

SCHEME OF COURSE WORK FOR DBMS LAB

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Course Details:

Course Title	Database Management Systems Lab		
Course Code	22CT1108	L T P C	0 0 3 1.5
Program:	B. Tech.		
Specialization:	Common to IT & CSE		
Semester	IV		

Course Outcomes (COs):

A graduate of engineering will be able to

CO1	Illustrate the DBMS architecture and model a database using ER diagram
CO2	Solve queries using procedural and non-procedural languages.
CO3	Apply the normalization techniques to improve the database design.
CO4	Explain the processing and controlling the consequences of concurrent data access.
CO5	Demonstrate the storage, accessing and recovery mechanisms

Course Outcome versus Program Outcomes:

COs	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO1	PSO2	PSO3
CO 1															
CO 2															
CO 3															
CO 4															
CO 5															

S-Strongly correlated, M-Moderately correlated, Blank-No correlation

Assessment Methods:	Lab internal Test/Viva/ Daily performance/ End Exam
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Teaching-Learning and Evaluation

Week	Topic/Contents	Course Outcomes	Sample Questions	Teaching Learning Strategy	Assessment Method & Schedule
1	Introduction to Oracle Data Definition Language (DDL) commands - CREATE, ALTER, DROP, RENAME, and TRUNCATE database object Data Manipulation Language (DML) - INSERT, SELECT, UPDATE and MERGE data commands	CO 1, CO 2	1. What is DBMS? 2. What is relational database? 3. Syntax for inserting a row in SQL	Lecture, PPT, Task-based interaction	Daily Performance and viva
2	Execute the commands Implement transaction control statement like COMMIT and ROLLBACK. Queries using ANY, ALL, IN, EXISTS, NOT EXISTS, UNION, SUM, AVG, MAX and MIN	CO 2	1. What is meant by transaction? 2. Explain the importance of commit. 3. Difference between ALL and UNION	Lecture, PPT, Task-based interaction	Daily Performance and viva
3	Queries using Conversion functions (to_char, to_number and to_date), string functions (Concatenation, lpad, rpad, ltrim, lower, upper, initcap, length, substr and instr), date functions (Sysdate, next_day, add_months, last_day, months_between, least, greatest, trunc, round, to_char, to_date)	CO 2	1. List some string functions with its uses? 2. Which format is displayed? 3. Difference between trunc and round	Lecture, PPT, Task-based interaction	Daily Performance and viva
4	Database Querying - Executes some simple queries.	CO 2	Difference between ALL and UNION? What is a constraint?	Lecture, PPT, Task-based interaction	Daily Performance and viva
5.	Queries using Aggregate functions (COUNT, SUM,	CO 2	List some mathematical	Lecture, PPT,	Daily Performance

	AVG, MAX, MIN), GROUP BY, HAVING		functions with its uses?	Task-based interaction	ce and viva
6.	Database Decomposition and Querying – Nested queries, Sub-queries.	CO 2, CO 3	what is a nested query? What is a multiple query? is a	Lecture, PPT, Task-based interaction	Daily Performance and viva
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7.	Queries using Joins for concurrent data access	CO4	What is inner join? What is outer join?	Lecture, PPT, Task-based interaction	Daily Performance and viva
8.	Queries using Views	CO4	What is a view?	Lecture, PPT, Task-based interaction	Daily Performance and viva
9.	Procedures and Functions.	CO4	1. What is procedure? 2. How are in and out parameters passed to them? 3. How to invoke functions in SQL statements?	Lecture, PPT, Task-based interaction	Daily Performance and viva
10.	Implicit and Explicit Cursors	CO5	What is a Cursor? Difference between implicit cursor and explicit cursor	Lecture, PPT, Task-based interaction	Daily Performance and viva
11.	Triggers	CO5	What is a TRIGGER? Difference between row and statement trigger?	Lecture, PPT, Task-based interaction	Daily Performance and viva
12.	Exception Handling	CO5	Explained different	Lecture, PPT,	Daily Performan

			blocks inexceptionhan dlingDifferenc esbetween userdefinedand customdefined exceptions	Task- basedinte raction	ce andviva
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