

## Course outcome and Programme outcome

(PO-CO)

### FORENSIC MEDICINE & TOXICOLOGY

	COMPETENCY	Clinician	Leader and member of health care team and system	Communicator	Lifelong learner	Professional	Critical thinker	Researcher
	Topic: General Information	1	2	3	4	5	6	7
FM1.1	Demonstrate knowledge of basics of Forensic Medicine like definitions of Forensic medicine, Clinical Forensic Medicine, Forensic Pathology, State Medicine, Legal Medicine and Medical Jurisprudence	3	3	2	3	2	2	1
FM1.2	Describe history of Forensic Medicine	0	0	1	0	0	1	1
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	3	3	2	2	2	1	2
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	2	1	1	1	1	1	1

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	3	1	1	1	2	2	1
FM1.6	Describe Offenses in Court including Perjury; Court strictures vis-avis Medical Officer	3	1	1	1	2	2	1
FM1.7	Describe Dying Declaration & Dying Deposition	3	1	1	1	2	1	1
FM1.8	Describe the latest decisions /notifications /resolutions/circulars/standing orders related to medico-legal practice issued by Courts/ Government authorities etc.	2	1	1	1	1	1	1
FM1.9	Describe the importance of documentation in medical practice in regard to medicolegal examinations, Medical Certificates and medicolegal reports especially - maintenance of patient case records, discharge summary, prescribed registers to be maintained in Health Centres. - maintenance of medico-legal register like accident register. - documents of issuance of wound certificate - documents of issuance of drunkenness certificate. - documents of issuance of sickness and fitness certificate. - documents for issuance of death certificate. -documents of Medical Certification of Cause of Death - Form Number4 and 4A - documents for estimation of age by physical, dental and radiological examination and issuance of certificate	3	1	2	2	3	2	1
FM1.10	Select appropriate cause of death in a particular scenario by referring ICD 10 code	3	2	1	1	2	1	1
FM1.11	Write a correct cause of death certificate as per ICD 10 document	2	2	1	1	2	1	1
	<b>Topic: Forensic Pathology</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
FM2.1	Define, describe and discuss death and its types including somatic/clinical/cellular, molecular and brain-death, Cortical Death and Brainstem Death	3	2	1	1	2	1	1

FM2.2	Describe and discuss natural and unnatural deaths	2	2	1	1	2	1	1
FM2.3	Describe and discuss issues related to sudden natural deaths	1	2	1	1	1	1	1
FM2.4	Describe salient features of the Organ Transplantation and The Human Organ Transplant (Amendment) Act 2011 and discuss ethical issues regarding organ donation	2	2	1	1	1	2	1
FM2.5	Discuss moment of death, modes of death - coma, asphyxia and syncope	2	2	1	1	1	2	1
FM2.6	Discuss presumption of death and survivorship	1	1	1	1	1	2	1
FM2.7	Describe and discuss suspended animation	2	1	1	1	1	2	1
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	2	1	1	1	1	1	1
FM2.9	Describe putrefaction, mummification, adipocere and maceration	1	1	1	1	1	1	2
FM2.10	Discuss estimation of time since death	1	1	1	1	1	1	2
FM2.11	Describe and discuss autopsy procedures including post-mortem examination, different types of autopsies, aims and objectives of post-mortem examination	2	1	1	1	1	1	2
FM2.12	Describe the legal requirements to conduct post-mortem examination and procedures to conduct medico-legal post-mortem examination	1	1	1	1	1	2	2
FM2.13	Describe and discuss obscure autopsy	1	1	2	1	1	2	1
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	2	1	1	1	2	1	1
FM2.15	Describe special protocols for conduction of medico-legal autopsies in cases of death in custody or following violation of human rights as per National Human Rights Commission Guidelines	1	1	2	1	1	2	1
FM2.16	Describe and discuss examination of mutilated bodies or fragments, charred bones and bundle of bones	1	1	1	2	1	1	2
FM2.17	Describe and discuss exhumation	1	1	1	1	1	1	2

