

Code :R7310201

R7

III B.Tech I Semester(R07) Supplementary Examinations, May 2011
COMPUTER SYSTEM ORGANIZATION
(Electrical & Electronics Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE questions
All questions carry equal marks

1. (a) Discuss about floating - point representation.
(b) Explain the bus structures in computers.
2. (a) What are the logic operations? Explain the hardware implementation of logic micro operations.
(b) Design and explain arithmetic logic shift unit.
3. (a) Explain all the memory reference instructions.
(b) Explain the following briefly
 - i. RISC & CISC
 - ii. Types of interrupts
4. (a) What is meant by control memory ? Explain micro programmed control organization.
(b) What are the address sequence capabilities in a control memory ? Design and explain the branch logic hardware.
5. (a) What is cache memory ? List the three types of mapping procedures and explain any one in detail.
(b) What is virtual memory? Explain address mapping using pages.
6. (a) List the modes of data transfer? Explain about the programmed I/O and interrupt-initiated I/O.
(b) What is meant by priority interrupt? Explain about the daisy chaining method.
7. (a) What is pipelining? Design & explain pipeline for floating point addition and subtraction.
(b) Discuss about array processors.
8. (a) Explain about inter processor arbitration
(b) Discuss about inter processor communication and synchronization.
