

National Forensic Sciences University
School of Cyber Security and Digital Forensics

Course Name: M.Sc. Digital Forensics and Information Security
(Batch: 2024-26)

Semester - I

Subject Code: CTMSDFIS SI P5

Time: 3.30 PM to 5.00 PM

Subject Name: Introduction to forensic science

Total Marks: 50

Exam: Mid Semester Examination (March - 2024)

Date: 11-10-2024

Instruction: 1. Kindly maintain a readable handwriting for your responses.

Q1. Answer the following questions in short. (Attempt any 4) [20 Marks]

- 1) Define forensic science and discuss its scope in the contemporary world.
- 2) Discuss the role of forensic science in international cooperation, focusing on organizations such as INTERPOL and the FBI.
- 3) Write a note on the Five major contemporary organisations of Forensic Science in India.
- 4) Explain the historical development of forensic science in India and its significance in modern investigations.
- 5) What are the basic principles of forensic science? Provide examples to illustrate their applications in investigations.
- 6) Write a short note on Video Spectral Comparator and Electrostatic Detection Apparatus.

Q2. Answer the following questions in detail. (Attempt any 3) [24 Marks]

- 1) Explain the principles of ethics and discuss the ethical code of conduct for forensic scientists in maintaining the integrity of investigations.
- 2) Describe the various tools and techniques used in forensic science for scientific investigations.
- 3) A murder case involves a suspect who claims to have been nowhere near the crime scene. However, forensic investigators found a set of fingerprints on a broken window through which the suspect allegedly entered the victim's house. In addition, DNA evidence from hair strands found at the scene matched the suspect. Based on this case study, discuss how forensic science can help establish the suspect's involvement in the crime. Explain the significance of fingerprint analysis & DNA evidence.
- 4) Discuss the key components and format of a forensic report. Also explain the importance of accuracy, clarity, and objectivity in report writing.

Q3. Select the Correct answer from the options (Attempt all) [06 Marks]

1) What is the primary function of forensic science?

- A) Studying ancient civilizations C) Organizing crime records
B) Solving legal issues through scientific methods D) Training police officers

2) A forensic scientist must adhere to which of the following in order to maintain ethical standards?

- A) Data manipulation C) Personal opinions
B) Code of conduct D) Avoiding collaboration with law enforcement

3) What institute of forensic science was established in the 1970's?

- A) LJNJ NICFS C) LNNJ NICFS
B) LNJN NICFS D) LNJL NICFS

4) What is the primary purpose of chromatography in forensic science?

- A) To analyze handwriting samples C) To identify fingerprints
B) To separate and analyze mixtures of substances D) To magnify small objects

5) Who is considered the "Father of Forensic Toxicology"?

- A) Alphonse Bertillon C) Hans Gross
B) Edmond Locard D) Mathieu Orfila

6) What should a forensic report mainly include?

- A) Personal opinions C) Guesswork about the case
B) Clear facts and evidence D) Unrelated information