

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

**ADVANCED MICROPROCESSORS**

[Maximum marks: 100]

(Time: 3 Hours)

**PART – A**

(Maximum Marks: 10)

Marks

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)

(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)

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