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## FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CBCSS—UG)

B.C.A.

# BCA 5B 07—COMPUTER ORGANISATION AND ARCHITECTURE

(2019 Admissions)

Time: Two Hours

Maximum: 60 Marks

## **Section A (Short Answer Type Questions)**

Answer at least **eight** questions.

Each question carries 3 marks.

All questions can be attended.

Overall Ceiling 24.

- 1. Define universal gates.
- 2. Define decoders.
- 3. Define multiplexer.
- 4. Define cache memory.
- 5. Define accumulator.
- 6. Define handshaking.
- 7. What is edge triggering?
- 8. Define multiprocessing.
- 9. Define I/O bus.
- 10. What is interrupt?
- 11. Define micro-operation.
- 12. Define register.

 $(8 \times 3 = 24 \text{ marks})$ 

Turn over

### **Section B (Short Essay Type Questions)**

Answer at least **five** questions. Each question carries 5 marks. All questions can be attended. Overall Ceiling 25.

- 13. Explain half and full adder in detail.
- 14. What is write-through method in cache organization.
- 15. Write a note on data transfer instructions.
- 16. Write a short note on direct mapping.
- 17. Differentiate between synchronous and asynchronous data transfer.
- 18. Write a note on SR flip flop.
- 19. What you meant by I/O controllers?

 $(5 \times 5 = 25 \text{ marks})$ 

#### Section C (Essay Type Questions)

Answer any **one** question.

The question carries 11 marks.

- 20. Define addressing modes. Give the details of different addressing modes.
- 21. Explain different modes data transfer to and from peripherals.

 $(1 \times 11 = 11 \text{ marks})$