



Subject Code: 09CT0502
Subject Name: ASP.NET
Diploma Year – III (Semester V)

Objective: After completion of this course, student will be able to:

1. learn efficient storage mechanisms of data for an easy access.
2. introduce various techniques for representation of the data in the real world.
3. develop application using ASP.NET.
4. teach the concept of protection and management of data.
5. improve the logical ability

Credits Earned:

Course Outcomes: After completion of this course, student will be able to:

1. Understand and apply the concept of Client Server architecture.
2. Develop web applications using standard ASP.Net control and validation control.
3. Design and develop interactive web applications using master page and theme

Pre-requisite of course: Basic knowledge of visual studio

Teaching and Examination Scheme

Teaching Scheme (Hours)			Credits	Theory Marks			Tutorial/Practical Marks		Total Marks
Theory	Tutorial	Practical		ESE	IA	CSE	Viva	Term Work (TW)	
0	0	6	3	00	30	20	25	25	100



Contents:

S.NO	TOPIC
1	Introduction to ASP.Net Web Programming Basics of ASP.NET: Features of ASP.NET, Differences between ASP.NET and Classic ASP, Web Applications and Webpage, Components of Web application, Client Server Architecture, MVC Architecture Creating simple Web Application in ASP.NET: Introduction to Visual Studio, creating a New Web Project (ASP.NET), Opening an Existing Web Site, Building Web Sites, set up of work environment, start page, the menu system, toolbars, the new project dialog box, graphical designer, code designer. Working with ASP.Net Web Forms: Types of ASP.Net Files, Web Form Round Trip, Stages in Web Form Processing ASP.Net Objects (Request, Response, Server, Application, Session)
2	ASP.NetServer Controls Introduction of HTML Controls, ASP.Net Server Controls and Validation Controls, Working with Properties, Events & Methods of Server Controls (Button, Textbox, Label, Checkbox, Checkbox list, Radio Button, Link Button, List Box, Drop Down List, Image, Hyperlink, Panel, Place Holder, File Upload) ,Validation Controls, (Required Field Validator, Compare Validator, Range Validator, Regular Expression Validator, Custom validator, Validation Summary, Validation Group)
3	State Management in ASP.Net State Management: View State, Session State, Application State, Query String, Cookies ASP.Net Configuration: Global.asax application file, Web.config file
4	Working with Master Page & Themes Master Pages: Create Master pages, Create & Develop Content Pages, Nest Master Page, Access master page controls from content page. Themes: Create theme, applying existing theme to an application, Create Skin Applying skin to a control.
5	Database Programming using ADO.Net and AJAX ADO.Net Components: Connection Object, Command Object, Data Reader, Datasets & Data Adapter, Data View. Insert, Update, Delete and Databinding operation using Data Grid, Data List and Repeater Control. ASP.Net AJAX Control: Ajax Framework, Script Manager, Update Panel & Update Progress Bar Control of Ajax

Suggested Theory distribution:



The suggested theory distribution as per Bloom’s taxonomy is as per follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process

Distribution of Theory for course delivery and evaluation					
Remember	Understand	Apply	Analyse	Evaluate	Create
40%	40%	10%	10%	0	0

Suggested List of Experiment:

S. No.	Practical Exercises (outcomes in psychomotor domain)	Approx. Hours Reqd.
1	Study of Visual Studio environment. (Create new web project, Open existing web project, building website, and study of toolbars, menu etc.)	2
2	a. Design a ASP.Net web form for User Registration having fields First Name, Last Name, Email, Password, repass, Age (dd- mm-yyyy), Ph. No., address, city, using different Server Controls. b. Validate all details in above application using validation controls and display all the details in the same form.	2 2
3	Create a page in ASP.Net using VB.Net, to choose a color from drop-down-list and display a message “you have chosen ‘color name’ ”.	1
4	Design a page that takes name and message from the user and choose a color by radio button, select a style for ex.-bold, italic, underline from the checkbox and display in label control, when you clicked on display button. And clear the information when you clicked on clear button.	2
5	Develop a web form to perform add, update, delete operation on List Box control.	2
6	Create a web page, for book sales. Enter the quantity, title and price of the book. Calculate the extended price, discount (15%) and after discount, the actual price of the book. Show the summary of book sales. (Like total no of books, total discount given, total discounted amount and average discount.) You will need command buttons- calculate, clear sale.	2
7	Design a web page to implement upload and download files functionality using File Upload Control.	2
8	Develop a web page to implement the concept of state management using Cookies	2



S. No.	Practical Exercises (outcomes in psychomotor domain)	Approx. Hours Reqd.
9	Develop a web page to implement the concept of state management using Session and Application	2
10	Develop a web page to implement the concept of state management using View State and Query String .	2
11	Create a web application using Global.asax file which will count the number of visitors on web page.	2
12	Use various tags in Web.config file for ASP.NET configuration.	2
13	Create a web site using Master Page Concept having two content pages.	2
14	Create a web application implementing Nested Master Page concept.	2
15	Design a web application to illustrate concept of CSS, Themes and Skin.	2
16	Write sample application to connect to database, Fetching and inserting data from database and using Data Reader	4
17	Develop a User Registration form designed in Experiment 2. Insert user details in Database and show the same in DataGrid/Grid View control.	4
18	Create a login page in your web application. Login page must have user name and password fields. If user enters correct ID, Password, he must be redirected to the homepage of your website.	6
19	Develop a web application to Add, Update, View and Delete records from Database data shown in Grid view.	6
20	Design a web form showing record in Repeater and Data List.	4
21	Implement Ajax Script Manager and Update Panel concept in above practical.	2
22	Develop a Login application and show Ajax Progress bar while user trying to log in.	3
	Total Hours	



SUGGESTED LEARNING RESOURCES

List of Books:

S.No.	Title of Books	Author	Publication
1	Murach's ASP.Net Web Programming in VB-Net	Mike Murach	Mike Murach & Associates
2	ASP.NET: The Complete Reference Book	Matthew Macdonald	McGraw Hill education
3	Programming in Visual Basic. NET	Julia Case Bradley, Anita C. Millspaugh	McGraw Hill, latest edition
4	Visual Basic .net Comprehensive Concepts and Techniques	Shelly, cashman, Quasney	Cengage learning, 2012

Supplementary Resources:

- <http://www.tutorialspoint.com/asp.net/index.htm>
- <http://www.homeandlearn.co.uk/NET/vbNet.html>
- <https://www.udemy.com/learn-aspnet-from-scratch/?dtcode=QO5KhFV1R5It>
- <http://stepbystepvideotutorials.com/>
- <http://msdn.microsoft.com/en-us/beginner/default.aspx> .