TEXTBOOK OF FORENSIC MEDICINE and TOXICOLOGY

comprehensively and systematically describes vital topics of forensic medicine and toxicology in an easy to understand manner, which will help the students, doctors and officers of police, judiciary and investigating agencies.

The book has also been updated to include recently passed acts like POCSO Act 2012 and its recent amendments, Mental Health Care Act 2017, Surrogacy Regulation Bill 2019, and other acts which will be helpful to all the readers.

It is written in a simple and lucid language and contains reader-friendly illustrations, tables, charts and color photographs, which are intended for an easy understanding of the subject.

Essentials for medical students and members of law enforcement agencies alike, the text is frequently interspersed with color photographs, simple and significant text illustrations for easy understanding.

It should also be reassuring to medical students that the content is based on the latest CBME Guidelines | Competency Based Undergraduate Curriculum for the Indian Medical Graduate. In addition, it also has added model MCQs and theory question papers for adopting an easy approach to examinations.



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TEXTBOOK OF FOREN ORENSIC MEDIC N Π and TOXICOLOGY ト Tamilmani

CBSPD

EDITION

TEXTBOOK OF FORENSIC **MEDICINE** and TOXICOLOGY

As per the latest CBME Guidelines | Competency Based Undergraduate Curriculum for the Indian Medical Graduate

K Tamilmani



CBSPD Dedicated to Education **CBS** Publishers and Distributors Pvt Ltd

CBSPD EDITION



Advisors M Manivasagam Lishu Chaure

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THIRUKURAL

Learn to learn what is learned, and after learning, it is possible to stand up.

Text explanatory:

In order to learn, one should learn good books without blaming them, and after doing so, one has to stand in line with the education learned.

Forensic Medicine and Toxicology CBME CURRICULUM

(a) Competencies: The learner must demonstrate:

- 1. Understanding of medico-legal responsibilities of physicians in primary and secondary care settings.
- 2. Understanding of the rational approach to the investigation of crime, based on scientific and legal principles,
- 3. Ability to manage medical and legal issues in cases of poisoning / overdose,
- 4. Understanding the medico-legal framework of medical practice and medical negligence,
- 5. Understanding of codes of conduct and medical ethics.

TEACHING METHODS & HOURS

Phase	Lectures (LGT)	Tutorials (SGT)	Practical's	Autopsy Demo	ACTCOM	Total
2 nd year	20 hrs	5 hrs	15 hrs	5 hrs	5 hrs	50 hrs
3 rd year	35 hrs	10 hrs	20 hrs	10 hrs	0 hrs	75 hrs
Total	55 hrs	15 hrs	35 hrs	15 hrs	5 hrs	125 hrs

SCHEME OF ASSESSMENT

Total marks	University Examination Marks		Internal Assessment		
	Theory	Practical + Record	Viva	Theory	Practical + Viva
Theory – 100	Paper – 100	Practical – 70	20 (10+10)	100	100
Practical – 100		Log Book + Record = 10	One external & Internal in each Group		
Pass marks	Mandatory 50% in theory and practical (Practical = Theory + Orals		tical = Practical + Viva) of	50% combined in theory and Practical (not less than 40% in each) for eligibility of appearing the University Examination	

SCHEME OF INTERNAL ASSESSMENT:

Timing	Month	Theory	Practical & Viva
2 nd professional Year	January	100	100
	April	100	100
2 nd professional Year	January	100	100
	August	100	100

1. INTRODUCTION OF FORENSIC MEDICINE

FM 1.1 Demonstrate knowledge of basics of Forensic

Medicine like definitions of Forensic medicines, Clinical Forensic Medicine, Forensic Pathology, State Medicine, legal Medicine and Medical Jurisprudence

FM 1.2 Describe history of Forensic Medicine

2. LEGAL PROCEDURE

- FM 1.3 Describe legal procedures including Criminal Procedure Code, Indian Penal Code, Indian evidence Act, Civil and Criminal Cases, Inquest, Cognizable and Non-cognizable offences, evidences.
- FM 1.4 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.
- FM 1.5 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.
- FM 1.6 Describe offenses in Court including Perjury; Court strictures vis-a-vis Medical Officer.
- 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.
- FM 1.7 Describe dying Declaration & Dying Deposition
- FM 1.8 Describe the latest decisions / notifications/ resolutions / circulars / standing orders related to medico-legal practice issued by courts / Government.
- FM 14.20 To record and certify dying declaration in a simulated / supervised environment.

