Microprocessor **Assignment#4** **B.Sc. CSIT**

1. Explain instruction cycle, machine cycle and T-States. Draw timing diagram of STA instruction. Make necessary assumptions.
2. Explain instruction cycle, machine cycle and T-states. Draw timing diagram of IN instruction with brief description.
3. What is instruction cycle? Draw timing diagram of MOV A, B. Make necessary assumptions.
4. Explain instruction cycle, machine cycle and T-states. Draw timing diagram of fetch and execute of LDA instruction with brief description.
5. Differentiate between instruction cycle and machine cycle. Draw timing diagram of MVI A, 32 H.
6. What do you mean by Isolated I/O? Explain basic DMA operation in brief.
7. Differentiate between interrupt based I/O and DMA based I/O. Explain DMA operation in brief.
8. Differentiate between vectored and non-vectored interrupts. Where and how 8259 PIC can be used to handle interrupts.
9. What is the significance of interrupt masking? Differentiate between vectored and polled interrupt.
10. Write short note on:
    a. DMA
    b. Interrupts
    c. Interrupt Masking

Deadline: 2081/04/20