FM2.18	Crime Scene Investigation:- Describe and discuss the objectives of crime scene visit, the duties & responsibilities of doctors on crime scene and the reconstruction of sequence of events after crime scene investigation	1	1	2	1	1	2	2
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	3	2	2	2	2	2	3
FM2.20	Mechanical asphyxia: Define, classify and describe asphyxia and medico-legal interpretation of post-mortem findings in asphyxial deaths	2	1	2	2	2	2	1
FM2.21	Mechanical asphyxia: 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	3	2	1	2	2	2	2
FM2.22	Mechanical asphyxia: 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	2	2	1	2	2	2	2
FM2.23	Describe and discuss types, patho-physiology, clinical features, post-mortem findings and medico-legal aspects of drowning, diatom test and, gettler test.	2	2	1	1	2	2	2
FM2.24	Thermal deaths: Describe the clinical features, post-mortem finding and medicolegal 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)	3	2	1	1	2	2	2
FM2.25	Describe types of injuries, clinical features, patho-physiology, post-mortem findings and medico-legal aspects in cases of burns,	3	2	1	1	2	2	3

	scalds, lightening, electrocution and radiations							
FM2.26	Describe and discuss clinical features, post-mortem findings and medico-legal aspects of death due to starvation and neglect	1	2	1	1	1	1	2
FM2.27	Define and discuss infanticide, foeticide and stillbirth	3	2	1	1	1	1	2
FM2.28	Describe and discuss signs of intrauterine death, signs of live birth, viability of foetus, age determination of foetus, DOAP session of ossification centres, Hydrostatic test, Sudden Infants Death syndrome and Munchausen's syndrome by proxy	3	2	1	1	1	2	2
FM2.29	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	2	2	1	1	1	2	2
FM2.30	Have knowledge/awareness of latest decisions/notifications/ resolutions/circulars/standing orders related to medico-legal practice issued by Courts/Government authorities etc	2	2	1	1	1	1	2
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	3	2	2	2	2	2	3
FM2.32	Demonstrate ability to exchange information by verbal, or nonverbal communication to the peers, family members, law enforcing agency and judiciary	3	2	2	2	2	2	3
FM2.33	Demonstrate ability to use local resources whenever required like in mass disaster situations	1	1	1	1	1	2	2
FM2.34	Demonstrate ability to use local resources whenever required like in mass disaster situations	1	3	3	1	2	2	1

FM2.35	Demonstrate professionalism while conducting autopsy in medicolegal situations, interpretation of findings and making inference/opinion, collection preservation and dispatch of biological or trace evidences	3	2	2	2	2	1	2
	<b>Topic: Clinical Forensic Medicine</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
FM3.1	IDENTIFICATION 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	2	2	3	2	2	1	2
FM3.2	IDENTIFICATION Describe and discuss identification of criminals, unknown persons, dead bodies from the remains- hairs, fibers, teeth, anthropometry, dactylography, foot prints, scars, tattoos, poroscopy and superimposition	2	2	3	2	2	2	2
FM3.3	Mechanical injuries and wounds: 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	3	2	2	2	2	1	2
FM3.4	Mechanical injuries and wounds: Define injury, assault & hurt. Describe IPC pertaining to injuries	3	2	2	2	2	1	2
FM3.5	Mechanical injuries and wounds: Describe accidental, suicidal and homicidal injuries. Describe simple, grievous and dangerous injuries. Describe ante-mortem and post-mortem injuries	3	2	2	2	2	2	2
FM3.6	Mechanical injuries and wounds: Describe healing of injury and fracture of bones with its medico-legal importance	3	2	2	2	2	1	1
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	3	3	3	3	3	2	3

FM3.8	Mechanical injuries and wounds: Describe and discuss different types of weapons including dangerous weapons and their examination	3	2	2	2	2	1	2
FM3.9	Firearm injuries: 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	2	2	2	2	2	1	2
FM3.10	Firearm injuries: 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	2	2	2	1	2	2	2
FM3.11	Regional Injuries: 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	3	2	2	1	2	1	2
FM3.12	Regional Injuries Describe and discuss injuries related to fall from height and vehicular injuries – Primary and Secondary impact, Secondary injuries, crush syndrome, railway spine	3	2	2	1	2	2	2
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	3	3	3	2	2	1	2
FM3.14	SEXUAL OFFENCES 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 despatch of trace evidences in such cases	3	3	3	2	2	1	2
FM3.15	SEXUAL OFFENCES Describe and discuss examination of accused and	3	3	3	2	2	2	2

