



## DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING - AI & ML

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

Course with Code: Analysis & Design of Algorithms Lab (BCSL404)				Faculty: Vanitha G Naik		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.	B1:05/03 B2:2/03 B3:4/03	C Program to find Minimum Cost Spanning Tree of a given connected undirected graph using Kruskal's algorithm.	Chalk &Talk PPT			Chalk &Talk PPT	
2.	B1:12/03 B2:09/03 B3:11/03	C Program to find Minimum Cost Spanning Tree of a given connected undirected graph using Prim's algorithm.	Chalk &Talk PPT			Chalk &Talk PPT	
3.	B1:26/03 B2:16/03 B3:18/03	Design and implement C Program to solve All-Pairs Shortest Paths problem using Floyd's algorithm. Design and implement C Program to find The transitive closure using Warshal's algorithm.	Chalk &Talk PPT			Chalk &Talk PPT	
4.	B1:09/04 B2:23/03 B3:25/03	C Program to find shortest paths from a given vertex in a weighted connected graph to other vertices using Dijkstra's algorithm.	Chalk &Talk PPT			Chalk &Talk PPT	
5.	B1:16/04 B2:6/04 B3:08/04	C Program to obtain the Topological ordering of vertices in a given digraph.	Chalk &Talk PPT			Chalk &Talk PPT	
6.	B1:23/04 B2:13/04 B3:15/04	C Program to solve 0/1 Knapsack Problem using Dynamic Programming method.	Chalk &Talk PPT			Chalk &Talk PPT	
7	B1:30/04 B2: 27/04 B3: 22/04	LAB INTERNALS 1					



## DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING - AI & ML

Course with Code: Analysis & Design of Algorithms Lab (BCSL404)				Faculty :Vanitha G Naik		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	B1:7/05 B2:4/05 B3:29/04	C Program to solve discrete Knapsack and continuous Knapsack problems using greedy approximation method.	Chalk &Talk PPT			Chalk&Talk PPT	
9	B1:7/05 B2:18/05 B3:6/05	C Program to find a subset of a given set $S = \{s_1, s_2, \dots, s_n\}$ of $n$ positive integers whose sum is equal to a given Positive integer $d$ .	Chalk &Talk PPT			Chalk &Talk PPT	
10	B1:14/05 B2:18/05 B3:13/05	C Program to sort a given set of $n$ integer elements using Selection sort method and compute its time complexity.	Chalk &Talk PPT			Chalk &Talk PPT	
11.	B1:14/05 B2:25/05 B3:20/05	C Program to sort a given set of $n$ integer elements using Quick Sort method and compute its time complexity..	Chalk &Talk PPT			Chalk &Talk PPT	
12.	B1:21/05 B2:25/05 B3:27/05	C Program to sort a given set of $n$ integer elements using Merge Sort method and compute its time complexity	Chalk &Talk PPT			Chalk &Talk PPT	
13.	B1:21/05 B2:1/06 B3:27/05	C Program for N Queen's problem using Backtracking.	Chalk &Talk PPT			Chalk &Talk PPT	
14	B1:04/06 B2:15/06 B3:3/06	LAB INTERNALS 2					



**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING - AI & ML**

	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%		
<b>Planning</b>			<b>Execution</b>	
Faculty Signature:			Faculty Signature:	
HoD Signature:			HoD Signature:	