QP Code : 1882

Time 3 Hrs   Max. Marks 100

Note: Question no. 1 is compulsory.
        Answer any four from Q.2 to Q.7   Dec 15
        All questions carry equal marks.

Q.1 A   Design 8086 microprocessor based system with following specification   10
        a) Microprocessor 8086 working at 10 MHz
        b) 64 KB EPROM using 16 KB chips
        c) 8 KB SRAM using 4 KB chips
        Explain the design.
    B   Explain memory organisation of PIC 18.   10

Q.2 A   Discuss different instruction formats of PIC 18.   10
    B   Draw timing diagram for read operation in minimum mode of 8086 and explain it. 10

Q.3 A   Interface 8087 NDP with 8086 microprocessor and explain their communication.   10
    B   Explain different data transfer modes of 8257 DMA controller.   10

Q.4 A   What is addressing mode and explain data related addressing modes of 8086
        microprocessor.   10
    B   Draw port structure of PIC 18 and explain.   10

Q.5 A   Explain interrupts structure of 8086 microprocessor.   10
    B   List different addressing modes of PIC 18 with examples.   10

Q.6 A   Write assembly language program for 8086 microprocessor to find out largest
        elements out of 10 elements.   10
    B   With the help of neat diagram explain interfacing of six, 7 segment displays with PIC 18. 10

Q.7 A   Write note on   20
        i) Cascading of three 8259s
        ii) Assembler directives
        iii) Bus controller 8288
        iv) Features of 80386

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