

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)

B.Tech. III Year II Semester Regular Examinations April-2026

CYBER SECURITY AND DIGITAL FORENSICS

CSE (Internet of Things and Cyber security Including Block Chain Technology)

Time: 3 Hours

Max. Marks: 70

PART-A

(Answer all the Questions 10 x 2 = 20 Marks)

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|---|---|--|-----|----|----|
| 1 | a | What is the role of strong passwords in preventing cybercrime? | CO1 | L2 | 2M |
| | b | What is the difference Quid Pro Quo and Water Holing? | CO1 | L1 | 2M |
| | c | Name two Mail Bombs Attacks . | CO2 | L1 | 2M |
| | d | What is meant by white collar criminal activity? | CO2 | L2 | 2M |
| | e | Differentiate between static routing and dynamic routing. | CO3 | L2 | 2M |
| | f | What is internetworking, and why is it necessary in computer networks? | CO3 | L2 | 2M |
| | g | Define External Ballistics? | CO4 | L1 | 2M |
| | h | State any two advantages of digital forensics. | CO4 | L1 | 2M |
| | i | Illustrate the structure of high-level Internet e-mail system. | CO5 | L2 | 2M |
| | j | Differentiate between HTTP and HTTPS. | CO5 | L2 | 2M |

PART-B

(Answer all Five Units 5 x 10 = 50 Marks)

UNIT-I

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|-----------|---|--|-----|----|----|
| 2 | a | Describe the concept of the challenges and prevention of Cybercrime. | CO1 | L2 | 5M |
| | b | Examine the key features that define cyber crime. | CO1 | L3 | 5M |
| OR | | | | | |
| 3 | a | Compare Individual and Government/Organization Cybercrime. | CO1 | L2 | 5M |
| | b | Explain the categories of Cybercrime in detail. | CO1 | L2 | 5M |

UNIT-II

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|-----------|---|--|-----|----|-----|
| 4 | | Analyze the key differences between Exploitation and Stalking. | CO2 | L3 | 10M |
| OR | | | | | |
| 5 | a | Explain the different strategies to prevent unauthorized access. | CO2 | L2 | 5M |
| | b | Discuss the Cyber Security Laws in India. | CO2 | L2 | 5M |

UNIT-III

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|---|---|--|-----|----|----|
| 6 | a | Demonstrate the working of various password attack techniques. | CO3 | L3 | 5M |
| | b | Illustrate the process of IP tracking with a suitable example. | CO3 | L3 | 5M |

OR

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|---|---|--|-----|----|----|
| 7 | a | Apply digital forensic methods to explain E-Mail Recovery | CO3 | L3 | 6M |
| | b | Use a scenario to explain the application of Autopsy software. | CO3 | L3 | 4M |

UNIT-IV

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|---|---|--|-----|----|----|
| 8 | a | Discuss various types of digital forensics with examples. | CO4 | L2 | 5M |
| | b | Describe about Advantages of Digital forensics and Disadvantages of Digital Forensics. | CO4 | L2 | 5M |

OR

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| 9 | | Explain the suitability of Face Recognition and Iris Recognition in real-world applications considering their advantages and drawbacks. | CO4 | L2 | 10M |
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UNIT-V

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| 10 | | Explain the objectives and scope of the Electronic Communications Privacy Act (ECPA) and discuss the role of the Stored Communications Act under it. | CO5 | L2 | 10M |
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OR

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|----|---|--|-----|----|----|
| 11 | a | Explain Digital Evidence Preservation Techniques. | CO5 | L2 | 5M |
| | b | Explain Ethical Responsibilities of a Digital Forensic Investigator. | CO5 | L2 | 5M |

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