FIFTH SEMESTER (CBCSS-UG) DEGREE EXAMINATION NOVEMBER 2022

B.C.A.

BCA/BCS 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 ripple carry adders.
- 2. Define Johnson's counter.
- 3. Define Encoder.
- 4. Define Accumulator.
- 5. Define Memory data register.
- 6. What is locality of reference?
- 7. Define memory access time.
- 8. Write a note on vectored interrupt.
- 9. Write a note on virtual memory.
- 10. Define control word.
- 11. Define register stack.
- 12. What is address sequencing?

Section B (Short Essay Type Questions)

Answer all the questions.

Each correct answer carries 5 marks.

Ceiling 30 marks.

- 13. Explain the operation of multiplexer with suitable diagram.
- 14. Write a note on Program control instructions.

Turn over

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- 15. Write a short note on control memory.
- 16. Differentiate polling and interrupt schemes in I/O techniques.
- 17. Describe about different types of logic gates.
- 18. Write a note on D flip-flop.
- 19. Write a short note on stack organization.

Section C (Essay Type Questions)

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

- 20. Explain mapping procedures of cache memory in detail.
- 21. Explain different computer instructions in detail.

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