TED (15/19) 6041
(Revision-2015/19)

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Reg.No..............................
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DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/ COMMERCIAL PRACTICE, APRIL - 2025

ADVANCED MICROPROCESSORS

[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.   State the function of Zero flag in 8086.

   2.   Define assembler.

   3.   Define PVAM of 80386.

   4.   List limitations of single core processor.

   5.   Define multicore processing.   (5 x 2 = 10)

PART – B
Maximum marks: 30

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

   1.   Explain memory segmentation in 8086.

   2.   Explain register set of 8086.

   3.   Explain interrupts in 8086.

   4.   Explain Assembler directives.

   5.   List any 6 features of Pentium-Pro processor.

   6.   Explain operating modes of 80386.

   7.   List the advantages of multicore technology.   (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.   (a) Explain minimum mode configuration of 8086.   (8)

       (b) Explain internal architecture of Intel 8086 with diagram.   (7)

OR

IV. (a) List main features of Intel 8086. (8)

    (b) Explain functions of HOLD, HLDA, READY pins in 8086. (7)

UNIT – II

V. (a) Explain any 4 types of addressing modes in 8086. (8)

    (b) Write an assembly language program to multiply two 8 bit numbers. (7)

OR

VI. (a) List data transfer instructions in 8086. (8)

    (b) Write an assembly language program to add two 8 bit numbers. (7)

UNIT - III

VII. (a) List the key features of Intel 80386. (8)

    (b) Explain paging mechanism in 80386. (7)

OR

VIII. (a) List the main features of Pentium processor. (8)

    (b) Explain internal architecture of Pentium processor with diagram. (7)

UNIT – IV

IX. (a) Explain single core and multicore processors with block diagram. (8)

    (b) Explain homogeneous and heterogeneous multicore processors. (7)

OR

X. (a) Explain internal architecture of Intel core 2 duo. (8)

    (b) Compare core i3, i5 and i7 processors. (7)