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C09–EC–**404**

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BOARD DIPLOMA EXAMINATION, (C–09)

OCT/NOV—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. Draw the block diagram of digital computer.

2. Explain the floating-point representation with example.

3. List 6 flags in 8086.

4. Write need for interrupt.

5. List the general purpose registers of 8086 and state their uses.

6. Explain any two addressing modes with example.

7. Describe any three logic instructions of 8086.

8. Write the procedure for executing an assembly language program with an assembler.

9. Write any three differences between 80386 and 80486.

10. Write any three features of CISC processors.

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. *(a)* Explain the instruction format.

(b) Explain zero-address, one-address and two-address instructions with one example for each.

12. *(a)* Explain cache memory organization.

(b) Explain memory interleaving.

13. Write the features of 8086 and draw the internal architecture of 8086 microprocessor.

14. *(a)* Write any five differences between 8-bit and 16-bit microprocessors.

(b) Explain the concept of pipeline processing.

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

16. Explain subroutine or procedure programming.

17. *(a)* Explain the operating modes of 80286.

(b) Explain the memory management of 80286.

18. Explain the architecture of 80386 with neat diagram.

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