

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/
COMMERCIAL PRACTICE, APRIL- 2023**

MICROPROCESSOR AND INTERFACING

[Maximum marks: 100]

(Time: 3 Hours)

PART – A

Maximum marks : 10

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

1. Write any two features of 8086.
2. Define ASCII.
3. List any 2 bit manipulation instructions.
4. Define interrupt.
5. Explain PVAM.

(5 x 2 = 10)

PART – B

Maximum marks : 30

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

1. Define assemblers for 8086.
2. Compare maximum mode & minimum mode in 8086.
3. Explain arithmetic instructions with example.
4. Write a program to subtract two 8 bit numbers.
5. Describe hardware interrupts in 8086.
6. Explain the procedure for interrupt service.
7. Explain multi core 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. Draw the architecture of 8086 processor and explain.

(15)

OR

- IV.(a) Explain segment register in 8086. (9)
(b) Write any 3 addressing modes of 8086. (6)

UNIT-II

- V. (a) Compare Procedure and Macros. (8)
(b) Explain shift and rotate instructions. (7)

OR

- VI. (a) Mention loop instructions in 8086 with example. (8)
(b) Write a program for a 16 bit addition. (7)

UNIT-III

- VII.(a) Explain the architecture of priority interrupt controller. (9)
(b) Explain the interrupts of 8086 in detail. (6)

OR

- VIII.(a) Explain block diagram of 8255. (7)
(b) Draw the architecture of keyboard and display interface. (8)

UNIT-IV

- IX. (a) Describe addressing modes of Pentium. (8)
(b) Mention the features of Pentium. (7)

OR

- X.(a) Explain Superscalar architecture of Pentium. (8)
(b) Explain hyper threading. (7)
