not exceed one third of the time schedule; two third schedule should include practical, clinicals or/and small group discussions. Learning process should include living experiences, problem-oriented approach, case studies and community health care activities.

Competency Nos.	Topics & Subtopics	TL Methods
Term I		
FM 1.1,1.3,1.4	<p>Topic: General Information</p> <p>FM 1.1 Demonstrate knowledge of basics of Forensic Medicine like definitions of Forensic medicine, Clinical Forensic Medicine, Forensic Pathology, State Medicine, Legal Medicine and Medical Jurisprudence</p> <p>FM1.3 Describe legal procedures including Criminal Procedure Code, Indian Penal Code, Indian Evidence Act, Civil and Criminal Cases, Inquest (Police Inquest and Magistrate's Inquest), Cognizable and Non-cognizable offences</p> <p>FM1.4 Describe Courts in India and their powers: Supreme Court, High Court, Sessions court, Magistrate's Court, Labour Court, Family Court, Executive Magistrate Court and Juvenile Justice Board</p>	Lecture-01
FM 1.2	FM1.2 Describe history of Forensic Medicine	SDL-01
FM 1.5,1.6, 1.7, 1.8, 1.9	<p>Topic: General Information</p> <p>FM1.5 Describe Court procedures including issue of Summons, conduct money, types of witnesses, recording of evidence oath, affirmation, examination in chief, cross examination, re-examination and court questions, recording of evidence & conduct of doctor in witness box</p> <p>FM1.6 Describe Offenses in Court including Perjury; Court strictures vis-a- vis Medical Officer</p> <p>FM1.7 Describe Dying Declaration & Dying Deposition</p>	Lecture-02

FM1.8,1.9	<p>Topic: General Information FM1.8 Describe the latest decisions/notifications/resolutions/circulars/standing orders related to medico-legal practice issued by Courts/Government authorities etc. F.M1.9 Describe the importance of documentation in medical practice in regard to medico legal examinations, Medical Certificates and medico legal reports</p>	Lecture-03
FM14.20	<p>Skills in Forensic Medicine & Toxicology FM14.20 To record and certify dying declaration in a simulated/supervised environment</p>	Small group-1 teachings/tutorials/Integrated teaching/Practical's
FM 2.29, 14.22	<p>Topic: General Information FM 2.29 Demonstrate respect to the directions of courts, while appearing as witness for recording of evidence under oath or affirmation, examination in chief, cross examination, re-examination and court questions, recording of evidence Skills in Forensic Medicine & Toxicology FM14.22 To give expert medical/ medico-legal evidence in Court of law</p>	Small group-2 teachings/tutorials/Integrated teaching/Practical's
FM3.1	<p>Clinical Forensic Medicine IDENTIFICATION FM 3.1 Define and describe Corpus Delicti, establishment of identity of living persons including race, Sex, religion, complexion, stature, age determination using morphology, teeth-eruption, decay, bite marks, bones-ossification centres, medico-legal aspects of age-Part 1</p>	Lecture-04
	<p>IDENTIFICATION FM 3.1 Define and describe Corpus Delicti, establishment of identity of living persons including race, Sex, religion, complexion, stature, age determination using morphology, teeth-eruption, decay, bite marks, bones-ossification centres, medico-legal aspects of age-Part 2</p>	Lecture-05
FM3.1	<p>IDENTIFICATION FM 3.1 age determination using morphology, teeth-eruption, bones-ossification centres, medico-legal aspects of age</p>	Small group- 3 teachings/tutorials/Integrated teaching
FM3.2	<p>IDENTIFICATION FM 3.2 Describe and discuss identification of criminals, unknown persons, dead bodies from the remains - hairs, fibers, teeth, anthropometry, dactylography, footprints, scars, tattoos, poroscopy and superimposition</p>	Lecture-06

FM3.2	IDENTIFICATION FM3.2 Dactylography, foot prints, scars, tattoos, poroscopy and superimposition	Small group-4 teachings/ tutorials/ Integrated teaching /Practical's
FM2.1,2.2,2.3	Forensic Pathology FM2.1 Define, describe and discuss death and its types including somatic/clinical/cellular, molecular and brain-death, Cortical Death and Brain stem Death FM2.2 Describe and discuss natural and unnatural deaths FM2.3 Describe and discuss issues related to sudden natural deaths	Lecture-07
FM2.5,2.6.2.7, 2.8	Forensic Pathology FM2.5 Discuss moment of death, modes of death - coma, asphyxia and syncope FM2.6 Discuss presumption of death and survivorship FM2.7 Describe and discuss suspended animation FM2.8 Describe and discuss postmortem changes including signs of death, cooling of body, post-mortem lividity, rigor mortis, cadaveric spasm, cold stiffening and heat stiffening	Lecture-08
FM2.9	Forensic Pathology FM2.9 Describe putrefaction, mummification, adipocere and maceration	Lecture-09
FM2.10	Forensic Pathology FM2.10 Discuss estimation of time since death	Lecture-10
FM2.11,2.12, 2.13,2.14	Forensic Pathology FM2.11 Describe and discuss autopsy procedures including post-mortem examination, different types of autopsies, aims and objectives of post-mortem examination FM2.12 Describe the legal requirements to conduct post-mortem examination and procedures to conduct medico-legal post-mortem examination FM2.13 Describe and discuss obscure autopsy FM2.14 Describe and discuss examination of clothing, preservation of viscera on post-mortem examination for chemical analysis and Other medico-legal purposes, post-mortem artefacts	Small group-5 teachings/ tutorials/ Integrated teaching/Practical's

