



C09-EC-404

3470

**BOARD DIPLOMA EXAMINATION, (C-09)
MARCH/APRIL—2014
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. What is accumulator? State its importance in the CPU.
2. Define micro and macro operations.
3. Write the need of bus control logic.
4. List the general-purpose registers of 8086 and state their use.
5. Write need for interrupt.
6. List any six data transfer instructions of 8086.
7. Write the generalized instruction format of 8086.
8. Describe any three assembler directives.

* 9. Write any three features of RISC processors.

10. List any six features of 80286.

PART—B

10×5=50

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

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

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

11. Explain zero-address, one-address, two-address and three-address instructions with one example each.

12. (a) Explain associative memory. 6

(b) State the advantages of virtual memory. 4

13. Explain sequential processing, parallel processing and pipeline processing.

14. Describe block diagram and bus cycle timing diagram of 8086 minimum mode.

15. Explain subroutine or procedure programming.

16. Write an assembly language program to find the smallest of N 8-bit number stored from SOURCE. Store the smallest number at RESULT.

* 17. Explain the architecture of Pentium Processor with neat diagram.

18. Explain pipelining and instruction level parallelism.
