

GUJARAT TECHNOLOGICAL UNIVERSITY
ME - SEMESTER- 2 • EXAMINATION – WINTER - 2023

Subject Code:3722313**Date: 17 Jan 2024****Subject Name:Digital Forensics****Time:10:30 AM TO 01:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Define digital forensic. Describe the steps of digital forensic process in brief. **07**
(b) Enlist categories of cybercrime and briefly explain any three cybercrimes with their modus operandi. **07**
- Q.2** (a) Discuss Locard's principal on crime scene and its relevance with digital forensics. **07**
(b) Describe the types and rules of digital evidence in brief. **07**
- OR**
- (b) Explain four-step general procedure for collecting and analyzing evidences. **07**
- Q.3** (a) Explain format of evidence collection form and procedure of chain of custody. **07**
(b) Explain why a hash value is commonly referred to as a "digital fingerprint" or "digital DNA" with respect to digital forensics. **07**
- OR**
- Q.3** (a) Explain the precautions need to be taken while investigating crime scene. **07**
(b) Write a note on preparing digital forensic analysis report to be submitted in court proceedings. **07**
- Q.4** (a) Write a note on preparing and assessing digital forensic case. **07**
(b) Explain the procedure for collecting and analyzing network-based evidence. **07**
- OR**
- Q.4** (a) Describe the importance and procedure of bit-stream copy of disk in computer forensics. **07**
(b) Write a note on network monitoring. Enlist network monitoring tool and explain any one in detail. **07**
- Q.5** (a) Explain mobile forensic techniques in brief. What kind of evidences can be captured through mobile forensics? **07**
(b) Discuss the challenges in collecting, handling, analyzing and presenting mobile device as digital evidence in court room. **07**
- OR**
- Q.5** (a) Describe the IT act 2008 in brief. **07**
(b) Enlist mobile forensic tools and explain any two tools in detail. **07**
