

## DETAILED SYLLABUS

### UNIT-I INTRODUCTION TO .NET FRAMEWORK

10 Hours

**1.1 Introduction to .NET framework:** Dot Net Architecture – Managed Code and the CLR –Intermediate Language, Metadata and JIT Compilation–Automatic Memory Management.

**1.2 Introduction to .NET framework:** Common Type System(CTS) – Common Language Specification (CLS) – Assembly –Namespace.

**1.3 Visual Studio .NET**– Using the .NET Framework. Exploring the Visual Studio Integrated Development Environment – System requirement – Versions

**1.4. The Framework Class Library**-.NETObjects – ASP.NET-.NET web services– Windows Forms

### UNIT-II INTRODUCTION TO C#

10 Hours

**2.1 Elements:** Variables and constants–data types– declaration. Operators– types– precedence – Expressions – Program flow – Decision statements – if .. then, if..then..else, select..case

**2.2. Loop statements**– while..end while, do..loop, for..next, for..each..next.

**2.3. Types:** Value data types – Structures, Enumerations. Reference data types –Single dimensional– Multi-dimensional arrays–Jagged arrays– Dynamic arrays

**2.4 Classes & objects** –Abstract & override methods – Creating and using your own classes – Data members and member methods – Instantiate an object –This keyword

### UNIT-III WINDOW APPLICATION USING WINDOW FORMS

10 Hours

**3.1 Windows programming**–Creating windows Forms–Working with Toolbox Controls– Button, Check Box, Combo Box, Label, List Box, Radio Button, Text Box, Group Boxes, Picture Box

**3.2. Advanced Controls & Events** : Timer , Progress Bar, Month Calendar , ToolTips, Tab Controls, Panels -Events–Click, Close, Deactivate, Load, MouseMove, MouseDown, MouseUp, Keypress ,KeyDown, KeyUp

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**3.3 Multiple Document Interface (MDI) Forms** – Creating MDI Applications – Creating MDI Child Windows –Arranging MDI Child Windows

**3.4 Menus and Dialog Boxes** – Creating menus – Menu items – Creating Submenus , Menu Shortcuts, Context menu – Using dialog boxes – show Dialog() method.

### UNIT-IV APPLICATION DEVELOPMENT USING ADO.NET

10 Hours

**4.1 Features of ADO.NET.** Architecture of ADO.NET– ADO.NET providers– connection – Command–Data Adapter–Dataset.

**4.2 Accessing Data with ADO.NET:** connecting to Data Source, Accessing Data with Data set and Data Reader– Modifying Table data using Command Objects – Understanding Data Set and working with Data Column and DataRow – Data Tables - Working with Data GridView

**4.3 Create an ADO.NET application**– Using Stored Procedures.

### UNIT-V XML

10 Hours

**5.1 Introduction:** Advantages –HTML Vs XML–Browsing and parsing XML–Creating a XML file–Details and–Wellformed XML document–XML components–elements– Entities–Comments–Processing instructions–Attributes

**5.2. DTD:** Declarations in DTD: Element, Attribute, Entity and Notation–Construction of an XML document – XML Namespaces –Declaring name spaces –Default namespaces – XML schema–Need and use of Schema–Building blocks–Simple elements–Defining attributes–Complex elements

### 5.3. XMLwith.NET:XMLSerializationinthe.NETFramework–SOAPFundamentals–Using SOAP with the .NET Framework.

#### REFERENCES:

S.No	Title	Author	Publisher	Year of Publishing / Edition
1.	Introducing Microsoft .NET	David S.Platt	Microsoft Press	SaarcEdition, 2001