

TED (15/19) – 4151
(Revision – 2015/19)

N22 - 03203

Reg.No.....
Signature.....

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/
COMMERCIAL PRACTICE – NOVEMBER – 2022**

MICROPROCESSORS AND INTERFACING

(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. Define microprocessor
2. List any two string instructions.
3. What is vectored interrupt.
4. List any two features of 80386.
5. What is pipe lining.

(5x2=10)

PART –B
(Maximum Marks : 30)

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

1. Draw the pin diagram of 8086.
2. Describe the flag register in 8086.
3. Explain any three shift and rotate instructions with example.
4. Write a short note on macro.
5. Discuss about priority of interrupts.
6. Explain the BSR mode of 8255.
7. Explain multicore processing.

(5x6=30)

PART – C

(Maximum Marks : 60)

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

UNIT – I

- III.** Explain the architecture of 8086 with a neat diagram. (15)

OR

- IV.** (a) Explain maximum mode configuration in 8086. (9)
(b) Write any three addressing modes of 8086. (6)

UNIT – II

- V.** (a) Write an assembly language program to add two 16 bit numbers. (9)
(b) Explain any three arithmetic instructions with example. (6)

OR

- VI.** (a) List different jump instructions in 8086. (6)
(b) Write an assembly language program to find the factorial of a number. (9)

UNIT –III

- VII.** (a) Explain the internal block diagram of PPI. (9)
(b) Describe the hardware Interrupts in 8086. (6)

OR

- VIII.** (a) Explain Programmable interrupt controller. (9)
(b) Discuss about dedicated interrupts. (6)

UNIT – IV

- IX.** (a) Describe the protected virtual addressing mode of 80386. (9)
(b) List the features of Pentium processor. (6)

OR

- X.** (a) Explain superscalar architecture. (9)
(b) Describe MMX technology. (6)