FM2.15,2.16,	Forensic Pathology FM2.15 Describes special protocols for conduction of medico-legal	Small group- 6 teachings/tutorials/
2.17,2.18	Autopsies in cases of death in custody or following violation of human rights as per National Human Rights Commission Guidelines FM2.16 Describe and discuss examination of mutilated bodies or fragments, charred bones and bundle of bones. FM2.17 Describe and discuss exhumation. FM2.18 Crime Scene Investigation:-Describe and discuss the objectives of crime scene visit, the duties & responsibilities of doctors on crime scene and there construction of sequence of Events after crime scene investigation	Integrated teaching/ Practical's
FM1.10 1.11	Forensic Pathology FM1.10 Select appropriate cause of death in a particular scenario by referring ICD 10 code FM1.11 Write a correct cause of death certificate as per ICD 10 document	Small group-7 teachings/tutorials/ Integrated teaching/ Practical's
FM2.19	Forensic Pathology FM2.19 Investigation of anaesthetic, operative deaths: Describe and discuss special protocols for conduction of autopsy and for collection, preservation and dispatch of related material evidences	Lecture-11
FM2.30	Forensic Pathology FM 2.30 Have knowledge/awareness of latest decisions/notifications/ resolutions/ circulars/ standing orders related to medico-legal practice issued by Courts/Government authorities etc.	SDL-2
FM2.33,2.34, 2.35	Forensic Pathology FM 2.33 Demonstrate ability to use local resources whenever required like in mass disaster situations FM 2.34 Demonstrate ability to use local resources whenever required like in mass disaster situations FM 2.35 Demonstrate professionalism while conducting autopsy in medico legal situations, interpretation of findings and making inference/opinion, collection preservation and dispatch of biological or trace evidences	Small group-8 teachings/tutorials/ Integrated teaching/ Practical's
FM14.9	Skills in Forensic Medicine & Toxicology FM14.9 Demonstrate examination of & present an opinion after examination of skeletal remains in a simulated / supervised Environment	Small group-9 teachings/tutorials/ Integrated teaching/ Practical's

FM14.4	Skills in Forensic Medicine & Toxicology FM14.4 Conduct and prepare report of estimation of age of a person for medico-legal and other purposes & prepare medico-legal report in a simulated/ supervised environment	Small group- 10 teachings/tutorials/ Integrated teaching/ Practical's
FM14.21	Skills in Forensic Medicine & Toxicology FM14.21 To collect, preserve, seal and dispatch exhibits for DNA-Finger printing using various formats of different laboratories.	Small group- 11 teachings/tutorials/ Integrated teaching/ Practical's
FM8.1	Toxicology: General Toxicology FM8.1 Describe the history of Toxicology	SDL-3
FM 8.2,8.3,8.6, 8.7,8.8	Toxicology: General Toxicology FM8.2 Define the terms Toxicology, Forensic FM8.3 Describe the various types of poisons, Toxicokinetics, and Toxicodynamics and diagnosis of poisoning in living and dead FM8.6 Describe the general symptoms, principles of diagnosis and management of common poisons encountered in India FM8.7 Describe simple Bedside clinic tests to detect poison/drug in a patient's body fluids FM8.8 Describe basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures Of enhanced elimination	Lecture-12
FM8.4	Toxicology: General Toxicology FM8.4 Describe the Laws in relations to poisons including NDPS Act, Medico-legal aspects of poisons	SDL-4
FM8.9	Toxicology: General Toxicology FM 8.9 Describe the procedure of intimation of suspicious cases or actual cases of foul play to the police, maintenance of records, preservation and dispatch of relevant samples for laboratory analysis.	Smallgroup-12 teachings/tutorials/ Integrated teaching/ Practical's
FM8.10	Toxicology: General Toxicology FM8.10 Describe the general principles of Analytical Toxicology and give a brief description of analytical methods available for toxicological analysis: Chromatography–Thin Layer Chromatography, Gas Chromatography, Liquid Chromatography and Atomic Absorption Spectroscopy	Small group-13 teachings/tutorials/ Integrated teaching/ Practical's

FM9.1	<p>Toxicology: Chemical Toxicology FM9.1 Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination with regard to: Caustics Inorganic-sulphuric, nitric, and hydro chloric acids; Organic- Carbolic Acid (phenol), Oxalic and acetyl salicylic acids</p>	Small group-14 teachings/tutorials/ Integrated teaching/ Practical's
FM9.2	<p>Toxicology: Chemical Toxicology FM9.2 Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, Antidote therapy, procedures of enhance delimitation with regard to Phosphorus, Iodine, Barium</p>	Small group-15 teachings/tutorials/ Integrated teaching/ Practical's
FM9.3	<p>Toxicology: Chemical Toxicology FM9.3 Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhance delimitation with regard to Arsenic, lead, mercury, copper, iron, cadmium and thallium</p>	Small group-16 teachings/tutorials/ Integrated teaching/ Practical's
FM9.4	<p>Toxicology: Chemical Toxicology FM9.4 Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhance delimitation with regard to Ethanol, methanol, ethylene glycol</p>	Lecture-13
FM9.4	<p>Toxicology: Chemical Toxicology FM9.4 Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhance delimitation with regard to Ethanol, methanol, ethylene glycol</p>	Small group-17 teachings/tutorials/ Integrated teaching/ Practical's
FM9.5	<p>Toxicology: Chemical Toxicology FM9.5 Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhance delimitation with regard to Organo phosphates, Carbamates, Organo chlorines, Pyrethroids, Paraquat, Aluminium and Zinc phosphide</p>	Small group-18 teachings/tutorials/ Integrated teaching/ Practical's

FM9.6	<p>Toxicology: Chemical Toxicology FM9.6 Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhance delimitation with regard to Ammonia, carbonmonoxide, hydrogen cyanide & derivatives, Methyl isocyanate, tear (riotcontrol)gases</p>	Small group-19 teachings/tutorials/ Integrated teaching/ Practical's
FM10.1	<p>Pharmaceutical Toxicology FM10.1 Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhance delimitation with regard to: i. Antipyretics-Paracetamol, Salicylates ii. Anti- Infectives (Commonantibiotics-anoverview) iii. Neuro psychotoxicology Barbiturates, benzodiazepinsphenytoin, lithium, haloperidol, neuroleptics, tricyclics</p>	Lecture-14
FM10.1	<p>Pharmaceutical Toxicology FM10.1 Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhance delimitation with regard to: i. Narcotic Analgesics, Anaesthetics, and Muscle Relaxants ii. Cardiovascular Toxicology Cardiotoxic plants - oleander, odollam, aconite, digitalis iii. Gastro-Intestinal and Endocrinal Drugs- Insulin</p>	Small group-20 teachings/tutorials/ Integratedteaching/ Practical's
FM11.1	<p>Toxicology: Biototoxicology FM11.1 Describe features and management of Snake bite, scorpionsting, bee and was posting and spider bite</p>	Lecture-15
FM12.1	<p>Toxicology: Socio medical Toxicology FM12.1 Describe features and management of abuse/poisoning with Following chemicals: Tobacco, cannabis, amphetamines, cocaine, hallucinogens, designer drugs & solvent</p>	Small group-21 teachings/tutorials/ Integrated teaching/ Practical's

