

Note: Attempt all questions

Q. No.	Question	COs, RBT level	Marks
Q.1	Illustrate the principle of optimality.	CO2, L3	2
Q.2	Evaluate the efficiency of Floyd-Warshall Algorithm.	CO3, L5	2
Q.3	Identify the shortcomings of the Dijkstra's Algorithm. Suggest and discuss a superior algorithm than it.	CO3, L2	4
Q.4	Demonstrate how greedy algorithm design technique is used solve the knapsack problem.	CO2, L3	4
Q.5	Examine the complexity of quicksort algorithm in detail.	CO1, L4	4
Q.6	Compare the working and performance of Prim's and Kruskal's algorithms to compute minimum cost spanning tree.	CO3, L4	8

**Course Outcomes (CO)**

*Students will be able to*