C09-EC-**404**

3470

BOARD DIPLOMA EXAMINATION, (C-09)

MARCH / APRIL - 2019

DECE - IV SEMESTER EXAMINATION

MICROPROCESSORS

Time : **3** Hours] [Total Marks : **80**

PART - A **3×10=30**

Instructions : *(1) Answer **ALL** questions.*
*(2) Each question carries **THREE** marks.*
(3) Answer should be brief and straight to the point.

1 Explain cache memory.

2 Define micro and macro operations.

3 List the general purpose registers of 8086 and state their use.

4 Explain the instruction queue of 8086.

5 State the need of memory segmentation in Intel 8086.

6 Classify instruction set of 8086.

7 List any six addressing modes of 5086.

8 Write the procedure for executing an assembly language program with an assembler.

9 Describe the instruction level parallelism.

10 List any six features of 80286.

PART - B 10×5=50

Instructions : *(1) Answer any **FIVE** questions.*
*(2) Each question carries **TEN** marks.*
(3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.

11 (a) Draw the block diagram of digital computer and briefly explain function of each block. **5+5**
(b) Draw the block diagram of accumulator based CPU.

12 (a) Explain the instruction format, **4+6**
(b) Explain zero address, one address, two address instructions with one example for each.

13 (a) Write any five differences between 8 bit and 16 bit microprocessors. **5+5**
(b) Explain the concept of parallel processing.

14 (a) Explain the generation of 20 bit physical address with an example. **5+5**
(b) What is interrupt? Explain interrupt response of 8086.

15 Explain sequence of execution of subroutine or procedure programming.

16 Write an assembly language program to move a block of `N' 8-bit number at location SOURCE to another memory area starting at DEST.

17 Explain the architecture of 80486 with neat diagram.

18 Explain the architecture of Pentium Processor with neat diagram.
