

Code No.: IT854PE

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H.T.No.

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CMR ENGINEERING COLLEGE: : HYDERABAD

UGC AUTONOMOUS

IV–B.TECH–II–Semester End Examinations (Advanced Supply) – June - 2025

CYBER FORENSICS

(IT)

[Time: 3 Hours]

[Max. Marks: 70]

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 20 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART-A

(20 Marks)

1. a) What is digital forensics? [2M]
- b) How computers can be used as evidence in cyber crime investigations? [2M]
- c) What is the difference between a forensic duplicate and a qualified forensic duplicate? [2M]
- d) Name two essential requirements for forensic duplication tools. [2M]
- e) How does network forensics differ from traditional digital forensics? [2M]
- f) What is steganography, and how is it used to hide data? [2M]
- g) Name two commonly used computer forensic software tools. [2M]
- h) What is the difference between an e-mail client and an e-mail server? [2M]
- i) Name two common file systems used in Windows. [2M]
- j) What is the Windows Registry? [2M]

PART-B

(50 Marks)

2. Explain why worms are often considered more dangerous than viruses. [10M]

OR

3. Explain how cybercriminals misuse computers to conduct activities such as identity theft, financial fraud and cyberterrorism? [10M]

4. Discuss the features that ensure data integrity and admissibility of forensic duplicates. [10M]

OR

5. Describe the step-by-step process of creating a forensic duplicate of a hard drive [10M]

6. What is remote forensic acquisition and why is it necessary in digital forensics process? [10M]

OR

7. Define network forensics and explain its significance in cybercrime investigations. [10M]

8. What are the key factors considered when evaluating the need for computer forensic tools? [10M]

OR

9. Explain the roles of an e-mail client and an e-mail server in digital forensic process. [10M]

10. Explain MS-DOS startup tasks while working with windows system. [10M]

OR

11. Explain how forensic investigators analyze virtual disk images and snapshots. [10M]