	victim of sodomy, preparation of report, framing of opinion, preservation and despatch of trace evidences in such cases							
FM3.16	SEXUAL OFFENCES Describe and discuss adultery and unnatural sexual offencesodomy, incest, lesbianism, buccal coitus, bestiality, indecent assault and preparation of report, framing the opinion and preservation and despatch of trace evidences in such cases	2	1	2	1	1	2	1
FM3.17	Describe and discuss the sexual perversions fetishism, transvestism, voyeurism, sadism, necrophagia, masochism, exhibitionism, frotteurism, Necrophilia	2	1	2	1	1	2	1
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 medicolegal importance	3	2	3	3	3	1	2
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	3	2	3	3	3	1	2
FM3.20	Discuss disputed paternity and maternity	2	2	2	2	3	1	2
FM3.21	Discuss Pre-conception and Pre Natal Diagnostic Techniques (PC&PNDT) - Prohibition of Sex Selection Act 2003 and Domestic Violence Act 2005	3	2	2	2	2	3	3
FM3.22	Define and discuss impotence, sterility, frigidity, sexual dysfunction, premature ejaculation. Discuss the causes of impotence and sterility in male and female	2	2	2	1	2	1	2
FM3.23	Discuss Sterilization of male and female, artificial insemination, Test Tube Baby, surrogate mother, hormonal replacement therapy with respect to appropriate national and state laws	3	2	2	1	2	1	2
FM3.24	Discuss the relative importance of surgical methods of contraception (vasectomy and tubectomy) as methods of contraception in the National Family Planning Programme	3	2	2	2	2	1	2
FM3.25	Discuss the major results of the National Family Health Survey K	1	1	2	1	1	1	2



FM3.26	Discuss the national Guidelines for accreditation, supervision & regulation of ART Clinics in India	1	1	2	1	1	1	2
FM3.27	Define, classify and discuss abortion, methods of procuring MTP and criminal abortion and complication of abortion. MTP Act 1971	3	2	2	2	3	1	2
FM3.28	Describe evidences of abortion - living and dead, duties of doctor in cases of abortion, investigations of death due to criminal abortion	3	2	2	2	2	1	2
FM3.29	Describe and discuss child abuse and battered baby syndrome	3	3	3	2	2	2	3
FM3.30	Describe and discuss issues relating to torture, identification of injuries caused by torture and its sequelae, management of torture survivors	3	3	3	2	2	2	3
FM3.31	Torture and Human rights Describe and discuss guidelines and Protocols of National Human Rights Commission regarding torture	2	2	2	2	2	1	2
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	3	2	2	2	2	1	2
FM3.33	Should be able to demonstrate the professionalism while dealing with victims of torture and human right violations, sexual assault psychological consultation, rehabilitation	2	2	2	2	1	1	2
	<b>Topic: Medical Jurisprudence (Medical Law and ethics)</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
FM4.1	Describe Medical Ethics and explain its historical emergence	2	2	2	2	1	2	1
FM4.2	Describe the Code of Medical Ethics 2002 conduct, Etiquette and Ethics in medical practice and unethical practices & the dichotomy	3	2	2	2	2	1	2
FM4.3	Describe the functions and role of Medical Council of India and State Medical Councils	3	2	2	2	3	1	1
FM4.4	Describe the Indian Medical Register	3	2	2	2	2	1	2
FM4.5	Rights/privileges of a medical practitioner, penal erasure, infamous conduct, disciplinary Committee, disciplinary procedures, warning notice and penal erasure	3	3	3	3	2	2	1

