**LIST OF PROGRAMS TO BE IMPLEMENTED IN LABORATORY SESSIONS**

**CSE 2nd Year 4th Semester**

**Subject: Design and Analysis of Algorithm Laboratory (PCC-CS494)**

**Session: 2021-2022**

**All the Experiments to be implemented in C Language Only**

**Deadline: 13/06/2022**

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| **Sl. No.** | **Experiment Name** |
| **1** | **BINARY SEARCH ALGORITHM** |
| **2** | **QUICK SORT ALGORITHM** |
| **3** | **MERGE SORT ALGORITHM** |
| **4** | **FIND THE MAXIMUM AND MINIMUM ELEMENT FROM AN ARRAY** |
| **5** | **FIND THE MINIMUM NUMBER OF SCALAR MULTIPLICATION FOR CHAIN OF MATRIX** |
| **6** | **WARSHALL’S ALGORITHM** |
| **7** | **FRACTIONAL KNAPSACK PROBLEM** |
| **8** | **SINGLE SOURCE SHORTEST PATHS ALGORITHM** |
| **9** | **MINIMUM COST SPANNING TREE USING KRUSKAL’S ALGORITHM** |
| **10** | **GRAPH TRAVERSALS(BFS AND DFS)** |
| **11** | **SUM OF SUB SETS PROBLEM** |
| **12** | **TRAVELLING SALES PERSON PROBLEM** |
| **13** | **MINIMUM COST SPANNING TREE USING PRIM’S ALGORITHM** |
| **14** | **ALL PAIRS SHORTEST PATHS ALGORITHM** |
| **15** | **N QUEENS PROBLEM** |
| **16** | **GRAPH COLORING PROBLEM** |
| **17** | **15-PUZZLE PROBLEM** |
| **18** | **JOB SEQUENCING WITH DEADLINES** |
| **19** | **HAMILTONIAN PROBLEM** |
| **20** | **STRASSEN’S MATRIX MULTIPLICATION ALGORITHM** |
| **21** | **0/1 KNAPSACK PROBLEM** |