THADOMAL SHAHANI ENGINEERING COLLEGE

Academic Year 2024 - 25 <u>List of Experiments</u>

Subject: Analysis of Algorithm Lab Subject Code: CSL401

Branch: Computer Engineering Semester: IV

Sr. No.	Experiments
1.	Implement
	a) Selection Sort
	b) Insertion Sort
2.	Divide and Conquer Approach – Implement
	a) Merge Sort
	b) Quick Sort
3.	Greedy Method Approach – Implement Minimum Cost Spanning Tree
	using Kruskal's Algorithm OR Prim's Algorithm
4.	Greedy Method Approach – Implement Dijkstra algorithm.
5.	Dynamic Programming Approach – Implement Longest Common
	Subsequence Problem.
6.	Dynamic Programming Approach – Implement 0/1 Knapsack
	problem.
7.	Dynamic Programming Approach – Implement All pair shortest path
	algorithm (Floyd Warshall algorithm)
8.	Backtracking Approach – Implement N – Queen Problem
9.	Backtracking Approach – Implement Sum of Subset Problem
10.	String Matching Algorithms – Implement the Rabin Karp Algorithm
	OR the Knuth-Morris-Pratt Algorithm

Khalid Ansari Subject In-Charge