



SYNERGY SCHOOL OF ENGINEERING
DEPARTMENT OF COMPUTER SCIENCE ENGINEERING
Lesson Plan of Data Structures and Algorithms Lab

Discipline : CSE	Semester: - 3TH Sem	Name of the teaching faculty: - Mr Jayanta Kumar Behera		
Subject: - Data Structures and Algorithms Lab	No. of Days/week class Allotted: 4	No. of weeks: -15 SESSION-2026-27 WINTER		
No. of week	No. of lab class	Topic to be Taught	DATE OF DELIVERY	
			G1	G2
1 ST	1 st	Introduction to Data Structures and Time Complexity Comparison of Array and Linked List Operations		
	2 nd	Introduction to Data Structures and Time Complexity Comparison of Array and Linked List Operations		
2 ND	1 st	Stack using Arrays Stack using Linked Lists		
	2 nd	Stack using Arrays Stack using Linked Lists		
3 RD	1 st	Stack Applications: Parentheses Matching Infix to Postfix Conversion		
	2 nd	Stack Applications: Parentheses Matching Infix to Postfix Conversion		
4 TH	1 st	Postfix Expression Evaluation Queue using Arrays		
	2 nd	Postfix Expression Evaluation Queue using Arrays		
5 TH	1 st	Queue using Linked Lists Circular Queue Implementation		
	2 nd	Queue using Linked Lists Circular Queue Implementation		
6 TH	1 st	Double Ended Queue (Deque) Revision and Lab Assessment-I		
	2 nd	Double Ended Queue (Deque) Revision and Lab Assessment-I		
7 TH	1 st	Singly Linked List: Creation and Traversal Insertion Operations in Singly Linked List		
	2 nd	Singly Linked List: Creation and Traversal Insertion Operations in Singly Linked List		
8 TH	1 st	Deletion Operations in Singly Linked List Doubly Linked List Operations		
	2 nd	Deletion Operations in Singly Linked List Doubly Linked List Operations		
9 TH	1 st	Circular Linked List Operations Stack and Queue using Linked Lists		
	2 nd	Circular Linked List Operations Stack and Queue using Linked Lists		
10 TH	1 st	Binary Tree Creation and Traversals Binary Search Tree (BST) Operations		
	2 nd	Binary Tree Creation and Traversals Binary Search Tree (BST) Operations		
11 TH	1 st	BST Insertion and Deletion AVL Tree Implementation		
	2 nd	BST Insertion and Deletion AVL Tree Implementation		
12 TH	1 st	Graph Representation using Adjacency Matrix Graph Representation using Adjacency List		
	2 nd	Graph Representation using Adjacency Matrix Graph Representation using Adjacency List		
13 TH	1 st	Breadth First Search (BFS) Depth First Search (DFS)		
	2 nd	Breadth First Search (BFS) Depth First Search (DFS)		
14 TH	1 st	Bubble Sort and Selection Sort Insertion Sort and Merge Sort		
	2 nd	Bubble Sort and Selection Sort Insertion Sort and Merge Sort		

Signature
02/06/2026

A. Prasad
02/06/26

15 TH	1 st	Quick Sort, Binary Search, HashingLab Assessment-II / Record Verification		
	2 nd	Quick Sort, Binary Search, HashingLab Assessment-II / Record Verification		

Prepared by:

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02/06/2026
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