DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING – DATA SCIENCE

Lesson Plan & Work-done Diary for AY: 2025-26, EVEN Semester

Course with Code: Analysis & Design of Algorithms Lab (BCSL404)				Faculty: Mrs. Madhu Nagaraj		Semester & Section:4 'A'	
Class No.	Date planned (DD/MM)	Topics to be covered	TLP Planned	Date of Conduction (DD/MM)	Topics Covered	TLP Executed	Remarks if any deviation
1.		C Program to find Minimum Cost Spanning Tree of a given connected undirected graph using Kruskal's algorithm.	PPT Chalk & Talk			PPT Chalk & Talk	
2.		C Program to find Minimum Cost Spanning Tree of a given connected undirected graph using Prim's algorithm.	PPT Chalk & Talk			PPT Chalk &Talk	
3.		a. Design and implement C Program to solve All-Pairs Shortest Paths problem using Floyd's algorithm. b. Design and implement C Program to find the transitive closure using Warshal's algorithm.	PPT Chalk & Talk			PPT Chalk & Talk	
4.		C Program to find shortest paths from a given vertex in a weighted connected graph to other vertices using Dijkstra's algorithm.	PPT Chalk & Talk			PPT Chalk & Talk	
5.		C Program to obtain the Topological ordering of vertices in a given digraph.	PPT Chalk & Talk			PPT Chalk & Talk	
6.		C Program to solve 0/1 Knapsack problem using Dynamic Programming method.	PPT Chalk & Talk			PPT Chalk & Talk	
7.		1st Lab IA				PPT Chalk & Talk	

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING – DATA SCIENCE

Course with Code: Analysis & Design of Algorithms Lab (BCSL404)				Faculty: Mrs. Madhu Nagaraj			Semester & Section:4 'A'	
Class No.	Date planned (DD/MM)	Topics to be covered	TLP Planned	Date of Conduction (DD/MM)	Topics Covered		TLP Executed	Remarks if any deviation
8.		C Program to solve discrete Knapsack and continuous Knapsack problems using greedy approximation method.	PPT Chalk & Talk				PPT Chalk & Talk	
9.		C Program to find a subset of a given set S = {sl , s2,.....,sn} of n positive integers whose sum is equal to a given positive integer d.	PPT Chalk & Talk				PPT Chalk & Talk	
10.		C Program to sort a given set of n integer elements using Selection sort method and compute its time complexity.	PPT Chalk & Talk				PPT Chalk & Talk	
11.		C Program to sort a given set of n integer elements using Quick Sort method and compute its time complexity..	PPT Chalk & Talk				PPT Chalk & Talk	
12.		C Program to sort a given set of n integer elements using Merge Sort method and compute its time complexity	PPT Chalk & Talk				PPT Chalk & Talk	
13.		C Program for N Queen's problem using Backtracking.	PPT Chalk & Talk				PPT Chalk & Talk	
14.		2nd LAB IA						

	Activity	Planned	Actual	Remarks
1	No of Labs	12		
2	Assignments/ Quizzes/ Self-study	-		
3	Tutorials/ Extra classes	-		
4	Internal Assessments	2		
5	ICT based Teaching (% of usage in Curriculum)	100%		
Planning			**Execution**	
Faculty Signature:			Faculty Signature:	
HoD Signature:			HoD Signature:	