## SARDAR PATEL UNIVERSITY Programme: BCA Semester: V Syllabus with effect from:June-2013

## Paper Code: US05CBCA01

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Title Of Paper: Visual Programming Through V B Net.	Total Credit: 4

Unit	Description in detail	Weighting (%)
Ι	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	25%
	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	
II	VB.NET Basics	
	Use of conditional statement (if), multibranaching statement (select) and	
	WithEndWith statement,	
	Looping Statement: DO, FOR, FOR EACHNEXT and WHILE, Working	
	with EXIT, CONTINUE and WITH statements	
	Working with procedures – introduction, types, use of parameters, parameter	25%
	passing, calling procedures	2.370
	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	
III	Developing Windows Forms, Exception Handling	
	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,	25%
	FontDialog, TreeView, Working with modules, classes (partial) and	
	namespaces	
	Error Handling: exception, structured exception using trycatch and final	
	statement	
IV	Persisting Data Using Databases and Files	
	ADO.NET – introduction and applications	
	ADO.NET – architecture (connected and disconnected)	
	Database connectivity using ADO.NET	25%
	Use of Data sources, Server Explorer and working with DataSet	
	Populating data in a DataGridView,	
	Working with files	



## **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

