K25U 0128



Reg.	No.	:	
Name ·			

Sixth Semester B.Sc. Degree (C.B.C.S.S. – OBE-Regular/Supplementary/ Improvement) Examination, April 2025 (2019 to 2022 Admissions) CORE COURSE IN COMPUTER SCIENCE

6B14CSC: Computer Organization

Time: 3 Hours Max. Marks: 40

PART – A (Short Answer)

Answer all questions.

 $(6 \times 1 = 6)$

- 1. Define a computer system.
- 2. What are the functional units of a computer?
- 3. What is reverse polish notation?
- 4. What is control memory?
- 5. What is asynchronous data transfer?
- 6. Define Direct Memory Access (DMA).

PART – B (Short Essay)

Answer any 6 questions.

 $(6 \times 2 = 12)$

- 7. Explain the concept of floating-point representation.
- 8. What is an interrupt?
- 9. Differentiate between register transfer and memory transfer.
- 10. What are micro operations?

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- 11. Differentiate between register stack and memory stack.
- 12. Explain the general register organization.
- 13. Explain priority interrupt with an example.
- 14. Explain the importance of cache memory.

PART – C (Essay)

Answer any four questions.

 $(4 \times 3 = 12)$

- 15. Describe the main types of computers.
- 16. Describe the process of fetch and decode in instruction cycles.
- 17. Explain the bus and memory transfer process.
- 18. Write short notes on addressing modes.
- 19. Describe the hierarchy of memory organization.
- 20. Write short notes on asynchronous data transfer.

PART – D (Long Essay)

Answer any two questions.

 $(2 \times 5 = 10)$

- 21. Describe multiprocessors and multi-computers in detail.
- 22. Write in detail about memory reference and register reference instructions.
- 23. Discuss the significance of addressing modes and their types.
- 24. Describe the role and functionality of an input-output processor in a computer system.