

**A-1267**

Total Pages : 3

Roll No. ....

**BCA-11**

**Bachelor of Computer Application (BCA)**

**Computer Organization**

Examination February, 2026

Time : 2:00 Hrs.

Max. Marks : 70

*Note :-* This paper is of Seventy (70) marks divided into Two (02) Sections 'A' and 'B'. Attempt the questions contained in these Sections according to the detailed instructions given therein. *Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.*

**Section-A**

**Long Answer Type Questions (2×19=38)**

*Note :-* Section 'A' contains Five (05) Long-answer type questions of Nineteen (19) marks each. Learners are required to answer any *two* (02) questions only.

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( 1 )

P.T.O.

1. Explain the working of various types of flip-flops (SR, JK) with logic diagrams and truth tables. Discuss how they are used in counters and registers.
2. Explain the instruction format and types of instructions used in 8085. Illustrate each with an example.
3. Compare Programmed I/O, Interrupt-Driven I/O, and DMA. Explain with flowcharts.
4. Describe ROM organization and types of ROM (PROM, EPROM, EEPROM, Flash).
5. Compare magnetic tape, optical memory, and magnetic disk in terms of access time, cost, and storage capacity.

### **Section–B**

#### **Short Answer Type Questions** (4×8=32)

**Note** :- Section ‘B’ contains Eight (08) Short-answer type questions of Eight (08) marks each. Learners are required to answer any *four* (04) questions only.

1. Differentiate between combinational and sequential circuits with examples.

2. Explain the function of Accumulator and Program Counter in instruction execution.
3. What are the advantages of DMA over Programmed I/O ?
4. Differentiate between volatile and non-volatile memories.
5. Differentiate between cache memory and main memory.
6. Define seek time, latency, and access time in disks.
7. Differentiate between sequential execution and pipelined execution.
8. What are complex instructions in CISC ? Give examples.

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