

M4.2-R3: PROGRAMMING THROUGH VISUAL BASIC

NOTE:

1. There are **TWO PARTS** in this Module/Paper. **PART ONE** contains **FOUR** questions and **PART TWO** contains **FIVE** questions.
2. **PART ONE** is to be answered in the **TEAR-OFF ANSWER SHEET** only, attached to the question paper, as per the instructions contained therein. **PART ONE** is **NOT** to be answered in the answer book.
3. Maximum time allotted for **PART ONE** is **ONE HOUR**. Answer book for **PART TWO** will be supplied at the table when the answer sheet for **PART ONE** is returned. However, candidates, who complete **PART ONE** earlier than one hour, can collect the answer book for **PART TWO** immediately after handing over the answer sheet for **PART ONE**.

TOTAL TIME: 3 HOURS

TOTAL MARKS: 100
(PART ONE – 40; PART TWO – 60)

PART ONE **(Answer all the questions)**

1. **Each question below gives a multiple choice of answers. Choose the most appropriate one and enter in the “tear-off” answer sheet attached to the question paper, following instructions therein.** (1 x 10)
 - 1.1 Which of the following event is not associated with Form?
 - A) Initialize
 - B) Load
 - C) Deactivate
 - D) QueryReload
 - 1.2 Which type of variable's value is preserved during procedure calls?
 - A) Static Local Variable
 - B) Global Variable
 - C) Module Variable
 - D) Dynamic Local Variable
 - 1.3 In each project you can have only one
 - A) Form
 - B) BAS module
 - C) Class module
 - D) MDI Form
 - 1.4 Which control is used to inform the user about the progress state of a lengthy operation?
 - A) StatusBar
 - B) ProgressBar
 - C) ToolBar
 - D) CoolBar
 - 1.5 Which of the following menu lists a collection of commands related to external modules that integrate into the environment?
 - A) Help Menu
 - B) Tools Menu
 - C) Add-In Menu
 - D) Window Menu

- 1.6 Windows API is
- A) a collection of exe files
 - B) a collection of DLLs
 - C) a collection of VB files
 - D) a collection of GUI files
- 1.7 Which object in the Data Environment designer represents an action performed on a database?
- A) Control
 - B) Form
 - C) Action
 - D) Command
- 1.8 You can write diagnostic messages from your application's code to immediate window using which of the following statement.
- A) Print
 - B) Out
 - C) Debug. Print
 - D) Put
- 1.9 Which object lets you specify all the necessary parameters – for example, the server and the database names, the user's name and password and the timeout – before opening the data sources?
- A) The Connection
 - B) The RecordSet
 - C) The Command
 - D) The Parameter
- 1.10 Which of the following commands, when pressed on a keyboard, will lead to the event occurrence?
- A) KeyType
 - B) KeyPress
 - C) KeyEnter
 - D) FormLoad

2. Each statement below is either TRUE or FALSE. Choose the most appropriate one and ENTER in the “tear-off” sheet attached to the question paper, following instructions therein. (1 x 10)

- 2.1 When a control is created from the Toolbox, its *Font* property reflects the font of the parent form.
- 2.2 Label control cannot get focus.
- 2.3 End toolbar will end the current running application and return you to Run mode.
- 2.4 ComboBox controls is support multiple selections.
- 2.5 The *Parent* property is a run time only property (that is, you don't see it in the Properties window), which returns a reference to the form that hosts the control.
- 2.6 Visual Basic 6.0 is command driven programming.
- 2.7 You can also use the Public attribute for module-level variables, for all module types except BAS modules.
- 2.8 Option Explicit statement is used to force declaration of variables.
- 2.9 Shortcut keys allow the user to access menu function using a single key or key combination.
- 2.10 *Encapsulation* is the ability of different classes to expose similar (or identical) interfaces to the outside.