FM4.6	Describe the Laws in Relation to medical practice and the duties of a medical practitioner towards patients and society	3	3	3	3	2	1	2
FM4.7	Describe and discuss the ethics related to HIV patients	3	3	2	2	2	1	2
FM4.8	Describe the Consumer Protection Act-1986 (Medical Indemnity Insurance, Civil Litigations and Compensations), Workman's Compensation Act & ESI Act	3	3	2	2	2	1	1
FM4.9	Describe the medico - legal issues in relation to family violence, violation of human rights, NHRC and doctors	2	2	2	2	2	1	2
FM4.10	Describe communication between doctors, public and media	3	3	2	2	3	1	2
FM4.11	Describe and discuss euthanasia	3	2	2	2	2	1	2
FM4.12	Discuss legal and ethical issues in relation to stem cell research	2	2	2	2	1	1	2
FM4.13	Describe social aspects of Medico-legal cases with respect to victims of assault, rape, attempted suicide, homicide, domestic violence, dowry- related cases	3	2	2	2	2	1	2
FM4.14	Describe & discuss the challenges in managing medico-legal cases including development of skills in relationship management – Human behaviour, communication skills, conflict resolution techniques	2	1	2	2	2	2	1
FM4.15	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	3	1	2	1	2	2	1
FM4.16	Describe and discuss Bioethics	3	1	2	2	1	2	2
FM4.17	Describe and discuss ethical Principles: Respect for autonomy, nonmaleficence, beneficence & justice	2	2	2	1	2	1	2
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	3	2	2	2	2	1	2

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	3	3	3	3	3	2	3
FM4.20	Describe therapeutic privilege, Malingering, Therapeutic Misadventure, Professional Secrecy, Human Experimentation	3	2	2	2	3	2	2
FM4.21	Describe Products liability and Medical Indemnity Insurance	3	2	2	2	2	2	2
FM4.22	Explain Oath – Hippocrates, Charaka and Sushruta and procedure for administration of Oath.	2	2	2	2	1	1	2
FM4.23	Describe the modified Declaration of Geneva and its relevance	1	1	1	2	1	1	1
FM4.24	Enumerate rights, privileges and duties of a Registered Medical Practitioner. Discuss doctor-patient relationship: professional secrecy and privileged communication	3	2	2	2	3	2	1
FM4.25	Clinical research & Ethics Discuss human experimentation including clinical trials	2	2	2	2	2	1	3
FM4.26	Discuss the constitution and functions of ethical committees	2	2	2	2	1	1	2
FM4.27	Describe and discuss Ethical Guidelines for Biomedical Research on Human Subjects & Animals	2	2	2	2	1	2	3
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	2	2	2	1	1	1	2
FM4.29	Demonstrate ability to communicate appropriately with media, public and doctors	3	3	3	2	3	1	2
FM4.30	Demonstrate ability to conduct research in pursuance to guidelines or research ethics	2	2	2	2	2	1	3
	<b>Topic: Forensic Psychiatry</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
FM5.1	Classify common mental illnesses including post-traumatic stress disorder (PTSD)	3	2	2	2	2	1	2
FM5.2	Define, classify and describe delusions, hallucinations, illusion, lucid interval and obsessions with exemplification	3	2	2	2	2	1	2
FM5.3	Describe Civil and criminal responsibilities of a mentally ill person	2	2	2	2	1	2	2

FM5.4	Differentiate between true insanity from feigned insanity	2	2	2	2	1	2	1
FM5.5	Describe & discuss Delirium tremens	2	2	2	2	1	2	2
FM5.6	Describe the Indian Mental Health Act, 1987 with special reference to admission, care and discharge of a mentally ill person	3	2	2	2	2	1	2
	<b>Topic: Forensic Laboratory investigation in medical legal practice</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
FM6.1	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 Fingerprinting. Describe Locard's Exchange Principle	3	2	2	2	1	2	2
FM6.2	Describe the methods of sample collection, preservation, labelling, dispatch, and interpretation of reports	3	2	2	2	2	1	1
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	3	2	2	3	3	1	3
	<b>Topic: Emerging technologies in Forensic Medicine</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
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	1	2	2	2	3	3	2
	<b>Topic: Toxicology: General Toxicology</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
FM8.1	Describe the history of Toxicology	1	2	2	2	1	1	2

