Government Engineering College, Rajkot
Computer Engineering Department
B.E. 3rd Semester
Data Structures (3130702)

Enrollment No._____

Sr. No.	Practical Definition.	Page No.	Date	Signature
1	Introduction to pointers. Call by Value and Call by reference.			
2	Introduction to Dynamic Memory Allocation. DMA functions malloc(), calloc(), free() etc.			
3	Implement a program for stack that performs following operations using array. (a) PUSH (b) POP (c) PEEP (d) CHANGE (e) DISPLAY			
4	Implement a program to convert infix notation to postfix notation using stack (with and without parenthesis) and evaluation of postfix expression.			
5	Write a program to implement QUEUE using arrays that performs following operations. (a) INSERT (b) DELETE (c) DISPLAY			
6	Write a program to implement Circular Queue using arrays that performs following operations.. (a) INSERT (b) DELETE (c) DISPLAY			
7	Write a menu driven program to implement following operations on the singly linked list. (a) Insert a node at the front of the linked list. (b) Insert a node at the end of the linked list. (c) Insert a node such that linked list is in ascending order.(according to info. Field) (d) Delete a first node of the linked list. (e) Delete a node before specified position. (f) Delete a node after specified position.			
8	Write a program to implement stack using linked list.			
9	Write a program to implement queue using linked list.			
10	Write a program to implement following operations on the doubly linked list. (a) Insert a node at the front of the linked list. (b) Insert a node at the end of the linked list. (c) Delete a last node of the linked list. (d) Delete a node before specified position.			
11	Write a program to implement following operations on the circular linked list. (a) Insert a node at the end of the linked list. (b) Insert a node before specified position. (c) Delete a first node of the linked list. (d) Delete a node after specified position.			
12	Write a program which create binary search tree.			
13	Implement recursive and non-recursive tree traversing methods inorder, preorder and postorder traversal.			
14	Write a program to implement Quick Sort.			
15	Write a program to implement Merge Sort.			
16	Write a program to implement Bubble Sort.			
17	Write a program to implement Linear and Binary Search.			