

**The LNM Institute of Information Technology, Jaipur**  
**CSE217L: Data Structure and Algorithms Lab**  
**2022-23 Odd Semester**

**DSA LAB: AVL**

**Time: 2 Hours**

***Instructions:***

- *Handle exceptions carefully*
- *Complete the task within the given duration*

1. Write a C program to perform following operations on AVL tree.

a. A-AVL := CREATE-a-AVL ();

b. A-AVL := INSERT-a-Node (Node-DV, A-AVL)

Note: your INSERT function should handle the following rotations:

- (i) LL-Rotations
- (ii) RR-Rotations
- (iii) LR-Rotations
- (iv) RL-Rotations

c. Count the number of each rotation.

d. Node-ptr := SEARCH-a-Node (Node-DV, A-AVL);