

LAB SCHEDULE PLAN

ADVANCED DATA STRUCTURES & ALGORITHMS Page No. 1 of
ANALYSIS

S.No.	Experiment / Exercise Title	Proposed No. of Sessions
1.	Construct an AVL tree for a given set of elements which are stored in a file. And implement insert and delete operations on the constructed tree.	
2.	write contents of a tree into a new file using in-order. Construct B-tree of order 5 with a set of 100 random elements stored in array. Implementing Searching, insertion & deletion operations	
3.	Construct Min and Max heap using arrays, delete any element and display the content of the Heap.	
4.	Implement BFS & DFS for given graph, when graph is represented by (a) Adjacency matrix (b) Adjacency lists.	
5.	Write a program for finding the biconnected components in a given graph.	
6.	Implement Quick sort & Merge sort & observe the execution time for various input sizes (Avg, worst & Best cases)	
7.	Compare the performance of SSSP using Greedy method when the graph is represented by adjacency matrix and adjacency lists.	
8.	Implement Job Sequencing with deadlines using Greedy strategy.	
9.	write a program to solve 0/1 knapsack problem using dynamic programming.	
10.	Implement N-Queen problem using Backtracking.	
11.	Use Backtracking strategy to solve 0/1 knapsack problem.	
12.	Implement Travelling sales person problem using Branch and Bound approach.	

Signature
with Date :

Faculty member

19/11/2024

HOD

Principal