LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.C.A. DEGREE EXAMINATION – COMPUTER APPLICATIONS

SECOND SEMESTER – NOVEMBER 2016

CA 2806 - MICROPROCESSOR AND ITS APPLICATIONS

Date: 07-11-2016
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

PART-A

Answer ALL Questions: 10*2=20

1. Define microprocessor. Mention its types

2. What are addressing modes? List the types.

3. Define Macro. Write its syntax.

4. Mention the flags of 8086.

5. What is an interrupt? Mention its sources.

6. List the different modes of operation of programmable timer.

7. What is handshaking ?

8. Define DMA.

9. What is a Coprocessor ?

10. Differentiate between microprocessor and microcontroller.

PART-B

Answer ALL Questions: 5*8=40

11.a.) Explain the different components of a microcomputer.

(or)

b.) Write short notes on the program development tools.

12.a.) Explain the flag and processor control instructions.

(or)

b.) Illustrate shift and rotate instructions with examples.

13.a.)Write short notes on various types of interrupts.

(or)

b.) Illustrate the timing diagram of WRITE machine cycle.

14.a.) Illustrate the digital to analog convertor.

(or)

b.) Explain key board interfacing with a neat diagram.

15.a.) Write short notes on EDA tools.

(or)

b.) Explain the features and addressing modes of a microcontroller.

PART-C

Answer any TWO Questions: **2*20=40**

16. a.) Explain in detail the program development steps.

    b.) Explain any ten assembler directives with examples.

17. a.) Illustrate   the priority interrupt controller with a neat diagram.

    b.) Explain in detail about 64K X 1 DRAM.

18. a.) Explain the Math Co – processor with a neat diagram.

    b.) Discuss in detail the stepper motor interface

****