M.C.A. DEGREE EXAMINATIONS: NOVEMBER 2009

Third Semester

P07CA302 MICROPROCESSORS AND APPLICATIONS

Time: Three Hours   **Maximum Marks: 100**

Answer ALL Questions:-

PART A (10 x 2 = 20 Marks)

1. Give the use of accumulator.

2. Why is the data bus bidirectional?

3. What are the modes under which 8086 operates?

4. Explain the functions of BIU and EU.

5. What is memory-mapped I/O?

6. What is the use of TEST?

7. Distinguish the real, protected and virtual modes of 80386.

8. Explain the features of 80386 microprocessor.

9. Define Key debounce technique.

10. How printers are classified based on character generation and character formation**.**

PART B (5 x 16 = 80 Marks)

11.   a)   Discuss 8085 signals and pinout configuration with neat sketch.   (16)

(OR)

       b)   Discuss in detail about 8085 interrupts and instructions related to interrupts. (16)

12.   a)   Explain elaborately about the Addressing modes of 8086.   (16)

(OR)

       b)   i) Discuss in detail about 8086 registers   (6)

             ii)Explain about 8086 String Instructions   (10)

13.   a)   i)Briefly explain Memory interfacing of 8086 MP   (8)

             ii)Explain the instructions used to rotate the content of the accumulator with
                example.   (8)

(OR)

b) Write an assembly language program to compute the following expression:

n!/(n! – r!). Assume n and r values are stored in some known memory locations.

(16)

14. a) Explain in detail about the various functional units of INTEL 80386. (16)

(OR)

b) Discuss about the modes of operations in 80386. (16)

15. a) With a neat block diagram explain the operations of 8279 programmable keyboard / display interface. (16)

(OR)

b) Explain in detail about the INTEL 8275 CRT Controller (16)

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