

Lesson Plan

Discipline: Computer Science & Engg.	Semester: Third (3rd)	Name of the Faculty: Er Satabdi Palit
Subject: Data Structure	No. of days/week class allotted: Five (5)	Semester from Date: 15.09.22 to Date: 22.12.22 No. of Weeks: 15
WEEK	CLASS DAY	THEORY TOPICS
1 st	1 st	Explain Data, Information, data types.
	2 nd	Define data structure & Explain different operations
	3 rd	Explain Abstract data types
	4 th	Discuss Algorithm & its complexity & Explain Time, space tradeoff
	5 th	Review Class
2 nd	1 st	Explain Basic Terminology, storing strings
	2 nd	Continue.....
	3 rd	State Character Data Type
	4 th	Discuss String Operations
	5 th	Review Class
3 rd	1 st	Introduction
	2 nd	Linear array, Representation of linear array in memory
	3 rd	Traversing linear arrays
	4 th	inserting & deleting elements
	5 th	Discuss Multidimensional arrays, Representation of two dimensional arrays in memory (Row major order & column major order),

4th	1 st	And pointers
	2 nd	Explain Sparse matrices
	3 rd	Review Class
	4 th	Monthly Test
	5 th	Give Fundamental idea a
5th	1 st	Explain Array representation of Stacks
	2 nd	Continue.
	3 rd	Explain Arithmetic expression, polish Notation
	4 th	& Conversion from infix to postfix using Stack
	5 th	C Application Stacks, Recursion
6 th	1 st	Discuss Queues
	2 nd	Review Class
	3 rd	Introduction to linked list Representation of linked list in memory
	4 th	Traversing a linked list ,Searching
	5 th	Garbage collection
7th	1 st	Explain Insertion into a linked list,
	2 nd	Deletion from a linked list
	3 rd	Monthly Test
	4 th	header linked list
	5 th	Continue..
8th	1 st	Review Class
	2 nd	Explain Basic terminology of Tree

	3 rd	Discuss Binary tree.
	4 th	its representation and traversal.
	5 th	Binary search tree, searching.
9th	1 st	Cont..
	2 nd	Explain insertion in a binary search trees
	3 rd	deletion in a binary search trees
	4 th	Continue.
	5 th	Review Class
10th	1 st	Explain graph terminology.
	2 nd	&Its representation.
	3 rd	Explain Adjacency Matrix.
	4 th	Monthly Test
	5 th	Path Matrix.
11th	1 st	Continue..
	2 nd	Review Class
	3 rd	Discuss Algorithms for Bubble sort,
	4 th	Quick sort
	5 th	Merging
12th	1 st	Linear searching
	2 nd	Binary searching.
	3 rd	Review Class
	4 th	Discuss Different types of files organization
	5 th	and their access method,

13th	1 st	Introduction to Hashing,
	2 nd	Hash function,
	3 rd	Linear Probing & modification,
	4 th	collision resolution, open addressing,
	5 th	Chaining.
14th	1 st	Cont.
	2 nd	Review Class
	3 rd	Monthly Test
	4 th	Revision-1
	5 th	Revision-2
15th	1 st	Revision-3
	2 nd	Revision-4
	3 rd	Revision-5
	4 th	Revision-6
	5 th	Revision-7