

MSc Sem.-2 Examination

409

Forensic Science

May-2025

Time : 2-30 Hours]

[Max. Marks : 70

Instructions: Illustrate your answers with neat diagrams wherever necessary.

Que 1 Write the following.

- (i) Discuss about various types of cement and their composition. (7 Marks)
- (ii) Explain in detail the methods for soil analysis and comparison of different soil samples? (7 Marks)

OR

- (i) Write down the Forensic Examination of Wire and Cables. (7 Marks)
- (ii) Write a note on different types of glass fractures with their forensic significance. (7 Marks)

Que 2 Write the following.

- (i) Discuss the History of Voice Identification in detail. (7 Marks)
- (ii) Discuss the Auditory Analysis for Speaker Recognition. (7 Marks)

OR

- (i) Explain Voice Production Theory in detail. (7 Marks)
- (ii) Write the components of Speaker Recognition in detail. (7 Marks)

Que 3 Write the following.

- (i) Explain UV Photography in detail. (7 Marks)
- (ii) Write a detailed note on "High Speed Videography". (7 Marks)

OR

- (i) Write a detailed note on "Photogrammetry". (7 Marks)
- (ii) Discuss the History of Photography. (7 Marks)

Que 4 Write the following.

- (i) Define an operating system. Explain the functions of an operating system in detail with respect to process management, memory management, file system management, and device management. (7 Marks)
- (ii) Explain the digital evidence collection process in different scenarios (monitor on with screen, screensaver, and monitor off). (7 Marks)

OR

- (i) Describe the types of cybercrime with examples. What preventive strategies can individuals and organizations adopt to mitigate such threats? (7 Marks)
- (ii) Define mobile phone forensics and explain its importance in digital investigations. Describe the standard process involved in acquiring and analyzing data from mobile devices, and discuss key challenges faced by forensic experts in this domain. (7 Marks)

Que 5 Attempt any seven out of twelve.

(14Marks)

- (i) What is regenerated fibre? Give examples.
- (ii) What is the use of Vicat Apparatus?
- (iii) List out the properties of Cu for widely used in electric cables.
- (iv) What is Text-Independent?
- (v) What is Speaker Verification?
- (vi) Write down the main difference between sound and speech.
- (vii) What is 24-bit Color?
- (viii) What is DXF?
- (ix) What are the Distinguishable features in photogrammetry?
- (x) What is the role of RAM in a computer?
- (xi) What is the difference between system software and firmware?
- (xii) What are Faraday bags used for in cyber forensic investigations?
