

A-0792

Total Pages : 3

Roll No.

BCA-11

Bachelor of Computer Application (BCA)

(Computer Organization)

Examination, June 2025

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.

- Q. 1. Implement a Full Adder using Half Adders and Logic Gates.
- Q. 2. Compare and Contrast Direct Memory Access (DMA) and Interrupt-Driven I/O.
- Q. 3. What is the difference between RAM and ROM ? Explain their advantages and disadvantages.
- Q. 4. What is Memory Fragmentation ? Explain its causes, effects and solution.
- Q. 5. Explain the concept of external memory.

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.

- Q. 1. What is the function of a resistor in a digital circuit ?
- Q. 2. What is the purpose of a buffer in input/output systems ?
- Q. 3. What is the difference between memory-mapped I/O and port-mapped I/O ?
- Q. 4. Give an example of a type of internal memory.

- Q. 5. How does pipelining improve processor performance ?
- Q. 6. What is the main difference between CISC and RISC architectures ?
- Q. 7. Why is RISC generally more efficient in terms of execution time ?
- Q. 8. Explain the different types of instructions used in a computer's instruction set ?