FM13.1	Topic: Toxicology: Environmental Toxicology FM13.1 Describe toxic pollution of environment, its medico-legal aspects & toxic hazards of occupation and industry	SDL-5
FM13.2	Topic: Toxicology: Environmental Toxicology FM13.2 Describe medico-legal aspects of poisoning in Workman's Compensation Act	Small group-22 teachings/tutorials/ Integrated teaching/ Practical's
FM14.2	Skills in Forensic Medicine & Toxicology FM14.2 Demonstrate the correct technique of clinical examination in a suspected case of poisoning & prepare medico-legal report in a simulated/supervised environment	Small group-23 teachings/tutorials/ Integrated teaching/ Practical's
FM14.3	Skills in Forensic Medicine & Toxicology FM14.3 Assist and demonstrate the proper technique in collecting, preserving and dispatch of the exhibits in a suspected case of poisoning, along with clinical examination	Small group-24 teachings/tutorials/ Integrated teaching/ Practical's
FM14.6	Skills in Forensic Medicine & Toxicology FM14.6 Demonstrate and interpret medico-legal aspects from examination of hair (human & animal) fibre, semen & other biological fluids	Small group-25 teachings/tutorials/ Integrated teaching/ Practical's
FM14.7,1 4.8	Skills in Forensic Medicine & Toxicology FM14.7 Demonstrate & identify that a particular stain is blood and identify the species of its origin FM14.8 Demonstrate the correct technique to perform and identify ABO & RH blood group of a person	Small group-26 teachings/tutorials/ Integrated teaching/ Practical's
FM14.16	Skills in Forensic Medicine & Toxicology FM14.16 To examine & prepare medico-legal report of drunk person in a simulated/ supervised environment	Small group- 27 teachings/tutorials/ Integrated teaching/ Practical's
FM14.17	Skills in Forensic Medicine & Toxicology FM14.17 To identify & draw medico-legal inference from common poisons e.g. dhatura, castor, cannabis, opium, aconite copper sulphate, pesticides compounds, marking nut, oleander, Nuxvomica, abrus seeds, Snakes, capsicum, calotropis, lead compounds & tobacco.	Small group- 28 teachings/tutorials/ Integrated teaching/Practical's
FM14.17	Skills in Forensic Medicine & Toxicology FM14.17 To identify & draw medico-legal inference from common poisons e.g. dhatura, castor, cannabis, opium, aconite copper sulphate, pesticides compounds, marking nut, oleander, Nuxvomica, abrus seeds, Snakes, capsicum, calotropis, lead compounds & tobacco.	Small group- 29 teachings/tutorials/ Integrated teaching/Practical's

FM14.17	Skills in Forensic Medicine & Toxicology FM14.17 To identify & draw medico-legal inference from common poisons e.g. dhatura, castor, cannabis, opium, aconite copper sulphate, pesticides compounds, marking nut, oleander, Nux vomica, abrus seeds, Snakes, capsicum, calotropis, lead compounds & tobacco.	Small group- 30 teachings/tutorials/ Integrated teaching/Practical's
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AETCOM Module 2.5	Bioethics continued - Case study on patient autonomy and decision making AETCOM Module 2.5 Identify, discuss and define medico legal, socio-cultural and ethical issues as it pertains to patient autonomy, patient right and shared responsibility in health care	<ul style="list-style-type: none"> • Introducing and group formation - 1 hour • Case introducing - 1 hour • Self - Directed learning - 2 hours • Anchoring lecture - 1 hour • Case Resolution - 1 hour
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Competency Nos.	Topics & Subtopics	TL Methods
Phase III Part 1 (Fifth & Sixth Semester)		
FM 4.2, 4.3, 4.4, 4.5, 4.22	Medical Jurisprudence (Medical Law and ethics) FM 4.2 Describe the Code of Medical Ethics 2002 conduct, Etiquette and Ethics in medical practice and unethical practices & the dichotomy FM 4.3 Describe the functions and role of Medical Council of India and State Medical Councils FM 4.4 Describe the Indian Medical Register FM 4.5 Rights/privileges of a medical practitioner, penal erasure, infamous conduct, disciplinary Committee, disciplinary procedures, warning notice and penal erasure 4.22 Explain Oath - Hippocrates, Charaka and Sushruta and procedure for administration of Oath.	Lecture-1
FM 4.1	Medical Jurisprudence (Medical Law and ethics) FM4.1 Describe Medical Ethics and explain its historical emergence	SDL-1

<p>FM 4.7, 4.8, 4.9</p>	<p>Medical Jurisprudence (Medical Law and ethics) FM4.7 Describe and discuss the ethics related to HIV patients FM4.8 Describe the Consumer Protection Act-1986 (Medical Indemnity Insurance, Civil Litigations and Compensations), Workman's Compensation Act & ESI Act FM4.9 Describe the medico - legal issues in relation to family violence, violation of human rights, NHRC and doctors</p>	<p>Small group-1 teachings/tutorials/ Integrated teaching/ Practical's</p>
<p>FM 4.6, 4.24, 4.28</p>	<p>Medical Jurisprudence (Medical Law and ethics) FM4.6 Describe the Laws in Relation to medical practice and the duties of a medical practitioner towards patients and society FM4.24 Enumerate rights, privileges and duties of a Registered Medical Practitioner. Discuss doctor- patient relationship: professional secrecy and privileged communication FM4.28 Demonstrate respect to laws relating to medical practice and Ethical code of conduct prescribed by Medical Council of India and rules and regulations prescribed by it from time to time</p>	<p>Lecture-2</p>
<p>FM 4.10, 4.11</p>	<p>Medical Jurisprudence (Medical Law and ethics) FM4.10 Describe communication between doctors, public and media FM4.11 Describe and discuss euthanasia</p>	<p>Small group-2 teachings/tutorials/ Integrated teaching/ Practical's</p>
<p>FM 4.12, 4.16, 4.17</p>	<p>Medical Jurisprudence (Medical Law and ethics) FM4.12 Discuss legal and ethical issues in relation to stem cell research FM4.16 Describe and discuss Bioethics FM4.17 Describe and discuss ethical Principles: Respect for autonomy, non- malfeasance, beneficence & justice</p>	<p>Small group-3 teachings/tutorials/ Integrated teaching/ Practical's</p>

