MC5311 DATA STRUCTURES AND ALGORITHMS LABORATORY

DETAILED SYLLABUS

OBJECTIVES

- To develop skills in design and implementation of data structures.
- To learn and implement linear, non linear and tree data structures.
- To learn Set ADT and Graph data structures and its applications.
- To study, implement and analyse the different sorting techniques.

LIST OF EXPERIMENTS

1. Array implementation of stack
2. Linked list implementation of Queue
3. Polynomial Addition using Linked List 37
4. Binary Search tree operations
5. AVL Tree operations
6. Graph Traversals
7. Shortest Path using Dijkstra"s Algorithm
8. Minimum Spanning Tree using Prim's Algorithm
9. Dictionary application using any of the data structure
10. Divide and Conquer Method - Merge Sort
11. Back Tracking - 8-Queen's Problem