

## AMIT-25 DOT NET

### UNIT-1 INTRODUCTION TO .NET 3.5 & INTRODUCTION TO C# 3.0

- 1.1 Introduction to .NET 3.5: Introduction to .NET Framework,
- 1.2 Components of .NET - CLR and Class Library, MSIL, CTS etc.
- 1.3 Introduction to C# 3.0: Language elements of C#, OOP with C#,
- 1.4 Properties and static members, Inheritance, overriding and shadowing,
- 1.5 Runtime polymorphism - virtual and abstract methods, boxing, unboxing,
- 1.6 Interfaces and structures, Exception Handling.
- 1.7 Introduction to VB.NET 9.0: structure of VB.NET, Control structures, OOP with VB.NET,
- 1.8 Properties, Default properties, Inheritance, overriding and shadowing,
- 1.9 Interfaces, structures and Exception handling.

### UNIT-2 FUNDAMENTALS OF ASP.NET & MS SQL SERVER

- 2.1 Server-side scripting, create simple ASP.NET,
- 2.2 Server-side event processing, Validation
- 2.3 Controls, Working with Rich Controls and Navigation related controls,
- 2.4 Master pages and themes, Cookies and their application, Sessions and Applications,
- 2.5 Working with GLOBAL.ASAX, Error handling, Debugging and tracing,
- 2.6 Page output caching, Data caching.
- 2.7 MS SQL Server: Architecture of SQL Server, Using Query Analyzer,
- 2.8 Working with Transact SQL, stored procedures and functions, creating database triggers.
- 2.9 ADO.NET: Introduction, SQL Connect, SQL Command,
- 2.10 SQL Data Reader object to access SQL Server, connect to Ms Access, and Oracle, Data Set, Data Table etc,
- 2.11 Retrieving and manipulating data using Grid View,
- 2.12 Details View, List View, Form View and Data List,
- 2.13 Calling stored procedures of SQL Server.

### UNIT-3 XML & WEB SERVICES

- 3.1 Introduction, well-formed XML and valid XML,
- 3.2 DOM and SAX, XML Reader and writer,
- 3.3 Validating XML with Schema and DTD, Loading data from XML to Database,
- 3.4 Writing data from Database to XML, Transforming XML content using XSLT.
- 3.5 Web Services: introduction, role in web applications, Component and protocols - SOAP,
- 3.6 WSDL, Proxy class, create web service, Web services accessing database.
- 3.7 Advanced Programming: Operator overloading, Conversion operators, Delegates,
- 3.8 Multithreading, Event Handling, Generics, Iterators, Auto properties, Lambda Expressions.

### UNIT-4 LINQ

- 4.1 Language Integrated Query: LINQ to Objects,
- 4.2 LINQ to SQL, Object-Relational Mapping, LINQ to XML.

- 4.3 AJAX: What is AJAX , related technologies, Using ASP.NET AJAX – Script Manager, Update Panel, Timer, Update Progress etc.,
- 4.4 Using ASP.NET AJAX Control Toolkit
- 4.5 Always Visible Control, AutoComplete,
- 4.6 Confirm Button, Filtered Text Box etc., Calling Web Services using AJAX.

**Reference Books:**

1. George Shepherd, "Microsoft ASP.NET 4.0 Step by Step", PHI learning Publication Eastern Economy Edition
2. Imar Spaanjaars," Beginning ASP.NET 3.5 In C# and VB," Wiley / Wrox publication, 2009
3. Bill Evjen, Scott Hanselman, Devin Rader,"Professional ASP.NET 3.5 in C# and VB," wiley publication,2008 [

