

Enrolment No./Seat No\_\_\_\_\_

## GUJARAT TECHNOLOGICAL UNIVERSITY

BE- SEMESTER-VII EXAMINATION – WINTER 2025

**Subject Code:3170725**

**Date:28-11-2025**

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

		MARKS
<b>Q.1</b>	(a) Define given terms. 1. Forensic Science 2. Digital Forensic.3. Locard's exchange principle.	<b>03</b>
	(b) List various modus operandi used by Cyber Criminals.	<b>04</b>
	(c) Discuss with example: crime with digital evidence.	<b>07</b>
<b>Q.2</b>	(a) Draw and explain central processing unit of basic computer.	<b>03</b>
	(b) Discuss slack space in HDD with example.	<b>04</b>
	(c) Discuss FAT and NTFS file system.	<b>07</b>
<b>OR</b>		
	(c) Draw and Explain digital forensic process model.	<b>07</b>
<b>Q.3</b>	(a) Discuss forensic cloning of evidence.	<b>03</b>
	(b) Explain File signature and Anti forensic in brief.	<b>04</b>
	(c) Discuss direct memory mapping scheme with example.	<b>07</b>
<b>OR</b>		
<b>Q.3</b>	(a) Discuss the importance of report drafting.	<b>03</b>
	(b) Define shadow copy. Discuss restore point in computer system.	<b>04</b>
	(c) List various challenges in investigating computer related crimes.	<b>07</b>
<b>Q.4</b>	(a) List various methods to recovers deleted files.	<b>03</b>
	(b) Discuss Mobile forensic.	<b>04</b>
	(c) Discuss the legal aspects in digital forensic.	<b>07</b>
<b>OR</b>		
<b>Q.4</b>	(a) Explain Electronics discovery.	<b>03</b>
	(b) Discuss the importance of tool validation process.	<b>04</b>
	(c) Discuss the application of digital forensic in social networking site.	<b>07</b>
<b>Q.5</b>	(a) Discuss web browser forensic.	<b>03</b>
	(b) Discuss quality assurance in digital forensic process.	<b>04</b>
	(c) Discuss the role of forensic examiner.	<b>07</b>
<b>OR</b>		
<b>Q.5</b>	(a) Discuss Email header forensic.	<b>03</b>
	(b) List various motivations behind cyber crimes.	<b>04</b>
	(c) Discuss physical acquisition and safekeeping of digital evidence.	<b>07</b>

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