# PRASAD V. POTLURI SIDDHARTHA INSTITUTE OF TECHNOLOGY (Autonomous) KANURU, VIJAYAWADA-520007

# II B.Tech – II Sem CSE (AI&ML)

# **Database Management Systems Lab**

Course Code	20AM3451	Year	II	Semester	II
Course Category	PCC Lab	Branch	CSE (AI&ML)	Course Type	Practical
Credits	1.5	L-T-P	0-0-3	Prerequisites	Programming for Problem Solving Lab
Continuous Internal Evaluation :	15	Semester End Examination:	35	Total Marks:	50

Course Outcomes				
Upon suc	cessful completion of the course, the student will be able to			
CO1	Apply database management techniques to solve problems	L2		
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			
Expt	Contents	Mapped CO	
No.			
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	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 on 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	Use Case-1	CO1,CO2,CO3, CO4,CO5
12	Use Case-2	

### **Learning Resources**

### **Text Books**

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

#### References

- 1. The Complete Reference MYSQL, Vikram Vaswani, 2017, McGraw Hill Education.
- 2. Fundamentals of Database Systems, Ramez Elmasri, Shamkant B. Navathe, Seventh edition, Pearson.