

WB Board Class 12 Cyber Security Question Paper(Memory Based)

Time Allowed :3 Hour	Maximum Marks :60	Total Questions :24
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General Instructions

Read the following instructions very carefully and strictly follow them:

- Answers to this Paper must be written on the paper provided separately.
- You will not be allowed to write during the first 15 minutes
- This time is to be spent in reading the question paper.
- The time given at the head of this Paper is the time allowed for writing the answers,
- The paper has four Sections.
- Section A is compulsory - All questions in Section A must be answered.
- You must attempt one question from each of the Sections B, C and D and one other question from any Section of your choice.

1. Define the three pillars of the CIA Triad.

2. What are the primary differences between a Computer Virus and a Worm?

3. Explain the process of Asymmetric Encryption using public and private keys.

4. What is Phishing, and how can users identify a suspicious email?

5. Describe the role of a Firewall in protecting a private network.

6. What is Digital Steganography, and how does it differ from encryption?

7. Explain the concept of Two-Factor Authentication (2FA) and its importance.

8. What are the key provisions of the Indian IT Act 2000 regarding cyber crimes?

9. Define Ransomware and suggest two methods to prevent such attacks.

10. What is the difference between a Denial of Service (DoS) and a Distributed Denial of Service (DDoS) attack?

11. Define SQL Injection and how it affects database security.

12. What is Social Engineering, and why is it considered a non-technical threat?
