Register Number: ……..

MCA DEGREE EXAMINATIONS : APRIL/MAY 2014

(Regulation 2009)

Third Semester

MASTER OF COMPUTER APPLICATIONS

MCA511: Microprocessor and its Applications

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

Answer all the Questions:-

PART A (10 x 2 = 20 Marks)

1. What are the limitations of 8085 MPU?
2. Why is microprocessor viewed as a programmable device?
3. What is the use of instruction pointer in 8086?
4. When the overflow flag is set?
5. How DIV instruction is different from IDIV instruction in 8086?
6. Define Programmed I/O.
7. When the 8086 processor is in minimum mode?
8. Write any two differences between 8086 and 8088.
9. What is the use of A1, A2 pins in 8255A?
10. Mention the purpose of priority resolver in 8259A.

PART B (5 x 16 = 80 Marks)

11. a) With a neat diagram, explain the architecture of 8085 microprocessor.

(OR)

b) List and discuss the applications of microprocessor.

12. a) Enumerate the minimum mode operations of 8086 microprocessor in detail.

(OR)

b) (i) Write an ALP Program in 8086 to add the 'N' elements of an array. (8)

(ii) Write an ALP program in 8086 to find the biggest number of given elements. (8)

13. a) How 8086 interfaces with memory? Discuss the procedure of dynamic memories with 8086.

(OR)

b) Write short notes on

(i) 8086 bus cycle (8)

(ii) 8086 address and data bus (8)

14. a) Draw the architecture of Pentium processor and discuss its important features.

(OR)

b) With neat diagram explain the architecture of 8088 coprocessor.

15. a) Explain the different modes of operation of programmable peripheral Interface in 8255.

(OR)

b) Draw and discuss about the internal architecture and signals of the Keyboard/Display Controller 8279.

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