### RAJIV GANDHI PROUDYOGIKI VISHWAVIDYALAYA, BHOPAL

### **New Scheme Based On AICTE Flexible Curricula**

### Computer Science & Information Technology, IV-Semester

#### **CSIT 406 Dot Net**

## **Course Objective:**

Gain a comprehensive understanding of the philosophy and architecture of C-Sharp programming. Configure and deploy a Microsoft ASP.NET Web application. Learn how to implement web applications using web forms, including programs that interact with databases. Gain a strong knowledge in all Dot Net Web application concepts

Introduction .NET framework, features of .Net framework, architecture and component of .Net, elements of .Net.

Basic Features Of C# Fundamentals, Classes and Objects, Inheritance and Polymorphism, Operator Overloading, Structures. Advanced Features Of C# Interfaces, Arrays, Indexers and Collections; Strings and Regular Expressions, Handling Exceptions, Delegates and Events.

Installing ASP.NET framework, overview of the ASP .net framework, overview of CLR, class library, overview of ASP.net control, understanding HTML controls, study of standard controls, validations controls, rich controls. Windows Forms: All about windows form, MDI form, creating windows applications, adding controls to forms, handling Events, and using various Tolls

Understanding and handling controls events, ADO.NET- Component object model, ODBC, OLEDB, and SQL connected mode, disconnected mode, dataset, data-reader Data base controls: Overview of data access data control, using grid view controls, using details view and frame view controls, ado .net data readers, SQL data source control, object data source control, site map data source.

XML: Introducing XML, Structure, and syntax of XML, document type definition (DTD), XML Schema, Document object model, Presenting and Handling XML. xml data source, using navigation controls, introduction of web parts, using java script, Web Services

#### References:

- 1. C# for Programmers by Harvey Deitel, Paul Deitel, Pearson Education
- 2. Balagurusamy; Programming in C#; TMH
- 3. Web Commerce Technology Handbook by Daniel Minoli, Emma Minoli, TMH

- 4. Web Programming by Chris Bates, Wiley
- 5. Alex Mackey, "Introduction.NET 4.5", Wiley India
- 6. ASP .Net Complete Reference by McDonald, TMH.
- 7. ADO .Net Complete Reference by Odey, TMH

# **List of Experiments/ program (Expandable):**

- 1. Working with call backs and delegates in C#
- 2. Code access security with C#.
- 3. Creating a COM+ component with C#.
- 4. Creating a Windows Service with C#
- 5. Interacting with a Windows Service with C#
- 6. Using Reflection in C#
- 7. Sending Mail and SMTP Mail and C#
- 8. Perform String Manipulation with the String Builder and String Classes and C#:
- 9. Using the System .Net Web Client to Retrieve or Upload Data with C#
- 10. Reading and Writing XML Documents with the XML Text-Reader/-Writer Class and C#
- 11. Working with Page using ASP .Net.
- 12. Working with Forms using ASP .Net
- 13. Data Sources access through ADO.Net,
- 14. Working with Data readers, Transactions
- 15. Creating Web Application.