



Department of Computer Science and Engineering

Lesson Plan and Execution

Faculty : Mr. Mohan H G	Department : CSE
Course : 18CS53 - Database Management System	Section : 5 B

Sl. No	Topic	CO	Module No.	Pedagogy	Execution Remarks	Execution Date	Signature
1	Introduction to Databases: Introduction, Characteristics of database approach,	1	1	Presentation	Done	01-09-2020	
2	Advantages of using the DBMS approach,	1	1	Presentation	Done	02-09-2020	
3	History of database applications.	1	1	Presentation	Done	03-09-2020	
4	Overview of Database Languages and Architectures: Data Models, Schemas, and Instances.	1	1	Presentation	Done	04-09-2020	
5	Three schema architecture and data independence, database languages, and interfaces,	1	1	Presentation	Done	07-09-2020	
6	The Database System environment.	1	1	Presentation	Done	08-09-2020	
7	Conceptual Data Modelling using Entities and Relationships:	1	1	Presentation	Done	09-09-2020 10-09-2020	
8	Entity types, Entity sets, attributes, roles,	1	1	Presentation	Done	14-09-2020 15-09-2020 16-09-2020	



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9	structural constraints, Weak entity types,	1	1	1	Presentation	Done Done	11-09-2020 18-09-2020	
10	ER diagrams, examples, Specialization and Generalization.	1	1	1	Presentation	Done Done	21-09-2020 22-09-2020	
11	Relational Model: Relational Model Concepts,	2	2	2	Presentation	Done	05-10-2020	
12	Relational Model Constraints and relational database schemas,	2	2	2	Presentation	Done Done	06-10-2020 07-10-2020	
13	Update operations, transactions, and dealing with constraint violations.	2	2	2	Presentation	Done Done	08-10-2020 09-10-2020	
14	Relational Algebra: Unary and Binary relational operations, additional relational operations	2	2	2	Presentation	Done Done	12-10-2020 13-10-2020	
15	Examples of Queries in relational algebra.	2	2	2	Presentation	Done Done	14-10-2020 15-10-2020	
16	Mapping Conceptual Design into a Logical Design: Relational Database Design using ER-to-Relational mapping.	2	2	2	Presentation	Done	16-10-2020	
17	SQL: SQL data definition and data types,	2	2	2	Live Coding	Done	23-09-2020	
18	specifying constraints in SQL,	2	2	2	Live Coding	Done	24-09-2020	
19	retrieval queries in SQL, INSERT, DELETE, and UPDATE statements in SQL,	2	2	2	Live Coding	Done Done Done.	25-09-2020 28-09-2020 29-09-2020	
20	Additional features of SQL.	2	2	2	Live Coding	Done Done	30-09-2020 01-10-2020	
21	SQL : Advanced Queries	2	3	3	Live Coding	Done	22-10-2020	



22	More complex SQL retrieval queries	2	3	Live Coding	Done	23-10-2020	
23	Specifying constraints as assertions and action triggers	2	3	Live Coding	Done	27-10-2020	
24	Views in SQL	2	3	Live Coding	Done	28-10-2020	
25	Schema change statements in SQL	2	3	Live Coding	Done	29-10-2020	
26	Database Application Development: Accessing databases from applications	2	3	Live Demo	Done Done	02-11-2020 03-11-2020	
27	An introduction to JDBC, JDBC classes and interfaces, SQLJ, Stored procedures	2	3	Live Demo	Done Done	04-11-2020 05-11-2020	
28	Case study: The internet Bookshop.	2	3	Live Demo	Done	06-11-2020	
29	Internet Applications: The three-Tier application architecture	3	3	Presentation	Done	10-11-2020	
30	The presentation layer, The Middle Tier	3	3	Presentation	The Presentation Layer The Middle layer	11-11-2020 12-11-2020	
31	Normalization: Database Design Theory, Introduction to Normalization using Functional and Multivalued Dependencies	3	4	Presentation	Done Done	13-11-2020 17-11-2020	
32	Informal design guidelines for relation schema	3	4	Presentation	Done	18-11-2020	
33	Functional Dependencies	3	4	Presentation	Done	23-11-2020	
34	Normal Forms based on Primary Keys, Second and Third Normal Forms	3	4	Presentation	Done Done	24-11-2020 25-11-2020	
35	Boyce-Codd Normal Form, Multivalued Dependency and Fourth Normal Form	3	4	Presentation	Done Done	26-11-2020 27-11-2020	
36	Join Dependencies and Fifth Normal Form	3	4	Presentation	Done	30-11-2020	



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37	Normalization Algorithms. Inference Rules, Equivalence, and Minimal Cover	3	4	Presentation	Done	01-12-2020	PA
38	Properties of Relational Decompositions	3	4	Presentation	Done	02-12-2020	PA
39	Algorithms for Relational Database Schema Design, Nulls, Dangling tuples, and alternate Relational Designs	3	4	Presentation	Done	04-12-2020	PA
40	Further discussion of Multivalued dependencies and 4NF, Other dependencies and Normal Forms	3	4	Presentation	Done	07-12-2020	PA
41	Transaction Processing: Introduction to Transaction Processing, Transaction and System concepts	4	5	Presentation	Done	08-12-2020	PA
42	Desirable properties of Transactions, Characterizing schedules based on recoverability	4	5	Presentation	Done	09-12-2020	PA
43	Characterizing schedules based on Serializability, Transaction support in SQL	4	5	Presentation	Done	10-12-2020	PA
44	Concurrency Control in Databases: Two-phase locking techniques for Concurrency control	4	5	Presentation	Done	11-12-2020	PA
45	Concurrency control based on Timestamp ordering, Multiversion Concurrency control techniques	4	5	Presentation	Done	14-12-2020	PA
46	Validation Concurrency control techniques	4	5	Presentation	Done	15-12-2020	PA
47	Granularity of Data items and Multiple Granularity Locking	4	5	Presentation	Done	16-12-2020	PA
48	Introduction to Database Recovery Protocols: Recovery Concepts, NO-UNDO/REDO recovery based on Deferred update	4	5	Presentation	Done	17-12-2020	PA



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49	Recovery techniques based on immediate update, Shadow paging	4	5	Presentation	Done	18-12-2020	
50	Database backup and recovery from catastrophic failures	4	5	Presentation	Done	21-12-2020	

Content Beyond Syllabus- Plan and Execution

Sl. No.	Contents Planned	CO	PO	Date of Execution	Contents Executed	Signature
1	Installation of Oracle and Managing Different Users of Database.	3	5	17-09-2020	Oracle Installation, Managing users, roles and access privileges	

Signature of Faculty Incharge

Signature of HOD