TED (10) – 3070

(REVISION — 2010)

Reg. No. ....

Signature ....

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2017

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 registers in 8086.

2.   List the I/O instructions in 8086.

3.   What is Keyboard debouncing ?

4.   What are the general purpose registers of Pentium processor ?

5.   What are the different types of DMA transfer.   (5×2 = 10)

PART — B

(Maximum marks : 30)

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

1.   Explain various flags in 8086.

2.   Discuss the function performed by 8279.

3.   Write the functions of the following instructions.

   (a)   CALL   (b)   XLAT   (c)   DAA

4.   Draw the internal structure of 8257.

5.   Discuss the general architecture of computer systems.

6.   Explain the method for developing assembly language program.

7.   Explain Hyper threading technology.   (5×6 = 30)

Marks

PART — C

(Maximum marks : 60)

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

UNIT — I

III Draw the internal architecture of 8086 and explain. 15

OR

IV Explain the internal registers and segment registers of 8086 15

UNIT — II

V (a) List and explain data transfer instructions. 10

 (b) Write an assembly language program to find the product of two numbers and explain the usage of MUL instruction. 5

OR

VI Explain different addressing modes of 8086. 15

UNIT — III

VII Draw the block diagram of 8255 and explain the function of each blocks. 15

OR

VIII Draw and explain the block diagram of 8279 and interfacing with 8086. 15

UNIT — IV

IX (a) Compare CISC and RISC processors. 8

 (b) Explain various MMX datatypes and MMX registers. 7

OR

X Explain the architecture of Pentium processor with block diagram. 15