

LAB SCHEDULE PLAN

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Course & Branch : ADSAA & CBS Semester : III
 Name of the Faculty Member : MNVL NARAYANA Department : IT
 Name of the Lab Paper : Advanced Data Structures and Algorithm Analysis Lab Code : 23CB3LO1

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, delete operations on the constructed tree. Write contents of tree into a new file using inorder.	01
2.	Construct B-tree of an order 5 with a set of 100 random elements stored in an array. Implement Searching, insertion and deletion operations.	01
3.	Construct Min and Max Heap using arrays. delete any element and display the content of Heap.	01
4.	Implement BFS, DFS for a given graph when graph is represented by i) Adjacency matrix ii) Adj Adjacency list.	01
5.	Write a Program for finding the bi-connected components in a given graph.	01
6.	Implement Quick Sort and Merge Sort and observe the execution time for various input sizes (Average, Worst and Best Case).	01
7.	Compare the performance of Single Source Shortest Path using Greedy method when the graph is represented by adjacency matrix, adjacency lists.	01
8.	Implement Job sequence with deadlines using Greedy Strategy.	01
9.	Write a Program to solve 0/1 Knapsack Problem using dynamic Programming.	01
10.	Implement N-Queen Problem using Backtracking.	01
11.	Using Backtracking strategy to solve 0/1 Knapsack Problem.	01
12.	Implement Travelling Sales Person Problem using Branch and Bound.	01
Total :		12

MNVL
Faculty Member

Rishu
HOD

Principal
Principal