

## Unit-3

### Microprocessor and its Applications (CS313)

#### Question Bank

1. What is the difference between memory mapped I/O scheme and I/O mapped I/O scheme.
2. What is the difference between Programmed data transfer scheme and DMA data transfer scheme?
3. Differentiate between synchronous and asynchronous data transfer scheme?
4. What is the advantage of using interrupt driven data transfer scheme over asynchronous data transfer scheme?
5. Differentiate between Burst mode and cycle stealing DMA data transfer scheme?
6. Write short note on modes of Intel 8255 (Programmable DMA controller).
7. Design the control word of 8255 when the ports of Intel 8255 are defined as bellow.  
Port A- input  
Mode of port A- mode1  
Port B-Output  
Mode of port B-mode1  
Remaining pins of port C(PC6 & PC7)-input
8. Design the control word of 8255 when the ports of Intel 8255 are defined as bellow.  
Port A- Bidirectional  
Port B-Input  
Mode of port B-mode1
9. What is sequence of operation performed by DMA Controller (Intel 8257)
10. Draw and explain the pin diagram of by DMA Controller (Intel 8257)
11. Write the features of Intel 8259. Draw and write the working of different registers of 8259.
12. Draw and explain the pin description of Intel 8251.
13. Write the features of Intel 8279.