

S.E. Sem 4

Con. 5359-08.

Computer Organization & Architecture

RC-6119

Comp & I.T.

(3 Hours)

[Total Marks : 100

10/12/08

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

(2) Attempt any **four** questions from remaining **six** questions.

(3) Assume **suitable data** whenever **necessary**.

(4) Draw **neat diagram** whenever **necessary**.

1. (a) Explain with diagram accumulator-based computer. 10  
(b) Explain IEEE-754 floating point representation format. 10
2. (a) "Booth's Multiplication algorithm is fastest". Justify it with comparing with normal multiplication algorithm. 10  
(b) Explain bus contention with solution to resolve it. 10
3. (a) Explain virtual memory with memory hierarchy. Why it is required ? 10  
(b) Explain Cache memory with different cache organisation scheme. 10
4. (a) Explain different methods for performing I/O data transfer. 10  
(b) Explain Flynn's classification for parallel processing system. 10
5. (a) Explain different method to design control unit of computer and compare it. 10  
(b) Differentiate between RISC and CISC. 10
6. (a) Explain memory interleaving techniques. 10  
(b) Explain different RAID levels. 10
7. Write short notes on (any **two**) :- 20  
(a) PCI bus (b) Page-Segmented Memory (c) TLB.