



Curriculum Of Sql Server

MODULE 1: INTRODUCTION TO DBMS

- File Management System & Its Drawbacks
- What are Relational Databases?
- Physical Data Models
- Logical Data Models
- Hierarchical Data Model (HDBMS)
- Network Data Model (NDBMS)
- Relational Data Model (RDBMS)
- Object Data Model (ODBMS)
- Normalization
- Entity – Relationship (E-R) Model

MODULE 2: INTRODUCTION TO SQL SERVER

- Introduction to Management Studio.
- Authentication Modes.
- Types of System Databases in SQL.
- Database Language.
- Data Definition Language (DDL)
- Data Manipulation Language (DML)
- Data Query Language (DQL)
- Data Control Language (DCL)
- Transaction Control Language (TCL)
- Datatypes in SQL Server.

MODULE 3: DATA QUERY LANGUAGE (DQL)

- Select
- Where
- Order by
- Distinct
- Like
- In
- Between

MODULE 4: CONSTRAINTS IN SQL

- Not Null
- Unique

- Default
- Check.
- Primary key, Foreign key.

MODULE 5: BUILT IN FUNCTIONS

- Numeric Functions
- Character Functions
- Conversion Functions
- Date Functions
- Aggregate Functions
- Ranking Functions

MODULE 6: SET OPERATORS

- Union
- Union All.
- Intersect.
- Except.

MODULE 7: JOINS

- Inner Join
- Outer Join – Left, Right, Full.
- Self Join
- Natural Join
- Cross Join

MODULE 8: STORED PROCEDURES

- Introduction to Stored Procedure.
- Advantages of Stored Procedure.
- With Parameter.
- Without Parameter.
- Input–Output and Optional Parameters.

MODULE 9: VIEWS

- Introduction to View.
- Advantages of view.
- Creating, altering and dropping views.
- Simple and Complex View.



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MODULE 10: FUNCTIONS

- Introduction to Function.
- Types of Function.
- Creating Scalar Functions
- Creating Table Valued Functions.

MODULE 11: TRIGGER

- Introduction to Trigger.
- Types of Triggers.
- Creating, altering and dropping trigger.
- For/after/instead of trigger.

MODULE 12: INDEXES

- Introduction to Indexes.
- Types of Indexes.
- Creating, altering and dropping Indexes.

MODULE 13: TRANSACTION MANAGEMENT

- Introduction
- Begin Transaction
- Commit Transaction
- Rollback Transaction
- Save Point
- Working with Multiple Transaction.

MODULE 14: DATA CONTROL LANGUAGE

- Creating Users & Roles
- Granting & Revoking of Roles & privileges

MODULE 15: CURSORS

- Introduction to Cursor
- Working with cursors
- Types of cursors, Creating a cursor.
- Advantages of cursor.

MODULE 16: BACKUP AND RESTORE

- Generating SQL Script
- Executing SQL Script
- Generating Change Script
- Taking database Backup
- Restoring database using backup

MODULE 17: ADVANCE FEATURES

- CTE
- Using XML Data type.
- IF-Else
- Loop.
- SQL Case Expression