|  |  |
| --- | --- |
| **DATABASE MANAGEMENT SYSTEMS LAB** | |
| **CSE 316** | **Credits : 2** |
| Instruction **:** 3 Periods/Week | Sessional Marks : 50 |
| End Exam : 3 Hours | End Exam Marks : 50 |

**Prerequisites:**

Elementary knowledge about computers including some experience using UNIX or Windows.

**Course Objectives:**

* To understand the basics of SQL and construct queries using SQL.
* To learn connectivity between web pages, OLAP,OLTP.

**Course Outcomes:**

|  |  |
| --- | --- |
| By the end of the course, the student will be able to: | |
| 1. | Write and compile basic SQL queries. |
| 2. | Write and compile complex queries like nested queries and joins. |
| 3. | Construct triggers and views and stored procedures. |
| 4. | Design and implement a database schema for given problem domain |
| 5. | Normalize a database and formulate integrity constraints accordingly. |

**Mapping of Course Outcomes with Program Outcomes:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Mapping | | PO | | | | | | | | | | | | PSO | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 1 | 2 |
| CO | 1 |  | 1 | 1 |  |  |  |  |  |  |  |  |  |  | 1 |
| 2 |  | 1 | 1 |  |  |  |  |  | 1 |  |  |  |  | 1 |
| 3 |  | 1 | 1 | 1 |  |  |  |  | 1 |  |  |  | 2 | 1 |
| 4 |  | 3 | 3 | 2 | 2 | 2 |  |  | 3 |  | 1 | 2 | 3 | 3 |
| 5 |  | 3 | 3 |  |  |  |  |  | 2 |  |  | 2 | 2 | 2 |

**SYLLABUS**

**List of Experiments:**

1. SQL DDL ,DML Statements
2. SQL Constraints.
3. Inbuilt functions in RDBMS.
4. Aggregate functions
5. Nested Queries & Join Queries.
6. Creation and dropping of Views.
7. Creating Triggers.
8. Stored Procedures.

**Sample Applications:**

1. Development of an Online Course Portal for a campus
2. Book Bank Management System
3. Car Rental Management System
4. Exam/academic system for College Management
5. Real estate Management system
6. University Management System
7. Database manager for a Magazine agency or a newspaper agency
8. Ticket booking for performances
9. Inventory Control System
10. Students management System

**Reference Books:**

1. Raghu Ramakrishnan, Johannes *Gehrke ”Database Management Systems*”, 3rd Edition,

McGraw- Hill

1. A.Silberschatz.H.Korth, *“Database System Concepts”* , 5th Edition, McGraw-Hill

**Web References:**

1. https://dev.mysql.com/doc/refman/5.5/en/sql-syntax-data-definition.html