Delhi Technological University

B. Tech (Computer Science and Engineering)

Semester III ODD 2022

Data Structures CO201

Assignment 1

Instructions for assignment submission:

- 1. Submit Pdf file with neat and clean handwriting as solution at following link https://forms.gle/giFuw6CY7LE47Z2MA
- 2. Name of pdf should be RollNumber_Name (e.g., 2K20/CO/01_Harshit Gupta).
- 3. Last date for submission is **15th November**, **2022 5 P.M**. No late submission will be entertained.
- 4. Write your name and roll number at top of your submission
- 5. **Only one submission** is allowed so submit the solution carefully.
- 6. Copied assignment will lead to zero marks.

Note: Programming language C/C++ allowed for programs

Q1 Insert Q, Z, O, P, W, X, Y, V, S, U, T, and R into initially empty AVL tree. From the tree thus obtained Delete W. Show all the intermediate trees/steps and write the appropriate rotations with proper justification/explanation.

Q2. Write a program to construct binary search tree on given pre-order traversal of the tree. After constructing the binary search tree, print the nodes level wise top to down and left to right.