

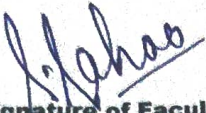
Academic Lesson Plan of Winter 2026

Department : CSE	Semester : 3rd	Name of the teaching faculty: SWARNALATA SAHOO
Subject: Data Structures	No. of days/per week class allotted . 3p/week.	Semester from : 1ST July 2026
		No. of weeks:15 weeks
		Topics to be covered:
1 st week	1 st	Basic Terminology of data structure
	2 nd	Classification of Data Structure
	3 rd	Classification of Data Structure
2 nd week	1 st	Operations on Data Structure
	2 nd	Operations on Data Structure
	3 rd	Asymptotic notation
3 rd week	1 st	worst-case analysis of algorithms
	2 nd	1st chapter revision
	3 rd	Introduction to Stacks
4 th week	1 st	Array Representation of Stacks
	2 nd	Operations on a Stack
	3 rd	Applications of Stacks
5 th week	1 st	Infix-to-Postfix Transformation
	2 nd	Infix-to-Postfix Transformation
	3 rd	evaluating Postfix Expressions
6 th week	1 st	Introduction to Queues
	2 nd	Array Representation of Queues
	3 rd	Types of Queues-DeQueue
7 th week	1 st	Types of Queues-DeQueue
	2 nd	Circular Queue
	3 rd	Applications of Queues-Round Robin Algorithm
8 th week	1 st	Applications of Queues-Round Robin Algorithm
	2 nd	2nd chapter revision
	3 rd	Introuduction to Linked List
9 th week	1 st	Representation in Memory
	2 nd	Operations on a Single Linked List
	3 rd	Operations on a Single Linked List
10 th week	1 st	Operations on a Single Linked List
	2 nd	Circular Linked Lists, Doubly Linked Lists
	3 rd	Linked List Representation and Operations of Stack
11 th week	1 st	Linked List Representation and Operations of Stack
	2 nd	Linked List Representation and Operations of Queue
	3 rd	Linked List Representation and Operations of Queue
12 th week	1 st	3rd chapter revision
	2 nd	Trees-Basic Terminologies
	3 rd	Definition and Concepts of Binary Trees
13 th week	1 st	Representations of a Binary Tree using Arrays
	2 nd	Representations of a Binary Tree using Linked Lists
	3 rd	Operations on a Binary Tree-Insertion
14 th week	1 st	Operations on a Binary Tree Deletion, Traversals
	2 nd	Types of Binary Trees
	3 rd	Graph Terminologies
15 th week	1 st	Representation of Graphs- Set, Linked, Matrix
	2 nd	Graph Traversals
	3 rd	Revision.

COURSE OUTCOMES

CO.1	Explain the fundamental concepts of data structures, classifications, and algorithm analysis techniques.
CO.2	Apply linear data structures such as stacks, queues, and their variations to solve computational problems.

CO.3	Develop and manipulate linked list structures including singly, doubly, and circular linked lists.
CO.4	Implement tree data structures and perform operations such as insertion, deletion, searching, and
CO.5	Analyze graph representations and traversal techniques for efficient storage and processing of data.


Signature of Faculty


HOD, CSE