



Vivekanand Education Society's Institute of Technology

Department of Information Technology

Lab Plan

Course Title: Database Management Systems Year:-2020-2021

Branch: INFT (III) Class: D10A

Faculty In-charge: Ms. Sukanya Roychowdhury

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Course objectives:

- Learn and practice data modeling using the entity-relationship and developing database designs.
- Understand the use of Structured Query Language (SQL) and learn SQL syntax.
- Understand the needs of database processing and learn techniques for controlling the consequences of concurrent data access

Course Outcomes:

Student should be able to:

- CO 1.** Explain the features of database management systems and Relational database
- CO 2.** Design conceptual models of a database using ER modeling for real life applications and also construct queries in Relational Algebra.
- CO 3.** Create and populate a RDBMS for a real life application, with constraints and keys, using SQL.
- CO 4.** Retrieve any type of information from a database by formulating complex queries in SQL.
- CO 5.** Analyze the existing design of a database schema and apply concepts of normalization to design an optimal database.
- CO 6.** Build indexing mechanisms for efficient retrieval of information from a database



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| Sr. No | Experiments | CO's | Grade |
|--------|---------------------------------------------------------------------------------------------------------|-------------------------|-------|
| 1. | Experiment to study different phases of database design. Design ER and EER diagram for company database | CO1,CO2 | 10 |
| 2. | To Map Er/EER to Relational Schema Model for Company Database | CO1,CO2,CO5 | 10 |
| 3. | Experiment to study DDL statements and Integrity constraint | CO3 | 10 |
| 4. | Experiment to study DML commands. | CO3 | 10 |
| 5. | Experiment to study Simple queries and Nested Queries. | CO2,CO4 | 10 |
| 6. | Experiment to study complex and Co-related queries | CO2,CO4 | 10 |
| 7. | Experiment to study different types of Joins. | CO4 | 10 |
| 8. | Experiment to study View. | CO4 | 10 |
| 9. | Execution of procedure and functions by using SQL Server. | CO4 | 10 |
| 10. | Assignment 1 Quiz | CO1, CO2, CO3, CO4, CO5 | 10 |

Subject In-charge

Overall Grade