SARDAR PATEL UNIVERSITY
Programme: B.Sc (Information Technology)
Semester: V
Syllabus with effect from: June - 2013

Paper Code: US05CINT03	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	25%
II	**VB.NET Basic** Working with Windows Forms – introduction, life cycle, basic properties, methods and events, use of simple windows forms control Working procedures – introduction, types, use of parameters, parameter passing, calling procedures Use of conditional statement (if), multi-branching statement (select) and With…EndWith statement. Looping Statement: DO, FOR, FOR EACH..NEXT and WHILE, Working with EXIT, CONTINUE and WITH statements Working with arrays and strings	25%
III	**Windows Forms – Types and Basic Controls** Working with modules, classes (partial) and namespaces Working with SDI and MDI forms Working with basic controls – Button, CheckBox, CheckedListBox, ComboBox, DateTimePicker, GroupBox, HScrollBar, RadioButton, VscrollBar, Label, ListBox, PictureBox, TextBox and Time controls. Working with advanced controls – LinkLabel, RichTextBox, ColorDiolog, FontDialog, TreeView, Error Handling: exception, structured exception using try…catch and final statement	25%
IV	Database Programming with ADO.NET and OOP Concepts 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 DataSet Populating data in a DataGridView, Working with files Use of FileStream class, StreamWriter class, StreamReader class, Binery	25%

Reader class, Binary Writer class, File class and Directory class. OOP concepts – Encapsulation, Inheritance, Interfaces and Polymorphism	

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