D 120571   (Pages : 2)   Name...

Reg. No.....................................

FOURTH SEMESTER (CBCSS—UG) DEGREE EXAMINATION APRIL 2025

Information Technology

BIT 4C 08—COMPUTER ORGANISATION AND ARCHITECTURE

(2019—2023 Admissions)

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. What is PC ?

2. What is Johnson's counter ?

3. What is encoder ?

4. What is Accumulator ?

5. What is Edge triggered flip-flop ?

6. What do you mean by Synchronous data transfer ?

7. What is the use of timing and control signal ?

8. What is JK flip-flop ?

9. What is Virtual Memory ?

10. What is decade counter ?

11. What is Ring Counter ?

12. What do you mean by strobe method ?

Turn over

Section B

Each question carries 5 marks.
Ceiling 30 Marks.

13. Explain Stack organization.

14. Describe about different Instruction formats.

15. Describe about Multiplexers and Demultiplexers.

16. Discuss the applications of shift registers.

17. Explain the phases in Instruction Cycle.

18. Explain logic gates.

19. What is DMA ?

Section C

Answer any **one** *question.*
The question carries 10 *marks.*

20. Explain the working of Master slave and JK flip-flop.

21. Explain about Half adder and Full adders in detail.

(1 × 10 = 10 marks)