

S. B. Roll. No.....

COMPUTER ARCHITECTURE
4th Exam/CSE/IT/0495/Nov'24
(For 2018 Batch Onwards)

Duration: 3Hrs.

M.Marks:75

SECTION A

Q1. Do as directed.

15x1=15

- a. LIFO stands for _____
- b. RAM stands for _____
- c. ASCII stands for _____
- d. VAD stands for _____
- e. DMA stands for _____
- f. SIMD stands for _____
- g. CISC stands for _____
- h. 1's complement of 100101 is _____
- i. Write down basic arithmetic operations.
- j. Define hit ratio.
- k. Define interrupt.
- l. Write names of peripheral devices used in computer system.
- m. Write names of secondary memories used in computer system.
- n. Write names of operations applied on memory stack.
- o. Write down base of decimal, octal, hexadecimal and binary numbers.

SECTION-B

Q2. Attempt any six questions.

6x5=30

- i. What is a DMA Controller? Describe along with its working using suitable diagram.
- ii. Explain pipeline processing.
- iii. What do you mean by addressing mode? Explain any five.
- iv. Write down characteristics of RISC and CISC.
- v. Explain memory stack organisation.
- vi. Explain general register organization.
- vii. What is I/O interface? What is its need?
- viii. Write an algorithm for addition of binary numbers
- ix. Explain daisy chaining interrupt.

SECTION-C

Q3. Attempt any three questions.

3x10=30

- a. Give a short note on memory connection to CPU.
- b. Explain various types of instruction formats in detail.
- c. Describe the concept of programmed I/O transfer mode.
- d. Explain memory hierarchy in detail.
- e. Write note on
 - i) Associative memory
 - ii) Virtual memory