



**QP CODE: 25022518**

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**Reg No** : .....

**Name** : .....

**M.Sc DEGREE (CSS) SPECIAL REAPPEARANCE EXAMINATION, APRIL 2025**

**Third Semester**

M.Sc APPLIED ELECTRONICS

**CORE - EL020301 - COMPUTER ORGANIZATION AND ARCHITECTURE**

2019 ADMISSION ONWARDS

73C84CDC

Time: 3 Hours

Weightage: 30

**Part A (Short Answer Questions)**

*Answer any **eight** questions.*

*Weight **1** each.*

1. Explain the operation concept between processor and memory.
2. Explain the Functional units of a computer .
3. Explain Register addressing and Register indirect addressing.
4. What is mpc ?
5. What are the different program control instructions?
6. Explain the memory hierachial system.
7. Draw the block diagram one stage decimal arithmetic unit.
8. What is interrupt?
9. What is pipelining?
10. What is write back coherence policy?

(8×1=8 weightage)

**Part B (Short Essay/Problems)**

*Answer any **six** questions.*

*Weight **2** each.*

11. Explain the method to represent floating point numbers and fixed point numbers.
12. What are the different register transfer languages?
13. Explain logic micro operation ?





14. Explain the subtraction of sign magnitude numbers with figure.
15. Explain the concept of virtual memory.
16. Explain 1.Memory mapped i/o 2.Isolated i/o
17. Explain PCI
18. Explain array processors

(6×2=12 weightage)

**Part C (Essay Type Questions)**

*Answer any **two** questions.*

*Weight 5 each.*

19. Explain Hardwired control and Microprogrammed control in detail.
20. Explain the following 1. Booth algorithm 2.division algorithm
21. Explain DMA with flow chart and diagram.
22. What are the different interconnection structures? Explain.

(2×5=10 weightage)

