ITC06 :: Data Structure and Algorithm

(3L-0T-2P)

Arrays, Stacks and Queues: Fundamentals and Representations, Applications of Arrays, Stacks and Queues
Sparse Matrices
Linked lists: Singly/Linear Linked lists, Linked Stacks and Queues, Doubly and Circular Linked Lists, Applications.
Trees: Binary Trees, B-Trees, N-ary Trees, B+-Trees, Tree Traversals and Tries, Storage of Trees, Threaded trees, Trees Applications
Hashing. Heaps
Graphs: Types, Terminology and Representations, Graph Traversals, Applications of Graphs.
Searching and Sorting: Sequential and Binary Searching, Search trees, Sorting Techniques.