C09-EC-**404**

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BOARD DIPLOMA EXAMINATION, (C-09)
MARCH/APRIL—2021
DECE - FOURTH SEMESTER EXAMINATION
MICROPROCESSORS

Time : 3 hours]   [*Total Marks* : 80

PART—A   4×5=20

Instructions :   (1) Answer *any* **five** questions.

(2) Each question carries **four** marks.

(3) Answers should be brief and straight to the point and shall not exceed five simple sentences.

1. Define micro and macro operations.

2. Define the following terms :
(i) Operation code
(ii) Operand

3. Compare 8-bit and 16-bit microprocessors.

4. List the features of 8086 microprocessor.

5. List the flags of 8086 microprocessor.

6. Draw the generalised instruction format of 8086.

7. Classify the instruction set of 8086.

8. List any four data transfer instructions of 8086.

9. List the features of 80286 microprocessor.

10. List the features of Pentium microprocessor.

PART—B

15×4=60

Instructions : (1) Answer *any* **four** questions.

(2) Each question carries **fifteen** marks.

(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.

11. Draw the block diagram of digital computer and state the function of each block.

12. Draw the block diagram of accumulator based CPU and state the function of each unit.

13. Draw the functional block diagram (internal architecture) of 8086 microprocessor.

14. Draw the pin diagram of 8086 microprocessor.

15. Explain the addressing modes of 8086 microprocessor with examples.

16. Explain any five data transfer group of instructions of 8086.

17. Compare RISC and CISC processors.

18. Compare the features of 80286 and 80386 processors.

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