

Roll No. 

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Total No. of Pages : 02

Total No. of Questions : 07

B.Sc. (IT) (Sem.-3)

**COMPUTER SYSTEM ARCHITECTURE**

Subject Code : BS-201

Paper ID : [B0409]

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTION TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students has to attempt any FOUR questions.

**SECTION-A**

1. Write briefly :

- a) What is the role of Program Counter?
- b) Differentiate between hardware and software interrupt.
- c) Explain the three address instruction format.
- d) Differentiate between hardwired and microprogrammed control unit.
- e) Write note on associative memory.
- f) Explain BSA instruction.
- g) Differentiate between RAM and ROM.
- h) What do you mean by page fault?
- i) Draw the flowchart of interrupt cycle.
- j) Give examples of data transfer instructions.

## SECTION-B

2. Explain about the evolution of computer.
3. Explain all the phases of instruction cycle.
4. Explain various addressing modes of computer system architecture. Discuss it with some example.
5. What is the design principle of cache memory? Discuss the direct cache mapping scheme.
6. List various modes of data transfer. Explain DMA in detail.
7. a) Write note on CPU-IOP communication.  
b) Differentiate between RISC and CISC.