## **Data Structures**

## Unit-III Assignment

- 1. Define the tree data structure. List the types of tree. List some applications of Tree-data structure?
- 2. What are Binary trees? Write the C code to perform in-order traversal on a binary tree.
- **3**. Write the recursive C function to count the number of nodes present in a binary tree.
- 4. Write a recursive C function to calculate the height of a binary tree.
- 5. Define Complete Binary Tree & Extended Binary Trees with Example.
- 6. Explain Binary trees & Traversing Binary trees.
- 7. Define Threaded Binary trees & Traversing Threaded Binary trees.
- 8. Explain Binary Search Tree (BST), Define Insertion and Deletion in BST with Example.
- 9. Explain Complexity of Search Algorithm, Path Length, AVL Trees.
- 10. In what scenario, Binary Search can be used?