



Aggarwal College Ballabgarh

LESSON PLAN

17 WEEKS (JAN-APRIL)-2025

Name of Faculty: Poonam Jain

Designation/ Department: Computer Science

CLASS: Bsc Cs

SEMESTER: 4

SECTION:

SUBJECT: 4.1: Data Structures with C /C++

Week		
1	7-1-2025	Unit 1-Data-Structure: Data-Structure operations
	8-1-2025	
	9-1-2025	
	10-1-2025	Algorithm, Complexity
	11-1-2025	Data structure and its essence
	12-1-2025	S. U. N. D. A. Y.
2	13-1-2025	
	14-1-2025	Introduction to Arrays, Array operations
	15-1-2025	
	16-1-2025	
	17-1-2025	Multi- dimensional arrays,
	18-1-2025	sequential allocation, address calculations
	19-1-2025	S. U. N. D. A. Y.
3	20-1-2025	
	21-1-2025	sparse arrays,
	22-1-2025	

	23-1-2025	
	24-1-2025	Revision
	25-1-2025	Test
	26-1-2025	REPUBLIC DAY /S. U. N. D. A. Y.
4	27-1-2025	
	28-1-2025	Stacks-Introduction to Stacks, primitive operations on stacks,
	29-1-2025	
	30-1-2025	
	31-1-2025	Representation of stacks as an array and stack-applications.
	1-2-2025	Revision
	2-2-2025	S. U. N. D. A. Y/BASANT PANCHAMI
5	3-2-2025	
	4-2-2025	Test
	5-2-2025	
	6-2-2025	
	7-2-2025	Unit 2-Queues:-Introduction to queues, operations on queue
	8-2-2025	circular queue,
	9-2-2025	S. U. N. D. A. Y
6	10-2-2025	
	11-2-2025	priority queue
	12-2-2025	HOLIDAY: GURU RAVIDAS JAYANTI
	13-2-2025	
	14-2-2025	Applications of queue.
	15-2-2025	Linked List-introduction and basic operations,

	16-2-2025	S. U. N. D. A. Y.
7	17-2-2025	
	18-2-2025	Header nodes,
	19-2-2025	
	20-2-2025	
	21-2-2025	doubly linked list
	22-2-2025	circular linked list,
	23-2-2025	S. U. N. D. A. Y.
8	24-2-2025	
	25-2-2025	Applications of linked list
	26-2-2025	HOLIDAY: MAHA SHIVRATRI
	27-2-2025	
	28-2-2025	Representation of linked list as an array, stacks and queues
	1-3-2025	Revision
	2-3-2025	S. U. N. D. A. Y.
9	3-3-2025	
	4-3-2025	Test
	5-3-2025	
	6-3-2025	
	7-3-2025	Tree structures: Basic terminology
	8-3-2025	binary trees and binary search trees
	9-3-2025	S. U. N. D. A. Y.
10	10-3-2025	
	11-3-2025	implementing binary trees,

	12-3-2025	
	13-3-2025	
	14-3-2025	Tree traversal algorithms
	15-3-2025	threaded trees,
	16-03-2025	S. U. N. D. A. Y.
11	17-3-2025	
	18-3-2025	trees in search algorithms,
	19-3-2025	
	20-3-2025	
	21-3-2025	AVL Trees,
	22-3-2025	Polish notation
	23-3-2025	S. U. N. D. A. Y.
12	24-3-2025	
	25-3-2025	expression trees
	26-3-2025	
	27-3-2025	
	28-3-2025	applications of binary trees.
	29-3-2025	Revision
	30-3-2025	S. U. N. D. A. Y.
13	31-3-2025	HOLIDAY: ID-UL-FITR
	1-4-2025	Test
	2-4-2025	
	3-4-2025	
	4-4-2025	Unit 4-Graph data structure and their applications.

	5-4-2025	Graph traversals,
	6-4-2025	S. U. N. D. A. Y.
14	7-4-2025	
	8-4-2025	shortest paths,
	9-4-2025	
	10-4-2025	HOLIDAY: MAHAVIR JAYANTI
	11-4-2025	spanning trees and related algorithms
	12-4-2025	spanning trees and related algorithms
	13-4-2025	S. U. N. D. A. Y.
15	14-4-2025	HOLIDAY: AMBEDKAR JAYANTI
	15-4-2025	Sorting: Internal and external sorting.
	16-4-2025	
	17-4-2025	
	18-4-2025	Sorting: Internal and external sorting.
	19-4-2025	Various sorting algorithms,
	20-4-2025	S. U. N. D. A. Y.
16	21-4-2025	
	22-4-2025	Various sorting algorithms,
	23-4-2025	
	24-4-2025	
	25-4-2025	Time and Space complexity of algorithms.
	26-4-2025	Searching techniques.
	27-4-2025	S. U. N. D. A. Y.
	28-4-2025	

17	29-4-2025	Applications of Sorting and Searching in computer science
	30-4-2025	HOLIDAY: AKSHAY TRITYA
	01-05-2025	
	02-05-2025	Revision and test
	03-05-2025	Revision and test
	04-05-2025	S. U. N. D. A. Y.

Signature