

UNIT –I

Part-B

1. List out the types of data structures
2. List out the various operations on data structures
3. Define – Abstract Data Type. Give one example for ADT.
4. What is the time complexity of an algorithm? Illustrate it with a simple example.
5. Explain in detail, the significance and limitations of Big O
6. How will you measure the running time of an algorithm?
7. Discuss the complexity of insertion sort
8. Discuss the complexity of bubble sort.
9. Discuss the complexity of binary search.
10. What is the need of using data structures?

Part-C

1. Write an algorithm for binary search with an example
2. Explain in detail, bubble sort with an example
3. Explain in detail, insertion sort algorithm with example
4. Write a program to sort a array using insertion sort.
5. Sort the following sequence of numbers in ascending order using bubble and show the each pass { 42,34,75,23,21,18,19,67,78 }
6. Apply binary search algorithm in a program to search an element in the data structure. using binary . Demonstrate the set of numbers { 10,8,2,7,3,4,9,1,6,5 }
7. Explain in detail, the complexity of an algorithm.