

## Annexure - I

# Syllabus of CCSD .Net

Objective: This course is designed to impart software development training programme IT aspirants. After completing the course the incumbent is able to do the software development using object oriented methodologies and various programming languages. This course is more practical oriented. After completion of course the candidates will be able to get employment as Software Developer and Programmer in IT industries. It consists of following four modules:

Module 1

Programming in .Net Technologies

Module 2

**DBMS** Packages

### **Module-1: Programming in .NET Technologies**

#### 1. C#

Getting Started with .Net Framework, Exploring Visual Studio .NET, Inside a C# Program, Data Types, Statements, Arrays, Using Strings, Objects, Classes and Structs, Properties, Inheritance, Indexers, Delegates, Events, Namespaces, Generics, Collections and Data Structures, Exception Handling, Threading, Using Streams and Files, Reflection, Assemblies, versioning, Windows Forms, Controls, Data binding to Conrols, Advanced Database Programming using ADO.net, Using GDI +, Networking,.net Remoting, Manipulating XML.

#### 2. VB.net

Creating Applications with Visual Basic.NET, Variables, Constants, and Calculations, Making Decisions and Working with Strings, Lists, Loops, Validation, Sub Procedures and Functions, Multiple Forms, Standard Modules, and Menus, Arrays, Timers, Form Controls, File Handling, Exception Handling, Working with Databases, Advanced Database Programming using ADO.net, Classes, Generics, Collections, Inheritance, Custom Controls, Packaging & deployment, Using Crystal Reports.

#### 3. ASP.net

Building a Web Application, Examples Using Standard Controls, Using HTML Controls, Validating Form Input Controls using Validation Controls, Understanding Applications and State, Applying Styles, Themes, and Skins, Creating a Layout Using Master Pages, Binding to Databases using Controls, Data Management with ADO.net, Creating a Site Navigation Hierarchy, Navigation Controls, Membership and Role Management, Login Controls, Securing Applications, Caching For Performance, Working with XML, Using Crystal Reports in Web Forms.

## **Module-2: DBMS Packages**

### 1. Database Management System:

Types of Database, DBMS Elements, Constraints, Relationships, E-R Diagram, Normalization, First Normal Form, Second Normal Form, Third Normal Form, BCNF, Locking, Database security & Backup.

# 2. MS SQL Server

Introduction to SQL Server, Management Studio, Working with SQL Server, Query: Create Table, Insert, Select, Alter, Drop, Delete, Update, Joins, Nested Query, View, index, Sequences, SQL Built in Functions, Trigger, Cursor, Procedure, Function, Database permissions, Inbuilt Specific Commands of SQL Server.