Data Structures

1. Pointers & Structures-
    a. Review of pointers
    b. Review Of Structures
    c. Typedefs & ADTs
2. Arrays
    a. Multidimensional arrays
    b. Arrays and pointer association
    c. Polynomial representation
3. Linked Lists
    a. Single, double and circular lists
    b. Insertion,deletion,traversal
    c. Polynomial representation
4. Linear Sorting
    a. Bubble,Insertion,Selection sort
    b. Sorting with arrays and linked lists
5. Non Linear Sorting
    a. Recursion Concepts
    b. Quick,heap sorts
6. Searching
    a. Binary search
    b. Fibonacci
    c. Index sequential search
7. Stacks
    a. Implementations with arrays and Linked list
    b. Applications of stacks
8. Queues
    a. implementations
    b. application
9. Trees
    a. Concept & Implementation
    b. Binary tree
    c. Traversal
    d. Insertion, deletion of leaf nodes
    e. Threaded binary tree
    f. Applications of trees

- Lab Sessions:
    - Each Topic is covered with practical (lab) sessions along with classroom sessions
    - Solutions of the assignments are explained and shown practically
    - Students will undergo thorough exercises and debugging sessions