MODULE 1

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<u>Lec-2: Introduction to DBMS (Database Management System) With Real life examples |</u>
What is DBMS

Lec-3: File System vs DBMS | Disadvantages of File System | DBMS Advantages

1.2

Database Languages and Software

database users in dbms with example | administrators

1.3

Lec-4: 2 tier and 3 tier Architecture with real life examples | Database Management System

Lec-5: What is Schema | How to define Schema | Database management system in Hindi

<u>Lec-6: Three Schema Architecture | Three Level of Abstraction | Database Management</u> System

Lec-7: What is Data Independence | Logical vs. Physical Independence | DBMS

MODULE 2

2.1

Database Design Process

Lec-14: Introduction to ER model | ER Model क्या है

Lec-15: Types of Attributes in ER Model | Full Concept | DBMS in Hindi

2.2

Lec-16: One to One relationship in DBMS in Hindi

Lec-17: One to Many Relationship in DBMS in Hindi | 1-M Relationship

Lec-18: Many to Many Relationship in DBMS | M-N Relationship

2.3

2.2 Entity, Types of Entity and Entity Sets

Basic Concepts of Entity-Relationship Model

2.4 & 2.5

Lec-44: Introduction to Relational Algebra | Database Management System

Lec-45: Projection in Relational Algebra | Database Management System

Lec-46: Selection in Relational Algebra | Database Management System

Lec-47: Cross/Cartesian Product in Relational Algebra | Database Management System

Lec-48: Set Difference in Relational Algebra | Database Management System

Lec-49: Union Operation in Relational Algebra | Database Management System

Lec-50: Division Operation in Relational Algebra | Database Management System

2.6 & 2.7

<u>Lec-52: Introduction to Structured Query Language | All Points regarding its Features and Syllabus</u>

<u>Lec-52: Introduction to Structured Query Language | All Points regarding its Features and Syllabus</u>

Lec-54: Create table in SQL with execution | SQL for Beginners | Oracle LIVE

Lec-55: ALTER Command (DDL) in SQL with Implementation on ORACLE

Lec-56: Difference between Alter and Update in SQL with examples in Hindi | DBMS

Lec-57 Difference between Delete, Drop & Truncate in SQL | DBMS

Lec-58: Constraints in SQL in Hindi | DBMS

Lec-59: SQL Queries and Subqueries (part-1) | Database Management System

Lec-60: SQL Queries and Subqueries (part-2) | 2nd Highest Salary | Nested Queries | DBMS

Lec-61: SQL Queries and Subgueries (part-3) | Group By clause | Database Management System

Lec-62: SQL Queries and Subqueries (part-4) | Having clause | Database Management

Lec-63: SQL Queries and Subqueries (part-5) | Database Management System

Lec-64: SQL Queries and Subqueries (part-6)| use of IN and Not IN | Database Management System

Lec-65: SQL Queries and Subqueries (part-7) use of IN and Not IN in Subquery | DBMS

Lec-66: EXIST and NOT EXIST Subqueries(part-8) | Database Management System

Lec-67: SQL Aggregate Functions - SUM, AVG(n), COUNT, MIN, MAX Functions | DBMS

Lec-68: Correlated Subquery in SQL with Example | Imp for Placements, GATE, NET & SQL certification

Lec-69: Difference between Joins, Nested Subguery and Correlated Subguery | Most Imp Concept of SQL

2.8

Lec-8.0: Integrity Constraints in Database with Examples

Lec-8: What is CANDIDATE KEY and PRIMARY key | Full Concept | Most suitable

examples | DBMSLec-9: What is Primary Key in DBMS | Primary Key with Examples in Hindi

Lec-10: Foreign Key in DBMS | Full Concept with examples | DBMS in Hindi

Lec-11: Insert, Update & Delete from Foreign Key table | Referential Integrity

Lec-13: Super key in DBMS in HINDI । ये Question Competition Exams में अक्सर पूछा गया है

MODULE 3

3.1

6.1- Features Of Relational Database Design DBMS | relational database design | DBMS gate lectures

Lec-20: Introduction to Normalization | Insertion, Deletion & Updation Anomaly

Lec-23: Functional Dependency & its properties in DBMS in HINDI

3.2

<u>Lec-21: First Normal form in DBMS in HINDI | 1st Normal form क्या होती है ?</u>

Lec-22: Finding Closure of Functional dependency in DBMS | Easiest & Simplest way

Lec-24: Second Normal Form | 2NF | Database Management System

Lec-25: Third Normal Form in dbms with examples in Hindi | Normalization

3.3

Decomposition Using Functional Dependency - Relational Database Design - Database Management System

Lec-26: Boyce Codd Normal Form #BCNF #DBMS #Normalization with best examples

Lec-27: BCNF Always Ensures Dependency Preserving Decomposition?? Normalization **Examples**

<u>Decomposition Using Multivalued Dependencies</u>

DBMS - Fourth Normal Form 4NF

<u>Lec-29: All Normal Forms with Real life examples | 1NF 2NF 3NF BCNF 4NF 5NF | All in</u> One

MODULE 4

4.1

Lec-96: Types Of Indexes | Most Important Video on Indexing

Lec-97: Primary Index With Example | GATE, PSU and UGC NET | DBMS

Lec-98: Clustered Index in Database with Example

<u>DBMS - Sparse vs. Dense Index</u>

Lec-99: Secondary Index in Database with Example | Multilevel Indexing

4.2

L-6.1: What is hashing with example I Hashing in data structure

Static Hashing - Indexing and Hashing - Database Management System

7 Dynamic hashing with example

4.3

DBMS - Introduction to Query Processing

<u>L128: Query Processing & Optimization in Distributed Database | Query Processing Steps, Query Blocks</u>

4.4

Query Optimization | SQL Query Optimization with Examples

Procedures in PL-SQL | Local Procedure vs Stored Procedure

How to Fetch Data from Database using Procedures | PL-SQL Procedure

MODULE 5

Lec-73: Introduction to Transaction Concurrency in HINDI | Database Management System

Lec-74: ACID Properties of a Transaction | Database Management System

Lec-75: Transaction States | Database Management System

Lec-76: What is Schedule | Serial Vs Parallel Schedule | Database Management System

<u>Lec-79: Read-Write Conflict or Unrepeatable Read Problem | Database Management System</u>

Lec-80: Irrecoverable Vs Recoverable Schedules in Transactions | DBMS

Lec-81: Cascading vs Cascadeless Schedule with Example | Recoverability | DBMS

Lec-82: Introduction to Serializability | Transactions Concurrency and Control | DBMS

<u>Lec-83: Conflict Equivalent Schedules with Example | Transaction concurrency and Control |</u>
DBMS

Lec-84: Conflict Serializability | Precedence Graph | Transaction | DBMS

Lec-85: Why View Serializability is Used | Introduction to View Serializability | DBMS

<u>Lec-86:Shared Exclusive Locking Protocol with Example in Hindi | Concurrency Control | DBMS | Part-1</u>

Log Based Database Recovery in Hindi | DBMS lectures for Beginners in Hindi | Shadow Paging in Database Recovery in Hindi | DBMS lectures for Beginners | Dead lock and its prevention techniques in Hindi | Distributed System Tutorials | Vertical fragmentation in Hindi | Distributed Database Tutorials | Horizontal fragmentation in Hindi | Distributed Database Tutorials |

One shot::

<u>Complete DBMS in 1 Video (With Notes) || For Placement Interviews</u>

Complete DBMS Data Base Management System in one shot | Semester Exam | Hindi