

6437

BOARD DIPLOMA EXAMINATION, (C-16) OCTOBER—2020 DECE—FOURTH SEMESTER EXAMINATION

MICROPROCESSORS

Time: 3 hours [Total Marks: 80

PART—A

 $3 \times 10 = 30$

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.** What is the difference between LDA and STA instructions of 8085 microprocessor?
- **2.** List any six features of 8085 microprocessor.
- **3.** State the need of memory segmentation in 8086.
- **4.** List various interrupts of 8086.
- **5.** Draw the generalized instruction format of 8086.
- **6.** List any three instructions which affect flags of 8086.
- **7.** Explain Return instruction of 8086 briefly.
- **8.** List any six assembler directives of 8086.
- **9.** List any six features of pentium processor.
- **10.** List any three features of RISC processors.

10

| Instructions | : (1) | Answer | any | five | questions. | |
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- (2) Each question carries ten marks.
- (3) Answers should be comprehensive and the criteria for valuation are the content but not the length of the answer.

| 11. | (a) Draw the pin diagram of 8085.(b) List different registers in 8085 and state their function. | 4 6 | | | | |
|-----|--|--------|--|--|--|--|
| 12. | Explain the concepts of sequential processing, parallel processing and pipelining. | 10 | | | | |
| 13. | Draw and explain the functional block diagram of 8086. | | | | | |
| 14. | Explain addressing modes of 8086 with examples. | | | | | |
| 15. | Explain any five data transfer instructions of 8086. | 10 | | | | |
| 16. | (a) Write an assembly language program of 8086 to perform addition of two 16-bit numbers.(b) List assembly language development tools and explain | 4 | | | | |
| | the use of any two of them. | 6 | | | | |
| 17. | Explain the operating modes of 80386. | 10 | | | | |
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18. Explain the architecture of 80286 with a neat diagram.