D 50578 (Pages : 2) Name.....

Reg. No.....

FIFTH SEMESTER (CBCSS—UG) DEGREE EXAMINATION
NOVEMBER 2023

Computer Science

BCS 5B 07—COMPUTER ORGANIZATION AND ARCHITECTURE

(2019 Admission onwards)

Time : Two Hours Maximum : 60 Marks

Section A (Short Answer Type Questions)

Answer **all** *questions, each correct answer carries a maximum of* 2 *marks. Ceiling* 20 *marks.*

1. Explain Multiplexer.
2. What is edge triggering ?
3. List out the basic registers of a computer.
4. Define effective address.
5. Explain direct addressing mode.
6. Define stack.
7. Discuss OR gate.
8. Explain full adder.
9. Define associative memory ?
10. Explain simplex data transmission method.
11. What is Direct Memory Access ?
12. List out 4 program control instructions.

Turn over

Section B (Short Essay Type Questions)

Answer **all** *questions, each correct answer carries a maximum of* 5 *marks.*

Ceiling 30 *marks.*

13. Explain typical RAM chip with the help of a block diagram.
14. Explain Status Bits.
15. Explain memory reference instruction with examples.
16. Write short note on shift registers.
17. Discuss asynchronous & synchronous counters.
18. Explain Register stack.
19. Differentiate external and internal interrupts.

Section C (Essay Type questions)

Answer any **one** *question, correct answer carries* 10 *marks.*

20. Explain various Flip Flops with the help of truth tables.
21. Define Cache Memory. Explain different cache memory mapping techniques.

(1 × 10 = 10 marks)