

**Kadi Sarva Vishwavidyalaya, Gandhinagar****MASTERS OF COMPUTER APPLICATION (MCA)****Semester – III (Second Year)****Subject: MCA-302 – Web Development Tools - 1 (WDT-1)**

SUB Total CREDIT	<u>Teaching scheme</u>		<u>Examination scheme</u>				
	(per week)		MID	CEC	External		Total Marks
	Th.	Pr.	Th.	Th.	Th.	Pr.	
5	3	4	25	25	50	50	150

**Objectives:**

1. To develop basic knowledge of designing and developing client server architecture based applications and web applications
2. The purpose of this course is to give students an understanding of both the Applications. This course covers some advanced topic in ASP.NET, so that student can develop projects for the industry.

**Learning Outcome:**

This Course Covers -

- Web Application Architecture
- Using Server & HTML Controls
- Using Master pages & Themes
- Working With Database
- Securing Web Application
- ASP.NET Web Services
- Mobile Application development

**Course Contents:****Unit 1: Introduction to Client Server Architecture & Visual Basic.Net****(20%)**

What is Client Server Architecture? Real client server architecture, 2-tier v/s 3-tier architecture.

Visual Basic: Exploring IDE, Creating First VB Application, IDE Components and Building Console Application.

**Unit – 2: ASP.NET Essentials** (20%)

ASP.NET Essentials, Developing a Web Application, Standard Controls – I

**Unit – 3: Various Controls** (20%)

Standard Controls - II, HTML Controls, Navigation Controls, Validation Controls, Login Controls, Master Pages & Themes

**Unit – 4: Working with Database** (20%)

Working with ADO.NET, Overview of Data Objects, Understanding Data Source Controls, Working with Databound Controls

**Unit – 5: Advanced Topic** (20%)

Understanding User Profiles, Caching, Dealing with web services using XML files. Developing Mobile Application, Tracking & securing Websites.

**Text Book(s):**

1. ASP.NET 4.0 Black Book, Dreamtech Press
2. Mastering Visual Basic 2008 – Evangelos Petroustos, Wiley India.

**Other Reference Books:**

1. ASP.NET Website Programming: Programs - Design – Solution
2. ASP.NET in a Nutshell
3. Teach Yourself ASP.NET in 24 Hours

**Experiment List :**

**Creating a Web Site Master Pages, & Themes**

Exercise 1 Create a e-Website

Exercise 2 Create a Master Page

Exercise 3 Theme the Web Site's Pages

**Using Controls**

Exercise 4 Add Multiple Views

Exercise 5 Build the Main Content Page

Exercise 6 Build the Product Pages

Exercise 7 Build the Check-Out Page

Exercise 8 Build the Thank-You Page

Exercise 9 Use the Web Site Administration Tool to configure website

### **Data Access**

Exercise 10 Create webshop Database

Exercise 11 Create Stored Procedure

Exercise 12 Create Data Access Layer

Exercise 13 Create Classes for category & Products

Exercise 14 Create an Admin Page

### **Membership, Login Controls, and Role Management Page**

Exercise 16 Apply Authentication and Authorization Settings

Exercise 17 Add Navigation Links to the Master Page

Exercise 18 Enable Role-Based Security, Employ Security Trimming, Add a Sitemap Path

### **State Management & Reports**

Exercise 19 Add Visitor Counter

Exercise 20 Create Reports.