

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER–VII (NEW) EXAMINATION – SUMMER 2022****Subject Code:3170725****Date:06/06/2022****Subject Name:Digital forensics****Time:02:30 PM TO 05:00 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

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| Q.1 | (a) Define metadata and recycle bin operation. | 03 |
| | (b) Explain Memory organization in brief. | 04 |
| | (c) Explain the use of digital forensic in social networking sites. | 07 |
| Q.2 | (a) Explain forensic science. | 03 |
| | (b) Explain Quality assurance in detail. | 04 |
| | (c) Explain Locard's Exchange Principle with suitable scenario. | 07 |
| | OR | |
| | (c) Explain The digital forensic process in brief. | 07 |
| Q.3 | (a) Define Hardware and Software tools for digital forensics. | 03 |
| | (b) Give the advantages of live collection. | 04 |
| | (c) Discuss legal aspects and their impact on digital forensics. | 07 |
| | OR | |
| Q.3 | (a) Discuss forensic cloning of evidence. | 03 |
| | (b) Write a note on Electronics discovery. | 04 |
| | (c) Discuss e-mail header forensic in brief. | 07 |
| Q.4 | (a) Which are the computer-related crime? | 03 |
| | (b) Explain tool validation in context of quality assurance. | 04 |
| | (c) Explain Hashing concepts to maintain the integrity of evidence. | 07 |
| | OR | |
| Q.4 | (a) What are the main challenges of investigating computer-related crime? | 03 |
| | (b) Explain Report drafting. | 04 |
| | (c) Define and differentiate Live and dead system forensic. | 07 |
| Q.5 | (a) Explain Digital evidence. | 03 |
| | (b) Discuss techniques of Finding deleted data. | 04 |
| | (c) What is cache memory? Explain direct mapping of cache memory with example. | 07 |
| | OR | |
| Q.5 | (a) Explain electronic evidence. | 03 |
| | (b) Discuss techniques of hibernating files. | 04 |
| | (c) Describe techniques to remove metadata. | 07 |
