Lesson Plan

STAFF NAME: SB + SNM + ARB   **SEMESTER: III**   **SECTION: A, B, C, D, E**
SUBJECT CODE: 20CS350   **SUBJECTNAME: DMS**
DEPARTMENT: CS&E   **NO. OF SCHEDULED CLASSES: 39**

Discrete Mathematical Structures

Session	Session-wise lesson plan
	Beginning of ODD semester-17TH OCTOBER 2022
1.	**UNIT 1 : Fundamental of Logic :** Basic Connectives with examples and problems
2.	Tautology , Contradiction ,Contingency , Definitions problems using truth table
3.	Logical Equivalence: Definition ,Problems using the truth table
4.	Problems using the laws of logics
5.	Duality laws , principle of duality , problems
6.	Rules of inference and problems using the tables
7.	Problems using the rules of inferences.
8.	The Use of Quantifiers: Definitions and problems.
9.	**UNIT 2 : Relations:** Introduction, Properties of relations,
10.	Properties of relations, and problems Continued………
11.	Computer Recognition: Zeros- One Matrices and problems
12.	Directed Graphs , problems based on the digraph and matrices
13.	Partial orders: Definitions, problems based on the verification of the partial order.
14.	Hasse diagrams : Definitions of the Hasse diagram and problems
15.	Equivalence Relations and Partitions Definitions Problems
16.	Lattices. Definitions and problems
17.	**UNIT 3 : Coding Theory:** Introduction , Elements of coding theory and Problems
18.	Elements of coding theory Definitions Problems
19.	Problems continued…….
20.	Generator of codes using the generator matrix
21.	Generator of codes using the generator matrix continued……
22.	Parity check matrix and problems
23.	Hamming matrix and problems
24.	Problems continued…….
25.	**UNIT 4 : Graph theory:** Definitions and Examples
26	Problems continued……….

27	Handshaking property and problems
28	Subgraphs, Complements, and Graph ,problems
29	Isomorphism, Vertex degree problems
30	Problems based on the isomorphism
31	Euler trail and circuits, Definitions and problems
32	Hamiltonian Paths and cycles. Definitions and problems
33	**UNIT 5 : Trees:** Definitions, Properties and Examples
34	Problems based on the properties of the trees
35	Rooted trees, balanced trees etc Definitions and problems
36	trees and sorting Different types of sorting
37	Problems based on the sorting
38	weighted trees : Definitions
39	Prefix Codes.: Definitions and problems

Signature of Teacher   Signature of HoD/Chairperson

Plan of action
- **Continuous Internal Evaluation process will be conducted for 50marks**

3 tests and 2 events will be conducted

TEST 1	EVENT 1	TEST 2	EVENT 2	TEST 3	Total
20 marks	Quiz (20 marks)	20 marks	Quiz (20 marks)	20 marks	50 marks

Teaching Methodology: Black board