FM 4.18	Medical Jurisprudence (Medical Law and ethics) FM4.18 Describe and discuss medical negligence including civil and criminal negligence, contributory negligence, corporate negligence, vicarious liability, Res Ipsa Loquitur, prevention of medical negligence and defenses in medical negligence litigations	Lecture-3
FM 4.19	Medical Jurisprudence (Medical Law and ethics) FM4.19 Define Consent. Describe different types of consent and ingredients of informed consent. Describe the rules of consent and importance of consent in relation to age, emergency situation, mental illness and alcohol intoxication	Lecture-4
FM 4.20, 4.21	Medical Jurisprudence (Medical Law and ethics) FM4.20 Describe therapeutic privilege, Malingering, Therapeutic Misadventure, Professional Secrecy, Human Experimentation FM4.21 Describe Products liability and Medical Indemnity Insurance	Lecture-5
FM 4.23	Medical Jurisprudence (Medical Law and ethics) FM 4.23 Describe the modified Declaration of Geneva and its relevance	SDL-2
FM 4.25, 4.26, 4.27	Medical Jurisprudence (Medical Law and ethics) FM4.25 Clinical research & Ethics Discuss human experimentation including clinical trials FM4.26 Discuss the constitution and functions of ethical committees FM4.27 Describe and discuss Ethical Guidelines for Biomedical Research on Human Subjects & Animals	Small group-4 teachings/tutorials/ Integrated teaching/ Practical's
FM 2.4	Forensic Pathology FM 2.4 Describe salient features of the Organ Transplantation and The Human Organ Transplant (Amendment) Act 2011 and discuss ethical issues regarding organ donation	Lecture-6
FM 2.31	Forensic Pathology FM2.31 Demonstrate ability to work in a team for conduction of medico-legal autopsies in cases of death following alleged negligence medical dowry death, death in custody or following violation of human rights as per National Human Rights Commission Guidelines on exhumation	Small group-5 teachings/tutorials/ Integrated teaching/ Practical's

FM 4.14	Medical Jurisprudence (Medical Law and ethics) FM 4.14 Describe & discuss the challenges in managing medico-legal cases including development of skills in relationship management - Human behaviour, communication skills, conflict resolution techniques	Small group- 6 teachings/tutorials/Integrated teaching/ Practical's
FM 4.15	Medical Jurisprudence (Medical Law and ethics) Describe the principles of handling pressure - definition, types, causes, sources and skills for managing the pressure while dealing with medico-legal cases by the doctor	Small group- 7 teachings/tutorials/Integrated teaching/ Practical's
FM 4.29	Medical Jurisprudence (Medical Law and ethics) FM4.29 Demonstrate ability to communicate appropriately with media, public and doctors	Small group- 8 teachings/tutorials Integrated teaching/ Practical's
FM 4.30	Medical Jurisprudence (Medical Law and ethics) FM4.30 Demonstrate ability to conduct research in pursuance to guidelines or research ethics	Small group- 9 teachings/tutorials Integrated teaching/ Practical's
FM 3.4, 3.3	Mechanical injuries and wounds: FM 3.4 Define injury, assault & hurt. Describe IPC pertaining to injuries FM 3.3 Define, describe and classify different types of mechanical injuries, abrasion, bruise, laceration, stab wound, incised wound, chop wound, defense wound, self-inflicted/fabricated wounds and their medico-legal aspects	Lecture-7
FM 3.3	Mechanical injuries and wounds: FM 3.3 Define, describe and classify different types of mechanical injuries, abrasion, bruise, laceration, stab wound, incised wound, chop wound, defense wound, self-inflicted/fabricated wounds	Lecture-8
FM 3.3	Mechanical injuries and wounds: FM 3.3 Define, describe and classify different types of mechanical injuries, abrasion, bruise, laceration, stab wound, incised wound, chop wound, defense wound, self-inflicted/fabricated wounds	Lecture-9

FM 3.3	Mechanical injuries and wounds: FM 3.3 Define, describe and classify different types of mechanical injuries, abrasion, bruise, laceration, stab wound, incised wound, chop wound, defense wound, self-inflicted/fabricated wounds	Lecture-10
FM 3.5	Mechanical injuries and wounds: FM3.5 Describe accidental, suicidal and homicidal injuries. Describe simple, grievous and dangerous injuries. Describe ante-mortem and post-mortem injuries	Small group-10 teachings/tutorials/ Integrated teaching/ Practical's
FM 3.6	Mechanical injuries and wounds: FM3.6 Describe healing of injury and fracture of bones with its medico-legal importance	Small group-11 teachings/tutorials/ Integrated teaching/ Practical's
FM 3.7	Mechanical injuries and wounds: FM3.7 Describe factors influencing infliction of injuries and healing, examination and certification of wounds and wound as a cause of death: Primary and Secondary	Small group-12 teachings/tutorials Integrated teaching/ Practical's
FM 3.8	Mechanical injuries and wounds: FM3.8 Describe and discuss different types of weapons including dangerous weapons and their examination	Small group-13 teachings/tutorials/ Integrated teaching/ Practical
FM 3.9	Firearm injuries: FM3.9 Describe different types of firearms including structure and components. Along with description of ammunition propellant charge and mechanism of fire-arms, different types of cartridges and bullets and various terminology in relation of firearm - caliber, range, choking	Lecture-11
FM 3.10	Firearm injuries: FM3.10 Describe and discuss wound ballistics-different types of firearm injuries, blast injuries and their interpretation, preservation and dispatch of trace evidences in cases of firearm and blast injuries, various tests related to confirmation of use of firearms	Lecture-12

FM 3.10	Firearm injuries: FM3.10 Describe and discuss wound ballistics-different types of firearm injuries, blast injuries and their interpretation, preservation and dispatch of trace evidences in cases of firearm and blast injuries, various tests related to confirmation of use of firearms	Lecture-13
FM 3.11	Regional Injuries: FM3.11 Describe and discuss regional injuries to head (Scalp wounds, fracture skull, intracranial haemorrhages, coup and contrecoup injuries), neck, chest, abdomen, limbs, genital organs, spinal cord and skeleton	Lecture-14
FM 3.12	Regional Injuries FM3.12 Describe and discuss injuries related to fall from height and vehicular injuries - Primary and Secondary impact, Secondary injuries, crush syndrome, railwayspine	Small group-14 teachings/tutorials Integrated teaching/ Practical's
FM 2.24	Forensic Pathology FM2.24 Thermal deaths: Describe the clinical features, post-mortem finding and medico legal aspects of injuries due to physical agents like heat (heat-hyper-pyrexia, heat stroke, sun stroke, heat exhaustion/prostration, heat cramps [miner's cramp] or cold (systemic and localized hypothermia, frostbite, trench foot, immersion foot)	Lecture-15
FM 2.25	Forensic Pathology FM2.25 Describe types of injuries, clinical features, patho- physiology, post- mortem findings and medico-legal aspects in cases of burns, scalds, lightening, electrocution and radiations	Lecture-16
FM 2.26	Forensic Pathology FM 2.26 Describe and discuss clinical features, post-mortem findings and medico-legal aspects of death due to starvation and neglect	SDL-3
FM 14.1	Skills in Forensic Medicine and Toxicology FM14.1 Examine and prepare Medico-legal report of an injured person with different etiologies in a simulated/ supervised environment	Small group-15 teachings/tutorials Integrated teaching/ Practical's

