



K26U 1130

Reg. No. :

Name :

**IV Semester B.C.A. Degree (CBCSS – OBE – Supplementary/Improvement)
Examination, April 2026
(2020 to 2023 Admissions)
Core Course
4B09BCA : COMPUTER ORGANIZATION**

Time : 3 Hours

Max. Marks : 40

**PART – A
(Short Answer)**

Answer **all** questions :

(6×1=6)

1. What is the use of an Accumulator Register (AR) ?
2. Describe the Register Transfer operation of a program in assembly language to evaluate $x = (A+B)*C$ using three address instructions.
3. Describe hard-wired control.
4. Write a short note on the cache hit ratio.
5. Describe write-through and write-back caching.
6. What is external fragmentation ?

**PART – B
(Short Essay)**

Answer **any six** questions :

(6×2=12)

7. Define Data Manipulation Instructions and give example.
8. Write notes on the Arithmetic and Logic Unit.
9. Write short notes on Output Devices.
10. Describe Asynchronous Data Transfer.

P.T.O.

K26U 1130



11. Explain the relation between address space and memory space in a virtual memory system.
12. Describe the characteristics of memory hierarchy design.
13. What are the different parallel processing mechanisms in uniprocessor system ?
14. Describe the pipeline stall.

PART – C
(Essay)

Answer **any four** questions :

(4×3=12)

15. Write short notes on Address Bus and Data Bus.
16. How does interrupts differ from subroutine calls ?
17. Explain general register organization.
18. Describe instruction formats.
19. What is DMA ?
20. Explain instruction pipelining.

PART – D
(Long Essay)

Answer **any two** questions :

(2×5=10)

21. Explain different addressing modes.
 22. Explain the Input Output processor and different modes of data transfer.
 23. What are the advantages of a virtual memory system ? Explain how paging and segmentation are used in virtual memory systems.
 24. Explain different multiprocessor architectures.
-