Department of Computer Science & Engineering

Lesson Plan & Work-done Diary for AY: 2019-20, ODD Semester

Course with Code: Data Structures & Applications(BCS304)				Faculty: Arjun G S				Semester & Section:3rd Sem	
Class No.	Date planned (DD/MM)	Topics to be covered	TLP Planned	Class No.	Date of Conduction (DD/MM)	Topics Covered		TLP Executed	Remarks if any deviation
MODULE-1									
1	15/11/23	Basics	Chalk & Talk						
2	17/11/23	**Introduction:** Data Structures, Classifications (Primitive & Non Primitive), Data Structure Operations.	Chalk & Talk						
3	20/11/23	Review Of Arrays, Structures, Self-Referential Structures	Chalk & Talk						
4	22/11/23	Unions., Pointers	Chalk & Talk						
5	24/11/23	Dynamic Memory Allocation Functions	Chalk & Talk						
6	27/11/23	Dynamic Memory Allocation For 1d And 2d Array, Representation Of Linear Arrays In Memory.	Chalk & Talk						
7	29/11/23	**Array Operations**: Traversing, Inserting	Chalk & Talk						
8	1/12/23	Deleting, Searching. And Sorting	Chalk & Talk						
9	4/12/23	Multidimensional Arrays, Polynomials And Sparse Matrices	Chalk & Talk						
10	6/12/23	**Strings:** Basic Terminology, Storing, Operations	Chalk & Talk						

| 11 | 8/12/23 | Pattern Matching Algorithms, Programming Examples. | Chalk & Talk | | | | Chalk & Talk | |

Course with Code: Data Structures & Applications(BCS304)				Faculty: Arjun G S			Semester & Section:3rd Sem	
Class No.	Date planned (DD/MM)	**Topics to be covered**	**TLP Planned**	Class No.	Date of Conduction (DD/MM)	**Topics Covered**	**TLP Executed**	**Remarks if any deviation**
				MODULE-2				
12	11/12/23	*Stacks:* Definition, Stack Operations	Chalk & Talk					
13	13/12/23	Array Representation Of Stacks, Stacks Using Dynamic Arrays, Stack Applications	Chalk & Talk					
14	15/12/23	Polish Notation, Infix To Postfix Conversion, Evaluation Of Postfix Expression	Chalk & Talk					
15	18/12/23	**Recursion** - Factorial, Fibonacci Sequence.	Chalk & Talk					
16	20/12/23	Ackerman's Function, Gcd	Chalk & Talk					
17	22/12/23	**Queues:** Definition, Array Representation, Queue Operations, Circular Queues	Chalk & Talk					
18	25/12/23	Circular Queues Using Dynamic Arrays	Chalk & Talk					
19	27/12/23	Dequeues, Priority Queues, A Mazing Problem	Chalk & Talk					
20	29/12/23	Multiple Stacks And Queues. Programming Examples	Chalk & Talk					

Course with Code: Data Structures & Applications(BCS304)				Faculty: Arjun G S				Semester & Section:3rd Sem	
Class No.	Date planned (DD/MM)	Topics to be covered	TLP Planned	Class No.	Date of Conduction (DD/MM)	Topics Covered		TLP Executed	Remarks if any deviation
MODULE-3									
21	1/1/24	**Linked Lists**: Definition, Representation Of Linked List In Memory	Chalk & Talk						
22	3/1/24	Memory Allocation, Garbage Collection	Chalk & Talk						
23	5/1/24	Linked List Operations: Traversing, Searching,	Chalk & Talk						
24	8/1/24	Insertion, Deletion	Chalk & Talk						
25	10/1/24	Doubly Linked Lists	Chalk & Talk						
26	12/1/24	Circular Linked Lists, Header Linked Lists	Chalk & Talk						
27	15/1/24	Linked Stacks And Queues	Chalk & Talk						
28	17/1/24	Applications Of Linked Lists – Polynomials	Chalk & Talk						
29	19/1/24	Sparse Matrix Representation.	Chalk & Talk						
30	22/1/24	Programming Examples	Chalk & Talk						

Course with Code: Data Structures & Applications(BCS304)				Faculty: Arjun G S				Semester & Section:3rd Sem	
Class No.	Date planned (DD/MM)	Topics to be covered	TLP Planned	Class No.	Date of Conduction (DD/MM)	Topics Covered		TLP Executed	Remarks if any deviation
MODULE-4									
31	24/1/24	TREES: Terminology, binary trees	Chalk & Talk						
32	26/1/24	Properties Of Binary Trees	Chalk & Talk						
33	29/1/24	Array And Linked Representation Of Binary Trees	Chalk & Talk						
34	31/1/24	Binary Tree Traversals - Inorder, Postorder, Preorder	Chalk & Talk						
35	2/2/24	Additional Binary Tree Operations	Chalk & Talk						
36	5/2/24	Threaded Binary Trees, Binary Search Trees – Definition	Chalk & Talk						
37	7/2/24	Insertion, Deletion,	Chalk & Talk						
38	9/2/24	Traversal	Chalk & Talk						
39	12/2/24	Searching	Chalk & Talk						
40	14/2/24	Application Of Trees- Evaluation Of Expression	Chalk & Talk						

Course with Code: Data Structures & Applications(BCS304)				Faculty: Arjun G S				Semester & Section:3rd Sem	
Class No.	Date planned (DD/MM)	Topics to be covered	TLP Planned	Class No.	Date of Conduction (DD/MM)	Topics Covered	TLP Executed	Remarks if any deviation
				MODULE-5					
41	12/2/24	**Graphs**: Definitions, Terminologies	Chalk & Talk					
42	12/2/24	Matrix And Adjacency List Representation Of Graphs	Chalk & Talk					
43	14/2/24	Elementary Graph Operations	Chalk & Talk					
44	14/2/24	Traversal Methods: Breadth First Search And Depth First Search	Chalk & Talk					
45	16/2/24	**Sorting And Searching**: Insertion Sort, Radix Sort, Address Calculation Sort	Chalk & Talk					
46	16/2/24	**Hashing:** Hash Table Organizations, Hashing Functions,	Chalk & Talk					
47	19/2/24	Static And Dynamic hashing	Chalk & Talk					
48	19/2/24	Hashing **Files And Their Organization:** Data Hierarchy, File Attributes	Chalk & Talk					
49	20/2/24	Text Files And Binary Files	Chalk & Talk					
50	20/2/24	Basic File Operations, File Organizations And Indexing	Chalk & Talk					

	Activity	Planned	Actual	Remarks
1	Theory Classes			
2	Assignments/ Quizzes/ Self-study			
3	Tutorials/ Extra classes			
4	Internal Assessments			
5	ICT based Teaching (% of usage in Curriculum)			

Planning	Execution
Faculty Signature:	Faculty Signature:
HoD Signature:	HoD Signature: