S-713

MSCIT-05

Computer Organization & Architecture

(MSCIT)

2nd Semester, Examination 2022(Dec.)

Time: 2 Hours   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.

Section – A

(Long Answer – type questions)

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.

[2 x 19 = 38]

P.T.O.

Q.1. Describe Concepts of auxiliary, Associative, Cache and Virtual Memory.

Q.2. What is Interrupts? Describe accessing Input/ Output device?

Q.3. Write Short Note on Arithmetic Pipelining, Instruction Pipelining, RISC Pipelining.

Q.4. (a) Explain the fetch and execute cycle during execution of an instruction?

(b) What do you mean by Serial Communication?

Q.5. Write short note on:
(i) SISD   (ii) SIMD
(iii) MIMD   (iv) MISD

Section – B

(Short-answer-type questions)

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.

[4 x 8 = 32]

Q.1. What are different logic gates? Draw their graphic and algebraic function.

Q.2. What is time space diagram. Write the characteristic of Multiprocessor.

Q.3. Explain DMA with diagram & its transfer modes?

Q.4. Write Future Directions for Parallel Processors?

Q.5. Explain Interrupt controlled I/O transfer?

Q.6. Explain & draw block diagram of Parallel Processing?

Q.7. Describe Secondary storage and type of storage devices?

Q.8. Differentiate between primary & secondary memory. What is cache memory?

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