**List of Practicals and Lab Plan**

 **Sub: ANALYSIS OF ALGORITHM Year (2022-23)**

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| **Sr. No** |  **Aim** | **CO Mapping** |  **Weekly Plan** |
| 1. | 1.1 Implementation of Selection sort. \*1.2 Implementation of Insertion sort. \* | **CSL401.1**, **CSL401.2, CSL401.3**  | Third WeekFourth Week |
| 2. | **Divide and Conquer Approach** 2.1 Finding Minimum and Maximum2.2 Merge sort 2.3 Quick sort 2.4 Binary search | **CSL401.1**, **CSL401.2, CSL401.3**  | Fifth WeekSixth Week |
| 3. | **Greedy Method Approach** 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 WeekNinethWeek |
| 4. | **Dynamic Programming Approach** 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**  | TenthWeek,Eleventh Week |
| 5. | **Backtracking and Branch and bound**5.1 N-queen problem5.2 Sum of subsets5.3 Graph coloring | **CSL401.1**, **CSL401.2, CSL401.3**  | Twelth Week |
| 6. | **String Matching Algorithms**6.1 The Naïve string-matching Algorithms6.2 The Rabin Karp algorithm6.3 The Knuth-Morris-Pratt algorithm | **CSL401.1**, **CSL401.2, CSL401.3**  | Thirteenth Week |