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Total No. of Questions—12]

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[3762]-206

S.E. (Comp. Engg.) (II Sem.) EXAMINATION, 2010

MICROPROCESSOR AND INTERFACING TECHNIQUES

(2008 COURSE)

Time : Three Hours

Maximum Marks : 100

N.B. :- (i) Answer *three* questions from Section I and *three* questions from Section II.

(ii) Answers to the two Sections should be written in separate answer-books.

(iii) Neat diagrams must be drawn wherever necessary.

(iv) Use of logarithmic tables, slide rule, Mollier charts, electronic pocket calculator and steam tables is allowed.

(v) Assume suitable data, if necessary.

SECTION I

1. (a) Draw and explain internal architecture block diagram of 8086 μ p. [10]

(b) Explain even and odd memory banks along with $\overline{\text{BHE}}$ and AO signals of 8086 μ p. [6]

P.T.O.

Or

2. (a) Explain Memory Read Cycle in minimum mode of 8086 μ p using timing diagram. [6]
- (b) How is Logical address converted into Physical address ? Explain with suitable examples. [6]
- (c) Differentiate between I/O mapped I/O and memory mapped I/O. [4]

3. (a) What is an addressing mode ? Explain the following addressing modes with suitable examples :
- (i) Indirect addressing mode
 - (ii) Implicit addressing mode
 - (iii) Immediate addressing mode. [8]
- (b) Write an ALP for converting 4 digit BCD number into its equivalent HEX. Accept BCD input from user and display result on console. Write appropriate comments. [8]

Or

4. (a) Explain the following Assembler directives :
- (i) MODEL
 - (ii) ENDP and ENDM
 - (iii) EXTRN
 - (iv) PTR. [8]

