C14-CM-404/C14-IT **-404**

4452

BOARD DIPLOMA EXAMINATION, (C-14)

MARCH/APRIL-2019

DCME - FOURTH SEMESTER EXAMINATION

MICROPROCESSORS

Time: 3 Hours Max.Marks: 80M

PART-A

10x3=30M

Instructions: 1) Answer **all** questions.
2) Each question carries **three** marks.
3) Answer should be brief and straight to the point and shall not exceed five simple points.

1) Define fetch cycle and execution cycle? 1½+1½=3M

2) Write a short note on flag Register of 8086 micro processor?

3) Differentiate between HLt and WAIT instructions? 1½+1½=3M

4) Draw the generalized instruction format.

5) Write a short note on 8086 vectored and non vectored interrupts? 1½+1½=3M

6) List the modes of operation of 8259A.

7) Differentiate between NEAR and FAR procedures. 1½+1½=3M

8) Define Half-duplex and full-duplex transmissions?

9) List the various peripherial interfacing devices used in computer system.

10) List the operating modes of 8086.

PART-B

5x10=50M

Instructions: 1) Answer any **five** questions.
2) Each questions carries **ten** marks.

11) a) Draw the timing diagram for read operation in minimum mode and explain? 5M

b) Define flow chart and explain the symbols used in flow chart. 5M

12) List and explain SHIFT and ROTATE instructions. 10M

13) a) List any six memory related adressing modes and explain. 6M

b) Expalin PUSH and POP instructions along with the role of stack pointer(SP). 2+2=4M

14) a) What is the purpose of 8259A Interrupt Mask Register?

b) Explain the Interrupt handling sequence steps in 8086 with 8259A interface. 7M

15) Write an assembly language program to find out no. of positive, negative numbers from a given series of signed numbers. 10M

16) Draw the functional block diagram of 8257 and explain. 10M

17) Draw the functional block diagram 8251 USART and explain the function of each block. 10M

18) Draw the internal architecture of 80486 and explain the function of each block. 10M

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