

MSc Sem.-2 Examination

408

Cybersecurity & Forensic

May-2025

Time : 2-30 Hours]

[Max. Marks : 70

Question 1 Answer the following questions:

- i. Describe the process and challenges involved in cybercrime investigation. 7Marks
- ii. How do social networking platforms contribute to the spread of terrorism? 7Marks

OR

- i. Explain the components of an incident handling process in cyber forensics. 7Marks
- ii. Explain different types of file systems and how they affect data recovery. 7Marks

Question 2 Answer the following questions:

- i. Describe the investigation procedure for a phishing attack. Include tools and techniques. 7Marks
- ii. How are Denial of Service (DoS) attacks investigated using forensic tools? 7Marks

OR

- i. Write a detailed note on the forensic approach to cyber pornography cases. 7Marks
- ii. Discuss the significance of real-life case studies in improving cybercrime investigation strategies. 7Marks

Question 3 Answer the following questions:

- i. Neha, a university student, started receiving repeated messages and emails from an unknown individual who praised her photos posted on social media. Over time, the messages turned intrusive and threatening. The individual created multiple fake profiles to follow her activities online, commented on her location updates, and even contacted her friends and family. Feeling unsafe and harassed, Neha filed a complaint with the cybercrime cell. Question: Based on the above case, explain the concept of cyberstalking under Indian cyber law. 7Marks
- ii. Define the term "Hacking" in the context of Indian cyber law. 7Marks

OR

- i. Critically examine the distinction between identity theft and impersonation within the framework of Indian cyber law. 7Marks
- ii. Explain any three significant provisions related to cybercrime under the Bharatiya Nyaya Sanhita. 7Marks

Questions 4 Answer the following questions:

- i. Explain the process of digital evidence gathering and its significance in forensic investigation. 7Marks
- ii. What is a Chain of Custody? Explain its importance with an example. 7Marks

OR

- i. Compare and contrast open-source and commercial forensic tools with examples. 7Marks
- ii. Explain encryption and decryption methods and their implications in forensic investigation. 7Marks

Questions 5: Attempt any Seven out of Twelve.

14 Marks

1. What is the purpose of file system analysis in cyber forensics?
2. Give two examples of social networking misuse in cyber-crimes.
3. What is meant by storage fundamentals in digital forensics?
4. What does a DoS attack aim to achieve?
5. Give two examples of credit card fraud in the cyber world.
6. What is cyber defamation?
7. What does data preservation mean?
8. Mention one step in the evidence collection process.
9. What is meant by email header analysis?
10. What is the maximum punishment prescribed for tampering with computer source documents under Indian cyber law?
11. What legal responsibility do intermediaries have regarding the preservation and retention of information under the IT Act?
12. Differentiate between the punishment for first-time and subsequent offences under the provision related to publishing obscene material in electronic form.

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