Enrollment No./Seat No.: _____

GUJARAT TECHNOLOGICAL UNIVERSITY
Bachelor of Engineering - SEMESTER - VII EXAMINATION - WINTER 2025

Subject Code: 3174809   **Date: 26-11-2025**

Subject Name: Cybercrime Investigation and Digital Evidence Handling

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.
4. Simple and non-programmable scientific calculators are allowed.

			Marks
Q.1	**(a)**	Define Forensic Science and mention its main branches.	**03**
	(b)	What are digital evidences? Give two examples.	**04**
	(c)	State Locard's Exchange Principle in brief.	**07**
Q.2	**(a)**	Define a computer system and list its basic components.	**03**
	(b)	Explain the difference between primary memory and secondary memory.	**04**
	(c)	Discuss the difference between volatile and non-volatile memory with examples.	**07**
		OR	
	(c)	Explain any two common data storage formats used in digital systems.	**07**
Q.3	**(a)**	Evaluate cyber crime scene protocol.	**03**
	(b)	What is hashing and why is it important in digital forensics?	**04**
	(c)	Outline the key sections of a forensic investigation report.	**07**
		OR	
	(a)	What is meant by evidence documentation in digital forensics?	**03**
	(b)	Analyze the importance of hashing in digital forensics.	**04**
	(c)	Compare live forensic analysis and offline forensic analysis in terms of data collection and challenges.	**07**
Q.4	**(a)**	What is data recovery, and why is it important in digital forensics?	**03**
	(b)	Define hibernation file (hiberfil.sys) and state its forensic significance.	**04**
	(c)	Define metadata and give two examples of metadata in files.	**07**
		OR	
	(a)	What are registry files, and how are they used in investigations?	**03**
	(b)	Explain the importance of system restore elements in digital forensic investigations.	**04**
	(c)	Analyze the digital investigation laws in context to digital forensics.	**07**

Q.5 (a) Define electronic discovery (e-discovery) in the context of digital forensics. **03**

(b) Explain how data privacy laws impact the process of digital forensics. **04**

(c) Examine the differences between software-based and hardware-based forensic tools. **07**

OR

(a) What is tool validation in digital forensics, and why is it important? **03**

(b) What is browser history, and how can it assist an investigation? **04**

(c) State some limitations of relying on social platform data during an investigation. **07**

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