

SARDAR PATEL UNIVERSITY
Programme & Subject: M.Sc – Information Technology (Integrated)
Semester: IV
Syllabus with Effect from: June-2013

Paper Code: PS04CIT03		Total Credit: 3
Title Of Paper: Visual Programming Through VB.NET		
Unit	Description in detail	Weightage (%)
I	Introduction to .NET Framework and VB.NET NET Architecture, .NET Languages, Microsoft Intermediate Language (MSIL), The Just-In-Time (JIT) compiler, Working with Assemblies, The .NET framework class library VB.NET - introduction, applications and types of project Introduction to Visual Studio IDE Creating simple Windows Application using VB.NET Variables, data types, constants and operators Type casting, Boxing and Unboxing, Working with arrays and strings Creating simple Windows Application using VB.NET	25%
II	VB.NET Basics Use of conditional statement (if), multi branching statement (select) and With...End With statement, Looping Statement: DO, FOR, FOR EACH..NEXT and WHILE, Working with EXIT, CONTINUE and WITH statements Working with procedures – introduction, types, use of parameters, parameter passing, calling procedures OOP concepts - Encapsulation, Inheritance, Interfaces and Polymorphism Working with modules, classes (partial) and namespaces Working with Windows Forms – introduction, life cycle, basic properties, methods and events, use of simple windows forms control. Working with SDI and MDI forms	25%
III	Developing Windows Forms, Exception Handling Working with basic controls – Button, Check Box, Checked List Box, Combo Box, Date Time Picker, Group Box, HScroll Bar, Radio Button, Vscroll Bar, Label, List Box, Picture Box, Text Box and Time controls. Working with advanced controls – Link Label, Rich Text Box, Color Dialog, Font Dialog, Tree View, Working with modules, classes (partial) and namespaces Error Handling: exception, structured exception using try...catch and final statement	25%
IV	Persisting Data Using Databases and Files ADO.NET – introduction and applications ADO.NET – architecture (connected and disconnected) Database connectivity using ADO.NET Use of Data sources, Server Explorer and working with Data Set Populating data in a Data Grid View, Working with files	25%

Basic Text & Reference Books:-

- Steven Holzner; VB.NET Black Book by Dreamtech publication
- Francesco Balena : Programming Microsoft Visual Basic.NET, Microsoft Press
- Bill Evjen, Billy Hollis, Bill Sheldon, Kent Sharkey and Tim McCarthy : Professional VB 2005 with .NET 3.0