FM8.2	Define the terms Toxicology, Forensic Toxicology, Clinical Toxicology and poison	1	2	2	2	1	1	2
FM8.3	Describe the various types of poisons, Toxicokinetics and Toxicodynamics and diagnosis of poisoning in living and dead	1	2	2	2	2	2	3
FM8.4	Describe the Laws in relations to poisons including NDPS Act, Medico-legal aspects of poisons	2	2	2	2	1	2	1
FM8.5	Describe Medico-legal autopsy in cases of poisoning including preservation and dispatch of viscera for chemical analysis	1	2	2	2	2	1	2
FM8.6	Describe the general symptoms, principles of diagnosis and management of common poisons encountered in India	2	2	2	2	2	2	3
FM8.7	Describe simple Bedside clinic tests to detect poison/drug in a patient's body fluids	3	2	2	3	2	3	3
FM8.8	Describe basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination	3	2	2	3	2	3	3
FM8.9	Describe the procedure of intimation of suspicious cases or actual cases of foul play to the police, maintenance of records, preservation and despatch of relevant samples for laboratory analysis.	2	2	2	2	1	2	2
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	1	2	2	2	1	1	3
	<b>Topic: Toxicology : Chemical Toxicology</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
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 hydrochloric acids; Organic- Carbolic Acid (phenol), Oxalic and acetylsalicylic acids	3	2	2	3	3	2	2
FM9.2	Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote	3	2	2	3	3	2	2

	therapy, procedures of enhanced elimination with regard to Phosphorus, Iodine, Barium							
FM9.3	Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination with regard to Arsenic, lead, mercury, copper, iron, cadmium and thallium	3	2	2	2	2	1	2
FM9.4	Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination with regard to Ethanol, methanol, ethylene glycol	3	2	2	2	1	2	2
FM9.5	Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination with regard to Organophosphates, Carbamates, Organochlorines, Pyrethroids, Paraquat, Aluminium and Zinc phosphide	3	2	2	2	1	1	2
FM9.6	Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination with regard to Ammonia, carbon monoxide, hydrogen cyanide & derivatives, methyl isocyanate, tear (riot control) gases	3	2	2	2	1	2	1
	<b>Topic: Toxicology : Pharmaceutical Toxicology</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
FM10.1	Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination with regard to: i. Antipyretics – Paracetamol, Salicylates ii. Anti-Infectives (Common antibiotics – an overview) iii. Neuropsychotoxicology Barbiturates, benzodiazepins phenytoin, lithium, haloperidol, neuroleptics,	3	2	2	2	2	1	2

	tricyclics iv .N arcotic Analgesics, Anaesthetics, and Muscle Relaxants v. Cardiovascular Toxicology Cardiotoxic plants – oleander, odollam, aconite, digitalis vi. Gastro-Intestinal and Endocrinal Drugs – Insulin							
	<b>Topic: Toxicology : Biotoxicology</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
FM11.1	Describe features and management of Snake bite, scorpion sting, bee and wasp sting and spider bite	2	2	2	2	2	1	2
	<b>Topic: Toxicology : Sociomedical Toxicology</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
FM12.1	Describe features and management of abuse/poisoning with following camicals: Tobacco, cannabis, amphetamines, cocaine, hallucinogens, designer drugs & solvent	3	2	2	2	1	2	2
	<b>Topic: Toxicology : Environmental Toxicology</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
FM13.1	Describe toxic pollution of environment, its medico-legal aspects & toxic hazards of occupation and industry	2	2	2	2	1	2	1
FM13.2	Describe medico-legal aspects of poisoning in Workman's Compensation Act	1	2	2	2	3	1	2
	<b>Topic: Skills in Forensic Medicine &amp; Toxicology</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
FM14.1	Examine and prepare Medico-legal report of an injured person with different etiologies in a simulated/ supervised environment	3	2	2	2	1	2	2
FM14.2	Demonstrate the correct technique of clinical examination in a suspected case of poisoning & prepare medico-legal report in a simulated/ supervised environment	3	2	2	2	2	2	2
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	3	2	2	2	2	2	2
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	3	2	2	2	2	2	2
FM14.5	Conduct & prepare post-mortem examination report of varied etiologies (at least 15) in a simulated/	1	2	2	1	1	2	2

