



**CS 331**

**DATABASE MANAGEMENT SYSTEMS LAB**

**1..SQL**

- a) Creating Database (Exercising commands like DDL,DML,DCL and TCL)
- b) Exercising all types of Joins
- c) Creating tables in I Normal ,II Normal , III Normal and BCNF Form.
- d) Creating table using combination of constraints.
- e) Exercising Simple to Complex Queries
- f) Usage of Stored Functions.
- g) Creating Password and Security features for an Application.
- h) Usage of File locking, Table locking facilities in an Applications

**2.PL/SQL**

- a) Demonstration of Blocks, Cursors, Procedures, Functions and Packages.
- b) Demonstrate Exception Handling .
- c) Usage of Triggers to perform operation on Single and Multiple Tables.
- d) PL/SQL Procedures for data validation

**3.FORMS**

Creation of forms for College Information System, Library Information System and Recruitment Cell.

#### **4.REPORTS**

- a) Creation of Reports based on different queries .
- b) Creation of small full fledged Database Application spread over 3 sessions.

*Note : The creation of sample database for the purpose of the experiments is Expected to be pre-decided by the instructor.*

#### ***Suggested Reading :***

1. 1.Nilesh Shah, "*Database Systems Using Oracle*", PHI,2007.
1. 2.Rick F Van der Lans, "*Introduction to SQL*", Fourth Edition, Pearson Education, 2007.
1. 3.BenjaminRosenzweig, Elena Silvestrova, "*Oracle PL/SQL by Example*", Third Edition, Pearson Education,2004.
1. 4.AlbertLulushi, "*Oracle Forms Developer's Handbook*", Pearson Education, 2006.