



Semester - I

BRANCH	Subject Title	Subject Code
B.Sc. (Forensic Science– Minor/Generic Elective Course)	Introduction to Forensic Science and Criminalistics	FSM2/FS

Course Learning outcomes (CLO)

Learning Objectives: After studying this paper the students will know the following

- Organizational setup of forensic science laboratories in India.
- The methods of securing, searching and documenting crime scenes.
- Importance of physical evidence in criminal investigation.
- The art of collecting, packaging and labeling and forwarding different types of physical and trace evidence at crime scenes.
- After the successfully completing the course, student will be able to join forensic science laboratory, police service, private detective or security agency or start his/her own investigative agency.

CONTENT

Unit - I

Forensic Science:

Forensic Science in India: History, organizational set up of forensic science laboratories, hierarchical set up of CFSL, State FSL, GEQDs, Finger print bureaus, LNJPNNICFS, Directorate of forensic science, mobileforensic laboratories. Police services at forensic laboratories. Qualifications, duties and code of conduct of forensic scientists at forensic science laboratory.

Unit - II

Search and seizure:

Section 42, 43, 44, 45, 50, 53, 57 and 58 of criminal procedure code.

Physical Evidence - Definition, classification of physical evidences- on the basis of class, nature and size, different search methods for physical evidences, collection, preservation, packaging, labelling, sealing and forwarding of physical evidences, chain of custody.

Unit - III



Searching, Collection, Packing, Labeling and Forwarding of Biological Evidences from Scene of Crime:

Human or animal blood, dry and wet blood, Semen on undergarments, body or any other surfaces, Saliva sample in cigarette buds, cup or glass, bottles, bite marks, etc. Vomit on cloths or any other surfaces, stomach wash, tears, nails, viscera including preservation and amount of organ, hair & fiber, botanical materials, etc.

Unit - IV

Searching, Collection, Packing, Labeling and Forwarding of Chemical and Toxicological Evidences from Scene of Crime: Cement, mortar & concrete, explosives material on various exhibits, and Arson evidence including charred materials, wood, paper etc. Petroleum products, drugs and poisons, viscera for toxicological analysis, blood for drug and poison analysis, urine for drug and poison analysis etc

Unit - V

Searching, Collection, Packing, Labeling and Forwarding of evidence related to physics and other impression from Scene of Crime: Soil or dust & paint chips, glass, fractured glass, coloured glass, tool marks, skid marks and tyre marks on various surfaces, Digital evidences, fingerprints (visible, latent and plastic), footprints, documents, weapon, fire arme bullet cartridge case etc

Practicals -

1. Collection, packing, labelling & forwarding of the physical evidences associated with biological fluids and wet exhibits
2. Collection, packing, labelling & forwarding of the physical evidences of soil / dust and glass materials
3. Collection, packing, labelling & forwarding of the physical evidences of hair and fibre of human or animal origin
4. Collection, packing, labelling & forwarding of the physical evidences of liquid materials and pharmaceutical products/drugs of abuse
5. Collection, packing, labelling & forwarding of the physical evidences of botanical material including plant parts or diatoms
6. Collection, packing, labelling & forwarding of the physical evidences of shell case/cartridge/bullet/pellets
7. Collection, packing, labelling & forwarding of the physical evidences of charred documents, questioned documents etc.



8. To know the basic steps of crime scene management followed by an investigator
9. Preliminary examination of arson evidences
10. Preliminary examination of toxicological evidences.
11. Preliminary examination of blood stains found on different surfaces like wall, glass, clothes and soil etc.
12. Preliminary examination of evidences found in case of vitriolage