

FORENSIC MEDICINE AND TOXICOLOGY

Instructions:

- (a) Medico-legal examination is the statutory duty of every registered medical practitioner, whether he is in private practice or engaged in Government sector and in the present scenario of growing consumerism in medical practice, the teaching of Forensic Medicine and Toxicology to the students is highly essential;
- (b) This learning shall enable the student to be well-informed about medico-legal responsibility in medical practice and he shall also be able to make observations and infer conclusions by logical deductions to set enquire on the right track in criminal matters and connected medico-legal problems;
- (c) The students shall also acquire knowledge of laws in relation to medical practice, medical negligence and codes of medical ethics and they shall also be capable of identification, diagnosis and treatment of the common poisonings in their acute and chronic state and also dealing with their medico-legal aspects;
- (d) For such purposes, students shall be taken to visit district courts and hospitals to observe court proceedings and post-mortem as per Annexure 'B'.

I. Forensic Medicine

A. Theory:

1. Introduction

- (a) Definition of forensic medicine.
- (b) History of forensic medicine in India.
- (c) Medical ethics and etiquette.
- (d) Duties of registered medical practitioner in medico-legal cases.

2. Legal procedure

- (a) Inquests, courts in India, legal procedure.
- (b) Medical evidences in courts, dying declaration, dying deposition, including medical certificates, and medico-legal reports.

3. Personal identification
 - (a) Determination of age and sex in living and dead; race, religion.
 - (b) Dactylography, DNA finger printing, foot print.
 - (c) Medico-legal importance of bones, scars and teeth, tattoo marks, handwriting, anthropometry.
 - (d) Examination of biological stains and hair.
4. Death and its medico-legal importance
 - (a) Death and its types, their medico-legal importance
 - (b) Signs of death (1) immediate, (2) early, (3) late and their medico-legal importance
 - (c) Asphyxial death (mechanical asphyxia and drowning).
 - (d) Deaths from starvation, cold and heat etc.
5. Injury and its medico-legal importance
Mechanical, thermal, firearm, regional, transportation and traffic injuries; injuries from radiation, electrocution and lightning.
6. Forensic psychiatry
 - (a) Definition; delusion, delirium, illusion, hallucinations; impulse and mania; classification of Insanity.
 - (b) Development of insanity, diagnosis, admission to mental asylum.
7. Post-mortem examination (autopsy)
 - (a) Purpose, procedure, legal bindings; difference between pathological and medico-legal autopsies.
 - (b) External examination, internal examination of adult, foetus and skeletal remains.
8. Impotence and sterility
Impotence; Sterility; Sterilisation; Artificial Insemination; Test Tube Baby; Surrogate mother.
9. Virginity, defloration; pregnancy and delivery
10. Abortion and infanticide
 - (a) Abortion: different methods, complications, accidents following criminal abortion, MTP.
 - (b) Infant death, legal definition, battered baby syndrome, cot death, legitimacy.
11. Sexual Offences
Rape, incest, sodomy, sadism, masochism, tribadism, bestiality, buccal coitus and other sexual perversions.
- II. Toxicology
 1. General Toxicology
 - (a) Forensic Toxicology and Poisons
 - (b) Diagnosis of poisoning in living and dead,
 - (c) General principles of management of poisoning,
 - (d) Medico-legal aspects of poisons,
 - (e) Antidotes and types.
 2. Clinical toxicology
 - (a) Types of Poisons:
 - (i) Corrosive poisons (Mineral acids, Caustic alkalis, Organic acids, Vegetable acids)
 - (ii) Irritant poisons (Organic poisons - Vegetable and animal; Inorganic poisons - metallic and non-metallic; Mechanical poisons)
 - (iii) Asphyxiant poisons (Carbon monoxide; Carbon dioxide; Hydrogen sulphide and some war gases)
 - (iv) Neurotic poisons (Opium, Nux vomica, Alcohol, Fuels like kerosene and petroleum products, Cannabis indica, Dhatura, Anaesthetics Sedatives and Hypnotics, Agrochemical compounds, Belladonna, Hyoscyamus, Curare, Conium)

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- (v) Cardiac poisons (Digitalis purpurea, Oleander, Aconite, Nicotine)
 (vi) Miscellaneous poisons (Analgesics and Antipyretics, Antihistaminics, Tranquillisers, antidepressants, Stimulants, Hallucinogens, Street drugs etc.)

Legislations relating to medical profession

- (a) the Homoeopathy Central Council Act, 1973 (59 of 1973);
 (b) the Consumer Protection Act, 1986 (68 of 1986);
 (c) the Workmen's compensation Act, 1923 (8 of 1923);
 (d) the Employees State Insurance Act, 1948 (34 of 1948);
 (e) the Medical Termination of Pregnancy Act, 1971 (34 of 1971);
 (f) the Mental Health Act, 1987 (14 of 1987);
 (g) the Indian Evidence Act, 1872 (1 of 1872);
 (h) the Prohibition of Child Marriage Act, 2006 (6 of 2007);
 (i) the Personal Injuries Act, 1963 (37 of 1963)
 (j) the Drugs and Cosmetics Act, 1940 (23 of 1940) and the rules made therein;
 (k) the Drugs and Magic Remedies (Objectionable Advertisements) Act, 1954 (21 of 1954);
 (l) the Transplantation of Human Organs Act, 1994 (42 of 1994);
 (m) the Pre-natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994 (57 of 1994);
 (n) the Homoeopathic Practitioners (Professional Conduct, Etiquette and Code of Ethics) Regulations, 1982;
 (o) the Drugs Control Act, 1950 (26 of 1950);
 (p) the Medicine and Toiletry Preparations (Excise Duties) Act, 1955 (16 of 1955);
 (q) the Indian Penal Code (45 of 1860) and the Criminal Procedure Code (2 of 1974) {relevant provisions}
 (r) the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 (1 of 1996);
 (s) the Clinical Establishment (Registration and Regulation) Act, 2010 (23 of 2010).

B. Practical:

1. Demonstration:

- (a) Weapons
 (b) Organic and inorganic poisons
 (c) Poisonous plants
 (d) Charts, diagrams, photographs, models, x-ray films of medico-legal importance
 (e) Record of incidences reported in newspapers or magazines and their explanation of medico-legal importance.
 (f) Attending demonstration of ten medico-legal autopsies.

2. Certificate Writing:

Various certificates like sickness certificate, physical fitness certificate, birth certificate, death certificate, injury certificate, rape certificate, chemical analyzer (Regional Forensic Laboratory), certificate for alcohol consumption, writing post-mortem examination report.

C. Examination:

1. Theory:

- 1.1. Number of papers-01
 1.2. Marks: 100

2. Practical including viva voce or oral:

- 2.1. Marks: 100

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2.2. Distribution of marks;	<u>Marks</u>
2.2.1. Medico-legal aspect of 4 specimens	40
2.2.3. Journal or practical records	10
2.2.4. Viva voce (oral)	50

Total	<u>100</u>