

## **Add on Diploma Course in Information Technology Part II Semester-III**

**2018-19, 2019-20 and 2020-21 Sessions**

### **PAPER A: PROGRAMMING IN VISUAL BASIC**

**External Marks: 45**

**Maximum Time: 3 Hrs.**

**Minimum Pass Marks: 35%**

**Lectures to be delivered: 45-55 Hrs.**

**Internal Assessment : 15**

#### **A) Instructions for paper-setter**

The question paper will consist of three sections A, B & C. Sections A & B will have four questions from the respective sections of the syllabus and will carry 40% marks each. Section C will have 6-12 short answer type questions which will cover the entire syllabus uniformly and will carry 20% marks in all.

#### **B) Instructions for candidates**

Candidates are required to attempt two questions each from sections A & B of the question paper and the entire section C.

### **SECTION-A**

**Introduction to Visual Basic:** The Visual Basic Program Development Process, The Visual Basic Environment, Opening a Visual Basic Project, Saving a Visual Basic Project, Running a Visual Basic Project.

**Visual Basic Fundamentals:** Numeric Constants, String Constants, Variables, Data Types and Data Declaration, Operators and Expressions, Hierarchy of Operations, String Expressions, Library Functions, Branching and Looping Statements, Relations Operators and Logical Expressions, Logical Operators, Branching with the if-Then Block, Branching with if-Then-Else Blocks, Selection: Select-case, Looping with for Next, Looping with Do-Loop, Looping with While Wend.

### **SECTION-B**

**Visual Basic Control Fundamentals:** Visual Basic Control Tools, Control tool Categories, Working with Controls, Naming Forms and Controls, Assigning Property Values to Forms and Controls, Executing commands (Event Procedures and Command Buttons), Display Output Data (Labels and Text Boxes), Selecting Exclusive Alternatives (Option Button and Frames), Assigning Properties Collectively (The With Block) Generating Error Messages (The MsgBox Function), Creating Time Events, Scrollbars. **Menus and Dialog Boxes:** Building Drop-Menus, Accessing a Menu From the Keyboard, Menu Enhancements, Submenus, Pop-up Menus, Dialog Boxes, Input Box.

#### **Text Books:**

1. H.M. Dietel, P J Dietel, T. R. Nieto, "Visual Basic 6: How to Program", 9th Edition, Pearson Education India.
2. Steve Holzner, Visual Basic 6 Programming Black Book, John Wiley & Sons.
3. Noel Jerke, Visual Basic 6 : The complete Reference 2000. Allied Publishers.

**PAPER B: Software Lab Based on Paper A**

**Maximum Marks: 40**

**Maximum Time: 3 Hrs.**

**Minimum Pass Marks: 35%**

**Practical Units to be conducted : 60-65 Hrs.**

The laboratory course will comprise of exercise to what is learnt under Paper A:  
Programming in Visual Basic.

The breakup of marks for the practical will be as under :

Lab Record	:	05 Marks
Viva Voce	:	10 Marks
Program Development And Execution	:	25 Marks

## **Add on Diploma Course In Information Technology Part II Semester – IV**

**2018-19, 2019-20 and 2020-21 Sessions**

### **PAPER A: ADVANCE VISUAL BASIC**

**External Marks: 45**

**Maximum Time: 3 Hrs.**

**Minimum Pass Marks: 35%**

**Lectures to be delivered: 45-55 Hrs.**

**Internal Assessment : 15**

#### **A) Instructions for paper-setter**

The question paper will consist of three sections A, B & C. Sections A & B will have four questions from the respective sections of the syllabus and will carry 40% marks each. Section C will have 6-12 short answer type questions which will cover the entire syllabus uniformly and will carry 20% marks in all.

#### **B) Instructions for candidates**

Candidates are required to attempt two questions each from sections A & B of the question paper and the entire section C.

### **SECTION-A**

**Executing and Debugging a New Project:** Syntax Errors, Logical Setting Break Points, Defining Watch Values, Stepping Through a Program, User-Induced Errors, Error Handlers,

**Procedures:** Modules and Procedures, Sub Procedure, Event Procedures, Function Procedures, Scope, Optional Arguments

**Arrays:** Array Characteristics, Array Declarations, Processing Array Elements, Passing Arrays to Procedures, Dynamic Arrays, Array-Related Functions, Control Arrays

### **SECTION-B**

**Using Class Modules:** Object Oriented Principles, Creating Class Modules, Using Class Modules Adding Properties and Events and Methods,

**Using COM Components :** Introduction to ActiveX Components and Component Object Model, Benefits of COM, Clients and Serves, Types of ActiveX Components Available in Visual Basic.

#### **Text Books:**

1. H.M. Dietel, P J Dietel, T. R. Nieto, "Visual Basic 6: How to Program", 9th Edition, Pearson Education India.
2. Steve Holzner, Visual Basic 6 Programming Black Book, John Wiley & Sons.
3. Noel Jerke, Visual Basic 6 : The complete Reference 2000. Allied Publishers.

**PAPER B: Software Lab Based on Paper A**

**Maximum Marks: 40**

**Maximum Time: 3 Hrs.**

**Minimum Pass Marks: 35%**

**Practical Units to be conducted : 60-65 Hrs.**

The laboratory course will comprise of exercise to what is learnt under Paper A:  
Advance Visual Basic.

The breakup of marks for the practical will be as under :

Lab Record	:	05 Marks
Viva Voce	:	10 Marks
Program Development And Execution	:	25 Marks