<p>FM 14.10</p>	<p>Skills in Forensic Medicine and Toxicology FM14.10 Demonstrate ability to identify & prepare medico legal inference from specimens obtained from various types of injuries e.g. contusion, abrasion, laceration, firearm wounds, burns, head injury and fracture of bone</p>	<p>Small group-16 teachings/tutorials/In tegrated teaching/ Practical's</p>
<p>FM 14.11</p>	<p>Skills in Forensic Medicine and Toxicology FM14.11 To identify & describe weapons of medicolegal importance which are commonly used e.g. lathi, knife, kripan, axe, gandasa, gupti, farsha, dagger, bhalla, razor & stick. Able to prepare report of the weapons brought by police and to give opinion regarding injuries present on the person as described in injury report/ PM report so as to connect weapon with the injuries. (Prepare injury report/ PM report must be provided to connect the weapon with the injuries)</p>	<p>Small group-17 teachings/tutorials/In tegrated teaching/ Practical's</p>
<p>FM 14.12</p>	<p>Skills in Forensic Medicine and Toxicology FM14.12 Describe the contents and structure of bullet and cartridges used & to provide medico-legal interpretation from these</p>	<p>Small group-18 teachings/tutorials Integrated teaching/ Practical's</p>
<p>FM 2.20, 2.21</p>	<p>Mechanical asphyxia: FM2.20 Define, classify and describe asphyxia and medico-legal interpretation of post-mortem findings in asphyxia deaths</p> <p>Mechanical asphyxia: FM2.21 Describe and discuss different types of hanging and strangulation including clinical findings, causes of death, post-mortem findings and medico-legal aspects of death due to hanging and strangulation including examination, preservation and dispatch of ligature material</p>	<p>Lecture-17</p>
<p>FM 2.21</p>	<p>Mechanical asphyxia: FM2.21 Describe and discuss different types of hanging and strangulation including clinical findings, causes of death, post-mortem findings and medico-legal aspects of death due to hanging and strangulation including examination, preservation and dispatch of ligature material</p>	<p>Lecture-18</p>

<p>FM 2.22</p>	<p>Mechanical asphyxia: FM 2.22 Describe and discuss patho-physiology, clinical features, post- mortem findings and medico-legal aspects of traumatic asphyxia, obstruction of nose & mouth, suffocation and sexual asphyxia</p>	<p>Lecture-19</p>
<p>FM 2.23</p>	<p>Mechanical asphyxia: FM2.23 Describe and discuss types, patho-physiology, clinical features, post mortem findings and medico-legal aspects of drowning, diatom test and, Gettler's test.</p>	<p>Lecture-20</p>
<p>FM 3.18, 3.13</p>	<p>SEXUAL OFFENCES FM3.18 Describe anatomy of male and female genitalia, hymen and its types. Discuss the medico-legal importance of hymen. Define virginity, defloration, legitimacy and its medico legal importance FM3.13 Describe different types of sexual offences. Describe various sections of IPC regarding rape including definition of rape (Section 375 IPC), Punishment for Rape (Section 376 IPC) and recent amendments notified till date</p>	<p>Lecture-21</p>
<p>FM 3.14</p>	<p>SEXUAL OFFENCES FM3.14 Describe and discuss the examination of the victim of an alleged case of rape, and the preparation of report, framing the opinion and preservation and dispatch of trace evidences in such cases</p>	<p>Small group-19 teachings/tutorials/In tegrated teaching/ Practical's</p>
<p>FM 3.15</p>	<p>SEXUAL OFFENCES FM3.15 Describe and discuss examination of accused and victim of sodomy, preparation of report, framing of opinion, preservation and dispatch of trace evidences in such cases</p>	<p>Small group-20 teachings/tutorials/In tegrated teaching/ Practical's</p>
<p>FM 4.13</p>	<p>Medical Jurisprudence (Medical Law and ethics) FM4.13 Describe social aspects of Medico-legal cases with respect to victims of assault, rape, attempted suicide, homicide, domestic violence, dowry- related cases</p>	<p>Small group-21 teachings/tutorials/In tegrated teaching/ Practical's</p>

FM 14.14	Skills in Forensic Medicine and Toxicology FM14.14 To examine & prepare report of an alleged accused in rape/unnatural sexual offence in a simulated/ supervised environment	Small group-22 teachings/tutorials /Integrated teaching/ Practical's
FM 14.15	Skills in Forensic Medicine and Toxicology FM14.15 To examine & prepare medico-legal report of a victim of sexual offence/unnatural sexual offence in a simulated/ supervised environment	Small group-23 teachings/tutorials/In tegrated teaching/ Practical's
FM 3.16	SEXUAL OFFENCES FM3.16 Describe and discuss adultery and unnatural sexual offences- sodomy, incest, lesbianism, buccal coitus, bestiality, indecent assault and preparation of report, framing the opinion and preservation and dispatch of trace evidences in such cases	Small group-24 teachings/tutorials/In tegrated teaching/ Practical's
FM 3.17	SEXUAL OFFENCES FM3.17 Describe and discuss the sexual perversions fetishism, transvestism, voyeurism, sadism, necrophagia, masochism, exhibitionism, frotteurism, Necrophilia	SDL-4
FM 3.19	SEXUAL OFFENCES FM3.19 Discuss the medicolegal aspects of pregnancy and delivery, signs of pregnancy, precipitate labour, superfoetation, superfecundation and signs of recent and remote delivery in living and dead	Lecture-22
FM 14.13	SEXUAL OFFENCES FM14.13 To estimate the age of foetus by post-mortem examination	Small group-25 teachings/tutorials/In tegrated teaching/ Practical's
FM 3.20	SEXUAL OFFENCES FM 3.20 Discuss disputed paternity and maternity	Small group-26 teachings/tutorials/In tegrated teaching/ Practical's

