



C16-CM/IT-404

6433

BOARD DIPLOMA EXAMINATION, (C-16)  
MARCH/APRIL—2018  
DCME—FOURTH 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) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

1. Define Microprocessor and Microcomputer.
2. Write the functions of ALE and MN/MX pins of 8086.
3. Classify the instructions set of 8086.
4. Write short notes on PUSH and POP instructions of 8086.
5. List the types of interrupts.
6. Write a short note on Read/Write control logic of 8259.
7. State the Conditional and Loop statements of 8086.
8. List any three features of 80486.
9. Write a short note on 8051 modes of operation.
10. Write about 8051 microcontroller ports.

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**PART—B**

10×5=50

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

11. (a) Draw 8086 functional block diagram. 5  
(b) Explain interrupt handling process in 8086. 5
12. Explain various addressing modes of 8086 with example.
13. Explain any five data transfer and arithmetic instructions of 8086.
14. Draw and explain functional block diagram of 8259 interrupt controller.
15. Write an assembly language program to find square of 8-bit number using parameter passing to procedure.
16. (a) List the features of Pentium processor P-II. 5  
(b) Differentiate between 80286, 80386 processors. 5
17. Draw and explain functional block diagram of 8051 microcontroller.
18. Explain in detail about counters and timers in 8051 microcontroller.

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