

TED (15/19) - 4151  
(REVISION-2015/19)

A22-03638

Reg.No.....

Signature.....

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

**MICROPROCESSORS AND INTERFACING**

(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. List any two operating modes of 80386.
  2. Name any two segment registers of 8086.
  3. Name two hardware interrupts of 8086.
  4. List any two string instructions in 8086.
  5. List the different modes of operation of 8255. (5 x 2 = 10)

**PART - B**

( Maximum Marks: 30 )

- II Answer *any five* questions from the following. Each question carries 6 marks.
1. Explain the control word of 8255 in BSR mode.
  2. Explain the arithmetic instructions of 8086.
  3. List the features of Pentium processor.
  4. Describe the flag register in 8086.
  5. Briefly discuss the 8086 family.
  6. Compare 8086 and 80386.
  7. Write an assembly language program to find the factorial of a number.(5 x 6 = 30)

**PART - C**

(Maximum marks: 60 )

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

**UNIT - 1**

- III (a) Explain the architecture of 8086 with a neat block diagram. (10)
- (b) Compare minimum mode and maximum mode. (5)

**OR**

- IV (a) Explain the addressing modes of 8086 (9)  
(b) Describe the registers of 8086. (6)

**UNIT – 2**

- V (a) Explain shift instructions with example. (7)  
(b) Explain rotate instructions with example. (8)

**OR**

- VI (a) Write short notes on procedures. (6)  
(b) Write an assembly language program to find the factorial of a number. (9)

**UNIT – 3**

- VII (a) Explain programmable Interrupt Controller. (9)  
(b) Discuss about dedicated interrupts. (6)

**OR**

- VIII (a) Explain the BSR mode of 8255 (8)  
(b) Describe the different types of interrupts. (7)

**UNIT – 4**

- IX (a) Explain the concept of hyper threading technology. (6)  
(b) Briefly explain the operating modes of 80386. (9)

**OR**

- X (a) Explain the superscalar architecture of Pentium processor. (8)  
(b) Describe the major issues in multicore processing. (7)

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