In a greedy method, the algorithm works in stages and it considers how many inputs at a time?

| 0 | 1 | 2 | 3 |

2. In Knapsack problem, the constraint is that the total weight of items must be _____ the capacity of Knapsack.

| Greater than or equal to | Less than or equal to | Can be both | None of the above |

3. Knapsack problem where we can't take fractions is also known as _____

| 0/1 Knapsack problem | Continuous knapsack problem | Divisible knapsack problem | Non continuous knapsack problem |

4. The Knapsack problem is an example of _____

| Greedy approach | Divide and Conquer | Linear programming | None of the above |

5. A spanning tree

| Does not have cycles | Cannot be disconnected | Both of the above | None of the above |

6. What are the greedy methods for finding the minimal spanning tree?

| Prim's algorithm | Kruskal's algorithm | Both of the above | None of the above |

7. Which data structure can be used to improve the time taken by minheap?

| Stack | Queue | Minheap | Maxheap |

8. Which of these algorithm always select a minimum cost edge no matter whether it is connected or not?

| Prim's algorithm | Kruskal's algorithm | Merge Sort | None of the above |

9. The Dijkastra algorithm can work on

| Directed graph | Undirected graph | Both of the above | None of the above |

10. The Dijkastra algorithm always searches for _____ path.

| Shortest | Longest | Equal | None of the above |

11. Out of these, the Dijkastra algorithm cannot work on _____.

| Directed edges | Undirected edges | Negative edges | None of the above |

The Dijkastra algorithm follows ___.

12.

| Dynamic programming | Greedy method | Divide and Conquer | Quick sort |

13. The time complexity when minheap is employed is

| $O(n)$ | $O(n^2)$ | $O(\log n)$ | Correct $O(n \log n)$ |

14. Which of these approaches is used for solving optimal storage on tapes problem?

| Greedy approach | Divide and Conquer | Backtracking | Branch and Bound |

15. What is the computing time of tapes?

| (1) | (n) | (log n) | None of the above |

16. The ordering in tapes can be carried out in _____ time.

| (1) | (n) | (log n) | (n log n) |

17. As per greedy method, the programs are stored in _____ order.

| Decreasing | Non-decreasing | Left to right | Right to left |

18. The sum of all programs must be _____of total length of tape

| Sqrt | Less than | Greater than | None of the above |