**D 32688** **(Pages : 2)** **Name.....**

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

**FIRST SEMESTER M.Sc. DEGREE (REGULAR/SUPPLEMENTARY) EXAMINATION, NOVEMBER 2022**

(CBCSS)

Computer Science

CSS1C05—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 shift registers.
2. Give a note on straight line sequencing.
3. Draw a flowchart for Unsigned Binary Division.
4. What is virtual memory ?
5. List out the timers of 8051 and their associated registers.
6. What is meant by interrupts ?
7. What are the data types in computer organization ?

(4 × 2 = 8 weightage)

**Section B**

*Answer any* **four** *questions.*

*Each question carries* 3 *weightage.*

8. Describe the Register Transfer Language (RTL).
9. Write a short note on Micro- programmed control unit.
10. What is overflow rule and subtraction rule ?
11. How to use daisy chaining priority in computer architecture ?
12. Discuss about the instruction cycle in 8085 microprocessors.

**Turn over**

13. Explain the I/O channels and its types.

14. Give a note on registers with, its types.

(4 × 3 = 12 weightage)

## Section C

*Answer any* **two** *questions.*

*Each question carries* 5 *weightage.*

15. Explain the decoders with its example.

16. Demonstrate the hard-wired control unit with its diagram.

17. Discuss about the, restoring division algorithm for unsigned integer.

18. Demonstrate the architecture of 8051 microcontrollers.

(2 × 5 = 10 weightage)