TED (10) – 3070

(REVISION — 2010)

Reg. No..

Signature ....

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2018

MICROPROCESSORS

[*Time* : 3 hours

(Maximum marks : 100)

PART — A

(Maximum marks : 10)

Marks

I   Answer *all* questions in one or two sentences. Each question carries 2 marks.

1. List the segment register used in 8086 processors.

2. Define assembler directive.

3. What is meant by interrupt vector table ?

4. Give two features of Pentium processors.

5. What is the use of DF in 8086 ?   (5×2 = 10)

PART — B

(Maximum marks : 30)

II   Answer any *five* of the following questions. Each question carries 6 marks.

1. Explain how physical address is calculated in 8086 processors.

2. Explain any three data transfer instructions.

3. Explain the types of interrupts in 8086.

4. Compare RISC and CISC processor.

5. What is hyper threading technology ?

6. Explain about memory bank in 8086.

7. Explain the addressing modes of 8086.   (5×6 = 30)

[252]

[P.T.O.

Marks

PART — C

(Maximum marks : 60)

(Answer *one* full question from each unit. Each full question carries 15 marks.)

Unit — I

III   (a)   Draw and explain the functional block diagram of 8086 processor.   9

     (b)   Explain the minimum mode operation of 8086.   6

Or

IV   (a)   Explain the different flags used in 8086.   8

     (b)   Explain maximum mode operation of 8086.   7

Unit — II

V   (a)   Explain any four looping instructions in 8086.   8

     (b)   Write program to multiply two 8 bit Numbers.   7

Or

VI   (a)   Explain any 4 string manipulation instructions.   8

     (b)   Write a program to reverse a string.   7

Unit — III

VII   (a)   Draw the block diagram of 8255.   7

     (b)   Explain about the operating modes of 8255.   8

Or

VIII   (a)   Draw the block diagram of 8257.   7

     (b)   Explain different blocks of 8257.   8

Unit — IV

IX   (a)   Draw and explain the architecture of Pentium processor.   9

     (b)   Explain the Pentium pipeline stages.   6

Or

X   (a)   Explain MMX technology.   6

     (b)   Explain the instruction set of MMX processor.   9