

Time: 2.30 Hrs]

[Max Marks: 70

Instructions: Illustrate your answers with neat diagrams wherever necessary.**Que 1 Write the following**

- (i) Write a note on collection preservation and examination of fibres in forensic (7 Marks) investigations?
- (ii) What is density gradient analysis explain in detail about the process with example. (7 Marks)

OR

- (i) Write a note on collection preservation and examination of paint samples in (7 Marks) forensic investigations?
- (ii) Explain in detail: Forensic examination of glass fractures. (7 Marks)

Que 2 Write the following

- (i) What are the fundamental principles of speaker identification and tape (7 Marks) authentication in forensic audio analysis?
- (ii) Describe the theory of voice production in detail. (7 Marks)

OR

- (i) Discuss the limitations and challenges faced in speaker identification and tape (7 Marks) authentication.
- (ii) Describe the factors influencing sound in speech production. (7 Marks)

Que 3 Write the following

- (i) Write a note on applications of Digital Image Processing (7 Marks)
- (ii) Illustrate and explain how an angle is captured in DSLR (7 Marks)

OR

- (i) Write a note on Exposure Triangle (7 Marks)
- (ii) How can you distinguish that Two images are from the same phone or not? (7 Marks)

Que 4 Write the following

- (i) What is Android? Explain in detail (7 Marks)
- (ii) What is Cyber-crime? Explain any five types of cyber-crime in detail. (7 Marks)

OR

- (i) Write a note on android architecture (7 Marks)
- (ii) Explain the steps of investigation of digital crime scene in detail. (7 Marks)

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Que 5 Attempt any seven out of twelve

(14Marks)

- (i) Which techniques are used for elemental analysis of glass?
- (ii) Define Seal under Forgery Act.
- (iii) How many types of stamps are encountered in forensic investigations? Give examples.
- (iv) What does "Numismatic" mean?
- (v) How Forensic examination of wires and cables is performed?
- (vi) What is full form of- RADAR?
- (vii) Define Pixel and Fill Factor of an Image.
- (viii) What is the range of high, medium and low pitch voices?
- (ix) What is the difference between cyber security and digital forensic?
- (x) Explain: Phishing, vishing and smishing
- (xi) Define: bluebugging
- (xii) Name different types of OS.
