



C. U. SHAH UNIVERSITY – WADHWAN CITY

FACULTY OF TECHNOLOGY AND ENGINEERING DEPARTMENT OF COMPUTER ENGINEERING DEPARTMENT OF INFORMATION TECHNOLOGY B. TECH. SEMESTER: - V

Subject Name: Programming with Dot Net Technology (PDN)

Subject Code : 4TE05PDN1

Teaching & Evaluation Scheme:-

Subject Code	Subject Name	Teaching Scheme (Hours)				Credits	Evaluation Scheme							
		Th	Tu	Pr	Total		Theory				Practical (Marks)			Total
							Sessional Exam		University Exam		Internal		University	
							Marks	Hours	Marks	Hours	Pr/Viva	TW	Pr	
4TE05PDN1	Programming with Dot Net Technology (PDN)	3	0	4	7	5	30	1.5	70	3.0	-	20	30	150

Objectives:

The objectives of the course are:

- To gain the knowledge of .Net Framework, Assemblies
- To gain the knowledge of C#.Net
- To gain the knowledge of VB.Net
- To gain the knowledge of console application
- To gain the knowledge of window form application
- To gain knowledge of database connectivity
- To perform practical related all these concepts during laboratory sessions

Prerequisites:

- Basic knowledge of Programming Language and database

Course outline:

Sr. No.	Course Contents	Total Hrs.
1	Introduction to .Net: .Net Framework, MSIL, CLR, CLS, Assemblies, Metadata & Intermediate Language, Garbage Collection, Versioning and Side-by-Side Execution, DLL Hell, The End to DLL Hell, Managed Execution, COM InterOp	04

2	Data Types and Base Class Libraries: Understanding .NET Data Types, Exploring Assemblies and Namespaces, String Manipulation, Files and I/O , Collections, The Microsoft Visual Basic Namespace	04
3	VB .NET: Language Features Creating .NET Projects, Namespaces, Data Structure and Language Highlights, Classes and Inheritance, Structured Error Handling, Exploring the Base Class Library, Compatibility with VB6, The .NET Type System , Threads	06
4	Object Oriented Programming with VB.NET: Creating Classes in VB.NET, Overloading , Constructors , Inheritance, Controlling scope and visibility , Dispose and Finalization, Debugging and Error Handling	04
5	Console Applications: When to use Console Applications , Generating Console Output , Processing Console Input	04
6	C# .NET: Introduction to C#, Namespaces, Constructors and Destructors, Function Overloading and Inheritance, Modifiers, Properties and Indexers, Attributes, Reflection API ,Unsafe Code, Events and Delegates	06
7	Introduction to Windows Forms: Benefits of Windows Forms , .NET Events , The Windows Forms Model ,Creating Windows Forms ,Windows Forms Properties and Events , Dialogs ,ToolTips	06
8	Windows Forms and Controls in detail: Windows Form Controls ,Resizing , Menus, Visual Inheritance , Apply Inheritance techniques to Forms , Creating Base Forms , Programming Derived Forms , MDI Form, Custom control creation, Using ActiveX Controls, Printing , Handling Multiple Events , GDI+	06
9	ADO.Net: Introduction to Ado. NET, Understanding the Connection Object Building the Connection String, Understanding the Command Object, Understanding Data Readers, Understanding Data Sets and Data Adapters, Data Table, Data Column, Data Row, Differences between Data Reader Model and DataSet Model Understanding the Data View Object, Working with System Data OleDb	08
	Total	48

Learning Outcomes:

At the end of this module the student will be:

- Able to build console applications using C#.NET
- Able to build console application using VB.NET
- Able to build Window Form Application using C#.NET
- Able to build Window Form Application using VB.NET

Books Recommended:

1. C#: The Basic, 2nd Edition, **Vijay Mukhi, Sonal Mukhi**, bpb publication
2. ProC# 2010 and the .NET 4 Platform, 5th Edition,**Andrew Troelsen**, apress publication (March 2010)
3. C# Precisely, 2nd Edition, **Sestoft Peter Hansen H.I**, PHI New Delhi
4. Programming Visual Basic.Net, 2nd Edition,**Jesse Liberty**, O'Reilly publication

5. Professional VB.NET, 2nd Edition, **Fred Barwell, Richard Case, Bill Forgey, Billy Hollis, Tim McCarthy, Jonathan Pinnock**, Wrox publication
6. VB.Net in Nutshell, 2nd Edition, **Steven Roman, Paul Lomax, Ron Petruscha**, Oreilly publication
7. Visual Basic .NET Programming Black Book, 1st Edition, **Steven Holzner**, Dreamtech Press
8. Windows Forms Programming in C#, 1st Edition, **Chris Sells**, Addison-Wesley Professional