3. Match words and phrases in column X with the closest related meaning/ word(s)/phrase(s) in column Y. Enter your selection in the “tear-off” answer sheet attached to the question paper, following instructions therein. (1 x 10)

X		Y	
3.1	The Erase statement	A.	Exposes only two meaningful properties: <i>Interval</i> and <i>Enabled</i> .
3.2	DirList Box	B.	Is the method that can be used to redraw a content of control?
3.3	Object	C.	The intrinsic controls that benefit most from the <i>SendMessage</i> API
3.4	Int	D.	Can be used to destroy an array
3.5	twips	E.	Is the measure by which default Top and Left properties are measured in relative to a container control
3.6	label control	F.	Controls background color is active only if you also set the <i>Style</i> property to 1-Graphical.
3.7	Timer control	G.	A file control that displays the folders of the current drive.
3.8	Refresh	H.	Is used to create a method for a class
3.9	TextBox controls	I.	Is an entity that embeds both data and the code that deals with it
3.10	CommandButton	J.	Is the function used to truncate a number to the integer values equal or lower than its argument function
		K.	Where& characters have no special meaning
		L.	Can be used to destroy text

4. Each statement below has a blank space to fit one of the word(s) or phrase(s) in the list below. Enter your choice in the “tear-off” answer sheet attached to the question paper, following instructions therein. (1 x 10)

A.	tiff	B.	twip	C.	MouseUp
D.	Index	E.	Ctrl+L	F.	Password Char
G.	Toolbar control	H.	Value	I.	ListBox
J.	Visibility	K.	Property Get	L.	Polymorphism
M.	Mouse	N.	PictureBox	O.	MouseDown

- 4.1 The Image control is similar to the _____ control, but it can't act as a container for other control and has other limitations.
- 4.2 The Call Stack window appears only when you break the execution of a running program and press _____.
- 4.3 _____ and ComboBox controls also fire *Click* events whenever their *ListIndex* properties change.
- 4.4 The *Button* parameter passed to _____ events reports which button has just been pressed.
- 4.5 _____ is the default property of Option Button.
- 4.6 _____ of a variable is the portion of code from which that variable can be accessed.
- 4.7 Visual Basic's default coordinate system uses a unit called _____.
- 4.8 The _____ field is used to create an array of menu commands.
- 4.9 The _____ exposes the Buttons collection, which in turn contains Button objects.
- 4.10 The _____ property of TextBox hides text with a single character.

PART TWO
(Answer and **FOUR** questions)

- 5.**
- a) What do you mean by “Event-Driven-Programming”? What are the basic components of any VB Project? Explain the different project types available in VB.
 - b) What is an MDI Form? Explain, how it differs from normal form. Which property has to set to make a form a child form of the MDI parent form?
 - c) Differentiate between followings:
 - i) PictureBox and Image Controls
 - ii) Combobox and Listbox Controls
 - iii) Checkbox and OptionButton

(6+3+6)

- 6.**
- a) Types of data that can be stored in variable are associated with data types. Visual Basic Applications supports several native data types. Explain Visual Basic data types by giving example for each.
 - b) A control array can be created only at design time and at least one control must belong to it. Which are the different ways to create control array? How control array adds flexibility to programs?
 - c) Visual Basic supports pop-up menus, those context-sensitive menus that most commercial applications show when you right-click on an user interface object. How pop-up menu can be created in Visual Basic? Explain with example.

(5+5+5)

- 7.**
- a) What do you mean by bug and debugging? Explain in brief types of errors in VB. Also list down the statements of Error Handling.
 - b) Explain the following constructs with properties, events and methods.
 - i) TextBox
 - ii) Label
 - iii) Command Button
 - c) The common dialog control provides a standard set of dialog boxes for operations such as opening and saving files, setting print options and selection colors and fonts. Explain various methods to display the desired dialog box of common dialog control.

(5+5+5)

- 8.**
- a) What is an array? Explain declaration and processing of one and two dimensional array. How to create dynamic array?
 - b) What is a module? Give different types of module with examples.
 - c) How many cursor types and lock types are there in ActiveX Data Objects (ADO)?

(5+5+5)

- 9.**
- a) Forms are used to develop the user interface. Explain Form in brief with its important properties. Also list the sequence of events while opening and closing the Form. Write a program to create and remove forms at run time.
 - b) Create a database application using Datagrid Control and Data Access Objects (DAO) control. Show the steps and coding for Displaying, Adding and Removing Data from Datagrid Control.

(6+9)