TED (15/19)5131
(Revision – 2015/19)

N24 - 8682

Reg. No……
Signature …….

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE, NOVEMBER - 2024

MICROPROCESSOR AND INTERFACING

[Maximum Marks: **100**] [Time: **3** Hours]

PART-A

[Maximum Marks: **10**]

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

1. What is microprocessor?
2. Define procedures and also write down its syntax.
3. Write the priority of interrupts.
4. Write any four features of Pentium processor.
5. List pipeline Hazards. (5 x 2 = 10)

PART-B

[Maximum Marks: **30**]

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

1. Explain the features of 8086.
2. Write a short note on flag registers.
3. List and explain any three data transfer instructions in 8086.
4. Explain different types of interrupts in 8086.
5. Explain the operating modes of 8255.
6. Explain the stages of pipelining.
7. Describe the major issues in 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. Draw and explain in detail the internal architecture of 8086. (15)

OR

IV. a. Explain addressing modes of 8086 with examples. (8)

b. Describe maximum mode configuration of 8086. (7)

UNIT – II

V. a. Explain any four arithmetic instructions with examples. (8)

b. Write an assembly language program to find sum of two numbers. (7)

OR

VI. a. Explain shift and rotate instructions with examples. (8)

b. What is procedure? What are the steps taken by a processor during procedure call? (7)

UNIT- III

VII. a. Explain interrupt response of 8086. (8)

b. Describe interrupt vector table. (7)

OR

VIII. Explain the internal block diagram of programmable interrupt controller 8259. (15)

UNIT - IV

IX. a. Distinguish between real mode and protected modes of 80386. (8)

b. Explain superscalar processors with suitable diagram. (7)

OR

X. a. Explain the concept of multicore processing. (8)

b. Describe MMX technology. (7)

****