

Course Name : SQL Concepts & Syntax	Course Code : ITDB3208
Pre Requisite : ITDB1102-Introduction to Database	Credit Hours : 3
Passing Grade : C	Level: Advanced Diploma
No. of Theory Hrs: 1	No. of Practical Hrs : 4
Goal: To prepare the students to gain skills in using Structured Query Language and its features using relational databases	
Objectives: Upon completion of this course, the students should be able to: <ol style="list-style-type: none"> 1. Write SQL code based on ANSI/ISO standards to build and maintain database 2. Retrieve data from single or multiple tables 3. Manipulate database content with SQL and transaction handling 4. Apply SQL security features 	
Outcomes	Methodologies
Upon completion of this course, the students should be able to:	
1. Distinguish relational database with other DBMS's	Theory
2. Create, alter and delete database objects using data definition language (DDL)	Practical
3. Apply Data Integrity constraints	Practical
4. Use constants, expressions & built in functions	Practical
5. Build queries using various operators and compound statements	Practical
6. Build relevant SELECT statements to retrieve data from a single table	Practical
7. Demonstrate data manipulation language (DML) commands	Practical
8. Apply equi-Join, Non equi-Join, self-join, natural join and outer joins to extract the data from multiple tables	Practical
9. Develop standard sub-queries and correlated sub-queries	Practical
10. Apply SQL security features (GRANT, REVOKE,ROLES and Views)	Practical
11. Apply Transaction processing commands (SAVEPOINT, ROLLBACK and COMMIT)	Practical
Software & Hardware Tools: Oracle	
Text Book: <ol style="list-style-type: none"> 1) Judith S.Bowman, Sandra L.Emerson, Marcy Darnovsky, The Practical SQL Handbook: Using 	

Structured Query Language (3rd Edition)

Reference Book:

- 1) Cecelia L. Allison, SQL Simplified:: Learn to Read and Write Structured Query Language, ISBN 1-4107-2974-5
- 2) Ryan S., Ron P. (2003) SAMS Teach Yourself SQL in 24 Hours, 3rd Edition. Sams Publishing.