

T.E. (EXTC.) Sem 5 (Rev.)

Computer Architecture & Organisation 12/12/07

Con/5375-07.

(REVISED COURSE)

CD-6078

(3 Hours)

[Total Marks : 100

N.B. : (1) Question No. 1 is **compulsory**.

(2) Attempt any **four** questions out of remaining **six** questions.

1. (a) Explain simple accumulator based CPU and its operation. 10
(b) Explain DMA operation with suitable block diagram. 10
2. (a) Explain microprogrammed control unit. 10
(b) Compare RISC and CISC. 10
3. (a) Distinguish SRAM and DRAM. 10
(b) When a page replacement algorithm is required ? Explain any one page replacement algorithm. 10
4. (a) Draw and explain the four stage floating point adder pipeline. 10
(b) Write note on RAID. 10
5. (a) What is programmed I/O ? Explain it detail. 10
(b) Show how virtual memory is mapped into physical memory using paging. 10
6. (a) Explain Flynn's classification of parallel processing systems. 10
(b) Explain two way set associative mapping of Cache Memory with suitable diagram. 10
7. Write note on (any **two**) : 20
 - (a) GCD Processor
 - (b) Addressing Modes
 - (c) I/O Processor.