

# SYLLABUS

## PANJAB UNIVERSITY, CHANDIGARH

BCA (SEMESTER-6<sup>TH</sup>)

APPLICATION DEVELOPMENT USING VB.NET

(BCA-16-602)

### UNIT - I

**Overview of the Visual Studio .NET IDE:** Introduction to .NET Framework and the Common Language Runtime, Introduction to Visual Studio .NET IDE: Menu Bar and Tool Bar, Solution Explorer, Toolbox, Using different controls of Toolbox and their commonly used properties and methods: TextBox, Label, Check Box, Radio Button, Button, Frame, List Box, Combo Box, Picture, Image, Shape, Drive, File, directory related controls, Introduction to Menus

### UNIT - II

**Basics of VB.Net:** Constants, Variables, data types, assignment operator, Operators: Arithmetic, Relational and logical operators, Assignment operators, Control structures: If, if/then/else selection structures, Select case Multiple-selection structure, While, do while, do until, For/Next repetition structure

**Procedures:** Introduction, sub Procedures, function procedures, event procedures, commonly used Form events, msgBox function, InputBox function.

**Arrays and Strings:** declaring and allocating Arrays, Using Strings and String functions: len, right, left, ucase, lcase, ltrim, trim;

**Control Arrays:** Introduction, creating and using Control Arrays

### UNIT - III

**Writing ASP .NET applications and Deploying ASP .NET Applications:** Introduction to ASP.NET, Difference between ASP and ASP.NET, Understanding Web Forms,

Using Validation Controls: required Field Validator, Range Validator, Compare Validator, Regular Expression Validator, Custom Validator, Validation Summary; ,

Managing State in ASP.NET Web Applications using Session object, Cookie and Query String, Creating ASP.NET application, Deploying ASP.NET Applications with Windows Installer, Introduction to Web Services.

#### **UNIT – IV**

**Accessing Data with ADO.NET:** Understanding ADO.net, ADO.NET Object model: Connected model and Disconnected model, architecture, components, Understanding Provider classes, using Data Reader to read data from database, Data Adapter and Data sets, Using DataAdapter for Data Navigation and Data Manipulation, connecting to and querying a data source, using Data Grid view control with ADO.NET data sources.