CHAPTER 6

Applications of Data Structures

Syllabus Topics

Applications of Linked Lists : Addition of 2 Polynomials and Multiplication of 2 polynomials.

Applications of Stacks : Reversal of a String, Checking validity of an expression containing nested parenthesis, Function calls, Polish Notation: Introduction to infix, prefix and postfix expressions and their evaluation and conversions.

Application of Queues : Scheduling, Round Robin Scheduling Applications of Trees: Huffman Tree and Heap Sort.

Applications of Graphs : Dijkstra's Algorithm, Minimum Spanning Tree: Prim's Algorithm, Kruskal's Algorithm.

Self-learning Topics : Implementation of Applications for Stack, Queues, Linked List, Trees and Graph.