

LESSON PLAN 2024-25

Name: Ms Sunita Arora

Department: Computer Science

Class: B.Sc-Computer Sc-5th Sem. Paper: Database Management System

Month: July

Week 4 : Basic Concepts - Data. Information. Records and files. Traditional file Based Approach-
Limitations of Traditional File Based Approach

Month: August

Week 1: Database Approach-Characteristics of Database Approach, Database Management System (DBMS).

Week 2: Components of DBMS Environment, DBMS Functions and Components, Advantages and Disadvantages of DBMS.

Week 3: Actors on the Scene Data and Database Administrator. Database Designers, End users Applications Developers and Workers behind the Scene. Database System Architecture - Three Levels of Architecture

Week 4: Schemas- External, Conceptual and Internal Level, Mappings - External/ Conceptual and Conceptual/Internal, Data Independence - Logical and Physical Data Independence

Month: September

Week 1: Database Languages- VDL, DDL, SDL, DML, SQL, Instances, Class Test

Week 2: Data Models: High Level, Low Level and Representational Records- based Data Models

Week 3: Object-based Data Models, Physical Data Models and Conceptual Models

Week 4: Entity-Relationship Model - Concepts, Entity Types, Entity Sets, Attributes

Month: October

Week 1: Relationships, Constraints, Keys, Degree, Cardinality etc.,ER Diagrams of any Database Organization- Inventory System, Payroll System, Reservation System, Online Book Store etc.

Week 2: Classification of architecture Database Management System, Centralized and Client Server

Week 3: Relational Data Model:-Brief History, Terminology in Relational Data Structure

Relations, Properties of Relations

Week 4: Diwali Break

Month: November

Week 1: Keys Primary, Secondary, Composite, Candidate, Alternate and Foreign Key

Week 2: Integrity Constraints over Relations.

Week 3: Revision and tests