

Dr. Babasaheb Ambedkar Open University
Term End Examination July – 2026

Course : BSCIT
Subject Code : BSCITRIN-304
Subject Name : Cyber Security

Date : 19/07/2026
Time : 03:00pm to 05:15pm
Duration : 02.15 Hours
Max. Marks : 70

Section A

Answer the following (Attempt any three) (30)

1. Discuss the classification of cybercrimes and explain the reasons for the commission of cybercrimes.
2. List and Explain different types of Malware.
3. Explain Authentication and Encryption. Discuss Symmetric Encryption and Asymmetric Encryption with suitable diagrams.
4. Discuss common wireless security threats and preventive measures for securing wireless networks.
5. Explain Ethical Hacking. Describe the phases of penetration testing and state the advantages of ethical hacking.

Section B

Answer the following (Attempt any four) (20)

1. Write a short note on DNS (Domain Name System).
2. Explain Firewall and state its advantages.
3. Write a short note on Digital Signature.
4. State any five guidelines for creating a strong password.
5. Explain the security practices for safe Internet browsing.
6. State any five precautions while using Social Media securely.

Section C

Part – A (Multiple Choice Questions) (10)

Q.1 Which type of malware is primarily designed to display unwanted advertisements?

- A) Worm B) Adware
C) Trojan Horse D) Rootkit

Q.2 Which cyber security technique converts readable information into an unreadable form?

- A) Authentication B) Encryption
C) Authorization D) Compression

Q.3 Which component mainly filters incoming and outgoing network traffic?

- A) Modem B) Firewall
C) Switch D) Scanner

Q.4 Which attack attempts to obtain confidential information by pretending to be a trusted entity?

- A) Phishing B) Sniffing
C) Spoofing D) Scanning

Q.5 Which authentication method provides an additional layer of security using a one-time code?

- A) CAPTCHA B) OTP Verification
C) IP Filtering D) Cookies

Q.6 Which professional is officially authorized to identify security vulnerabilities in computer systems?

- A) Black Hat Hacker B) Ethical Hacker
- C) Script Kiddie D) Cyber Stalker

Q.7 Which application is primarily used for secure web browsing?

- A) Web Browser B) Media Player
- C) Calculator D) Text Editor

Q.8 Which device is commonly used to connect a wireless network?

- A) Router B) Plotter
- C) Scanner D) Printer

Q.9 Which cyber security process verifies the identity of a user before granting access?

- A) Authentication B) Formatting
- C) Compression D) Routing

Q.10 Which type of cyber attack floods a server with excessive requests to interrupt its normal services?

- A) SQL Injection B) Denial of Service (DoS)
- C) Phishing D) Password Guessing

Part – B (State whether the following statements are true or false)

(10)

- 1 Cyber security aims to protect computer systems, networks and digital information.
- 2 Malware may reduce the performance of a computer system.
- 3 Public-key cryptography uses a pair of different keys for encryption and decryption.
- 4 Digital signatures help verify the authenticity and integrity of electronic documents.
- 5 Firewalls can be implemented using hardware, software or both.
- 6 Regular software updates help improve system security.
- 7 Safe browsing habits reduce the risk of cyber-attacks.
- 8 Wireless networks should be protected using appropriate security mechanisms.
- 9 Ethical hacking helps organizations identify security weaknesses.
- 10 Computer forensics assists in collecting and preserving digital evidence.
