

GUJARAT TECHNOLOGICAL UNIVERSITY

Diploma in Commercial Practice

Semester: 3

Subject Code

Subject Name COMPUTER-III

Sr. No.	Course content
1.	Overview of Database Management Systems 1.1.Introduction 1.2.DBMS – An overview 1.3.Data Storage : paper based v/s Computer-based Systems 1.4.File Processing system v/s Database Management Systems 1.5.View of Data 1.6.Data Models 1.7.Database Languages 1.8.Database Users 1.9.Classification of DBMSs 1.10 Overall System Structure
2.	Entity Relationship Model 2.1.Introduction 2.2.Design Phases 2.3.Database Application – An Example 2.4.Entity Relationship Model 2.5.Constraints 2.6.E-R Diagram 2.7.Constructing an E-R Diagram 2.8.E-R Model to Relational Model
3.	SQL: The Programming Language of Oracle 3.1 Introduction 3.2 Tools of Oracle 3.3 SQL- An Introduction 3.4 Basic Data Types 3.5 Creating a Table 3.6 Describing a Table 3.7 Inserting Data into Table 3.8 Select Command – Viewing Data of Table 3.9 Copying Table and Data into Another Table 3.10 Deleting Records in a Table 3.11 Updating Contents of a Table 3.12 Rename, Drop and Truncate Table 3.13 Altering Table Schema
4.	SQL: Operators and Functions Introduction The Dual Table and SYSDATE Employee – A Sample Table SQL Operators SQL Functions

5.	SQL: Constraints 5.1 Introduction 5.2 Constraints 5.3 NOT NULL Constraint 5.4 UNIQUE Constraint 5.5 PRIMARY KEY Constraint 5.6 FOREIGN KEY Constraint 5.7 CHECK Constraint 5.8 Naming a Constraint 5.9 Altering Table Schema
6.	SQL: Combining Multiple Tables 6.1 Introduction 6.2 Set Operations 6.3 Sub-Queries 6.4 Joins
7.	SQL: TCL and DCL 7.1 Introduction 7.2 TCL- Transaction Control Language 7.3 DCL- Data Control Languages
8.	PL/SQL : The Beginning 8.1 Introduction 8.2 Advantage of PL/SQL 8.3 The Generic PL/SQL block 8.4 Data Types 8.5 Variables 8.6 Displaying Messages 8.7 Comments 8.8 Creating and Executing a PL/SQL Block 8.9 Control Structures 8.10 Transaction Control

LABORATORY EXPERIENCES :

1. Create a database table, describe the table, and insert data into table
2. Select command copying Table and Data into another table.
3. Deleting Records in a Table and Updating Contents of a table.
4. SQL Operators
5. SQL Functions
6. UNIQUE, PRIMARY KEY, FOREIGN KEY CONSTRAINT
7. CHECK Constraint, Naming a Constraint, Altering Table Schema
8. Set Operations, Sub-Queries, and Joins.
9. TCL- Committing, cancelling Transactions completely and Partially
10. DCL- GRANT Command, REVOKE Command.
11. Data types, Variables, Displaying Messages
12. Creating and Executing a PL/SQL Block, Control Structures and Transaction Control

REFERENCES BOOK :

Relational Database Management System with SQL and PL/SQL