FM 3.21	FM 3.21 Discuss Pre-conception and Pre Natal Diagnostic Techniques (PC&PNDT) - Prohibition of Sex Selection Act 2003 and Domestic Violence Act 2005	Small group-27 teachings/tutorials Integrated teaching/ Practical's
FM 3.22, 3.23	SEXUAL OFFENCES FM 3.22 Define and discuss impotence, sterility, frigidity, sexual dysfunction, premature ejaculation. Discuss the causes of impotence and sterility in male and female FM 3.23 Discuss Sterilization of male and female, artificial insemination, Test Tube Baby, surrogate mother, hormonal replacement therapy with respect to appropriate national and state laws	Small group-28 teachings/tutorials Integrated teaching/ Practical's
FM 3.24, 3.25, 3.26	SEXUAL OFFENCES FM 3.24 Discuss the relative importance of surgical methods of contraception (vasectomy and tubectomy) as methods of contraception in the National Family Planning Programme FM 3.25 Discuss the major results of the National Family Health Survey FM 3.26 Discuss the national Guidelines for accreditation, supervision & regulation of ART Clinics in India	Small group-29 teachings/tutorials Integrated teaching/ Practical's
FM 3.27, 3.28	FM 3.27 Define, classify and discuss abortion, methods of procuring MTP and criminal abortion and complication of abortion. MTP Act1971 FM 3.28 Describe evidences of abortion - living and dead, duties of doctor in cases of abortion, investigations of death due to criminal abortion	Lecture-23
FM 3.29	Torture and Human rights FM3.29Describe and discuss child abuse and battered baby syndrome	Small group-30 teachings/tutorials Integrated teaching/ Practical's
FM 3.30	Torture and Human rights FM3.30Describe and discuss issues relating to torture, identification of injuries caused by torture and its sequelae, management of torture survivors	Small group-31 teachings/tutorials Integrated teaching/ Practical's

FM 3.31	Torture and Human rights FM3.31 Describe and discuss guidelines and Protocols of National Human Rights Commission regarding torture	Small group-32 teachings/tutorials Integrated teaching/ Practical's
FM 3.32	FM3.32 Demonstrate the professionalism while preparing reports in medicolegal situations, interpretation of findings and making inference/opinion, collection preservation and dispatch of biological or trace evidences	Small group-33 teachings/tutorials Integrated teaching/ Practical's
FM 3.33	SEXUAL OFFENCES FM3.33 Should be able to demonstrate the professionalism while dealing with victims of torture and human right violations, sexual assaults- psychological consultation, rehabilitation	Small group-34 teachings/tutorials Integrated teaching/ Practical's
FM 5.1, 5.2	Forensic Psychiatry FM5.1 Classify common mental illnesses including post-traumatic stress disorder (PTSD) FM5.2 Define, classify and describe delusions, hallucinations, illusion, lucid interval and obsessions with exemplification	Lecture-24
FM 5.3, 5.4	Forensic Psychiatry FM 5.3 Describe Civil and criminal responsibilities of a mentally ill person FM 5.4 Differentiate between true insanity from feigned insanity	Lecture-25
FM 5.5, 5.6	Forensic Psychiatry FM5.5 Describe & discuss Delirium tremens FM5.6 Describe the Indian Mental Health Act, 1987 with special reference to admission, care and discharge of a mentally ill person	Small group-35 teachings/tutorials Integrated teaching/ Practical's
FM 6.1	Forensic Laboratory investigation in medical legal practice FM 6.1 Describe different types of specimen and tissues to be collected both in the living and dead: Body fluids (blood, urine, semen, faeces saliva), Skin, Nails, tooth pulp, vaginal smear, viscera, skull, specimen for histo-pathological examination, blood grouping, HLA Typing and DNA Finger printing.	Small group-36 teachings/tutorials Integrated teaching/ Practical's

FM 6.1	Forensic Laboratory investigation in medical legal practice Describe Locard's Exchange Principle	SDL-5
FM 6.1	Forensic Laboratory investigation in medical legal practice FM 6.1 Describe different types of specimen and tissues to be collected both in the living and dead: Body fluids (blood, urine, semen, faeces saliva), Skin, Nails, tooth pulp, vaginal smear, viscera, skull, specimen for histo-pathological examination, blood grouping, HLA Typing and DNA Finger printing.	Small group-37 teachings/tutorials Integrated teaching/ Practical's
FM 6.2	Forensic Laboratory investigation in medical legal practice FM6.2 Describe the methods of sample collection, preservation, labelling, dispatch, and interpretation of reports	Small group-38 teachings/tutorials Integrated teaching/ Practical's
FM 6.3	Forensic Laboratory investigation in medical legal practice FM6.3 Demonstrate professionalism while sending the biological or trace evidences to Forensic Science laboratory, specifying the required tests to be carried out, objectives of preservation of evidences sent for examination, personal discussions on interpretation of findings	Small group-39 teachings/tutorials Integrated teaching/ Practical's
FM 7.1	Emerging technologies in Forensic Medicine FM7.1 Enumerate the indications and describe the principles and appropriate use for: - DNA profiling - Facial reconstruction - Polygraph (Lie Detector) - Narcoanalysis, - Brain Mapping, - Digital autopsy, - Virtual Autopsy, - Imaging technologies	Small group-40 teachings/tutorials/Integrated teaching/ Practical's
FM 7.1	Emerging technologies in Forensic Medicine FM7.1 Enumerate the indications and describe the principles and appropriate use for: - DNA profiling - Facial reconstruction - Polygraph (LieDetector) - Narcoanalysis, - Brain Mapping, - Digital autopsy, - Virtual Autopsy, - Imaging technologies	Small group-41 teachings/tutorials/Integrated teaching/ Practical's

FM 14.21	Skills in Forensic Medicine & Toxicology FM14.21 To collect, preserve, seal and dispatch exhibits for DNA-Finger printing using various formats of different laboratories.	Small group-42 teachings/tutorials/Integrated teaching/ Practical's
FM 14.18	Skills in Forensic Medicine & Toxicology FM14.18 To examine & prepare medico-legal report of a person in police, judicial custody or referred by Court of Law and violation of human rights as requirement of NHRC, who has been brought for medical examination	Small group-43 teachings/tutorials/Integrated teaching/ Practical's
FM 14.19	Skills in Forensic Medicine & Toxicology FM14.19 To identify & prepare medico-legal inference from histo-pathological slides of Myocardial Infarction, pneumonitis, tuberculosis, brain infarct, liver cirrhosis, brain haemorrhage, bone fracture, Pulmonary oedema, brain oedema, soot particles, diatoms & wound healing	Small group-44 teachings/tutorials/Integrated teaching/ Practical's
FM 14.5	Skills in Forensic Medicine & Toxicology FM14.5 Conduct & prepare post-mortem examination report of varied etiologies (at least 15) in a simulated/ supervised environment Journal and logbook checking-	Small group-45 teachings/tutorials/Integrated teaching/ Practical's It can be scheduled at any small groups as per availability of Post Mortem examination.

