

**III B.Tech II Semester Supplementary Examinations,
November/December 2005
COMPUTER ORGANISATION
(Electronics & Control Engineering)**

Time: 3 hours

Max Marks: 80

**Answer any FIVE Questions
All Questions carry equal marks**

1. (a) Give a detailed flow chart and explain the addition and subtraction operations of signed magnitude numbers.
(b) Introduce the required hardware configuration for the above operations. [10+6]
2. (a) Define the following
 - i. Micro operation
 - ii. Micro instruction
 - iii. Micro program
 - iv. Micro code.(b) Draw the architecture of 8085 CPU and discuss. [8+8]
3. (a) Explain the microprogram sequencer for a control memory.
(b) Explain the differences between hardwired control and microprogrammed control. Is it possible to have hardwired control associated with control memory. [8+8]
4. (a) What are various modes of parallel data transfer? Explain with suitable examples.
(b) Compare I/O mapped I/O and memory mapped I/O. [10+6]
5. (a) Draw the block diagram of a memory hierarchy in a computer system.
(b) Write short notes on associative memory. [8+8]
6. Explain in detail with suitable diagrams.
 - (a) Main memory.
 - (b) Auxilliary memory. [8+8]
7. (a) Draw the block diagram of a DMA controller and explain the data transfer using DMA in a computer system.
(b) Why does DMA have priority over the CPU when both request a memory transfer. [8+8]
8. (a) Introduce Daisy-chain interrupt priority scheme with a block diagram.

- (b) Explain different forms of communication between CPU and IOP with a neat flow chart. [8+8]

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