

Practical list for CSPP202 (Data Structures)
(4hrs per Week)
B.Sc. (P) II semester

NOTE : All programs must be implemented in C++.

Exam : 4Hours, 50marks (includes 25 marks internal assesment)

1. Write a program to sort an array using insertion sort.
2. Write a program to sort an array using bubble sort.
3. Write a program to sort an array using selection sort.
4. Write a program to search an element using linear search.
5. Write a program to search an element using binary search
6. Write a menu driven program to implement a stack using array to perform push, pop, empty and full stack operations.
7. Write programs to perform the following operations using recursion:
 - (i) Factorial of a number
 - (ii) Fibonacci Series up to n
 - (iii) Multiplication of two numbers
 - (iv) GCD of two numbers
 - (v) Binary Search
8. Write a program to implement a circular queue using array (perform insert, delete, empty and full queue operations).
9. Write a program to handle the following operations on a singly linked list :
 - (i) Create a list
 - (ii) Add a node before a given node
 - (iii) Add a node after a given node
 - (iv) Delete a node
 - (v) Count the no of nodes
 - (vi) Concatenate two lists
 - (vii) Display the list
10. Write a program for linked implementation of stack.
11. Write a program for linked implementation of queue.