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**Date: 29-01-2021.**

**II.B.TECH- I-SEM (R22)-II MID Examinations-January-2024 Date: 23/01/2024**

**Subject: COA Time:01:30 TO 03:30 PM**

**Branch: CSE, IT, CSC, CSM&CSD Marks: 30 M**

***Answer all Questions in Part -A & Answer any FOUR Questions in Part –B***

**PART-A 5x2=10 M**

**CO**

1. What is a fixed point notation? 3
2. What is Cache Memory? 4
3. Example of I/O Interface? 4
4. What is parallel processor?
5. What is Inter processor Communication? 5

# PART-B 4 x 5 M = 20 M

# CO

1. Describe Multiplication Algorithm (with example and flow chart)? 3
2. Explain the block diagram of DMA transfer in detail? 4
3. Discuss the strobe control and handshake methods of asynchronous data transfer? 4
4. Explain RISC and CISC characteristics? 4
5. a) Explain Pipeline processing with below example 5

Ai\* Bi + Ci for i = 1, 2, 3, 7?

b) Write Arithmetic and instruction pipeline with steps? 5

11. What is Cache Coherence problem discuss solutions for it? 5

SCHEME OF EVALUATION

PART-A

|  |  |  |  |
| --- | --- | --- | --- |
| S NO | THEORY | MARKS | TOTAL |
| 1 | What is a fixed point notation? | 2 | 2 |
| 2 | What is Cache Memory? | 2 | 2 |
| 3 | Example of I/O Interface? | 2 | 2 |
| 4 | What is parallel processor? | 2 | 2 |
| 5 | What is Inter processor Communication? | 2 | 2 |

PART-B

|  |  |  |  |
| --- | --- | --- | --- |
| S NO | THEORY | MARKS | TOTAL |
| 6 | Describe Multiplication Algorithm (with example and flow chart)?  (or) | 5 | 5 |
| 7 | Explain the block diagram of DMA transfer in detail? | 5 | 5 |
| 8 | a) Define asynchronous data transfer? And what are the methods  b) Discuss the strobe control and handshake methods of asynchronous data transfer?  (or) | 2  3 | 5 |
| 9 | Explain RISC and CISC characteristics? | 5 | 5 |
| 10 | a) Explain Pipeline processing with below example 5  Ai\* Bi + Ci for i = 1, 2, 3, 7?  b) Write Arithmetic and instruction pipeline with steps?  (or) | 3  2 | 5 |
| 11 | a)what is Cache memory.  b) What is Cache Coherence problem discuss solutions for it? | 1  4 | 5 |