## 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.