

Data Structures

MID-1

Question Bank

UNIT-I

1. a).What is data structure? Explain primitive and non primitive data structures?
b).Compare and contrast linear and non linear data structures?
2. a).Explain the phases of implementation of data structures
b).Define is an array? Explain about types of arrays
3. a).Build algorithms for insertion and deletion operations of arrays?
b).Construct an algorithm for linear search technique with an example?
4. a).Construct an algorithm for binary search technique with an example?
b).Develop a c Program for addition of two matrices?
5. a).Develop a c Program for multiplication of two matrices?
b).How would you use pointer arrays?

UNIT-II

1. a).Compare different types of linked lists?
b).Distinguish between arrays and linked lists?
2. a).What is the relationship between static and dynamic representation of a linked list?
b).Make use of an algorithms to insert a node at front and end positions of a single linked list?
3. a).How would you solve deletion of a node from a single linked list at any position?
b).Make use of an algorithm to insert a node into a double linked list at any position?

4. a).How would you solve deletion of a node from a double linked list at front and end positions?
b).How would you show the process need for merging and searching operations of a singly linked list?
5. a).Choose an algorithm to perform merging operation of a circular single linked list?
b).How would you solve sorting of a list of elements using circular double linked list?