MODULE-4

1. What is a tree? Explain the following(Jan 2018)
   Binary tree
   Strictly Binary tree
   Complete Binary tree
   Skewed binary tree
   Almost complete binary tree
   Degree of a binary tree
2. Given in-order sequence DJGBHEAFKIC and post-order sequence: JGDHEBKIFCA construct binary tree and give pre-order traversal (Jan 2018)
3. Explain threaded binary tree in detail (Jan 2018)
4. Write function to insert an item into an ordered binary search tree (duplicate items are not allowed) (Jan 2018)
5. What is a tree? write the routines to traverse the given string using (Jan 2019)
   a. Pre-order traversal
   b. In-order traversal
   c. Post-order Traversal
6. Define binary search tree. write the recursive search and iterative search algorithm for a binary search tree(Jan 2019)
7. Write the routine for: (Jan 2019)
   a. Coping the binary trees
   b. Testing for equality of binary trees
8. List the rules to construct the threads, write the routines for in-order traversal of a threaded binary tree (Jan 2019)
9. What is a tree? with suitable example define i) Binary tree ii)Levels of binary tree(Jan 2017) iii)Complete Binary tree(Jan 2017)
10. Write the routines to traverse i) In-order, Pre-order and Post-order traversal (Jan 2017)
11. What is a binary search tree? Write an Algorithm to implement the recursive search or iterative search for a binary search tree(Jan 2017)
12. Write the routines for i) Create a binary tree ii)Testing for equality of binary trees(Jan 2017)
13. For the given data draw a binary search tree and show the array and linked representation of the same 100,85,45,55,110,20,70,65.
14. Draw a binary tree for the following expression 3+4*(7-6)/4+3.Traverse the above generated tree using in-order, pre-order and post-order, also write function in C for each one
15. What is the advantage of threaded binary tree over binary tree? Explain the construction of threaded binary tree for 10,20,30,40,50.