

COMPUTER ARCHITECTING - I

Time : 3 Hours

Maximum Marks : 90

Note : Question 1 is Compulsory and attempt one question from each unit.

1. Explain
 - i) Non Impact Printers
 - ii) Cycle stealing
 - iii) Micro Instructions
 - iv) RTL
 - v) Raster Scanning
 - vi) Multi Level Cache

UNIT-I

2. Discuss in Detail :
 - i) Input devices and their Interface.
 - ii) Method of Information exchange between I/o and Memory devices.

3. i) Write the advantages of Handshaking over strobe control Data transfer in Detail.
- ii) Explain DMA controller.

UNIT-II

4. i) Describe way to represent various ve numbers in a computer system.
- ii Discuss various types of shift operations and this use.
5. i) Solve the following:
- a) 48-37 using 2's compliment method.
 - b) Divide 111001 by 101.
 - c) Add 125 and 73 using Binary no. system.
 - d) Multiply 10011 by 101.
- ii) Explain cary storage Address.

Unit-III

6. i) Explain Memory Hierarchy and also gives its Advantages.
- ii) How to reduce speed Mismatch between Memory and processor.
7. i) Explain paging and segmentation Techniques used in virtual memory.
- ii) Discuss Associative Memory in Detail.

Unit-IV

8. a) Explain Expression solving through stack.
- b) Give addressing modes in detail.

9. a) What do you mean by an Instruction? How will you categorize the Instruction depending upon its Addressing format schemes.
- b) Explain Hardwired control unit in detail.

