Register Number…………………………

M.C.A DEGREE EXAMINATIONS: NOV/DEC 2012

Third Semester

MASTER OF COMPUTER APPLICATIONS

MCA511: Microprocessors and Applications

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

Answer All Questions:-

PART A (10 x 2 = 20 Marks)

1. What is the need for ALE signal in 8085 microprocessor?

2. What are the different flags in 8085?

3. How the 20 bit effective address is calculated in an 8086 processor?

4. What are the differences between segment and general purpose registers?

5. Why is the 8086 memory set up as 2-byte wide banks?

6. What is the advantage of time multiplexing the address/data bus?

7. List out the advantages of Loosely Coupled Configuration.

8. What are the differences between CALL and INT Interrupt Instructions?

9. Write the features of mode 0 in 8255?

10. Give the operating modes of 8259A.

PART B (5 x 16 = 80 Marks)

11. a) (i) Discuss briefly about the different types of addressing modes in 8085?   (8)

    (ii) Write an assembly program to find greatest between two numbers   (8)

(OR)

    b) (i) With neat block diagram explain the Pin diagram of 8085? Describes the function of

        each pin.   (10)

    (ii) Explain briefly about the 8085 Data Transfer Instructions.   (6)

12. a) Explain the architecture of 8086 with the help of a block diagram?

(OR)

    b) Discuss the following 8086 Instruction sets.

    (i) Program control Instructions   (8)

    (ii) Logical Instructions   (8)

13. a) Explain briefly about the 8086 Pins and Signals.

(OR)

b) (i) Illustrate briefly about Read Bus Cycle. (8)

(ii) Enumerate briefly about the even addresses word transfer? (8)

14. a) Explain the minimum mode of operation of 8086.

(OR)

b) Discuss the architecture of Pentium processor with neat diagram.

15. a) Describe briefly about the programmable interval timer 8253 IC?

(OR)

b) List major components of 8279 Programmable Keyboard/Display interface and explain their function.

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