

**Course:** BCA

**Semester:** 5

**Prerequisite:** Basic understanding of HTML, CSS, JavaScript.

**Course Objective:** The introduction of ASP.NET using the MVC architecture provides developers with a powerful and flexible framework for building modern web applications that are modular, maintainable, testable, and scalable.

## Teaching and Examination Scheme

Teaching Scheme					Examination Scheme					Total
Lecture Hrs/Week	Tutorial Hrs/Week	Lab Hrs/Week	Seminar Hrs/Week	Credit	Internal Marks			External Marks		
					T	CE	P	T	P	
-	-	2	-	1	-	-	20	-	30	50

SEE - Semester End Examination, T - Theory, P - Practical

## Course Outcome

**After Learning the Course the students shall be able to:**

1. Understand the Model-View-Controller (MVC) architecture and Apply it in web development.
2. Demonstrate proficiency in ASP.NET MVC for web application development and Utilize test-driven development techniques. (Demonstrate, Utilize)
3. Describe code effectively to improve maintainability and sustainability in web projects.
4. Implement SEO optimizations, performance tuning, and security measures while Developing real-world, production-ready applications.

## List of Practical

1.	Create a first ASP.NET Website and execute it on a web browser.
2.	Write ASP.NET program that will display "HelloWorld" on page load event.
3.	Write ASP.NET program that will display "HelloWorld" in Labelcontrol on formload event.
4.	Write ASP.NET program that will display "HelloWorld" in division tag or paragraph tag onclick of button.
5.	Write ASP.NET program that will do following operations Take two string values from textbox control, concatenated it & display it.
6.	Write ASP.NET program that will take two int values & calculate $a^b$
7.	Write ASP.NET program that will take 3 subject marks & find Total & Average.
8.	Create ASP.NET Webpage that will take feedback details from user and Display it as testimonial. Feedback Name, email and feedback desc
9.	Create ASP.NET Web page that will upload any file to web server.
10.	Create ASP.NET web page that will display Sleeve Items in a list box control. On the selection of display image and cost of item.
11.	In the above ASP.NET Web page, all users to add quantity in textbox control (i.e. Readonly) on click of + & - button controls quantity should be increment & decrement then calculate payment.
12.	Write an asp.net web page that will make student exam details from exam form and generate fee receipt. Exam details: name, exam type year, sem subject's fees.
13.	Create ASP.NET Webpage that will test the Database connection.



14.	Create ASP.NET web page that will display data in Gridview Control using SqlDataSource.
15.	Create ASP.NET web page that will display data in Grid view Control using C# code.
16.	Create ASP.NET Web page that will display data into Repeater control.
17.	Create ASP.NET Web page that will display data into List box and drop-down list control using SqlDataSource.
18.	Create ASP.NET Webpage that will display data into List box and dropdown list control on button click event using c# code.
19.	Create ASP.NET webpage that will take User's Name & Favorite Color from TextBox & Dropdownlist. before submitting values check whether values are empty or not using required Field Validator.
20.	Create ASP.NET Webpage that will take validate from the user into text box control using Range validator.
21.	Create ASP.NET Webpage that will check validation using Compare Validation <ol style="list-style-type: none"><li>1. Check the DataType Of Bdate</li><li>2. Check Bdate must be greater than now/today.</li><li>3. Check End Date Must be Greater than Start Date.</li></ol>
22.	Create ASP.NET Webpage that will take valid mail addresses and valid URLs using Regular Expression Validation Control.
23.	Create ASP.NET Webpage that will not allow users to enter more than 10 characters Using custom validator.
24.	Create ASP.NET Webpage that registration details like Username, Password, and Confirm Password from the user, assign validation controls on all the fields and display a validation error message.
25.	Create an ASP.NET Webpage that will take username and password from the user and create session a session for username and display it on a webpage.
26.	Create an ASP.NET webpage that will allow users to add product details to the product master table and upload product image to the server.
27.	Create ASP.NET web page that will display products from the product master table.
28.	Create a webpage that will show full details of the product on click.
29.	Create ASP.NET webpage that will display all the records into grid view control. Create Employee Table EmpID, EmpName, Bdate, and Contact.
30.	In above ASP.NET webpage add web controls that will insert data into grid view control.
31.	In the above ASP.NET webpage add a button in to grid view control that will edit/update data of grid view control.
32.	In the above ASP.NET web page add delete button to grid view control that will delete data of grid view control.
33.	Create ASP.NET web page that will display the current date & time and create an output cache of the webpage and create a cache by param.
34.	Create ASP.NET webpage that will display the current date & time from user control and create a partial cache of the webpage.
35.	Create ASP.NET web pages that will display the current date & time using absolute expiration cache.
36.	Create ASP.NET web pages that will display the current date & time using absolute expiration cache.
37.	Create ASP.NET a web page that will display data into grid view control and create data caching.
38.	Create an XML file that will store student information.
39.	Create ASP.NET Web page that will read XML file and display XML data into GridView control.
40.	Create ASP.NET Webpage that will read data from the database and write on XML on button click.