

Unit - III

3. a) Explain macros and subroutines. (8)
b) Explain the interrupt structure of 8085 MPU with suitable diagram. Also classify the different types of interrupts available with 8085 MPU. (8)

OR

3. a) Explain the instructions SIM and RIM and illustrate how to use them for 8085 interrupts. (8)
b) Write short notes on 8259 interrupt controller. (8)

Unit - IV

4. a) Write short note on DMA controller 8257. (8)
b) Design a square wave generator with a pulse width of $100 \mu s$ by using 8054 timer. Set the timer in mode 3. The clock frequency is 3 MHz (8)

OR

4. a) Draw the command word and mode word format of 8251 USART. Also explain its transmitter and receiver section. (8)
b) i) Write short note on Rs 232 c bus standards. (4)
ii) Compare Rs 422 A and Rs 423 A serial data standards. (4)

Unit - V

5. Write short notes on
i) Memory segmentation in 8086
ii) Flags of 8086
iii) Block diagram of 8086
iv) Comparative study of 8086 and 8088 (16)

OR

5. a) write short notes on:-
i) Dual core processor
ii) Features of pentium processor. (8)
b) Explain the various data types supported by MMX architecture. (8)