II Year – II SEMESTER

T P C
0 3 2

ADVANCED DATA STRUCTURES LAB

- 1. To implement functions of Dictionary using Hashing (division method, Multiplication method, Universal hashing)
- 2. To perform various operations i.e, insertions and deletions on AVL trees
- 3. To perform various operations i.e., insertions and deletions on 2-3 trees.
- 4. To implement operations on binary heap.
- 5. To implement operations on graphs
 - i) vertex insertion
 - ii) Vertex deletion
 - iii) finding vertex
 - iv)Edge addition and deletion
- 6. To implement Depth First Search for a graph non recursively.
- 7. To implement Breadth First Search for a graph non recursively.
- 8. To implement Prim's algorithm to generate a min-cost spanning tree.
- 9. To implement Krushkal's algorithm to generate a min-cost spanning tree.
- 10. To implement Dijkstra's algorithm to find shortest path in the graph.
- 11. To implement pattern matching using Boyer-Moore algorithm.
- 12. To implement Knuth-Morris-Pratt algorithm for pattern matching.