Timings :	**7.00 -8.30pm**
Scheduled on :	**Weekdays (from 21 Feb Onwards)**
Estimated Lectures:	**10 lectures (2 Weeks)**
Extras:	**How to Go through the Articles**

Reference Book	**Fundamentals of Database Systems, S Navathe**

Topic Name	Sub-Topic Name	Lecture Number	Recordings	Reading Material
Introduction to Database Management Systems				
	What is data, database, information, dbms ?		Zoom Rec-1	
	Database users: DBA, DD, EU			
	Advantages of DBMS approach over File System Approach			
	DBMS architecture: 2-tier, 3-tier architecture, n-tier architectures			
	DBMS Languages: SDL, VDL, DDL			
	Classification of DBMS's	Notes and Doubts		Lecture 0
Data Modelling using ER				
	Need of data Modelling ? Various models available for modelling of data.			
	ER Model with a sample database approach: Entities(Types, Sets), Attributes and Keys		Zoom Rec-1	
	Relationship Types, Sets and Constraints	Lecture 1		Lecture 01
Relational Modelling				
	Relational Model Concepts: Domain, Attributes, Tuples and Relations			
	Characteristics of Relation: Ordering of Tuple, Values and Nulls		Zoom Recording	
	Relational Model Constraints: Domain Constraints, Other Types of Constraints			
	Dealing with constraint violations	Lecture 2		Lecture 2
SQL				
	Schema and Catalog concept			
	DDL and DML Introduction	Lecture 3	Zoom Recording	Lecture3
	Attributes Data types and domains in SQL			
	Create table command in SQL			
	Constraints in SQL	Lecture 4	Zoom Recording	Lecture4
	Foreign Key Constraint	Lecture 5	Zoom Recording	Lecture5
	TEST --> Questions and Answers	QUIZ		QUIZ QUESTION & ANSWER LINK
	Alter Table Command	Lecture 6	Zoom Recording	Lecture 6
	Drop Command			
	Truncate command			
	DML Commands Introduction			
	Insert and Delete Command	Lecture 7	Zoom Recording	Lecture 7
	Update Command			
	Select from where structure in SQL	Lecture 8	Zoom Recording	
	Practice Select from where set - 1	Lecture 9	Zoom Recording	Lecture 8 and 9
	Practice Select from where set - 2	Lecture 10	Zoom Recording	Lecture 10
	Order By clause			
	Comparisons involving NULLS			
	Nested Queries	Lecture 11	Zoom Recording	Lecture 11
	Exists and Unique functions in SQL			
	Joins in SQL & Cartesian Product, Union, Intersection and Minus operations using Joins			
	Aggregate Functions	Lecture 12	Zoom Recording	Lecture 12
	Group By and Having Clause			
	With and Case: with few examples			
	Views in SQL			
	Alter Command	Lecture 13	Zoom Recording	Lecture 13
Normalization				
	Redundant information in Tuples			
	Insertion, Updation and Deletion Anomalies			
	Spurious Tuples			
	Functional Dependencies			
	Normalization of Relations			
	1NF, 2NF, and 3NF			
	BCNF			
	Multivalued Dependency			Lecture 14
Introduction to Transactions				
	Introduction to Transaction			
	A in DBMS			
	C in DBMS			
	I in DBMS			
	D in DBMS	Lecture 14	Zoom Recording	Lecture 15

Learning Objectives	Quiz
Students will completely be understand how data is been captured. Our motive while conduncting this would be to engage up with concept and queries. These lectures are constructed in such way that ; students get basics stronger.	Quiz
In this chapter we are digging deeper into ER-Diagrams ; what are components of ER-Diagram ; Terms and terminologies in the ER-model.	Quiz
understand the fundamentals like Relational Model Concepts- Domain, Attributes , Tuples and their relationship. With the help of interactive excercise and quizes we will be able to grasp the knowledge ; with effective notes we are going to revise the content.	Quiz
We will be digging deep into Concepts like Schema and Usage of Diff. Schemas as well as What is DDL , DML..	Quiz Quiz