Third Year B. Tech (Semester- VI)

AIP309- Database Engineering Lab

Teaching Scheme	
Practical	2 Hrs. /Week
Total Credits	1

Evaluation Scheme	
CIE	50
SEE	50
Total Marks	100

Course Objectives	
1	To expose students to Database Management Systems functioning
2	To expose students to E-R Data Model
3	To expose students to Structured Query Language (SQL)

Course Outcomes At the end of the course students will be able to -	
1	Students will be able describe the fundamentals of database management systems.
2	Students will be able to design database for the application.
3	Students will be able to analyze database queries for the application
4	Students will be able to implement database queries for the application.

List of Experiments -	
Minimum 8 to 10 experiments to be performed based on following guidelines	
1	Installation and Demonstration of DBMS like MySql
2	Draw E-R Diagram for different applications like – Library Management Systems, College Management Systems, Hospital Management Systems etc.
3	Convert E-R Diagrams into relational tables.
4	Use DDL Statements to Crete, Alter, Drop, Rename, Truncate Tables
5	Use DML Statements to Insert, Select, Update, Delete Data
6	Use of aggregate functions, group by – having clause and order by clause.
7	Use of Joins
8	Use of Set Operations
9	Creation of Indices and Views in SQL
10	Implement PL/SQL procedure and Function
11	Implement PL/SQL Cursor.
12	Implement Triggers in PL/SQL.
13	Find Canonical Cover and Closure for set of functional dependencies.
14	Demonstration of Indexing – Dense index, Sparse index, B+ tree index
15	Demonstration of Hashing – Static hashing, Dynamic hashing
16	Demonstration of Log based recovery.
17	Study of concurrency control mechanisms