

## LESSON PLAN

**Subject Code & Name: 20CSTT202 & Discrete Mathematics**  
**Academic Year: 2022-2023 Branch/Semester II-I CSE-DS**  
**Faculty Name: Dr SAnthikumar Rajamahanthi**

Contact Hour (Cumulative)	Unit No	Topic	Teaching Methodology	Remarks
1	I	Introduction to logic & mathematical reasoning	BB	
2	I	Statements&Notations	BB	
3	I	Connectives	BB	
4	I	Truth Tables	BB	
5	I	Tautologies	BB	
6	I	Equivalence of formulas	BB	
7	I	Tautological Implications	BB	
8	I	Normal forms	BB	
9	I	Theory of inference for Statement calculus.	BB	
10	II	Introduction to Predicate Calculus	BB	
11	II	Predicate Logic	BB	
12	II	Statement functions	BB	
13	II	Variables&quantifiers	BB	
14	II	Free&bound variables	BB	
15	II	Inference Theory of predicate calculus	BB	
16	II	Logical implication involving quantifiers	BB	
17	II	Statements with more than one variable	BB	
18	III	Proporties of Relations	BB	
19	III	Equivalence relations	BB	
20	III	Posets	BB	

\*Black Board / LCD / OHP / Other Method



# LESSON PLAN

21	III	Lattices	BB	
22	III	Properties of Lattices	BB	
23	III	Special Types of Lattices(without Proofs)	BB	
24	III	Lattices with Examples	BB	
25	IV	Basic Concepts of Graphs	BB	
26	IV	Matrix Representation of Graphs	BB	
27	IV	Problems on Adjacency Matrices	BB	
28	IV	Problems on Incidence Matrices	BB	
29	IV	Isomorphic Graphs	BB	
30	IV	Paths&Circuits	BB	
31	IV	Eulerian&Hamiltonian Graphs	BB	
32	IV	Problems	BB	
33	IV	Planar Graphs	BB	
34	IV	Graph coloring	BB	
35	V	Introduction&Applications of Trees	BB	
36	V	Tree Travels	BB	
37	V	Spanning Trees	BB	
38	V	Minimum cost Spanning Trees	BB	
39	V	Prim's Algorithm	BB	
40	V	Kruskal's Algorithm	BB	

# LESSON PLAN

41	VI	Generating Function of Sequences	BB	
42	VI	Find the coefficient of Generating function	BB	
43	VI	Partial Fractions	BB	
44	VI	1 <sup>st</sup> order & 2 <sup>nd</sup> order Linear Homogeneous Recurrence relations	BB	
45	VI	Method of Generating Functions	BB	

