

## Lesson Plan

**Subject-** Data Structures

**Lesson Plan-** 17 Weeks (July – Nov 2019)

Week	Date	BCA-II BCA-232
1	16- July-2019	Introduction: Elementary data organization
	17- July-2019	Elementary data organization, Data Structure definition
	18- July-2019	-
	19- July-2019	-
	20- July-2019	-
	21- July-2019	Sunday
2	22- July-2019	Data type vs. data structure
	23- July-2019	Categories of data structures
	24- July-2019	Data structure operations, Applications of data structures
	25- July-2019	-
	26- July-2019	-
	27- July-2019	-
	28- July-2019	Sunday
3	29- July-2019	Algorithms complexity and time-space tradeoff
	30- July-2019	Big-O notation., Strings: Introduction
	31- July-2019	Holiday
	1- Aug- 2019	-
	2- Aug- 2019	-
	3- Aug- 2019	-
	4- Aug- 2019	Sunday
4	5- Aug- 2019	String operations.
	6- Aug- 2019	Pattern matching algorithms.
	7- Aug- 2019	Arrays: Introduction
	8- Aug- 2019	-
	9- Aug- 2019	-
	10- Aug- 2019	-
	11- Aug- 2019	Sunday
5	12- Aug- 2019	Holiday
	13- Aug- 2019	Representation of linear array in memory
	14- Aug- 2019	Array Traversal→Insertions, Deletion in an array, Multidimensional arrays
	15- Aug- 2019	Holiday
	16- Aug- 2019	-
	17- Aug- 2019	-
	18- Aug- 2019	Sunday
6	19- Aug- 2019	Parallel arrays, Sparce matrices.
	20- Aug- 2019	Linked List: Introduction, Array vs. linked list
	21- Aug- 2019	Insertion, Deletion, Searching in a linked list, Header linked list
	22- Aug- 2019	-
	23- Aug- 2019	-

	24- Aug- 2019	-
	25- Aug- 2019	Sunday
7	26- Aug- 2019	Circular linked list, Two-way linked list, Garbage collection
	27- Aug- 2019	Applications of linked lists.
	28- Aug- 2019	Algorithms for Insertion, deletion in array, Single linked list
	29- Aug- 2019	-
	30- Aug- 2019	-
	31- Aug- 2019	-
	1- Sept- 2019	Sunday
8	2- Sept- 2019	Stack: Introduction
	3- Sept- 2019	Array and linked representation of stacks
	4- Sept- 2019	<b>Assignment -2</b>
	5- Sept- 2019	-
	6- Sept- 2019	-
	7- Sept- 2019	-
	8- Sept- 2019	Sunday
9	9- Sept- 2019	Operations on stacks, Applications of stacks
	10- Sept- 2019	<b>Sessional</b>
	11- Sept- 2019	Polish notation, Recursion
	12- Sept- 2019	-
	13- Sept- 2019	-
	14- Sept- 2019	-
	15- Sept- 2019	Sunday
10	16- Sept- 2019	Queues: Introduction
	17- Sept- 2019	Array and linked representation of queues
	18- Sept- 2019	Operations on queues, Deques,
	19- Sept- 2019	-
	20- Sept- 2019	-
	21- Sept- 2019	-
	22- Sept- 2019	Sunday
11	23- Sept- 2019	Holiday
	24- Sept- 2019	Priority Queues, Applications of queues
	25- Sept - 2019	Tree: Introduction
	26- Sept - 2019	-
	27- Sept - 2019	-
	28- Sept - 2019	-
	29- Sept - 2019	Sunday
12	30- Sept - 2019	Representing Binary tree in memory
	1- Oct- 2019	Traversing binary trees
	2- Oct- 2019	Holiday
	3- Oct- 2019	-
	4- Oct- 2019	-
	5- Oct- 2019	-
	6- Oct- 2019	Sunday
13	7- Oct- 2019	Traversal algorithms using stacks
	8- Oct- 2019	Holiday
	9- Oct- 2019	Traversal algorithms using recursion
	10- Oct- 2019	Holiday

	11- Oct- 2019	-
	12- Oct- 2019	-
	13- Oct- 2019	Sunday
14	14- Oct- 2019	Graph: Introduction
	15- Oct- 2019	Graph theory terminology
	16- Oct- 2019	Sequential representation of graphs
	17- Oct- 2019	Holiday
	18- Oct- 2019	-
	19- Oct- 2019	-
	20- Oct- 2019	Sunday
15	21- Oct- 2019	Linked representation of graphs.
	22- Oct- 2019	Revision
	23- Oct- 2019	Revision
	24- Oct- 2019	-
	25- Oct- 2019	Diwali Break
	26- Oct- 2019	
	27- Oct- 2019	
	28- Oct- 2019	
16	29- Oct- 2019	
	30- Oct- 2019	-
	31- Oct- 2019	-
	1- Nov- 2019	Holiday
	2- Nov- 2019	Holiday
	3- Nov- 2019	Sunday
	4- Nov- 2019	Discussion over Previous Year papers
17	5- Nov- 2019	Discussion over Previous Year papers
	6- Nov- 2019	Revision
	7- Nov- 2019	-
	8- Nov- 2019	-
	9- Nov- 2019	-
	10- Nov- 2019	Sunday