Unit-4	
1.	Explain in detail two ways of designing control unit
2.	What are the flag bits? Give the meaning of each and use of them in programming.
3.	Write a note on: Adress Sequencing
4.	Explain Instruction format for microinstruction in detail
Unit -5	
1.	Explain various types of interrupts.
2.	Compare RISC with CISC architecture
3.	Explain four types of instruction formats.
4.	Explain various addressing modes in detail
5.	Write a note on general purpose register organization
6.	What are various data manipulation and data transfer instructions?
7.	Describe the below addressing modes with examples a. Implied Mode b. Immediate Mode c. Auto increment and Auto decrement Mode d. Direct and Indirect Address Modes
8.	Explain the three categories of computer instructions such as data transfer instructions, data manipulation instructions and program control instructions.
9.	Write a program to evaluate the arithmetic statement: X=(A+B)*(C+D) i. Using a general register computer with three address instruction. ii. Using a general register computer with two address instruction iii. Using an accumulator type computer with Zero address instruction
Unit-6	
1.	Explain four segment instruction pipelines.
2.	Write a note on Flynn's taxonomy
3.	What is arithmetic pipeline?
4.	Explain Instruction pipeline in detail
5.	Explain three segment instruction pipelines in detail
6.	Write a note on: Vector processing
Unit-7	
1.	Explain booth's multiplication algorithm with a flowchart.
2.	What is division process of two signed bit numbers?
3.	Draw a neat diagram for hardware implementation of booth's multiplication algorithm and explain.
4.	Explain Floating Point Arithmetic with an example
Unit-8	
1.	With a neat diagram, explain the working principle of DMA.
2.	Write a note on input-output interface.
3.	What is asynchronous data transfer?
4.	List modes of data transfer in I/O device. Explain any one mode in detail.
5.	Write a note on: serial communication
Unit-9	
1.	Explain memory hierarchy in computer system with a diagram.
2.	Write a note on: Auxiliary memory
3.	Define Random Access Memory and types of RAMs present?
4.	Discuss virtual memory organization
5.	What is static RAM? Differentiate SRAM and DRAM
6.	Explain how read and write operations are carried out in cache memory