

Course Content		
Expt.No.1	Demonstrate recursive algorithms with examples.	CO1
Expt.No.2	Implement various searching techniques.	CO2
Expt.No.3	Develop programs for different sorting techniques	CO2
Expt.No.4	Implement and perform different operations on Single, Double and Circular Linked Lists.	CO3
Expt.No.5	Develop a program to perform operations of a Stack using arrays and linked Lists.	CO3
Expt.No.6	Develop programs to implement Stack applications.	CO3
Expt.No.7	Develop a program to perform operations of Linear Queue using arrays and linked Lists.	CO3
Expt.No.8	Implement Circular Queues.	CO3
Expt.No.9	Develop a program to represent a tree data structure.	CO4
Expt.No.10	Develop a program to demonstrate operations on Binary Search Tree.	CO4
Expt.No.11	Demonstrate Graph Traversal Techniques.	CO4
Expt.No.12	Develop a program to find Minimum cost Spanning tree.	CO4
Text Books	1. Data Structures and Algorithm Analysis in C, Mark Allen Weiss, Second Edition, 2002, Pearson. 2. Introduction to Algorithms, Thomas H. Cormen, Charles E. Leiserson, Ronald L. Rivest, Clifford Stein, Third Edition, 2010, PHI. 3. Data Structures and Algorithms Made Easy by Narasimha Karumanchi, 2020, CareerMonk Publications.	
Reference Books		
e-Resources & other digital material	1. https://www.cs.usfca.edu/~galles/visualization/Algorithms.html 2. http://www.algomatic.com/algorithm/single-linked-list-insert-delete 3. http://www.algomatic.com/algorithm/binary-tree-insert-delete-display 4. https://www.youtube.com/watch?v=AfYqN3fGapc 5. https://www.youtube.com/watch?v=7vw2iIdqHIM 6. http://littlesvr.ca/dsa-html5-animations/sorting.php	