	supervised environment							
FM14.6	Demonstrate and interpret medico-legal aspects from examination of hair (human & animal) fibre, semen & other biological fluids	3	2	2	2	2	2	2
FM14.7	Demonstrate & identify that a particular stain is blood and identify the species of its origin	2	2	2	2	2	1	1
FM14.8	Demonstrate the correct technique to perform and identify ABO & RH blood group of a person	2	2	2	2	1	2	1
FM14.9	Demonstrate examination of & present an opinion after examination of skeletal remains in a simulated/ supervised environment	1	2	2	2	1	1	3
FM14.10	FM14.10 Demonstrate ability to identify & prepare medicolegal inference from specimens obtained from various types of injuries e.g. contusion, abrasion, laceration, firearm wounds, burns, head injury and fracture of bone	2	2	2	2	1	1	3
FM14.11	To identify & describe weapons of medicolegal importance which are commonly used e.g. lathi, knife, kripa, axe, gadasa, gupta, 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)	1	2	2	2	2	1	2
FM14.12	Describe the contents and structure of bullet and cartridges used & to provide medico-legal interpretation from these	1	2	2	2	1	2	3
FM14.13	To estimate the age of foetus by post-mortem examination	1	2	2	2	2	1	2
FM14.14	To examine & prepare report of an alleged accused in rape/unnatural sexual offence in a simulated/ supervised environment	3	2	2	2	3	2	3
FM14.15	To examine & prepare medico-legal report of a victim of sexual offence/unnatural sexual offence in a simulated/ supervised environment	3	2	2	2	3	2	3
FM14.16	To examine & prepare medico-legal report of drunk person in a simulated/ supervised environment	2	2	2	2	3	2	3
FM14.17	To identify & draw medico-legal inference from	2	2	2	2	1	1	2



	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							
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	1	2	2	2	1	2	1
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	2	2	2	2	2	1	2
FM14.20	To record and certify dying declaration in a simulated/ supervised environment	3	3	3	3	2	2	1
FM14.21	To collect, preserve, seal and dispatch exhibits for DNA-Finger printing using various formats of different laboratories.	2	2	2	2	1	1	2
FM14.22	give expert medical/ medico-legal evidence in Court of law	3	2	2	2	2	2	2
	<b>Column C: K- Knowledge, S – Skill, A - Attitude / professionalism, C- Communication. Column D: K – Knows, KH - Knows How, SH - Shows how, P- performs independently, Column F: DOAP session – Demonstrate, Observe, Assess, Perform. Column H: If entry is P: indicate how many procedures must be done independently for certification/ graduation</b>							
<b>Integration</b>								
	<b>Human Anatomy</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
AN14.3	Describe the importance of ossification of lower end of femur & upper end of tibia	1	2	2	1	1	2	2
	<b>Pharmacology</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>

PH1.22	Describe drugs of abuse (dependence, addiction, stimulants, depressants, psychedelics, drugs used for criminal offences)	1	2	1	2	2	2	3
	<b>Radiodiagnosis</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
RD1.13	Describe the components of the PC & PNDT act and its medicolegal implications	3	2	2	2	2	1	2
	<b>Psychiatry</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
PS19.3	Describe and discuss the basic legal and ethical issues in psychiatry	2	2	2	1	2	1	2
	<b>General Medicine</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
IM20.1	Enumerate the poisonous snakes of your area and describe the distinguishing marks of each	3	2	2	1	2	2	2
IM20.2	Describe, demonstrate in a volunteer or a mannequin and educate (to other health care workers / patients) the correct initial management of patient with a snake bite in the field	3	2	2	2	1	1	2
IM20.3	Describe the initial approach to the stabilisation of the patient who presents with snake bite	3	2	2	2	1	2	2
IM20.4	Elicit and document and present an appropriate history, the circumstance, time, kind of snake, evolution of symptoms in a patient with snake bite	3	2	2	1	2	1	2
IM21.2	Enumerate the common plant poisons seen in your area and describe their toxicology, clinical features, prognosis and specific approach to detoxification	1	2	2	1	3	2	2
IM21.3	Enumerate the common corrosives used in your area and describe	2	2	2	2	1	2	1
IM21.4	Enumerate the commonly observed drug overdose in your area and describe their toxicology, clinical features, prognosis and approach to therapy	3	2	2	2	2	1	2
IM21.5	Observe and describe the functions and role of a poison center in suspected poisoning	3	2	2	2	2	3	1
IM21.6	Describe the medico legal aspects of suspected suicidal or homicidal poisoning and demonstrate the correct procedure to write a medico legal report on a suspected poisoning	2	2	2	2	1	2	2
IM21.7	Counsel family members of a patient with suspected poisoning about the clinical and medico legal aspects with empathy	3	2	3	2	2	2	2



