

SECTION - A

Answer any THREE questions

(3×15 = 45)

- 1) Explain 0/1 knapsack problem with neat illustration.
- 2) Discuss about Divide & Conquer method with example.
- 3) Explain prims algorithm with example in detail.
- 4) Explain different traversal techniques with example.
- 5) Discuss about branch and bound technique with neat illustration.

SECTION – B

Answer any FIVE questions

(5×5 = 25)

- 6) Discuss a bout elementary data structures.
- 7) Write a short notes on job scheduling.
- 8) Write about recursive algorithms.
- 9) Explain about tree vertex splitting algorithm.
- 10) Write about Depth first search.
- 11) Write a short notes on back tracking algorithm.
- 12) Write about direct and indirected graph with neat diagram.
- 13) Discuss about NP hard and NP complete problems.

SECTION-C

Answer ALL questions

(5×1 = 5)

- 14)** Define BFS.
- 15)** Give the time complexity for Merge sort.
- 16)** Define Omega Notation.
- 17)** What is Divide & Conques method.
- 18)** Define NP hard & NP complete.

