

LESSON PLAN- Relational database management system

Name of Faculty : Mrs. Priyanka Sachdeva
Discipline : Bachelor of Computer Applications
Semester : BCA 4th Semester
Subject : Relational database management system
Lesson plan duration : 15 Weeks

Work load (Lecture) Per Week (in hours): Lectures-03

| Week | Theory | |
|------|-------------|---|
| | Lecture day | Topic (Including assignment and test) |
| 1 | 1 | Introduction |
| | 2 | Relational Model Concepts |
| | 3 | Codd 's Rules for Relational Model |
| 2 | 4 | Relational Algebra-Selection with examples |
| | 5 | Projection with examples |
| | 6 | Set Operation with examples |
| 3 | 7 | Renaming |
| | 8 | Join and Division |
| | 9 | Relational Calculus: Tuple Relational Calculus |
| 4 | 10 | Domain Relational Calculus |
| | 11 | Class Test |
| | 12 | Functional Dependencies and Normalization Purpose |
| 5 | 13 | Data Redundancy and Update Anomalies |
| | 14 | Functional Dependencies:-Full Functional Dependencies |
| | 15 | Transitive Functional Dependencies, |
| 6 | 16 | Decomposition and Normal Forms |
| | 17 | Characteristics of Functional Dependencies |
| | 18 | Normal Forms |
| 7 | 19 | Normal Forms with examples |
| | 20 | Normal Forms 2NF with anomalies |
| | 21 | Normal Forms 3 NF |
| 8 | 22 | Normal Forms BCNF |
| | 23 | Class Test |
| | 24 | SQL |
| 9 | 25 | Data Definition and data types |
| | 26 | SQL Operators |
| | 27 | Specifying Constraints in SQL |
| 10 | 28 | Basic DDL, DML and DCL commands in SQL |
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| | 30 | Class test |
| 11 | 31 | Simple Queries |
| | 32 | Nested Queries, Tables |
| | 33 | Views |
| 12 | 34 | Indexes, Aggregate Functions, |
| | 35 | Clauses |
| | 36 | Class Test |
| 13 | 37 | PL/SQL architecture, PL/SQL and SQL*Plus |
| | 38 | PL/SQL Basics, Advantages of PL/SQ |
| | 39 | The Generic PL/SQL Block: PL/SQL Execution Environment |
| 14 | 40 | PL/SQL Character set and Data Types |
| | 41 | Control Structure in PL/SQL |
| | 42 | Cursors in PL/SQL |
| 15 | 43 | Triggers in PL/SQL |
| | 44 | Programming using PL/SQL |
| | 45 | Class Test |