

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

Course	: BSCIT	Date	: 20/07/2026
Subject Code	: BSCIT-105	Time	: 11:30am to 01:45pm
Subject Name	: Computer Fundamentals	Duration	: 02.15 Hours
		Max. Marks	: 70

Section A

Answer the following (Attempt any three) (30)

1. Explain the functional components of a computer system.
2. Explain the memory hierarchy in a computer system.
3. Explain different categories of input and output devices.
4. Explain different data communication media and connectivity technologies used in computer networks.
5. Explain different number systems used in computers.

Section B

Answer the following (Attempt any four) (20)

1. Explain the characteristics and applications of Micro Architecture.
2. Differentiate between System Software and Application Software.
3. Explain the purpose of Instruction Set Architecture (ISA).
4. Write a short note on Optical Storage Devices.
5. Explain the functions of the Motherboard and Chipset.
6. Write a short note on File Management.

Section C

Part – A (Multiple Choice Questions) (10)

- Q.1 Which component of the CPU performs arithmetic and logical operations?
A) Memory Unit B) Arithmetic Logic Unit (ALU)
C) Control Unit D) Register
- Q.2 Which storage medium is commonly classified as an optical storage device?
A) Hard Disk B) DVD
C) Magnetic Tape D) SRAM
- Q.3 Which computer generation introduced integrated circuits (ICs)?
A) First Generation B) Second Generation
C) Third Generation D) Fifth Generation
- Q.4 Which protocol is primarily used for transferring web pages over the Internet?
A) FTP B) HTTP
C) SMTP D) POP3
- Q.5 Which software acts as an interface between the computer hardware and the user?
A) Compiler B) Operating System
C) Assembler D) Utility Program
- Q.6 Which numbering system uses sixteen distinct symbols?
A) Binary B) Decimal
C) Hexadecimal D) Octal

Q.7 Which device is primarily used to digitize printed photographs or documents?

- A) Plotter B) Scanner
- C) Microphone D) Speaker

Q.8 Which bus transfers memory addresses from the CPU to memory?

- A) Data Bus B) Address Bus
- C) Control Bus D) Expansion Bus

Q.9 Which storage device generally provides the fastest data access?

- A) DVD B) Magnetic Tape
- C) Cache Memory D) Optical Disk

Q.10 Which logic gate produces a HIGH output only when all of its inputs are HIGH?

- A) OR Gate B) XOR Gate
- C) AND Gate D) NOR Gate

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

(10)

- 1 Virtual memory enables a computer to execute programs larger than the available physical RAM.
- 2 Registers are high-speed storage locations located inside the CPU.
- 3 A motherboard provides physical and electrical connections among major computer components.
- 4 Sequential Access Storage Devices retrieve data in a fixed sequence.
- 5 Optical Character Recognition (OCR) converts printed text into machine-readable form.
- 6 Utility software is developed primarily to perform specific maintenance and system support tasks.
- 7 A compiler translates an entire source program into machine code before execution.
- 8 Network communication may use either wired or wireless transmission media.
- 9 The hexadecimal number system uses the symbols 0–9 and A–F.
- 10 A buffer is used to temporarily hold data during data transfer between devices.
