

Class: Subject Teacher's Name	MONTH	TOPICS/Chapters to be covered	Academic Activities to be organized	Topic of Assignments Test to be given to the student
Data Structure  MANJEET KAUR	1st week	Introduction to Data Structures: Elementary data organization	1. Brainstorming on different Data Structures	Assignment1: Explain Types of Data structure Recursion
	2nd week	Data structure operations, Algorithm complexity and time-space tradeoff,		
	3rd week	Classification of data structures.		NIL
	4th week	String Processing: Storing strings, String operations, Pattern matching algorithms		
	5th week	Arrays: Linear arrays, Operations on arrays, Multidimensional arrays, Storage of arrays, Matrices, Sparse		
	6th week	Linked Lists: Representation of linked list in memory, Traversal, Searching, Insertion, Deletion,	2. GD on different Queue methods	Assignment2: Explain Functions of graphs
	7th week	Sorted Linked List, Header List, Two – Way List;		
	8th week	Stacks		
	9th week	Linked and Array representation of Queues	3. Brainstorming on Different Control structures	
	10th week	Dequeues		
	11th week	Priority Queues		

	12th week	Operations on stacks and queues.	NIL	Class Test: Class test on link list
	13th week	Applications of stacks: Recursion, Polish Notation, Quicksort.		
	14th week	Trees: Binary Trees, Representation of binary trees in memory, Threaded Binary Trees, Balanced Tree, Different tree traversal algorithms,	NIL	
	15th week	Binary Search Tree: Searching, Insertion, and deletion in a Binary search tree, Heap Sort.		
	16th week	Representation of Graphs and Applications: Adjacency Matrix, Path Matrix, Warshall's Algorithm, Linked Representation of a Graph, Traversing a Graph;	Old Question Papers Solving	
	17 week	Sorting and Searching: Radix Sort, Merge Sort, Linear Search, Binary Search, Insertion Sort, Selection Sort, Bubble Sort		
	18-26 week	Revision of Syllabus		