Course: Data Structure Lab Time: 1.5 Hours Total Marks: 30

Answer any three including question 4

1) Write a C++ program to merge two sorted array into one sorted array.

Sample input: Array1 = 2, 4, 5, 8, 9 Array2 = 3, 6, 7, 10, 12

Output: 2, 3, 4, 5, 6, 7, 8, 9, 10, 12

- 2) Write a C++ program to implement Stack using linked list. a) Insert into Stack b) Delete an item from Stack c) Traverse the Stack.
- 3) Write a C++ program to implement Queue using linked list. a) Insert into Queue b) Delete an item from Queue c) Traverse the Queue.
- 4) Write a C++ program for the following:

7 1 0 3 2 5 4 6 9 8 10

For the above list of integer numbers, create a Binary Search Tree Data Structure that will take the above numbers as inputs and will output the numbers in the Pre-order.