



**Course Outcomes & CO-PO-PSO Mapping and Justification**

|                         |   |                        |
|-------------------------|---|------------------------|
| <b>Subject</b>          | <b>Database Management System laboratory with mini project</b>                          | <b>17CSL58</b>         |
| <b>COURSE OUTCOMES:</b> |   |                        |
| <b>CO No.</b>           | <b>On completion of this course, students will be able to:</b>                          | <b>Cognitive Level</b> |
| 17CSL58.1               | Use Structured Query Language (SQL) for database Creation and manipulation.             | L2<br>Understand       |
| 17CSL58.2               | Demonstrate the working of different concepts of DBMS.                                  | L2<br>Understand       |
| 17CSL58.3               | Construct a database by using data definition, data manipulation and control languages. | L6<br>Design           |
| 17CSL58.4               | Implement and test the project developed for an application.                            | L6<br>Design           |

**CO-PO-PSO MAPPING**

| CO No.         | PO1        | PO2        | PO3        | PO4      | PO5        | PO6      | PO7      | PO8      | PO9      | PO10     | PO11     | PO12       | PSO1       | PSO2     | PSO3     |
|----------------|------------|------------|------------|----------|------------|----------|----------|----------|----------|----------|----------|------------|------------|----------|----------|
| 17CSL58.1      | 3          | 2          | 1          | -        | 3          | -        | -        | -        | -        | -        | -        | 2          | 3          | -        | -        |
| 17CSL58.2      | 3          | 2          | 2          | -        | 3          | -        | -        | -        | -        | -        | -        | 2          | 2          | -        | -        |
| 17CSL58.3      | 3          | 2          | 2          | -        | 3          | -        | -        | -        | -        | -        | -        | 2          | 3          | -        | -        |
| 17CSL58.4      | 3          | 2          | 2          | -        | 3          | -        | -        | -        | -        | -        | -        | 2          | 3          | -        | -        |
| <b>17CSL58</b> | <b>3.0</b> | <b>2.0</b> | <b>1.8</b> | <b>-</b> | <b>3.0</b> | <b>-</b> | <b>-</b> | <b>-</b> | <b>-</b> | <b>-</b> | <b>-</b> | <b>2.0</b> | <b>2.8</b> | <b>-</b> | <b>-</b> |

**CO-PO-PSO JUSTIFICATION**

| CO No.    | PO/PSO | CL | Justification   |
|-----------|--------|----|---|
| 17CSL58.1 | PO1    | 3  | The student is able to construct the database using any SQL commands. |
|           | PO2    | 2  | The student can analyze a problem based on its data requirements.     |

|           |      |   |  |
|-----------|------|---|--|
|           | PO3  | 1 | The student can design the structure of the tables based on the given problem.   |
|           | PO5  | 3 | The student becomes well versed in using oracle tool (SQL PLUS) for designing database solutions.  |
|           | PO12 | 2 | The student becomes well versed in using SQL plus for designing database solutions.  |
|           | PSO1 | 3 | The student is able to understand the basics of database design and its core principles and apply them for application software development.       |
| 17CSL58.2 | PO1  | 3 | The student is able to retrieve the data from the database using any SQL commands.   |
|           | PO2  | 2 | The student can analyze a query and resolve based on problem statement.  |
|           | PO3  | 2 | The student can apply different design solutions such as schema diagram, ER diagrams for the given problem.  |
|           | PO5  | 3 | Ability to select and apply discipline-specific tools, techniques and resources.   |
|           | PO12 | 2 | Identify deficiencies like Assertions, Triggers and Procedures in knowledge and demonstrate an ability to source information to close this gap.    |
|           | PSO1 | 2 | The student is able to use the concepts of database design in application development to retrieve the data.  |
| 17CSL58.3 | PO1  | 3 | The student is able to understand the concepts of DDL, DML and DCL concepts.   |
|           | PO2  | 2 | The student can write and analyze the query and resolve based on problem statement.  |
|           | PO3  | 2 | The student can apply different design techniques.   |
|           | PO5  | 3 | Ability to select and apply discipline-specific tools, techniques and resources.   |
|           | PO12 | 2 | The student can able to work with sql and front end technologies to build database application.  |
|           | PSO1 | 2 | The student is able to use the concepts of database design in application development to retrieve the data.  |
| 17CSL58.4 | PO1  | 3 | The student gets a general knowledge about how to design and develop a mini project.   |
|           | PO2  | 2 | The student gets an idea on how to work as a team to analyze a given problem definition.   |
|           | PO3  | 2 | Define a problem, its scope and importance for the purpose of investigation such as Relational Design and analyze the tool such as Oracle 11g etc. |

|  |      |   |   |
|--|------|---|---|
|  | PO5  | 3 | The student is able to use modern tools to develop a small database project by working as a team.   |
|  | PO12 | 2 | The student is able to perform database connectivity from front-end applications.   |
|  | PSO1 | 3 | Students develop their own application software's. The student is made able to design and develop small sized applications using databases in the back-end. |

Prepared by:

HoD

(Naveen H S & Shilpa Reddy K)

(Dr. M. Ramakrishna)