Roll No. ..... Total Pages : 2

BT-6/M-20 **36160**

MICROPROCESSOR AND INTERFACING

Paper–EE-304 N

Opt. (II)

Time : Three Hours] [Maximum Marks : 75

Note : Attempt *five* questions in all, select at least *one* question from each unit.

UNIT–I

1. (a) List the various applications of 8086 processor?

(b) Draw and explain the Pin Diagram of 8086. 15

2. Explain the various types of Interrupt of 8086 and classify them on the basis of lowest and highest priority. Explain the two modes of operation of 8086. 15

UNIT–II

3. (a) Explain the following instructions :

(i) LODS.

(ii) CMP.

(iii) MOVSB.

(iv) INC.

(v) LOOPE.

(vi) WAIT.

(b) With the example, explain the arithmetical and logical instructions of 8086 Processor. 15

4. (a) Write an Assembly level program to convert hexadecimal number into decimal number.

(b) Write an assembly language program to sort the numbers in ascending order. 15

UNIT–III

5. (a) Draw the Write Bus Cycle diagram of 8086 CPU working in Minimum mode. What are the changes this diagram will undergo in Maximum Mode Write Cycle?

(b) Describe maximum system mode memory control signals in 8086. 15

6. Give an interface between 8086 Microprocessor and 4 numbers of 64 KB RAMs and 4 numbers of EPROMs. Give a detail memory segmentation with starting and end address of each memory.

Also differentiate between bit organized and byte organized memory organizations. 15

UNIT–IV

7. (a) Analyze the merits and demerits of asynchronous mode of transmission.

(b) Explain about the asynchronous transmission and reception in microcontroller. 15

8. Discuss in detail the interrupt and interrupt service routine in 8086 Processor. 15
