

Branch: BCA	Semester-IV
Subject Code: 4201	Practical: 02 Credit: 02
Subject Title	DATA STRUCTURES LAB

Modules	Sr. No.	Topic and Details	No of Lectures/Practicals Assigned	Marks Weight age %
UNIT-I	1	Arrays: Implementations of Array and Operations- Insertion, deletion of an element from One dimensional array, Traversing of an array	2	4
	2	Linked lists: Singular Implementation of List and Linked List And Operations -Inserting, Deleting nodes etc	2	4
UNIT-II	3	Linked lists: Implementation of Two way Doubly and Circular Linked List And Operations -Inserting, Deleting nodes etc	3	6
	4	Stack : Stack implementation, Operations on stack (Push Pop), Implementation of stack using	4	8

		pointer, Applications of stack, Infix prefix, postfix , converting from one form to another		
UNIT-III	5	Queue : Implementation of Queue implementation, Operations on queue (Insertion & deletion)	3	6
	6	Trees – Implementation of tree as Array and Linked lists and Traversal (Inorder , preorder, postorder)	4	8
	7	Graphs - I Implementation of Graph traversal (BFS, DFS, Shortest path)	3	6
UNIT-IV	8	Searching & Sorting: Implementation of Searching (Sequential, Binary search) Sorting (Bubble sort, Selection sort, Quick sort etc)	4	8
		Total	25	50