D 50532 **(Pages : 2)** **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

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 × 10 = 10 marks)