

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/
COMMERCIAL PRACTICE, NOVEMBER – 2023**

ADVANCED MICROPROCESSORS

[Maximum Marks : 100]

[Time : 3 hours]

PART – A
(Maximum Marks : 10)

Marks

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

1. Write two functional units of 8086.
2. What is the importance of NMI of 8086?
3. Define assembler.
4. List the operating modes of Pentium processor.
5. Define Core.

(5x2=10)

PART – B
(Maximum Marks : 30)

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

1. Draw and explain the flag register of 8086.
2. Enumerate the Instruction sets in 8086.
3. Briefly describe the assembler directives of 8086.
4. Explain the operating modes of 80386.
5. List the main features of Pentium processor.
6. Describe the advantages of multi core technology.
7. Briefly explain single core processor with general block diagram.

(5x6=30)

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 internal architecture of 8086. (12)
(b) List any 3 features of 8086. (3)

OR

- IV.** (a) Draw the maximum mode configuration of 8086. (6)
(b) Explain the pin functions of 8086. (9)

UNIT – II

- V.** (a) Explain different addressing modes of 8086. (8)
(b) Describe the types of interrupt in 8086. (7)

OR

- VI.** (a) Briefly explain Bit manipulation Instruction in 8086. (9)
(b) Write an ALP to add two 16 bit number. (6)

UNIT –III

- VII.** (a) Draw the internal Architecture of 80386. (9)
(b) List the features of Intel 80386. (6)

OR

- VIII.** (a) Describe the internal architecture of Pentium processor. (10)
(b) Discuss any five features of Pentium Pro-processor. (5)

UNIT – IV

- IX.** (a) Briefly explain the internal architecture of Intel core 2Duo. (10)
(b) Discuss the major issues in multi core processor. (5)

OR

- X.** (a) Compare the i3 and i5 processor. (9)
(b) Discuss the features of IA processor. (6)
