

# 21 Lecture - CS301

## Important Mcqs

1. What is the first node added to the AVL Tree in the building example?

- a) 1
- b) 2
- c) 5
- d) 8

Answer: c) 5

2. What is the second node added to the AVL Tree in the building example?

- a) 1
- b) 2
- c) 3
- d) 8

Answer: b) 2

3. How many rotations are performed to maintain balance after inserting node 1 in the AVL Tree?

- a) 0
- b) 1
- c) 2
- d) 3

Answer: b) 1

4. What is the height of the AVL Tree after inserting node 3?

- a) 1
- b) 2
- c) 3
- d) 4

Answer: b) 2

5. Which rotation is performed after inserting node 6 to maintain balance in the AVL Tree?

- a) Left rotation
- b) Right rotation
- c) Left-right rotation
- d) Right-left rotation

Answer: a) Left rotation

6. What is the height of the AVL Tree after inserting node 9?

- a) 3

- b) 4
- c) 5
- d) 6

Answer: b) 4

7. What is the root node of the AVL Tree after inserting all the nodes?

- a) 1
- b) 2
- c) 5
- d) 8

Answer: c) 5

8. Which is the last node added to the AVL Tree in the building example?

- a) 6
- b) 8
- c) 9
- d) 3

Answer: c) 9

9. What is the maximum height of an AVL Tree with 7 nodes?

- a) 2
- b) 3
- c) 4
- d) 5

Answer: b) 3

10. How many rotations are performed in total to maintain balance while building the AVL Tree in the example?

- a) 2
- b) 3
- c) 4
- d) 5

Answer: c) 4