

3/4 B.Tech. FIFTH SEMESTER

EM5L2

DATABASE MANAGEMENT SYSTEMS LAB  
(Common to CSE/IT/ECM)

Credits: 2

Lab/Practice: 3 periods/week

Internal assessment : 25 marks

Semester end examination : 50 marks

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**Course Objectives:**

- To provide hands on experience on Database Management Systems such as MSAccess, Microsoft SQL Server and ORACLE .
- To provide knowledge on creating databases and posing complex SQL queries of relational databases.
- To be familiar with a broad range of data management issues including data integrity and security
- To Perform stored procedures & functions
- To Setup triggers that activate to perform specific data-handling operations when they insert or update table rows.
- Develop Programs using Cursors & Packages.

**Learning Outcomes:**

Students will be able to

- Construct database schema using Structured Query Language which would provide functionality to create tables and to enforce constraints.
- Query and update data from tables
- Write complex queries to select a subset of the data from the collection of tables.
- Write programming blocks with conditionals, assignments, loops, etc in PL/SQL.
- Write Exception Handling, Transaction oriented programs, stored procedures, functions, packages
- Cursors and triggers in PL/SQL.

**Introduction to list of experiments**

1. Simple Queries : Create ,Insert ,Delete ,Update,Select
2. Built-in-functions
3. Group Functions
4. Multiple sub-queries
5. SQL Views & Triggers
6. Simple PL/SQL Procedures
7. PL/SQL Procedures accessing Databases

**Learning resources**

**TEXT BOOKS:**

1. **Introduction to Database Systems**, 8<sup>th</sup> Edition , **C.J.Date**, Pearson 2006