SQL COURSE SYLLABUS

* **Introduction to SQL**
  + SQL introduction
  + RDBMS
  + Data types in SQL
  + Installation of SQL server
  + SQL Server introduction

* **Statements** 
  + **Statements** :

(DDL, DML, DQL/DRL, DCL, TCL)

* **Constraints:**
  + **Constraints** :

Primary Key, Unique key, foreign key, Null, not null, Check, Default, Distinct

* **Operators** 
  + Arithmetic
  + Logical Operators
  + Relational Operators.
* **Functions :**
  + **Single Row Functions**:

1. Number Functions

2. Character Functions

3. Datetime Functions

4. Conversion Functions

**Multi Row Functions**:

(Count, Sum, Min, Max, Avg)

* **Clauses**
  + SQL Query Execution Order By
  + SQL WHERE Clause
  + SQL GROUP BY Clause
  + SQL HAVING Clause
  + ORDER BY Clause in SQL
  + SQL Aliases
  + Case
  + Distinct
  + Limit
* **set operator**
  + Union
  + Union all
  + Intersect
  + Except (SQL Server)/Minus (Oracle)
* **Joins**
  + **Types of joins:**

Cartesian Join/Cross Join:

Self-Join

Inner Join

Left outer Join.

Right Outer Join

Full Outer Join

* **Tables , Temporary table ,views and stored procedures** 
  + Difference between Tables, Temporary table, views and stored procedures
* **Sub queries and Corelated sub queries** ,**Indexes**
  + Sub queries and Corelated sub queries
  + Indexes
* **Analytical functions, Triggers , Types of relationships**

**Analytical functions**:

Row, Rank, Dense Rank

**Types of relationships**