A22-02102

TED (15) - 6041   Reg.No............................

(Revision-2015)   Signature........................

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/ COMMERCIAL PRACTICE   -   APRIL - 2022

ADVANCED MICROPROCESSORS

[Maximum marks: 100]   (Time: 3 Hours)

Marks

PART – A
(Maximum Marks: 10)

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

1. Define pipelining.

2. Define Assembler directive.

3. Name operating modes of Pentium.

4. What are the limitations of single core processor.

5. Define homogeneous multicore processors.   (5 x 2 = 10)

PART – B
(Maximum Marks: 30)

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

1. What are the features of 8086.

2. Describe the registers of 8086.

3. Explain Predefined interrupts

4. Write an ALP to divide a 16 bit by 8 bit number in 8086.

5. Describe paging mechanism in 80386.

6. Explain the features of Pentium.

7. Explain the concept of Multicore processing.   (5 x 6 = 30)

PART – C
(Maximum Marks: 60)
(Answer one full question from each unit. Each full question carries 15 marks)

UNIT –I

III. (a) Explain memory segmentation in 8086.   (7)

   (b) Explain how physical address is generated in 8086.   (8)

OR

IV. (a) Explain maximum mode pins of 8086.   (10)

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(b) Explain flag register of 8086. (5)

UNIT-II

V. (a) Explain Interrupt Vector Table of 8086. (7)

(b) Explain the response of 8086 to an interrupt. (8)

OR

VI. (a) Explain any five addressing modes of 8086. (10)

(b) Write an ALP for 16 bit multiplication in 8086. (5)

UNIT-III

VII. (a) List the features of 80386. (5)

(b) Explain the operating modes of 80386. (10)

OR

VIII. (a) Explain the internal architecture of Pentium Processor. (10)

(b) List the main features of Pentium Pro. (5)

UNIT-IV

IX. (a) Explain Hyperthreading Technology. (8)

(b) Differentiate singlecore and multicore processors. (7)

OR

X. (a) Explain the features of IA processors. (8)

(b) Compare core i3, i5 and i7 processors. (7)