AETCOM Module 3.2	Case study in Bioethics Disclosure of medical errors: The student should be able to: Demonstrate and understanding of the implications and the appropriate procedure and response to be followed in the event of medical errors.	<ul style="list-style-type: none"> • Introducing of case - 1 hour • Self-Directed learning (SDL) : 2 hours • Anchoring lecture - 1 hour • Discussion and Closure of case - 1 hour
AETCOM Module 3.4	Case study in Bioethics-Confidentiality The student should be able to: Identify, discuss and define medico legal, socio-cultural and ethical issues as it pertains to confidentiality in patient care.	<ul style="list-style-type: none"> • Introducing of case - 1 hour • Self-Directed learning (SDL) : 2 hours • Anchoring lecture - 1 hour • Discussion and Closure of case - 1 hour

IN ADDITION TO THE ABOVE CONTENTS,

The following topics are also to be included as per earlier syllabus revisions. These are,

- **CHILD ABUSE**
 - Scope of Child Abuse in India,
 - Diagnosis and medico legal evaluation of child abuse,
 - Autopsy protocol in cases of death due to child abuse,
- **VIOLENCE AGAINST WOMEN**
 - Scope of Violence against women in India,
- Process of Renewal of Registration of Medical Practitioner,
- Medicare Service Person & Medicare Service Institution (Prevention of Violence and damage or loss to Property), Act 2010,
- The Protection Of Children from Sexual Offences Act, 2012,
- The National Medical Commission Act, 2019,
- The Surrogacy (Regulation) Bill, 2019,
- Good Samaritan Law.

2. EVALUATION**During II MBBS (Phase II) & III MBBS Part 1 (Phase III Part 1)**

Semester / Term	Examination Head	
	Theory	Practical
Third / (II/I)	50 Marks	50 Marks
Fourth/ (II/II)	50 Marks	50 Marks
Fifth/ (III/I)	50 Marks	50 Marks
Sixth (Preliminary) (III/II)	100 Marks	100 Marks
Total	250 Marks	250 Marks
To be converted to	40 Marks	40 Marks

A. UNIVERSITY EXAMINATION & PRELIMINARY EXAMINATION MARK DISTRIBUTION

Type of exam		Maximum marks	Minimum Marks
SUMMATIVE			
Theory (One Paper)	Paper I	100	50
Practical		100	50
Total		200	100

B. PATTERN OF THEORY EXAMINATION IN FINAL EXAMINATION INCLUDING DISTRIBUTION OF MARKS, QUESTIONS, AND TIME.

- i. One theory paper : 100 marks (**Third Year MBBS Part- 1**)
 ii Total duration : 3 hour (There will be 3 sections)

Forensic Pathology, Thanatology, Legal Procedures, Medical Jurisprudence, Medical Ethics, Clinical Forensic Medicine including
 iii 1 Paper : sexual jurisprudence, Forensic Psychiatry, Forensic Science Laboratory, General & Systemic Toxicology including ATECOM module 2.5, 3.2 & 3.4.

C. QUESTION PAPER PATTERN

1 Paper - Forensic Pathology, Thanatology, Legal Procedures, Medical Jurisprudence, Medical Ethics, Clinical Forensic Medicine including sexual jurisprudence, Forensic Psychiatry, Forensic Science Laboratory, General & Systemic Toxicology including ATECOM module 2.5, 3.2 & 3.4.

Section	Question No	Type	No of Questions	Marks
A	Question 1.	MCQ	20	20
B	Question 2	Long Answer Question	1	12
	Question 3	Short Notes	3 / 4	18
	Question 4	Short Answer Question	5 / 6	10
C	Question 5	Long Answer Question	1	12
	Question 6	Short notes	2 / 3	12
	Question 7	Shot Answer Question	5 / 6	10
	Question 8	Short notes (ATECOM module 2.5, 3.2 & 3.4)	1	6

D. PRACTICAL EXAMINATION:

1	Exercise 'A' - Age Estimation	:	08 marks
2	Exercise 'B' - MCCD	:	08 marks
3	Exercise 'C' - Injury Report	:	08 marks
4	Exercise 'D' -Report on Survivor of sexual violence	:	08 marks
5	Exercise 'E' - Drunkenness Report / Report on Accused of sexual violence	:	07 marks
6	Exercise 'F' - Weapon Report	:	07 marks

7	Exercise 'G' - Bone Examination	:	07 marks
8	Exercise 'H' - Fetus Examination	:	07 marks
9	Exercise 'I' - OSPE / Digital Spots	:	20 marks
10	Oral/ Viva Voce Forensic Medicine, Forensic Pathology, Legal procedures & Forensic Psychiatry - 10 marks Forensic Toxicology, Forensic Science Laboratory & Medical Jurisprudence- 10 marks	:	20 marks
	Total	:	100 marks

E. FIRST, SECOND & THIRD INTERNAL ASSESSMENT EXAMINATIONS

1. Theory and Practical including Viva voce Mark Distribution

		Maximum Marks	Minimum Marks
Internal Assessment	Theory	40	16
	Practical	40	16
	Log Book	20	08
	Total	100	50

2. Theory Examination Pattern

Question No	Type	No of Questions	Marks
Question 1.	MCQ	10	10
Question 2	Long Answer Question	1	12
Question 3	Short Notes	3 / 4 (6 each)	18
Question 4	Short Answer Question	5 / 6 (2 each)	10

3. Practical Examination:

For First, Second & Third Internal Assessment examinations:
50 marks each

Log Book:

Sr. No	Head of activity	Marks
1	Day to day assessment	4
2.	Journal completion	4
3	Reflection on ATECOM module 2.5, 3.2 & 3.4	3
4	Activities like seminar, symposia, quizzes and other academic activities	5
5	Achievement of certifiable competencies.	4
Total		20

Mark distribution for Theory and Practical Exam

Exam	Examination Head			Total
	Theory	Practical	Log Book	
First Internal Assessment	50	50		
Second Internal Assessment	50	50		
Third Internal Assessment	50	50		
Preliminary Examination	100	100		
Total No. of marks	250	250		
To be converted to	40	40	20	100
Minimum marks for eligibility	16	16	08	50

