

Roll No.

Total Pages : 2

I : 4.865

2343/N

P-14/2115

**COMPUTER SYSTEM
ORGANIZATION AND ARCHITECTURE**

SEMESTER-III

Time Allowed : 3 Hours]

[Maximum Marks : 75

Note : Attempt five questions in all by selecting at least two questions each from the Section A and B. Section C is compulsory.

SECTION—A

15×2=30

1. Distinguish between RISC and CISC architectures. Discuss their advantages and disadvantages. Give some examples of RISC and CISC processor.
2. Explain in detail the various error-correcting codes.
3. Define Cache Memory. What are the various memory mapping procedures involving cache memory ? Explain.
4. What do you mean by Program Interrupt ? Discuss various types of Interrupts with suitable examples.

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SECTION—B

15×2=30

5. Explain in detail the various arithmetic Micro-operations with examples.
6. Briefly discuss the following concepts :
 - (a) Control Memory.
 - (b) Address Sequencing.
 - (c) Micro-programmed Control.
7. What is Input-output Interface ? Briefly discuss and compare the following I/O schemes :
 - (a) Programmed I/O
 - (b) Interrupt initiated I/O.
8. What do you mean by Asynchronous Data transfer ? What are the methods of achieving asynchronous data transfer? Explain.

SECTION—C

5×3=15

9. Write short note on the following :
 - (i) CPU organisation.
 - (ii) Instruction-level Parallelism.
 - (iii) Types of addressing modes.
 - (iv) Arithmetic logic shift unit.
 - (v) DMA.