

No. of Printed Pages : 03

Roll No.

18C2

B. Tech. EXAMINATION, 2022

(Third Semester)

(C Scheme) (Main & Re-appear)

(CSE, ECE)

CSE203C

Computer Organization and Architecture

Time : 3 Hours]

[Maximum Marks : 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit.

Unit I

1. (a) Explain Input/output subsystem in detail. 7
(b) How to represents fixed and floating points ? 8
2. Perform n bit addition and subtraction using adder and complement with example. 15

Unit II

3. (a) Explain CPU architecture types. 8
(b) What is pipeline ? Explain the effect of pipeline on speed and throughput. 7
4. (a) Explain addressing modes with suitable example. 10
(b) Show the Instruction cycle for MOVE Instruction. 5

Unit III

5. (a) Differentiate between Serial and Parallel data transmission. 7

- (b) Explain programmed I/O data transfer. Why is I/O data transfer used ? 8

6. (a) Design control unit using microprogrammed control. 10
(b) What is Micro Instruction ? Explain in detail. 5

Unit IV

7. (a) What is cache memory ? Explain copy-back cache writing policies. 10
(b) Explain the characteristics of Memory devices. 5
8. Explain Virtual Memory. Also explain page replacement method for address mapping in virtual memory. 15