Code No. 3308

FACULTY OF INFORMATICS

B.E. 2/4 (IT) (II-Semester) (Supplementary) Examination, January 2011

COMPUTER ORGANIZATION & MICROPROCESSOR

Time : Three Hours] [Maximum Marks : 75

*Answer **ALL** questions of Part A. Answer **FIVE** questions from Part B.*

PART—A (Marks : 25)

1. Explain the purpose of system software. 2
2. Explain distributed arbitration scheme. 3
3. What is memory interleaving ? 3
4. Explain memory hierarchy. 3
5. What is meant by hardwired control ? 3
6. Write about full adder. 2
7. Explain about alignment directives. 2
8. Write about EPROM, EEPROM. 2
9. Write about DMA. 3
10. What are interrupt routines ? 2

PART—B (Marks : 50)

11. (a) Draw and explain functional units of a computer. 4
    (b) Explain performance with respect to :— 6
        (i) Processor clock
        (ii) Instruction set
        (iii) Clock rate
        (iv) Compiler
        (v) Performance Equation
        (vi) Pipelining and Scalar Operations.
12. Explain different mapping functions.
13. Explain in detail about two techniques for fast multiplication with examples.
14. Discuss about address computation and memory segmentation of 8086.
15. Write about branch and loop instructions of 8086.
16. What are the fundamental I/O consideration and explain programmed I/O.
17. Explain about :
    (a) Virtual memory Organisation
    (b) Addressing modes of 8086.