

TED (10) – 5040

Reg. No.....

(REVISION — 2010)

Signature

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

ADVANCED MICRO-PROCESSORS

[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 pointer and index registers of 8086 processor.
2. Define an assembler.
3. Define interrupts.
4. List the data segment registers in 80386.
5. Write four control flags in Pentium processor.

(5×2 = 10)

PART — B

(Maximum marks : 30)

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

1. Explain assembler directives.
2. Write a program to perform sum of 'N' natural numbers.
3. State the features of 8237 DMA controller.
4. Explain hardware interrupts.
5. Explain Real address mode in 80286.
6. Describe register organisation in Pentium microprocessor.
7. Compare Pentium II and Pentium III.

(5×6 = 30)

PART — C

(Maximum marks : 60)

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

UNIT — I

III Draw and explain the architecture of 8086. 15

OR

IV Classify the instructions in 8086 and explain. 15

UNIT — II

V (a) Explain the Intel predefined interrupts in 8086. 8

(b) State the features of 8279 keyboard/Display interface. 7

OR

VI Draw and explain 8259A interrupt controller. 15

UNIT — III

VII (a) Explain operating modes of 80286. 8

(b) Explain memory management in 80386. 7

OR

VIII Draw and Explain architecture of 80386. 15

UNIT — IV

IX (a) Explain superscalar architecture with neat diagram. 9

(b) Describe the flag register of Pentium processor. 6

OR

X Draw and explain pentium architecture. 15