Con. 6278–10. (REVISED COURSE) GT–6543

(3 Hours) [Total Marks : 100

N. B. : (1) Question No. 1 is **compulsory**.

(2) Attempt any **four** questions from the remaining.

(3) Assume suitable address and data if <u>necessary</u>.

(4) Figures to the right indicate **full** marks.

1. A)What is Pipelining . Explain the term with respect to IC 8086. 20

   B)What do you mean by Segment Override prefix. Explain with a example.

   C)Explain the power down mode of IC8051.

   D)Compare RISC and CISC.

2. A)How parameters are passed to a procedure. List & explain the methods of 10

   passing parameters.

   B)Write an 8086 based assembly language program to generate a delay of 100 5

   msec. Assume system frequency to be 10 MHz.

   C)List the procedure to set a TRAP flag of IC8086. 5

3. A)Compare Minimum mode & Maximum mode of 8086. 10

   B)Explain the following Instructions of IC8086 with example:– 10

   (1) DAA (2) INTO (3) JS (4)DAS .

4. A)Explain in detail the Interrupt structure of IC 8051. 10

   B)Write an assembly language program for IC 8051 to find the number of 10

   negative elements from an array of signed numbers.

5. A)Explain the TIMER/COUNTER's of IC 8051. 10

   B)Explain the addressing modes of IC8051 with example. 10

6. A)Interface LCD with IC 8051. Draw the necessary interfacing diagram. 10

   B)Interface ADC with IC 8051. Write the assembly language program & explain. 10

7. Write short notes on any <u>three</u>:- 20

   A) Clock Generator IC 8284. B)8051 register banks and Stack.

   C) Registers of PIC microcontroller. D)Harvard architecture & Pipelining.