3. DEATH AND ITS CAUSES

- FM 2.1 Define, describe and discuss death and its types including somatic / clinical / cellular, molecular and brain death, Cortical death and Brainstem Death.
- FM 2.2 Describe and discuses natural and unnatural deaths.
- FM 2.5 Discuss moment of death, modes of death-coma, asphyxia and syncope.
- FM 2.3 Describe and discuss issues related to sudden natural deaths.
- FM 2.6 Discus presumption of death and survivorship
- FM 2.7 Describe and discuss suspended animation.
- 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.
- FM 1.10 Select appropriate cause of death in a particular scenario by referring ICD 10 code
- FM 1.11 Write a correct cause of death certificate as per ICD 10 document.

4. POST MORTEM CHANGES

- FM 2.8 Describe and discuss post mortem changes including signs of death, cooling of body, post-mortem divinity, rigor mortis, cadaveric spasm, cold stiffening and heat stiffening.
- FM 2.9 Describe putrefaction, mummification, adipocerous and maceration.
- FM 2.10 Discuss estimation of time since death.

5. AUTOPSY PROCEDURE

- FM 2.12 Describe the legal requirements to conduct post mortem examination and procedures to conduct medico-legal post-mortem examination.
- FM 2.11 Describe and discuss autopsy procedures including post mortem examination, different types of autopsies, aims and objectives of post-mortem examination.
- FM 2.14 Describe and discuss examination of clothing, preservation of viscera on post-mortem examination for chemical analysis and other.
- FM 2.13 Describe and discuss obscure autopsy
- FM 2.17 Describe and discuss exhumation.

6. IDENTIFICATION

- FM 3.1 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 centers, medico-legal aspects of age.
- FM 14.9 Demonstrate examination of & present an opinion after examination of skeletal remains in a simulated / supervised environment.
- FM 14.4 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.
- FM 3.2 IDENTIFICATION Describe and discuss identification of criminals, unknown persons, dead bodies from the remains-hairs, fibers, teeth, anthropometry, dactylographic, footprints, scars, tattoos, horoscopy and super imposition.
- FM 14.6 Demonstrate and interpret medico-legal aspects from examination of hair (human & animal) fibre, semen & other biological fluids.

7. MECHANICAL INJURIES

- FM 3.3 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.
- FM 3.6 Mechanical injuries and wounds; Describe healing of injury and fracture of bones with its medico-legal importance.
- FM 3.7 Describe factors influencing infliction of injuries and healing, examination and certification of wounds and wound as a cause of death; Primary and Secondary.
- FM 14.1 Examine and prepare Medico-legal report of an injured person with different etiologies in a simulated / supervised environment.
- FM 3.4 Mechanical injuries and wounds; Define injury, assault & hurt. Describe IPC pertaining to injuries Mechanical injuries and wounds; Describe accidental, suicide land homicidal injuries.
- FM 3.5 Describe simple, grievous and dangerous injuries. Describe simple, grievous and dangerous injuries.
- FM 3.8 Describe ante-mortem and post-mortem injuries Mechanical injuries and wounds; Describe and discuss different types of weapons including dangerous weapons and their examination.
- FM 14.11 To identify & describe weapons of medico legal importances which are commonly used e.g lathi, knife, ripen, 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).

FIREARM INJURIES

- FM 3.9 Fireman 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 to firearm-caliber, range, choking.
- FM 3.10 Firearm injuries: Describe and discuss wound ballistics-different types of firearm injuires, blast injuries and their interpretation, preservation and dispatch of trace evidence in cases of firearm and blast injuries, various tests related to confirmation of use of firearms.
- FM 14.12 Describe the contents and structure of bullet and cartridges used & to provide medico-legal interpretation from these.

8. REGIONAL INJURIES

- FM 3.11 Regional Injuries: Describe and discuss regional injuries to head (Scalp wounds, fracture skull, intracranial hemorrhages, coup and ontre coup injuries) neck, chest, abdomen, limbs, genital organ, spinal cord and skeleton.
- FM 3.12 Regional injuries: Describe and discuss injuries related to fall from height and vehicular injuries Primary and Second any impact, Secondary injuries, crush syndrome, railway spine.

9. MECHANICAL ASPHYXIA

- FM 2.20 Mechanical asphyxia: Define, classify and describe asphyxia and medico-legal interpretation of post-mortem findings in asphyxia deaths.
- FM 2.21 Mechanical asphyxia: Describe and discuss different types of hanging and strangulation including clinical finding, 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.
- FM 2.22 Mechanical asphyxia: Describe and discuss patho-physiology, clinical features, postmortem findings and medico-legal aspects of traumatic asphyxia, obstruction of nose & mouth, suffocation and sexual asphyxia.
- FM 2.23 Describe and discuss types, patho-physiology, clinical features, postmortem findings and medico-legal aspects of drowning, diatom test and gettler test.

