

Microprocessor and Interfacing

Assignment: 3

1	Explain microprocessor initiated operation and bus organization in detail.
2	Explain internal and externally initiated operation of 8085 in detail.
3	What demultiplexing? How demultiplexing is done in microprocessor 8085 for address and data bus? Explain with neat diagram.
4	Discuss in detail memory mapped I/O and I/O mapped I/O.
5	What are the control signals? How do we generate them? Give their importance.
6	What are the control signals? generate them using decoder. Give their importance.
7	Answer the following questions in brief. 1. What is a microprocessor? List its internal sections with the major functions. 2. What is system bus? Give its role. 3. Why does opcode fetch cycle need 4-T states although it is similar to memory read cycle?
8	Illustrate the steps and the timing of data flow when the instruction code 0100 1111 (4FH –MOV C, A), stored in location 2005H, is being fetched.
9	Draw and explain the timing diagram of instruction MVI A,32H. Find execution time required, if clock frequency is 2MHz.
10	How many machine cycles are required to execute LDA 3050h instruction? Draw complete timing diagram with each machine cycle and briefly explain it.
11	Write a program to count continuously in hexadecimal from FFH to 00H in a system with 0.5 us clock period.
12	Explain the Timing Diagram of Memory Write Cycle.
13	Draw and explain timing diagram of OUT 01H
14	Draw and explain timing diagram of IN 01H
15	Explain the execution of the instruction STA 2050H with neat timing diagram.
16	Find out address range (memory map) of following memory with explanation in detail.



