**Computer Organization and Architecture**

ASSIGNMENT 5

1. Explain the working of DMA controller with help of suitable diagrams.
2. Write short notes on- a) I/O Ports b) I/O Interface c) I/O channels & Processor
3. Discuss the Synchronous and Asynchronous communication with suitable examples.
4. Discuss the various types of Interrupts and Exception in computer organization with suitable examples.
5. Explain Modes of data transfer: Programmed I/O, Interrupt initiated I/O.
6. Why are the read and write control lines in DMA bidirectional?
7. Write the difference between serial and parallel communication. Explain difference between vectored and non- vectored interrupts.
8. Explain CPU - IOP Communication. Draw the flowchart showing the sequence of operations to be carried out.
9. What is FIFO buffer? Draw and explain the circuit diagram of 4X4 FIFO buffer.