

D 52795

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Name.....

Reg. No.....

**FIRST SEMESTER M.Sc. DEGREE (REGULAR/SUPPLEMENTARY)  
EXAMINATION, NOVEMBER 2023**

(CBCSS)

Computer Science

CSS 1C 05—COMPUTER ORGANIZATION AND ARCHITECTURE

(2019 Admission onwards)

Time : Three Hours

Maximum : 30 Weightage

**Section A**

*Answer any **four** questions.  
Each question carries 2 weightage.*

1. Define combinational circuits.
2. What is addressing modes ?
3. Specify the general ways that can achieve fast multiplication.
4. How cache memory is used in computer organization ?
5. Give a note on the types of instruction formats.
6. Mention the classification of external devices.
7. List out the types of branch instruction

(4 × 2 = 8 weightage)

**Section B**

*Answer any **four** questions.  
Each question carries 3 weightage.*

8. List out the functions in computer organization.
9. Write a short note on branch instruction in computer organization.
10. How to use the integer representation ?
11. What are the I/O modules and its functions ?
12. List out the instruction set of 8085.

**Turn over**

13. Drawbacks of programmed and interrupt-driven I/O.
14. Construct a flow chart for Booth's Algorithm for twos complement multiplication.

(4 × 3 = 12 weightage)

### Section C

*Answer any two questions.  
Each question carries 5 weightage.*

15. Explain in detail about the basic logic gates.
16. Discuss about the control unit and its design.
17. Describe about the memory hierarchy design.
18. Demonstrate the architecture of 8086 CPU.

(2 × 5 = 10 weightage)