

GUJARAT TECHNOLOGICAL UNIVERSITY

DIPLOMA IN INFORMATION TECHNOLOGY

SEMESTER- VI

Subject Name: ASP.NET AND VB.NET WEB PROGRAMMING

Sr. No.	Subject Content	Hrs.
1	<p>1.0 Introduction to .NET and Visual Studio 2005</p> <p>1.1 What's Wrong with Classic ASP? 1.2 Basics of ASP.NET 1.0 1.3 An Introduction to Microsoft .NET 1.4 The Common Language Runtime 1.5 Assemblies 1.6 An Introduction to Visual Studio 2005</p> <p style="padding-left: 40px;">Creating a New Web Project (ASP.NET) Opening an Existing Web Site Building Web Sites Accessing a Web Site Debugging</p>	4
2	<p>2.0 ASP.NET Web Forms</p> <p>2.1 Using the Web Forms Designer (Adding Controls) 2.2 Page Life cycle 2.3 Web Form Processing Stages 2.4 Master Page</p>	3
3	<p>3.0 ASP.NET Controls</p> <p>3.1 HTML Server Controls (HtmlAnchor, HtmlButton, HtmlForm, HtmlImage, HtmlInputCheckBox, HtmlInputImage, HtmlInputRadioButton, HtmlInputText, HtmlTable, HtmlTableCell, HtmlTableRow, HtmlTextArea)</p> <p>3.2 Web Server Controls (Button, CheckBox, CheckBoxList, DropDownList, HyperLink, Image, ImageButton, Label, LinkButton, ListBox, ListItem, Panel, Placeholder, RadioButton, RadioButtonList, TextBox)</p>	6

	<p>3.3 Working with Control Properties and Events</p> <p>3.4 Validation Controls (RequiredFieldValidator, RangeValidator Control, CompareValidator, RegularExpressionValidator, CustomValidator, ValidationSummary)</p>	
4	<p>4.0 State Management</p> <p>4.1 ASP.NET State Management</p> <p>4.1 View State</p> <p> 4.11 Storing Objects in View State</p> <p> 4.12 Assessing View State</p> <p>4.2 The Query String</p> <p> 4.21 Cross-Page Posting and Validation</p> <p> 4.22 Cookies (create, set, add and expire cookie)</p> <p>4.3 Session State</p> <p> 4.31 Session Architecture</p> <p> 4.32 Using Session State(HttpSessionState Members)</p> <p>4.4 Application State</p>	6
5	<p>5.0 ASP.NET Configuration</p> <p>5.1 The Global.asax Application File</p> <p> 5.11 Application Events</p> <p>5.2 ASP.NET Configuration</p> <p> 5.21 The Machine.config File</p> <p> 5.22 The Web.config File</p> <p> 5.23 Configuration Settings</p>	3
6	<p>6.0 ADO.NET Fundamentals</p> <p>6.1 The ADO.NET Architecture</p> <p> 6.11 ADO.NET Data Providers</p> <p> 6.12 Standardization in ADO.NET</p> <p> 6.13 Fundamental ADO.NET Classes</p> <p>6.2 Connection Strings</p> <p>6.3 The Command and DataReader Classes</p> <p> 6.31 Command Basics</p> <p> 6.32 The DataReader Class</p> <p> 6.33 The ExecuteReader() Method and the DataReader</p> <p> 6.34 The ExecuteScalar() Method</p> <p> 6.35 The ExecuteNonQuery() Method</p>	6

7	7.0 Data Components and the DataSet 7.1 Concept of Disconnected Data 7.11 Web Applications and the DataSet 7.2 The DataSet Class 7.21 The DataTable Class 7.22 The DataRow Class 7.3 The DataAdapter Class 7.31 Filling a DataSet 7.4 The DataView Class 7.41 Sorting with a DataView 7.42 Filtering with a DataView	7
8	8.0 Data Binding 8.1 Basic Data Binding 8.11 Single-Value Binding 8.12 Repeated-Value Binding 8.2 The SqlDataSource 8.21 Selecting Records 8.22 Updating Records 8.23 Parameterized Commands 8.24 Disadvantages of the SqlDataSource 8.3 The ObjectDataSource 8.31 Selecting Records 8.32 Updating Records 8.33 Updating with a Data Object	7
	Total	42

NOTE:- Following are the minimum experiences required, but the college can do more experiences if possible.

Laboratory Experiences:

Student should write programs on the basis of prescribed Syllabus of this Course. It should include the following.

1. Creating ASP.NET Web Forms with ASP.NET Controls
2. State Management Practical
3. Web.config setup illustrating Practical
4. ADO.NET Connection related practical
5. Use of DataSet illustrating Practical
6. Data Binding through controls

Reference Books:

1. Beginning Object Oriented ASP.NET 2.0 with VB.NET From Novice to Professional by Brian R. Myers – Apress.
2. Pro ASP.NET 2.0 In VB 2005 by Laurence Moroney and Matthew MacDonald – Apress.
3. Beginning ASP.NET 2.0 by Chris Hart, John Kauffman, Dave Sussman, Chris Ull