Microprocessor and Interfacing

Assignment: 5

1	Write a detailed note on Interrupts of 8085.
2	What are interrupts? List and explain the interrupt available in microprocessor 8085?
3	What are the vectored interrupts? Distinguish between the hardware & software interrupts.
4	Explain RST (Restart) instruction.
5	Write short note on SIM and RIM instruction.
6	What is interrupt? List the interrupts available in 8085 Microprocessor and explain in brief. Also discuss the function of SIM and RIM instructions.
7	Draw and explain block diagram of Programmable Interrupt Controller 8259.
8	Draw and explain logic block diagram of 8279 (Programmable Keyboard/Display IC).
9	Draw and explain logic block diagram of 8255 (Programmable Peripheral IC).
10	Explain the working of 8255 in various modes.
11	What is the function of Programmable Timer Counter IC? Explain its control word format and different modes of working.
12	Draw 8253 block diagram & explain its control word format.
13	What is USART? Draw the functional Block diagram of 8251.
14	Write a program for 8085 to generate a square wave with period of 500µs. Use bit D_0 to output the square wave. The system clock period is 325ns.
15	Answer following questions. 1. How many address lines are necessary on the chip of 2K byte memory? 2. If the memory chip size is 1024 X 4 bits, how many chips are required to make up 2K bytes of memory? 3. The memory map of a 4K byte memory chip begins at the location 2000 H. Specify the address of the last location on the chip and the number of pages on the chip. 4. The memory address of the last location of an 8K byte memory chip is FFFF H. Find the starting address. 5. The memory address of the last location of a 1 K byte memory chip is given as FBFF H. Specify the memory map.