Course Description

Title of Course: Database Systems Lab **Course Code: 18B17CI372**
L-T-P Scheme: 0-0-2 **Course Credit: 1**

18B11CI373: Database Systems Lab	
CO1	Define basic requirement and operations of file based and database systems.
CO2	Illustrate the relational database design using data definition, data manipulation queries.
CO3	Develop the database using relational database query, Identify the suitable of the data structures as per the requirements.
CO4	Utilize the knowledge of structured query language to develop and deploy the database for real life based problems.
CO5	Develop the normalize database for their suitability on a given problem.
CO6	Design the database systems, from concept to executable transaction, concurrency and recovery control using the real time based problems in group project based task .

Objectives: To develop the ability to design, implement and manipulate databases as well as to build Database management systems.

Learning Outcome

1. Ability to design systems by using ER Modeling.
2. Ability to develop skills of writing applications by using SQL.
3. Ability to understand query optimization techniques and transaction processing.

Course Contents:

- SQL queries for the creation of tables and insertion of values into tables.
- SQL queries for viewing all data and specific data corresponding to a particular row or column in a table.
- SQL queries for the updation, deletion and dropping of tables.
- SQL queries for aggregation, range finding etc on the tables.
- SQL queries for renaming, truncating and destroying the tables.
- SQL queries for the use of not null, group by, having clause.
- SQL queries for the computation done on the table data.
- Exercise on nested SQL queries and sub queries.
- Use of cursors, triggers, functions and writing pl/sql block.
- A brief idea about oracle report builder.

Text Book

1. SQL, Learning MySQL by Saied M.M. Tahaghoghi, Hugh E. Williams, Publisher(s): O'Reilly Media, Inc., ISBN: 9780596008642
2. SQL, PL/SQL the Programming Language of Oracle, Ivan Bayross, 3rd edition.

Evaluation scheme:

Exams	Marks	Coverage
P-1	15 Marks	**Based on Lab Exercises: 1-7**

P-2		15 Marks	**Based on Lab Exercises: 8-14**
Day-to-Day Work	Viva	20 Marks	**70 Marks**
	Demonstration	20 Marks	
	Lab Record	15 Marks	
	Attendance & Discipline	15 Marks	
Total		**100 Marks**	