10. MEDICAL LAW & ETHICS

- FM 4.1 Describe Medical Ethics and explain its historical emergence.
- 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.
- FM 4.6 Describe the Laws in Relation to medical practice and the duties of medical practitioner towards patients and society.
- FM 4.28 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.
- FM 4.24 Enumerate rights, privileges and duties of a Registered Medical Practitioner. Discuss doctor-patient relationship; professional Secrecy and privileged communication.
- FM 4.19 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.
- FM 4.20 Describe therapeutic privilege, Malingering, Therapeutic Misadventure, Professional Secrecy, Human Experimentation.
- FM 4.21 Describe Products liability and Medical Indemnity Insurance.
- FM 4.17 Describe and discuss ethical Principles; Respect for autonomy, non malfeasance, beneficence & justice.
- FM 4.18 Describe and discuss medical negligence including civil and criminal negligence, contributory negligence, corporate negligence, vicarious liability, Res Ipsa Loquitor, prevention of medical negligence and defenses in medical negligence litigations.
- FM 4.8 Describe the Consumer Protection Act 1986 (Medical Indemnity Insurance, Civil Litigations and Compensations), Workman's Compensation Act & ESI act.
- FM 4.11 Describe and discuss euthanasia.
- FM 4.22 Explain Oath Hippocrates, Charaka and

- FM 4.23 Sushruta and procedure for administration of Oath.
- FM 4.16 Describe the modified Declaration of Geneva and its relevance.
- FM 4.27 Describe and discuss Bioethics.
- FM 4.25 Describe and discuss Ethical Guidelines for Biomedical Research on Human Subjects & Animals Clinical research & Ethics. Discuss human experimentation including clinical trials.

11. THERMAL INJURIES

- FM 2.24 Thermal deaths; Describe the clinical features, post-mortem finding and medio legal aspects of injuries due to physical agents like heat stroke, sun stroke, heat exhaustion / prostration, heat cramps (miner's cramp) or (systemic and localized) hypothermia, frostbite, trench foot, immersion foot.
- FM 2.25 Describe types of injuries, clinical features, patho-physiology, postmortem findings and medico-legal aspects in cases of burns, scalds, lightening, electrocution and radiations.

12. THERMAL INJURIES AND WOUND CERTIFICATE

FM 1.9 Describe the importance of documentation in medical practice in regard to medico legal examinations, Medical Certificates and medico legal reports especially – maintenance of patient case records, discharge summary, prescribed registers to be maintained in Health Centers. Documents of estimation of age by physical, dental and radiological examination and issuance of certificate.

Maintenance of medico-legal register like accident register.

Documents of issuance of wound certificate.

Documents of issuance of sickness and fitness certificate.

Documents for issuance of death certificate documents of Medical Certification of Cause of death – Form Number 4 and 4A

Documents of issuance of drunkenness certificate.

13. IMPOTENCE STERILITY A.I.D.

- FM 3.18 Describe anatomy of male and female genitalia, hymen and its types. Discuss the medico-legal importance of hymen. Define virginity, defloration, legitimacy, medico legal importance.
- 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.
- FM 3.20 Discuss disputed paternity and maternity.

14. VIRGINITY PREGNANCY DELIVERY

- FM 3.19 Discuss the medico legal aspects of pregnancy and delivery, signs of pregnancy, precipitate labour, superfoetation, super fecundation and signs of recent and remote delivery in living and dead.
- FM 3.21 Discuss Pre-conception and Pre natal Diagnostic Techniques (PC & PNDT) Prohibition of Sex Selection Act 2003 & Domestic Violence Act 2005.
- 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.

15. ABORTION MTP

- FM 3.27 Define, classify and discuss abortion, methods of procuring MTP and criminal abortion and complication of abortion. MTP Act 1971.
- FM 3.28 Describe evidences of abortion living and dead, duties of doctor in cases of abortion, investigations of death due to criminal abortion.

