

ANALYSIS AND DESIGN OF ALGORITHMS LAB

B.Tech IVth sem CSE

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Branch – CSE IVth sem

COURSE OBJECTIVE

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| **CO-1** | **To learn how to analyse the complexity of Algorithm** |
| **CO-2** | **To compare and evaluate algorithms in terms of time and space complexity** |
| **CO-3** | Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations **(Design/development of solutions)**. |

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| **S.No** | **Experiment** | **Page No.** |
| **1** | RADIX SORT |  |
| **2** | COUNTING SORT |  |
| **3** | QUICK SORT |  |
| **4** | MERGE SORT |  |
| **5** | BUBBLE SORT |  |
| **6** | INSERTION SORT |  |
| **7** | HUFFMAN CODING |  |
| **8** | JOB SEQUENCING |  |
| **9** | WARSHALL’S ALGORITHM |  |
| **10** | DIJKSTRA’S ALGORITHM |  |
| **11** | MINIMUM COST SPANNING TREE ALGORITHM (Prim’s) |  |
| **12** | MINIMUM COST SPANNING TREE ALGORITHM (Kruskal’s) |  |
| **13** | GRAPH SEARCH ALGORITHM (DFS, BFS) |  |
| **14** | TRAVELLING SALES PERSON PROBLEM |  |
| **15** | N QUEENS PROBLEM |  |

OBJECTIVE:

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PROGRAM LOGIC:

Time Complexity:

SOURCE CODE: INPUT/OUTPUT: