

SE205 - Microprocessor and Microcontrollers

P. Pages : 2

Time : Three Hours



GUG/W/23/13915

Max. Marks : 80

- Notes :
1. All questions carry marks as indicated.
 2. Assume suitable data wherever necessary.
 3. Illustrate your answers wherever necessary with the help of neat sketches.

1. a) Explain the function of following register in 8085 UP. 8
i) Program counter ii) Stack pointer
iii) Instruction decoder.

- b) Explain the following instructions of UP 8086. 8
i) ADD AL, F0H ii) XCHG BX, CX
iii) DAA iv) DIV

OR

2. a) Draw and explain HW interrupt structure of UP 8085. 8

- b) Show the interfacing of two ICs of 4Kx8 RAM & two ICs of 16Kx8 EPROM with 8086.
Give complete memory map and also show generation of CS signals. 8

3. a) Draw and explain block diagram of Intel 8255 PPI in detail. 8

- b) Explain the IC 8254 CWR format and set up the 8254 as a square wave generator with
1 ms period if the input frequency to the 8254 is 1 MHz. 8

OR

4. a) Interface 8251 USART with UP 8085 such that the port addresses start from 80H.
Draw the complete interfacing diagram. 8

- b) Show the interface of 8-bit DAC with up 8086 and write a program to generate ramp wave
at output of DAC. 8

5. a) Draw and explain flag register of Pentium. 8

- b) Explain the following pins of UP 80486. 8
i) BLAST ii) BREQ
iii) KEN iv) PCHK

OR

6. a) Write short note on. 8
i) Paging ii) Segmentation
iii) Cache memory

- b) Draw and explain the architecture of UP 80386. 8

