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C16-EC-403**6437**

BOARD DIPLOMA EXAMINATION, (C-16)
OCTOBER/NOVEMBER—2023
DECE – 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. List the general purpose registers of 8085.
2. Define opcode and operand of an instruction.
3. State the need of bus control logic.
4. List different flags of 8086.
5. Define PUSH and POP instructions.
6. List any three arithmetic instructions of 8086.
7. List any three assembler directives of 8086.
8. State the need of subroutine.
9. State the features of 80486 microprocessor.
10. What is PVAM mode in 80286?

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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 criterion for valuation is the content but not the length of the answer.

- 11.** Explain the working of multiplexing and demultiplexing of address bus and data bus in 8085.
- 12.** Explain the concepts of sequential, parallel and pipeline processing.
- 13.** Draw and explain the pin diagram of 8086.
- 14.** Explain the following instructions :
- (a) CALL [8100H]
 - (b) STC
 - (c) NEG [8200H]
 - (d) WAIT
- 15.** Explain any five addressing modes of 8086 with examples.
- 16.** Write a program to subtract two 32-bit numbers. The first 32-bit number is stored in the locations 9100H, 9101H, 9102H and 9103H. The second number is stored in the locations 9104H, 9105H, 9106H and 9107H. Store the result in the locations 9108H, 9109H, 910A and 910BH.
- * **17.** Explain the memory organization in 80386.
- 18.** (a) State the features of Pentium microprocessor.
(b) Compare RISC and CISC.

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