

# SARDAR PATEL UNIVERSITY

## Vallabh Vidyanagar

Programme & Subject : B.Sc (CA & IT) – M.Sc (CA & IT) Dual Degree

Semester – 3

### US03CIIT23 : Visual Programming

(w.e.f June 2020)

Credits : 4

Exam Duration : 3hrs

Lectures per week : 4

All units carry equal weightage.

Unit	Description in detail	Weightage(%)
I	<b>Introduction to .NET Framework and VB.NET</b> <ul style="list-style-type: none"><li>➤ .NET Architecture, .NET Languages, Microsoft Intermediate Language (MSIL), The Just-In-Time (JIT) compiler, Working with Assemblies, The .NET framework class library</li><li>➤ VB.NET - introduction, applications and types of project</li><li>➤ Introduction to Visual Studio IDE</li><li>➤ Variables, data types, constants and operators</li><li>➤ Type casting, Boxing and Unboxing,</li><li>➤ Working with arrays and strings</li><li>➤ Creating simple Windows Application using VB.NET</li></ul>	25%
II	<b>VB.NET Basics</b> <ul style="list-style-type: none"><li>➤ Use of conditional statement (if), multi branching statement (select) and</li><li>➤ With...End With statement,</li><li>➤ Looping Statement: DO, FOR, FOR EACH...NEXT and WHILE, Working</li><li>➤ with EXIT, CONTINUE and WITH statements</li><li>➤ Working with procedures – introduction, types, use of parameters, parameter</li><li>➤ passing, calling procedures</li><li>➤ Working with modules, classes (partial) and namespaces</li><li>➤ Working with Windows Forms – Introduction, life cycle, basic properties, methods and events, use of simple windows forms control.</li><li>➤ Working with SDI and MDI forms</li></ul>	25%
III	<b>Developing Windows Forms, Exception Handling</b> <ul style="list-style-type: none"><li>➤ 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 Timer controls.</li><li>➤ Working with advanced controls – Link Label, Rich Text Box, Color Dialog, Font Dialog, Tree View, Progressbar</li><li>➤ Error Handling: exception, structured exception using try...catch and final Statement</li></ul>	25%

IV	<b>Persisting Data Using Databases and Files</b> <ul style="list-style-type: none"><li>➤ ADO.NET – introduction and applications</li><li>➤ ADO.NET – architecture (connected and disconnected)</li><li>➤ Database connectivity using ADO.NET</li><li>➤ Use of Data sources, Server Explorer and working with Data Set</li><li>➤ Populating data in a Data Grid View</li><li>➤ Working with files</li></ul>	<b>25%</b>
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**Basic Text & Reference Books:**

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