S.No.	Week	Торіс	Mode of Delivery
	1	Introduction : Database System — Views– Data Models – Database Languages — Database System Architecture – Database users and Administrator	Chalk and Talk
2	2	E-R model – E-R Diagrams Introduction to relational databases	PowerPoint Presentation
3	3	Relational model: The relational Model -Keys - Relational Algebra	-do-
4	4	Domain Relational Calculus – Tuple Relational Calculus - Fundamental operations – Additional Operations	-do-
5	5	SQL fundamentals - Integrity - Triggers - Security - Advanced SQL features -Missing Information-Views -	-do-
6	6	Database design: Functional Dependencies – Non-loss Decomposition – Functional Dependencies	-do-
7	7	First, Second, Third Normal Forms, Dependency Preservation – Boyce/Codd Normal Form	-do-
8	8	Multi-valued Dependencies and Fourth Normal Form – Join Dependencies and Fifth Normal Form	-do-
9	9	Transactions :Transaction Concepts - Transaction Recovery – ACID Properties – System Recovery –Media Recovery Two Phase Commit - SQL Facilities for recovery – Concurrency – Need for Concurrency – Locking Protocols – Two Phase Locking	-do-
10	10	Intent Locking – Deadlock- Serializability – Recovery Isolation Levels	-do-
11	11	Emerging systems: Distributed Data bases – Object oriented Data bases - Mobile Databases- XML and Web Databases	-do-
12	12	Active and Deductive Databases - Multimedia Databases- Multimedia Data Structures - Multimedia Query languages - Spatial Databases.	-do-