

**III/IV B.TECH. FIRST SEMESTER
DATA BASE MANAGEMENT SYSTEMS LAB (Required)**

Course Code : CS5L1**Credits: 2****Lab Hours : 3 periods/week****Internal assessment: 25 marks****Tutorial : --****Semester end examination: 50 marks**

Prerequisite: Data base Management Systems

Course Outcomes:

CO1) Design and implement a database schema for a given problem-domain

CO2) Formulate query for a database using DDL/DML commands

CO3) Apply integrity constraints on a database

CO4) Develop programs including procedures, stored functions, cursors and packages for data manipulation.

The Following Experiments are to be conducted using MySQL Database.

Syllabus:**EXP-1**

1. Introduction to MySQL Workbench.
2. How to use MySql Workbench to work with a database.
3. How to use MySql Workbench to run SQL Statements.
4. Introduction to Data Types in MySQL.
(Character,Integer,Fixed,Floating,Date,Time,ENUM,SET,Large Objects).

Exp-2

5. Examples on DDL Commands.
CREATE , ALTER, DROP, TRUNCATE a Table.

Exp-3

6. Examples on Implementation of Constraints
PRIMARY KEY,FOREIGN KEY,CHECK,NOT NULL,UNIQUE.

Exp-4

7. Examples on DML & DCL Commands.
INSERT, UPDATE,DELETE, Commands.
COMMIT WORK, ROLLBACK,SAVEPOINT Commands.

EXP-5

8. How to retrieve data from a single table
Select Statement,Select statement with
where clause(Comparison Operators, AND,OR,NOT,IN,BETWEEN,LIKE) ORDER
BY clause(sort by column name)

LIMIT Clause

Exp-6

9. Examples on Functions in MySQL.
String, Numeric, Date, Time and Other Functions.

Exp-7

10. How to retrieve data from two or more tables
Inner join, self-join, join a table in another db, join more than two tables, outer join,
How to use USING, NATURAL Keywords, joins using UNION & SET OPERATORS.

Exp-8

11. Summary Queries:
Queries using Aggregate functions, Group By Clause, Having Clause
ROLLUP Operator.

Exp – 9

12. Examples on SUB/SUMMARY Queries Using
IN, ANY, SOME, ALL, EXISTS Operators

Exp-10

13. Examples on How to
Create INDEXES,
Create VIEWS, VIEWS WITH CHECK OPTION
INSERT, DELETE, DROP on VIEWS

Exp-11

14. Examples on How to
Create and Call STORED PROCEDURE,
INPUT, OUTPUT Parameters,
Validate and Raise errors
DROP a STORED PROCEDURE.

Exp-12

15. Examples on How to Create, call and Drop a FUNCTION.

Exp-13

16. Examples on How to Create, View, Alter and Drop a TRIGGER

Learning Resource**Text Books**

1. Murach's MySQL by JOEL MURACH, Shroff Publishers & Distributors Pvt.Ltd, June 2012.