Database Management Systems Lab

Course Code	20CS3551	**Year**	III	**Semester**	I
Course Category	PCC	**Branch**	CSE	**Course Type**	Practical
Credits	1.5	**L-T-P**	0-0-3	**Prerequisites**	Problem Solving and Programming Lab
Continuous Internal Evaluation :	15	**Semester End Evaluation:**	35	**Total Marks:**	50

Course Outcomes		
Upon successful completion of the course, the student will be able to		
CO1	Apply database management techniques to solve problems	**L2**
CO2	Implement experiments by using modern tools like MYSQL, Oracle	**L3**
CO3	Develop an effective report based on various constructs implemented.	**L3**
CO4	Apply technical knowledge for a given problem and express with an effective oral communication.	**L3**
CO5	Analyze outputs of queries for a given problem	**L4**

Contribution of Course Outcomes towards achievement of Program Outcomes & Strength of correlations (3:Substantial, 2: Moderate, 1:Slight)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1													3	
CO2					2				1					
CO3										2				
CO4	2									3				
CO5			3											

Syllabus		
Expt. No.	**Contents**	**Mapped CO**
1	Introduction to MySQL Workbench. How to use MySql Workbench to run SQL Statements.	**CO1,CO2,CO3,CO4,CO5**
2	Examples on i) DDL Commands: CREATE , ALTER, DROP and TRUNCATE a Table ii) Implementation of Constraints PRIMARY KEY, FOREIGN KEY,CHECK,NOT NULL,UNIQUE.	**CO1,CO2,CO3,CO4,CO5**
3	Examples on i) DML Commands. INSERT, UPDATE and DELETE ii) DCL Commands: COMMIT , ROLLBACK and SAVEPOINT.	**CO1,CO2,CO3,CO4,CO5**
4	Examples on retrieving data from a single table using i) SELECT statement ii) SELECT statement with where clause(Comparison Operators, AND, OR, NOT, IN, BETWEEN,LIKE) iii) ORDER BY clause(sort by column name) iv) LIMIT clause	**CO1,CO2,CO3,CO4,CO5**
5	Examples of Functions in MySQL: String, Numeric, Date, Time and Other Functions.	**CO1,CO2,CO3,CO4,CO5**
6	Examples on Summary Queries: Queries using Aggregate functions, GROUP By and Having Clauses, ROLLUP Operator.	**CO1,CO2,CO3,CO4,CO5**
7	Examples on Inner join, outer join using USING and NATURAL Keywords	**CO1,CO2,CO3,CO4,CO5**
8	Examples on SUB/SUMMARY Queries Using IN, ANY, SOME, ALL , EXISTS and NOT EXISTS functions	**CO1,CO2,CO3,CO4,CO5**
9	Examples on i) Creating INDEXES and VIEWS ii) INSERT,DELETE and DROP on VIEWS	**CO1,CO2,CO3,CO4,CO5**
10	Examples on i) Create and Call STORED PROCEDURE (IN, OUT, INOUT Parameters), Drop a STORED PROCEDURE. ii) Create, call and Drop a FUNCTION. iii) Create and Drop a TRIGGER	**CO1,CO2,CO3,CO4,CO5**
11	Case Study Using Real world Database Applications	**CO1,CO2,CO3,CO4,CO5**
Learning Resources		
Text Books		
1. Murach"s MySQL by JOEL MURACH, Shroff Publishers & Distributors Pvt.Ltd, June 2012.		
References		
1. The Complete Reference MYSQL,VikramVaswani, 2017, McGrawHill Education. 2. Fundamentals of Database Systems, Ramez Elmasri,ShamkantB. Navathe, Seventh edition, Pearson.		