16. LIVE BIRTH STILL BIRTH INFANTICIDE

- FM 2.28 Describe and discuss signs of intrauterine death, signs of live birth, viability of fetus, age determination of fetus, DOAP session of ossification centers, Hydrostatic test, Sudden.
- FM 2.27 Infants Death syndrome and Munchausen's syndrome by proxy.
- FM 3.29 Define and discuss infanticide, feticide and stillbirth.
- FM 14.13 Describe and discuss child abuse and battered baby syndrome. To estimate the age of fetus by post-mortem examination.

17. TORTURE

- FM 3.30 Describe and discuss issues relating to torture, identification of injuries caused by torture and its squeal, management of torture survivors.
- FM 3.31 Torture and Human rights Describe and discuss guidelines and Protocols of National Human Rights Commission regarding torture.

18. SEXUAL OFFENCES

- FM 3.13 Describe different types of sexual offences. Describe various section of IPC regarding rape including definition of rape (Section 375 IPC), Punishment of Rape (Section 376 IPC) and recent amendments notified till date.
- 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.
- FM 3.15 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.
- FM 3.16 Describe and discuss adultery and unnatural sexual offence 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.
- FM 3.17 Describe and discuss the sexual perversions fetishism transvestism, voyeurism, sadism, necrophagia, masochism, exhibitionism, frotteurism necrophilia.
- FM 14.14 To examine & prepare report of an alleged accused in rape / unnatural sexual offence in a simulated / supervised environment.
- FM 14.15 To examine & prepare medico-legal report of a victim of sexual offence / unnatural sexual offence in a simulated / supervised environment.

19. FORENSIC SEROLOGY

- FM 6.1 Describe different types of specimen an 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 histopathological examination, blood grouping, HLA Typing and DNA Finger printing.
- FM 6.2 Describe Locard's Exchange Principle. Describe the methods of sample collection, preservation, labeling, dispatch, and interpretation of reports.
- FM 6.3 Demonstrate professionalism while sending the biological or trace evidences to Forensic Science laboratory, specifying the required tests to the carried out, objectives of preservation of evidences sent for examination, personal discussions on interpretation of findings.
- FM 14.7 Demonstrate & identify that a particular stain is blood and identify the species of its origin.
- FM 14.8 Demonstrate the correct technique to perform and identify ABO & RH blood group of a person.
- FM 14.21 To collect, preserve, seal and dispatch exhibits for DHA Finger printing using various formats of different laboratories.

20. RECENT ADVANCES AND FSL

- FM 7.1 Enumerate the indications and describe the principles and appropriate use for: DNA profiling Facial reconstruction – Polygraph (Lie Detector) – narco analysis – brain mapping – Digital autopsy – Virtual Autopsy – imaging technologies.
- FM 8.10 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.

21. FORENSIC PSYCHIATRY

- FM 5.1 Classify common mental illnesses including post traumatic stress disorder (PTSD).
- FM 5.2 Define, classify and describe delusions, hallucinations, illusion, lucid interval and obsessions with exemplification.
- FM 5.3 Describe Civil and criminal responsibilities of a mentally ill person.
- FM 5.4 Differentiate between true insanity from feigned insanity.
- FM 5.5 Describe & discuss Delirium tremens.
- FM 5.6 Describe the Indian Mental Health Act, 1987 with special reference to admission, care and discharge of a mentally ill person.

22. GENERAL TOXICOLOGY

- FM 8.1 Describe the history of Toxicology.
- FM 8.2 Define the terms Toxicology, Forensic Toxicology, Clinical Toxicology and poison.
- FM 8.3 Describe the various types of poisons, Toxic kinetics and Toxic dynamics and diagnosis of poisoning in living and dead.
- FM 8.4 Describe the Laws in relations to poisons including NDPS Act, Medico-legal aspects of poisons.
- FM 8.5 Describe Medico-legal autopsy in cases of poisoning including preservation and dispatch of viscera for chemical analysis.
- FM 8.6 Describe the general symptoms, principles of diagnosis and management of common poisons encountered in India.
- FM 8.7 Describe simple Bedside clinic tests to detect poison / drug in a patient's body fluids.
- FM 8.8 Describe basic methodologies in treatment of poisoning: decontamination, supportive therapy antidote therapy, procedures of enhanced elimination.
- 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.

23. CORROSIVES

FM 9.1 Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination with regard to: Caustics Inorganic – sulfuric, nitric, and hydrochloric acids: Organic – Carbolic Acid (phenol), Oxalic and acetylsalicylic acids.

24. INORGANIC IRRITANT

FM 9.2 Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination with regard to: Caustics Inorganic – sulfuric, nitric, and hydrochloric acids; Organic – carbolic Acid (phenol), Oxalic and acetylsalicylic acids.

