



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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