BA / BSc / BCOM DEGREE END SEMESTER EXAMINATION - NOVEMBER 2024
UGP (HONS.) SEMESTER - 1: DISCIPLINE SPECIFIC COURSE (COMPUTER APPLICATIONS)
COURSE: 24UBCADSC102: COMPUTER ORGANIZATION

(For Regular 2024 Admission)

Time: 2 Hours   Max. Marks: 70

PART A
Answer any 5 questions. Each question carries 2 marks

1. Recall the use of cache memory in a computer.
2. Define instruction cycle.
3. Review the push and pop operations in a memory stack.
4. Perform logical shift operation on 1001 0100.
5. Describe virtual memory.
6. Differentiate between a compiler and an interpreter.
7. Describe the polling method in inter-processor arbitration.

(2 x 5 = 10)

PART B
Answer any 6 questions. Each question carries 5 marks

8. Explain the basic CPU registers in computer architecture.
9. Explain stored program concept.
10. Evaluate the postfix expression 3 7 * 5 2 * +
11. Perform ROL and ROR on the binary data 1101 0100.
12. Discuss the principle behind RAID.
13. Explain different types of ROM.
14. Discuss the different DMA transfer modes.
15. Explain any two interconnection structures of a multi-processor system.

(5 x 6 = 30)

PART C
Answer any 3 questions. Each question carries 10 marks

16. Explain, with a neat diagram, the functional units of a computer.
17. Discuss any five addressing modes with necessary diagrams and examples.
18. Explain paging in detail with necessary diagrams.
19. Discuss the different bus arbitration mechanisms.

(10 x 3 = 30)