F. PLAN FOR INTERNAL ASSESSMENT:

1. There will be 4 Internal Assessment (IA) examinations (Including one Preliminary Examination) in Forensic Medicine & Toxicology. The structure of the Internal Assessment (IA) Theory examinations will be similar to the structure of University Examinations.
2. It is mandatory for the students to appear for all the Internal Assessment (IA) examinations.
3. There will be only one additional examination for absent students (due to genuine reason) after approval by the Institutional Grievances Committee. It shall be taken after preliminary examination and before submission of internal assessment marks to the University.
4. Internal Assessment (IA) marks for theory will be out of 250 and practical will be out of 250.
5. Total theory Internal Assessment (IA) will be reduced to 40 marks and total practical Internal Assessment (IA) will be reduced to 40 marks.
6. Log Book will have 20 marks. It will include day to day assessment, Journal completion, Reflection on ATECOM module 2.5, 3.2 & 3.4, all activities like seminar, symposia, quizzes and other academic activities and Achievement of certifiable competencies.
7. Students must secure at least 50% marks of the total marks 100 of internal assessment (**combined in theory, practical and Log Book; not less than 40 % marks in theory, practical or Log Book**) to be eligible for appearing University examination
8. Internal Assessment (IA) marks will reflect as separate head of passing at the summative examination.
9. Internal Assessment (IA) marks will not to be added to marks of the University examinations and will be shown separately in mark list.
10. If any candidate fails in Internal Assessment (IA), his / her result will be withheld by university and one theory and one Practical exam will be conducted within 60 days of result as internal exam.

MBBS Second & Third Phase Part -I

Internal Assessment

Subject: Forensic Medicine & Toxicology

Applicable w.e.f October 2020 onwards examination for batches admitted from June 2019 onwards

Phase	I-Exam (At the end of first term)			II-Exam (At the end of second term)		
	Theory	Practical (Including 10 Marks for Journal & Log Book)	Total Marks	Theory	Practical (Including 10 Marks for Journal & Log Book)	Total Marks
II MBBS	50	40 + 10	100	50	40 + 10	100

Phase	I-Exam (At the end of first term)			II-Exam (At the end of second term)		
	Theory	Practical (Including 10 Marks for Journal & Log Book)	Total Marks	Theory	Practical (Including 10 Marks for Journal & Log Book)	Total Marks
II MBBS	50	40 + 10	100	50	40 + 10	100

1. There will be 4 internal assessment examinations in Forensic medicine. The structure of the Preliminary internal assessment theory examinations should be similar to the structure of University examination.
2. It is mandatory for the students to appear for all the internal assessment Examinations in the respective phases. A student who has not taken minimum required number of tests for Internal Assessment each in theory and practical will not be eligible for University examinations.
3. There will be only one additional examination for absent students (due to genuine reason) after approval by the Institutional Grievances Committee. It should be taken after preliminary examination and before submission of internal assessment marks to the University.
4. Internal assessment marks for theory will be out of 250 and practical will be out of 250.
5. Reduce total theory internal assessment to 40 marks and total practical internal assessment to 40 marks. Students must secure at least 50% marks of the total marks (combined in theory and practical; not less than 40 % marks in theory and practical separately) to be eligible for appearing University examination
6. Conversion Formula for calculation of marks in internal assessment examinations

	First I A II Phase	Second I A II Phase	Third I A III Phase Part - 1	(Preliminary) III Phase Part - 1	Total	Internal Assessment mark conversion formula (out of 40)	Eligibility to appear for final University examination (after conversion out of 40) (40% separately in Theory & Practical, 50% Combined)	
Theory	50	50	50	100	250	Total Mark obtained 6.25	16 (Minimum)	Total Theory + Practical Must be 40
Practical	50	50	50	100	250		16 (Minimum)	

7. While preparing Final Marks of Internal Assessment, the rounding-off marks shall done as illustrated in following table

Internal Assessment Marks	Final rounded marks
15.01 to 15.49	15
15.50 to 15.99	16

8. Students must secure at least 50% marks of the total marks (combined in theory and practical / clinical; not less than 40 % marks in theory and practical Separately) assigned for internal assessment in order to be eligible for appearing at the final University examination of that subject. Internal assessment marks will reflect as separate head of passing at the summative examination.
9. Internal assessment marks will not to be added to marks of the University examinations and will be shown separately in mark list.

6. BOOKS RECOMMENDED

1. Modis text book of Medical Jurisprudence and Toxicology,
2. The Essentials of Forensic Medicine and toxicology by K.S. Narayan Reddy
3. Parikh's Text book of Medical Jurisprudence and Toxicology
4. Text book of Forensic Medicine – J.B. Mukherjee, vol 1&2
5. Principles of Forensic Medicine – A. Nandy
6. Principles of Forensic Medicine & Toxicology by Rajesh Bardale, Third Edition.
7. Review of Forensic Medicine & Toxicology by Gowtam Biswas,
8. Bernard Knight et. al: Cox's Medical Jurisprudence & toxicology.

Reference books

1. Russell S. Fisher & Charles S.Petty: Forensic Pathology
2. Kith Simpson: Forensic Medicine
3. Jurgen Ludwig: Current Methods of autopsy practice.
4. Gradwohl- Legal Medicine
5. A Doctors Guide to Court – Simpson
6. Polson C.J.: The essentials of forensic Medicine
7. Adelson: The pathology of Homicide
8. Atlas of Legal Medicine
9. Sptiz, W.U. & Fisher R.S.: Medicolegal investigation of death
10. A Handbook of legal pathology
11. Taylors principles and practice of Medical Jurisprudence.
12. Ratanlal&Dhirajlal, The Indian penal Code, Justice Hidaytullah& V.R..Manohar
13. Ratanlal&Dhirajlal The code of Criminal procedures, Justice Hidaytullah.
14. Ratanlal&Dhirajlal, The Law of evidence, justice Hidaytullah& V.R. Manohar
15. Medical Law &Etich in India – H. S. Mehata
16. Bernard Knight: Forensic Pathology
17. Code of Medical ethics: Medical Council of India, approved by central Government/S 33 (M) Of IMC Act.1956 (October 1970)
18. Krogman, W.M. The human skeleton in legal medicine.
19. FE Camps, JM Cameren, and David Lanham: Practical Forensic Medicine
20. V.V. Pillay: Modern Medical Toxicology.

