6437

BOARD DIPLOMA EXAMINATION, (C-16)

MAY/JUNE—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 any three features of 8085 microprocessors.

2.   Define execution cycle and instruction cycle.

3.   State the need of memory segmentation.

4.   Mention the function of instruction pointer.

5.   List different instructions of 8086 based on their functions.

* 6.   List any three arithmetic instructions of 8086.

7.   What is the need of subroutine?

8.   What are editor and linker?

9.   List any three features of 80486.

10.   What is pipelining?

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. Draw and explain the functional block diagram of 8085. 10

12. Draw the pin diagram of 8086 microprocessor and state the function of each pin. 10

13. *(a)* Explain the generation of 20-bit physical address in 8086 with an example. 5

(b) List the instructions which affecting flags of 8086. 5

14. Explain any five addressing modes of 8086 with examples. 10

15. Explain any five string manipulation instructions of 8086. 10

16. Write an 8086 assembly language program to find factorial of the given number 05 H. 10

17. *(a)* Compare RISC and CISC. 5

(b) Explain the memory management of 80286 microprocessor in protected mode. 5

18. Explain the architecture of 80386 with a neat diagram. 10

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