6437

BOARD DIPLOMA EXAMINATION, (C-16)

JUNE/JULY—2022

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.

1. Define the term op-code and operand with example.

2. List any three features of 8085 microprocessor.

3. State the importance segment registers of 8086 microprocessor.

4. List the types of flags of 8086 microprocessor.

5. Write the generalized instruction format of 8086 microprocessor.

6. List any three data transfer instructions of 8086 microprocessor.

7. List the different types of LOOP statements in 8086 programming.

8. State the need of subroutine.

9. State any three features of 80286 microprocessor.

10. Compare RISC and CISC.

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PART—B

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 microprocessor. **10**

12. *(a)* Explain general purpose registers of 8086 microprocessor. **10**

    (b) Compare 8-bit and 16-bit microprocessor. **5+5**

13. Draw and explain the timing diagram of memory read cycle in maximum mode operation of 8086 microprocessor. **10**

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

15. *(a)* Explain any three string manipulation instruction of 8086. **6**

    (b) Explain any two instruction effecting flags of 8086. **4**

16. Explain the use of various assembly language development tools like editor, assembler, linker, locator and debugger. **10**

* 17. *(a)* Explain operating modes in 80386 microprocessor. **5**

    (b) Explain memory organization in 80386 microprocessor. **5**

18. Draw and explain the architecture of 80486 microprocessor. **10**

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