

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/  
COMMERCIAL PRACTICE, NOVEMBER-2021**

**ADVANCED MICRO PROCESSORS**

[Maximum marks: 75]

(Time: 2.15 Hours)

**PART – A**

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

1. List any two main features of 8086.
2. List external interrupt pins of 8086.
3. List operating modes of Pentium processor.
4. Define core.
5. Define turbo boosting in intel processors. (3 x 2 = 6)

**PART – B**

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

1. Discuss how physical address is generated in 8086.
2. Discuss the concept of segmentation in 8086, and its advantage.
3. Discuss how 8086 responds to an external interrupt signal.
4. Discuss any three 8086 arithmetic instructions with examples.
5. Discuss superscalar architecture of Pentium processor.
6. Discuss the real addressing mode of operation of 80386.
7. Differentiate i3,i5 and i7 processors. (4 x 6= 24)

**PART – C**

(Answer **any of the three units** from the following. Each full question carries 15 marks)

**UNIT –I**

- III. (a) Discuss the functions of pins MN/MX, ALE, BHE, and RESET in 8086. (8)  
(b) Draw block diagram of BIU section and write its operation. (7)

OR

- IV.(a) Draw and explain minimum mode configuration of 8086. (8)

(b) Draw flag register of 8086 and name all flags. (7)

### UNIT-II

V. (a) Explain any four addressing modes for accessing memory with examples. (8)

(b) Write an 8086 ALP with assembler directives to add two sixteen bit numbers and store result in memory. (7)

### OR

VI. (a) Explain any four data definition directives with examples. (8)

(b) Discuss the pre defined interrupts in 8086. (7)

### UNIT-III

VII. (a) Discuss address translation in protected mode without paging in 80386. (8)

(b) List main features of Pentium pro processor. (7)

### OR

VIII.(a) Draw block diagram and explain internal architecture of 80386 processor. (10)

(b) Compare segmentation and paging in 80386. (5)

### UNIT-IV

IX. (a) Differentiate single core and multi core processors with block diagram. (8)

(b) Discuss the concept of Hyper threading technology. (7)

### OR

X. (a) Compare homogeneous and heterogeneous multicore processors. (8)

(b) List advantages of multi core technology. (7)

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