Sem-V   Microprocessors

Con. 5800–10.   (REVISED COURSE)   B7om   GT-6738

CAS

(3 Hours)   3/12/10   [Total Marks : 100]

N.B. : (1) Question No. 1 is **compulsory**.
(2) Attempt any **four** questions out of remaining **six** questions.
(3) **Figures** to the **right** indicate **full** marks.
(4) Assumptions made should be **clearly** stated.

1. (a) Explain Banking in case of 8086.
   (b) What is role of Bus arbitor in multiprocessor ?   5
   (c) Distinguish between Bus Interface Unit and Execution Unit of 8086.   5
   (d) Explain different addressing modes of 8085 with suitable example.   5
                                                                                       5

2. (a) Explain interrupt in 8086 in detail.
   (b) Draw the interface of 8086-8087 and explain its working.   10
                                                                                       10

3. (a) Explain different string instructions of 8086.
   (b) List and explain different data types supported by 8087 NDP.   10
                                                                                       10

4. Design 8086 microprocessor based system in minimum mode for following 20
   specifications :—
         (i)   CPU with 8 MHz clock
         (ii) 128 KB EPROM using 32 KB devices
         (iii) 64 KB RAM using 16 KB devices
         (iv) Two 8 bit output port in handshaking mode.
   Draw neat schematic and memory and I/O map.

5. (a) Write a program to find out area of circle using 8086 and 8087.
   (b) Explain architecture of 8085.   10
                                                                                       10

6. (a) Explain different priority resolving schemes applicable to multiprocessing 10
       systems.
   (b) Draw Timing diagram of :—
         (i) IN 80h   10
         (ii) MOV, M, A.

7. (a) Explain 8086 family maximum mode operation with timing diagram.
   (b) Distinguish between maximum mode and minimum mode.   16
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