CO-REQUISITES:

• Database Management Systems.

COURSE OBJECTIVES

- Introduce ER data model, database design and normalization
- Learn SQL basics for data definition and data manipulation

COURSE OUTCOMES: After Completion of the course, student will be able to

CO1: Design database schema for a given application and apply normalization

CO2: Acquire skills in using SQL commands for data definition and data manipulation.

CO3: Develop solutions for database applications using procedures, cursors and triggers

LIST OF EXPERIMENTS

- 1. Concept design with E-R Model
- 2. Relational Model
- 3. Normalization
- 4. Practicing DDL commands
- 5. Practicing DML commands
- 6. Querying (using ANY, ALL, IN, Exists, NOT EXISTS, UNION, INTERSECT, Constraints etc.)
- 7. Queries using Aggregate functions, GROUP BY, HAVING and Creation and dropping of Views.
- 8. Triggers (Creation of insert trigger, delete trigger, update trigger)
- 9. Procedures
- 10. Usage of Cursors

TEXT BOOKS:

- 1. Raghurama Krishnan, Johannes Gehrke, Database Management Systems, Tata McGraw Hill, 3rd Edition, 2014
- 2. Silberschatz, Korth, Database System Concepts, McGraw Hill, 7th edition, 2021.

REFERENCE BOOKS:

- 1. Peter Rob, Carlos Coronel, Database Systems design Implementation and Management, 7th Edition, 2006.
- 2. Elmasri Navrate, Fundamentals of Database Systems, Pearson Education, 7th edition 2016
- 3. C.J. Date, Introduction to Database Systems, Pearson Education, 8th edition, 2006.
- 4. S. Shah and V. Shah, Oracle for Professionals, The X Team, SPD, 2008.
- 5. Shah, Database Systems Using Oracle: A Simplified guide to SQL and PL/SQL, PHI, 2nd edition, 2002
- 6. M. L. Gillenson, Fundamentals of Database Management Systems, Wiley Student Edition, 2011