416251

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Name..... Reg. No.....

# FIFTH SEMESTER (CBCSS—UG) DEGREE EXAMINATION NOVEMBER 2023

## B.C.A.

## BCA 5B 07—COMPUTER ORGANISATION AND ARCHITECTURE

(2019 Admission onwards)

Time : Two Hours

Maximum : 60 Marks

### Section A (Short Answer Type Questions)

Answer **all** the questions. Each correct answer carries 2 marks. Ceiling 20 Marks.

- 1. Define combinational circuits.
- 2. Define ring counter.
- 3. Define demultiplexer.
- 4. Define DMA.
- 5. Define Memory address register.
- 6. What is level triggering?
- 7. Define pipeline processing.
- 8. Write a note on strobe control.
- 9. Define priority interrupt.
- 10. Draw the logic diagram of AND gate using NOR gate.
- 11. Define Polling.
- 12. Define control word.

**Turn over** 

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### Section B (Short Essay Type Questions)

Answer **all** the questions. Each correct answer carries 5 marks. Ceiling 30 Marks.

- 13. Explain ripple carry adders in detail.
- 14. Write a note on Data manipulation instructions.
- 15. Write a short note on associative mapping.
- 16. Write a short note on address sequencing.
- 17. Differentiate between isolated I/O and Memory mapped I/O.
- 18. Differentiate between register stack and memory stack.
- 19. Write a note on JK flip-flop.

### Section C (Essay Type Questions)

Answer any **one** question. Correct answer carries 10 marks.

- 20. Explain different instruction formats in detail.
- 21. Explain memory hierarchy in detail.

 $(1 \times 10 = 10 \text{ marks})$