

**Computer Architecture  
(CSE-201, Dec-07)**

**Section-A**

- 1). a). Draw top leveled view of computer components.
- b). Write typical physical realization of bus architecture.
- c). Differentiate among direct mapping and associate mapping.
- d). Define the terms:-Seek time, Rotational Delay, Access time.
- e). Differentiate between RISC & CISC.
- f). Differentiate between arithmetic shift and logical shift.
- g). Write characteristics of I/O channels.
- h). Briefly write about 8255 chip.
- i). Compare SPMD and MIMD machine.
- j). Write major requirement for I/O module.

**Section-B**

- 2). Write functional view of computer which are the possible computer operational.
- 3). Write and explain all the classes of interrupts.
- 4). Which is the elements considered in Bus design.
- 5). Write instructions (8085) to: Load 00H in the accumulator; Decrement the accumulator; Display the answer.
- 6). What is the difference between memories mapped I/O and Isolated I/O?

**Section-C**

- 7). (a) When a device interrupt occurs, how the processor determines which device issued the interrupt.  
(b) When a DMA module takes control of a bus and while it retain control of the bus, what does the processor do?
- 8). (a) Provide it typical list of the input and outputs of control unit.  
(b) What is the difference between a hardwired implementation and a micro programmed implementation of a control unit.
- 9). (a) Explain instruction set of SPARC with descriptions.  
(b) Write and explain types of parallel processor systems.