ACADEMY OF TECHNOLOGY
Lab Assignment (Assignment 8)
Paper name: Data Structure and Algorithm
Code: PCC-CS391   **Semester: 3rd**
Discipline: CSE   **Time: 2 Hours**
Date: September 21, 2022

1. Write a menu driven program in C or C++ to perform the following operations on Binary Search Tree.

   (a) *insert* a node.

   (b) *inorder* traversal.

   (c) *preorder* traversal.

   (d) *postorder* traversal.

   (e) *search* an given *key*.

   (f) Find the smallest element.

   (g) Find the largest element.

   (h) Delete an element.

   (i) Count the total number of nodes.

   (j) Count the total number of external nodes.

   (k) Count the total number of internal nodes.

   (l) Determine the height of the tree.