25. HEAVY METALS

FM 9.3 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.

26. ALCOHOL

- FM 9.4 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 gly-col.
- FM 14.16 To examine & prepare medico-legal report of drunk person in a simulated / supervised environment.

27. INSECTICIDES PESTICIDES

FM 9.5 Describe General Principles and basic methodologies in treatment of poisoning; decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination with regard to Organophosphates, Carbonates, Organ chlorines, Pyrethroids, Paraquat, Aluminum and Zinc phosphate.

28. GENERAL TOXICOLOGY

FM 9.6 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.

29. SUBSTANCE ABUSE

FM 12.1 Describe features and management of abuse / poisoning with following chemicals; Tobacco, cannabis, amphetamines, cocaine, hallucinogens, designer drugs & solvent.

30. ANIMAL BITE

FM 11.1 Describe features and management of Snake bite, scorpion string, bee and wasp sting and spider bite.

31. ANTIDOTE

- FM 10.1 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-Infective (Common antibiotics an overview)
 - iii. Neuropsychotoxicology barbiturates, benzodiazepines.
 - iv. Narcotic Analgesics, Anaesthetics, and Muscle relaxants.
 - v. Cardiovascular toxicology Cardio toxic plants oleander, odollam, aconite, digitalis
 - vi. Gastro intestinal and endocrinal drugs Insulin.

32. ASPHYXIANTS

FM 13.1 describe toxic pollution of environment, its medico-legal aspects & toxic hazards of occupation and industry.

33. MEDICO LEGAL DOCUMENT

- FM 14.5 Conduct & Prepare post-mortem examination report of varied etiologies (at least 15) in a simulated / supervised environment.
- FM 14.10 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.

Departments	Competencies
Anatomy	AN 14.3
Pharmacology	PH 1.22, PH 5.7
Radio diagnosis	RD 1.13
Psychiatry	PS 19.3
General Medicine	IM 20.1, IM 20.2, IM 20.3, IM 20.4, IM 21.2, IM 21.3, IM 21.4, IM 21.5, IM 21.6, IM 21.7, IM 21.8.
Obs. Gynecology	OG 1.3, OG 9.2, OG 20.1, OG 20.2, OG 20.3
General Surgery	SU 8.1, SU 8.2, SU 8.3

INTEGRATION with other Department.

Anatomy: Describe the importance of ossification of long bones (AN14.3)

Pharmacology:

- Enumerate the common plant poisons seen in your area and describe their toxicology, clinical features, prognosis and specific approach to detoxification. (IM21.2)
- Enumerate the common corrosives used in your area and describe their toxicology, clinical features, prognosis and approach to therapy. (IM21.3)
- Enumerate the commonly observed drug overdose in your area and describe their toxicology, clinical features, prognosis and approach to therapy. (IM21.4)
- Observe and describe the functions and role of a poison center in suspected poisoning. (IM21.5)
- 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. (IM21.6)
- Counsel family members of a patient with suspected poisoning about the clinical and medico legal aspects with empathy. (IM21.7)

AETCOM:

- (FM2.4) Describe salient features of the Organ Transplantation and The Human Organ Transplant (Amendment) Act 2011 and discuss ethical issues regarding organ donation.
- (FM3.32) Demonstrate the professionalism while preparing reports in medico-legal situations, interpretation of findings and making inference/opinion, collection preservation and dispatch of biological or trace evidences.
- (FM3.33) should be able to demonstrate the professionalism while dealing with victims of torture and human right violations, sexual assault psychological consultation, rehabilitation.
- (FM4.2) Describe the Code of Medical Ethics 2002 conduct, Etiquette and Ethics in medical practice and unethical practices & the dichotomy.
- (FM4.3) Describe the functions and role of Medical Council of India and State Medical Councils
- (FM4.4) Describe the Indian Medical Register
- (FM4.5) Rights/privileges of a medical practitioner, penal erasure, infamous conduct, disciplinary Committee, disciplinary procedures, warning notice and penal erasure
- (FM4.6) Describe the Laws in Relation to medical practice and the duties of a medical practitioner towards patients and society
- (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
- (FM4.10) Describe communication between doctors, public and media
- (FM4.11) Describe and discuss euthanasia.

SDL:

- 1. PCPNDT Act in relation to medical practice 1 hour.
- 2. POCSO Act and responsibilities of a doctor 2 hours.
- 3. Importance of history in medico legal practice 1 hour.
- 4. Important penal codes a doctor should be aware off 1 hour.