FACULTY OF INFORMATICS
B.E. 2/4 (IT) II Sem. (Suppl.) Examination, January 2012
COMPUTER ORGANIZATION AND MICROPROCESSOR

Time: 3 Hours]   [Max. Marks: 75

Note : Answer **all** questions from Part **A**. Answer **any five** questions from Part **B**.

PART – A   (25 Marks)

1. Give the functional units of Computer.   2

2. Write advantages of RISC.   3

3. Explain PCI.   3

4. Explain performance considerations of the memory.   3

5. Explain the principle 'locality of reference'.   2

6. Differentiate Hardwired control and Microprogrammer control.   2

7. Explain integer division with an example.   3

8. Write the sequence of operations to add the contents of Register RI to the result in register R3.   3

9. Explain Branch instructions.   2

10. Write procedures on modular programming.   2

PART – B   (50 Marks)

11. a) Write short notes on Buses of a computer system.   5
    b) Explain about DMA controller.   5

12. a) Discuss about semiconductor RAM memories.   5
    b) Explain memory hierarchy interms of speed, cost and size.   5

13. Explain floating point numbers and operation with example.   10

14. Write short notes on :

     a) Translation of Assembler instructions.   5

     b) The 8088.   5

15. Explain about programmed I/O interrupt I/O.   (5+5)

16. Write short notes on :

     a) Logical instructions

     b) Assembly process.   (5+5)

17. Write short notes on :

     a) MACROS

     b) Stacks.   (5+5)

2

500