

SECTION-B

2. What is an array? Write an algorithm to insert an element in an array.
3. What is complexity of an algorithm? How is it measured? Discuss Time space trade off with an example.
4. Explain Depth First Search algorithm in a graph with the help of an example.
5. What is meant by collision resolution in Hashing? Explain any one strategy for dealing with it.
6. Explain the concept of Memory Leak and Dangling Pointers.

SECTION-C

7. Sort the following data using Quick Sort : (10)
10 23 64 21 74 95 02 59 50 86 58
8. Explain and write an algorithm to perform the following operation on a singly linked list.
 - a. Insert new node at the beginning of list. (3)
 - b. Insert new node at Middle. (3)
 - c. Delete a node in the middle of the list. (4)
9. Illustrate the following operations of Binary tree with algorithms : (10)
 - a. Insertion
 - b. Deletion
 - c. Searching