Course's Code	S7GA-IT-03
Course's Description	S7GA-IT- 03 - SQL SERVER TRAINING Basic Training(DEVELOPER)
Duration :	24 hours

S.NO	Topics
1	**Introduction to Microsoft SQL Server 2014**
	Introducing Microsoft SQL Server 2014
	Installing SQL Server Sample Databases
	Getting Started with SQL Server Management Studio (SSMS)
2	**Introduction to T-SQL Querying**
	Introducing T-SQL
	Primary Key and Foreign Key; RDBMS Basics
	1NF, 2NF & 3NF Normal Forms
	Understanding the Logical Order of Operations in SELECT statements
3	**DATABASE DESIGN**
	Understanding Logical Data Modeling,
	Working with Table Column Data Types,
	New; DATE, TIME, Datetime, DATETIMEOFFSET & DATETIME2,
	Char, Varchar, Int, Tinyint, Small int, BigInt, Money, Small money
	Double, Float, Decimal, FileStream and Geographical
	CREATE TABLE by Script & Using Object Explorer
	Primary Key and Foreign Key Constraints and Type
	Database Diagram Design in Object Explorer
4	**Writing SELECT Statement**
	Writing Simple SELECT Statements
	Eliminating Duplicates with DISTINCT
	Using Column and Table Aliases
	Writing Simple CASE Expressions
	Basic SQL SELECT and SELECT INTO Statements
	The GROUP BY Clause & Aggregate Functions
	Sorting SELECT Query Results with ORDER BY
	TOP, ROW_NUMBER, RANK, DENSE_RANK and NTILE
5	**Categories of SQL Statements**
	DML (Data Manipulation Language): Insert, Update and Delete
	DDL (Data Definition Language): Alter, Create, Drop, Truncate
	DCL (Data Control Language): Grant, Deny, Revoke

		TCL (Transaction Control Language): Begin, Commit and Rollback
		DQL (Data Query Language): Select, Where, ORDER, Having
		Writing Queries with PIVOT and UNPIVOT
6		**Sorting and Filtering Data**
		Sorting Data ASC, DESC
		Filtering Data with a WHERE Clause
		Working with Unknown and Missing Values Using Aggregate Functions
		Using the GROUP BY Clause
		Filtering Groups with HAVING
		Using Common Table Expressions (CTE)
7		**Grouping and Aggregating Data**
		Using Aggregate Functions
		Using the GROUP BY Clause
		Filtering Groups with HAVING
8		**Querying Multiple Tables**
		Understanding Joins
		Querying with Inner Joins
		Querying with Outer Joins (Left, Right and Full Joins)
		Querying with Cross Joins and Self Joins
9		**Combining results with set operators**
		Writing Queries with the UNION Operator
		Stacking results with UNION ALL
		Using EXCEPT to find nonmatching rows
		Identifying matching rows with INTERSECT
		Using APPLY
10		**How Modify DATA**
		INSERT INTO Statement with VALUES Clause
		Understanding INSERT and SELECT Subquery
		INSERT and EXECUTE Statement
		Data Removal with the DELETE Statement
		Data Modification with the UPDATE Statement
		Working with the MERGE Statement
		Synchronizing Two Tables with MERGE

11	Using Subqueries
	Writing Self-Contained Subqueries
	Writing Correlated Subqueries
	Using the EXISTS Predicate with Subqueries
12	Using Table Expressions
	Using Derived Tables
	Using Common Table Expressions (CTE)
	Deleting Duplicate Rows with CTE
	Using Views
	Using Inline Table-Valued Functions
13	Protecting data integrity with constraints
	Guaranteeing uniqueness with primary key constraints
	Enforcing integrity with foreign key constraints
	Imposing business rules with check constraints
	Enabling and disabling constraints
	Removing constraints with ALTER TABLE
14	Executing Stored Procedures (PROGRAMMABILITY)
	Stored Procedure Design and Programming
	Passing Parameters to Stored Procedures
	Creating Simple Stored Procedures
	DML - Data Manipulation Language Triggers
	Trigger Examples with DELETED & INSERTED Tables
	Discovering INSTEAD OF Triggers & AFTER Triggers
	DDL - Data Definition Language Triggers
	Designing & Creating Views - Modifying Data
	Table-Valued, Scalar-Valued & Inline Functions
	Temporary Tables, Table Variables & tempdb