

PART - A

(20 x 2 = 40 MARKS)

ANSWER ALL QUESTIONS

1. Define Algorithm.
2. What is the Time Complexity of an Algorithm?
3. What do you mean by frequency count of a statement?
4. Mention the running time of a FOR - LOOP statement.
5. Differentiate Linear and Non-Linear Data Structure.
6. Define queue.
7. What is priority queue?
8. List the draw backs of sequential data structures.
9. What is tree?
10. Define Hashing Function.
11. What is binary heap?
12. What do you mean by chaining?
13. Define Sorting.
14. What is runlists?
15. List the various families of the sorting algorithms.
16. Differentiate Internal and External Sorting.
17. Define Graph.
18. What is Hamiltonian circuit?
19. What do you mean by connected undirected graph?
20. What is articulation point?

PART - B

(5 x 12 = 60 MARKS)

ANSWER ANY FIVE QUESTIONS

21. Explain Apriori Analysis with the help of an algorithm.
22. Explain the insertion and deletion operation of Circular Linked List.
23. Explain various applications of Trees.
24. Explain insertion sort and quick sort with algorithm.
25. How will you find a minimum spanning tree? Explain with algorithm.
26. Explain the insertion and deletion algorithm of AVL Tree.
27. Write and analyze the complexity of Polyphase sorting.
28. Explain various applications of stack.

*****THE END*****