

Dr. Babasaheb Ambedkar Open University, Ahmedabad

Term-End Examination : January-2026

Course Name : BSCCS

Subject Name : Computer Fundamentals and Security

Subject Code : BSCCS-103

Date : 18-02-2026

Time : 11:30AM TO 01:45PM

Max Marks : 70

Section A

Q.-1. Answer the following. (Attempt any three) (30)

- (1) Discuss different types of storage devices and explain their uses and characteristics.
- (2) Explain different output devices and discuss their importance in a computer system.
- (3) Define computer security and explain the CIA triad in detail.
- (4) Discuss different security measures used to protect computer systems from unauthorized access.
- (5) Explain the importance of cyber security in modern organizations and discuss basic security practices for users.

Section B

Q.-2. Write short notes on any four of the following topics. (20)

- (1) Explain the concept of firmware and discuss its role in computer systems.
- (2) Describe online processing systems and explain how they differ from batch processing systems.
- (3) Explain the working principle of mouse and joystick as input devices.
- (4) Explain data transmission modes and discuss simplex, half-duplex, and full-duplex communication.
- (5) Describe authentication and authorization mechanisms used in computer security.
- (6) Explain types of malware and differentiate between virus, worm, and Trojan horse.

Section C

Q.-3. Choose the correct answer from the options given below. (10)

(1) Which component performs arithmetic operations

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|-----------------|----------|
| A) Control Unit | B) ALU |
| C) Register | D) Cache |

(2) Which memory stores BIOS instructions

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|--------|-------------|
| A) RAM | B) Cache |
| C) ROM | D) Register |

(3) Which device is a secondary storage

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|--------------|-------------|
| A) RAM | B) Register |
| C) Hard Disk | D) Cache |

(4) Primary storage includes

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|----------------|---------------|
| A) RAM and ROM | B) CD and DVD |
| C) Pen drive | D) Hard disk |

(5) Which gate is known as universal gate

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|---------|--------|
| A) AND | B) XOR |
| C) NAND | D) OR |

(6) Phishing is a type of

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|---------------------|-----------------------|
| A) Hardware failure | B) Social engineering |
| C) Network topology | D) Encryption |

(7) Firewall is used to

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|-----------------|--------------------------------|
| A) Store data | B) Prevent unauthorized access |
| C) Process data | D) Display output |

(8) Confidentiality, Integrity and Availability form

- | | |
|--------------|--------------|
| A) CIA Triad | B) AAA Model |
| C) OSI Model | D) TCP Model |

(9) Unauthorized access to a system is known as

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|----------------|---------------|
| A) Hacking | B) Debugging |
| C) Programming | D) Processing |

(10) Spyware mainly aims to

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|------------------------|--------------------------|
| A) Improve performance | B) Monitor user activity |
| C) Protect data | D) Speed up system |

Section D

Q.-4. Decide whether the statements given below are True or False.

(10)

- (1) CPU is known as the brain of the computer
- (2) RAM is a non-volatile memory
- (3) Keyboard is an output device
- (4) Cache memory is slower than main memory
- (5) Address bus carries data
- (6) First generation computers used vacuum tubes
- (7) RAM and ROM are part of secondary storage
- (8) Binary number system has base 10
- (9) NOT gate is also called inverter
- (10) Phishing is a hardware failure
