# Rajalakshmi Engineering College

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Branch: REC

Department: I AI & ML FA

Batch: 2028

Degree: B.E - AI & ML



## NeoColab\_REC\_CS23231\_DATA STRUCTURES

REC\_DS using C\_Week 5\_MCQ

Attempt : 1 Total Mark : 15

Marks Obtained: 15

Section 1: MCQ

1. Which of the following is the correct in-order traversal of a binary search tree with nodes: 9, 3, 5, 11, 8, 4, 2?

Answer

2, 3, 4, 5, 8, 9, 11

Status: Correct Marks: 1/1

2. Find the in-order traversal of the given binary search tree.

Answer

1, 2, 4, 13, 14, 18

Status: Correct Marks: 1/1

3. The preorder traversal of a binary search tree is 15, 10, 12, 11, 20, 18, 16, 19. Which one of the following is the postorder traversal of the tree?

### **Answer**

11, 12, 10, 16, 19, 18, 20, 15

Status: Correct Marks: 1/1

4. Which of the following is the correct pre-order traversal of a binary search tree with nodes: 50, 30, 20, 55, 32, 52, 57?

#### Answer

50, 30, 20, 32, 55, 52, 57

Status: Correct Marks: 1/1

5. How many distinct binary search trees can be created out of 4 distinct keys?

#### Answer

14

Status: Correct Marks: 1/1

6. Which of the following is the correct post-order traversal of a binary search tree with nodes: 50, 30, 20, 55, 32, 52, 57?

#### Answer

20, 32, 30, 52, 57, 55, 50

Status: Correct Marks: 1/1

7. Find the pre-order traversal of the given binary search tree.

Answer

13, 2, 1, 4, 14, 18

Status: Correct

Marks : 1/1

8. In a binary search tree with nodes 18, 28, 12, 11, 16, 14, 17, what is the value of the left child of the node 16?

Answer

14

Status: Correct Marks: 1/1

9. Which of the following is a valid preorder traversal of the binary search tree with nodes: 18, 28, 12, 11, 16, 14, 17?

**Answer** 

18, 12, 11, 16, 14, 17, 28

Status: Correct Marks: 1/1

10. Find the preorder traversal of the given binary search tree.

Answer

9, 2, 1, 6, 4, 7, 10, 14

Status: Correct Marks: 1/1

11. Find the postorder traversal of the given binary search tree.

Answer

1, 4, 2, 18, 14, 13

Status: Correct

Marks : 1/1

|     |   | 2. While inserting the elements 71, 65, 84, 69, 67, 83 in an empty binary earch tree (BST) in the sequence shown, the element in the lowest level is |   |             |  |
|-----|---|--|---|-------------|--|
| 241 |   | 24/2   | 2475  | 2475        |  |
|     | Answer  |  |   |             |  |
|     | 67  |  |   |             |  |
|     | Status: Correct   |  |   | Marks : 1/1 |  |
| 241 | Search Tree (BST)  Answer Inorder traversal  Status: Correct  14. While inserting | in ascending or  | 741501021<br>5, 4, 2, 8, 7, 10, 12 in a binary se | Marks: 1/1  |  |
|     | the element at the  | iowest ievei is _  | ·   |             |  |
|     | Answer  |  |   |             |  |
|     | 12  | Α  | Α.  |             |  |
|     | Status : Correct  | 21027  | 2/02)   | Marks : 1/1 |  |
| O A | 15 Find the nost-   | order traversal o  | of the given hinary search tree                   | 04750       |  |
| · V | 15. Find the post-order traversal of the given binary search tree.                |  |   |             |  |
|     | Answer  |  |   |             |  |
|     | 10, 17, 20, 18, 15, 32  | , 21   |   |             |  |
|     | Status: Correct   |  |   | Marks : 1/1 |  |
|     |   |  |   |             |  |
| 24  | 501021  | 24,150,102,1   | 241501021   | 241501021   |  |