

## List of Practicals and Lab Plan

**Sub: ANALYSIS OF ALGORITHM**

**Year (2023-24)**

<b>Sr. No</b>	<b>Aim</b>	<b>CO Mapping</b>	<b>Weekly Plan</b>
1.	1.1 Implementation of Selection sort. * 1.2 Implementation of Insertion sort. *	CSL401.1, CSL401.2, CSL401.3	Third Week Fourth Week
2.	<b>Divide and Conquer Approach</b> 2.1 Finding Minimum and Maximum 2.2 Merge sort 2.3 Quick sort 2.4 Binary search	CSL401.1, CSL401.2, CSL401.3	Fifth Week Sixth Week
3.	<b>Greedy Method Approach</b> 3.1 Single source shortest path- Dijkstra 3.2 Fractional Knapsack problem 3.3 Job sequencing with deadlines 3.4 Minimum cost spanning trees-Kruskal and Prim's algorithm	CSL401.1, CSL401.2, CSL401.3	Eighth Week Ninth Week
4.	<b>Dynamic Programming Approach</b> 4.1 Single source shortest path- Bellman Ford 4.2 All pair shortest path- Floyd Warshall 4.3 0/1 knapsack 4.4 Travelling salesperson problem 4.5 Longest common subsequence	CSL401.1, CSL401.2, CSL401.3	Tenth Week, Eleventh Week

5.	<b>Backtracking and Branch and bound</b> 5.1 N-queen problem 5.2 Sum of subsets 5.3 Graph coloring	<b>CSL401.1,  CSL401.2,  CSL401.3</b>	Twelfth Week
6.	<b>String Matching Algorithms</b> 6.1 The Naïve string-matching Algorithms 6.2 The Rabin Karp algorithm 6.3 The Knuth-Morris-Pratt algorithm	<b>CSL401.1,  CSL401.2,  CSL401.3</b>	Thirteenth Week