**PRASAD V. POTLURI SIDDHARTHA INSTITUTE OF TECHNOLOGY (Autonomous)**

**KANURU, VIJAYAWADA**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

# DATABASE MANAGEMENT SYSTEMS LAB

**(Minor in CSE)**

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| **Course Code** | **23CS5551** | **Year** | III | **Semester** | I |
| **Course Category** | **Minor in CSE** | **Branch** | **CSE** | **Course Type** | Practical |
| **Credits** | 1.5 | **L – T – P** | 0-0-3 | **Prerequisites** | Basic Mathematics and Programming skills |
| **Continuous Evaluation:** | 30 | **Semester End Evaluation:** | 70 | **Total Marks:** | 100 |

| **Course Outcomes** | | |
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| Upon successful completion of the course, the student will be able to: | | |
| **CO1** | Apply database management techniques to solve problems | L3 |
| **CO2** | Conduct 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 |

| SYLLABUS | | |
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| **EXP No.** | **Contents** | **Mapped CO** |
| 1. | Introduction to MySQL Workbench.<br>How to use MySql Workbench to run SQL Statements. | CO1,CO2,CO3,CO4,CO5 |
| 2. | Examples on<br>i) DDL Commands: CREATE , ALTER, DROP and TRUNCATE a Table<br>ii) DML Commands. INSERT, UPDATE and DELETE | CO1,CO2,CO3,CO4,CO5 |
| 3. | Examples on<br>i) DCL Commands: COMMIT , ROLLBACK and SAVEPOINT<br>ii) Implementation of Constraints PRIMARY KEY, FOREIGN KEY, CHECK, NOT NULL, UNIQUE. | CO1,CO2,CO3,CO4,CO5 |
| 4. | Examples on retrieving data from a single table using<br>i) SELECT statement<br>ii) SELECT statement with where clause(Comparison Operators, AND, OR, NOT,IN, BETWEEN,LIKE)<br>iii) ORDER BY clause(sort by column name)<br>iv) LIMIT clause | CO1,CO2,CO3,CO4,CO5 |
| 5. | Examples on<br>Query the sample database using built-in single row functions | CO1,CO2,CO3,CO4,CO5 |
| 6. | Examples on Summary Queries:<br>Queries using Aggregate functions, GROUP By and Having Clauses | CO1,CO2,CO3,CO4,CO5 |
| 7. | Examples on<br>Inner join, outer join using USING, 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<br>CREATE, INSERT,DELETE and DROP on VIEWS | CO1,CO2,CO3,CO4,CO5 |
| 10. | 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.

**Reference Books**

1. The Complete Reference MYSQL,VikramVaswani, 2017, McGrawHill Education.
2. Fundamentals of Database Systems, Ramez Elmasri,ShamkantB. Navathe, Seventh edition, Pearson