**SRM INSTITUTE OF SCIENCE AND TECHNOLOGY**

**SCHOOL OF COMPUTING**

**21CSC204J – DESIGN AND ANALYSIS OF ALGORITHMS**

**Week Wise Lab Schedule**

**2022-2023 Even Semester**

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| **S.No** | **Week** | **Exercise to be Completed** |
| 1 | Week 1 | Linear search |
| 2 | Week 2 | Bubble sort, Insertion sort |
| 3 | Week 3 | Merge sort |
| 4 | Week 4 | Quick sort, binary Search |
| 5 | Week 5 | Strassen Matrix multiplication, Maximum Subarray Sum |
| 6 | Week 6 | Finding maximum and minimum in an array, Convex hull problem |
| 7 | Week 7 | Huffman coding, Knapsack using Greedy |
| 8 | Week 8 | Tree traversals, MST using Kruskal’s algorithm |
| 9 | Week 9 | Longest common subsequence |
| 10 | Week 10 | N queen’s problem |
| 11 | Week 11 | Travelling salesman problem |
| 12 | Week 12 | BFS and DFS implementation with array |
| 13 | Week 13 | Randomized quick sort |
| 14 | Week 14 | String matching algorithms |
| 15 | Week 15 | Implement any problem statement with two different algorithm design strategy that you have learnt. Compare and contrast with its time complexity analysis. Submit the same as report. |