

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 A Timer control that performs a task at programmer-specified intervals is
 - A) not visible to the user
 - B) always visible to the user
 - C) can be made visible by user
 - D) none of the above
 - 1.2 A picture box is a control that displays
 - A) Images
 - B) User input
 - C) Output
 - D) Other controls
 - 1.3 While using **MsgBox**(String, integer, title) function, if the integer argument value is 3, the resulting MsgBox command buttons are
 - A) Abort, Retry, Ignore
 - B) Yes, No, Cancel
 - C) OK, Cancel, Retry
 - D) None of the above
 - 1.4 When it is desired that a menu item does not appear at run time, it must be ensured that the following property/properties must be set to false
 - A) Enabled
 - B) Visible
 - C) Both Enabled and Visible
 - D) Both Checked and Visible

1.5 During the execution of a program in Visual basic, following property of List Box control refers to the index corresponding to the list entry that has been clicked.

- A) ListCount
- B) ListIndex
- C) Index
- D) Value

1.6 The name of event that occurs first when a form is loaded into memory is

- A) Load
- B) Activate
- C) Initialize
- D) Resize

1.7 A method that refreshes all the contents of a **RecordSet** object from the data source by reissuing the original command retrieving the data second time is called:

- A) Refresh
- B) Requery
- C) StayInSync
- D) Update

1.8 A form's coordinates and dimensions onscreen are always measured in:

- A) Point
- B) Twips
- C) Pixel
- D) Inch

1.9 An event that occurs when a form is closed is called

- A) Unload
- B) Terminate
- C) Deactivate
- D) None of the above

1.10 The following function converts the numeric values of an indicated date to a visual basic date data type.

- A) DateValue
- B) DateSerial
- C) DateformatTime
- D) None of the above

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 Static variables are always declared in a procedure.
- 2.2 Rnd returns a number in the range of $0 < x \leq 1$.
- 2.3 The keyword ByVal applies to all variables in the parameter list that follows it.
- 2.4 Function ASC returns the string representation of a numeric character representation.
- 2.5 A variant array can store many different types of values.
- 2.6 A fixed-size array can be assigned to a dynamic array.
- 2.7 Both & and + can be used to concatenate a string with numeric value.
- 2.8 An Active X control property pages can only be accessed at run-time.
- 2.9 Constant variables must be initialized with a constant expression and when they are declared, they cannot be modified thereafter.
- 2.10 Iteration explicitly uses a repetition structure while recursion achieves repetition through repeated procedure calls.

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 Option Compare	A. Zorder
3.2 A file that stores images	B. Unit of Measure to use
3.3 Object and event	C. Cursor Type
3.4 AdOpenStatic	D. Default type is binary
3.5 Return Value	E. Cursor Location
3.6 To indicate whether objects of ADO model are open or not.	F. Event Procedure
3.7 Scale Mode Property	G. Function Procedure
3.8 To generate Curved Shape on object	H. Sub Procedure
3.9 Changes that are pending during record modified in batch updating	I. Pset Method
3.10 Change the RGB color of a point	J. Circle Method
	K. frx file
	L. State property
	M. Status

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.	ToolTipText	G.	child	M.	If/Then/Else/Endif
B.	Array	H.	MaxValue	N.	Floating Point
C.	constructive	I.	MaxLength	O.	Name
D.	destructive	J.	J.User32.dll	P.	Caption
E.	Variable	K.	CommonDialog	Q.	Variant
F.	ListIndex	L.	ToolTipValue		

- 4.1 The default data type is called _____.
- 4.2 The _____ Property identifies a form and is often prefixed with **frm**.
- 4.3 The _____ property display a tool tip.
- 4.4 A location in a computer’s memory that may contain different values at various times throughout program execution is called a _____.
- 4.5 The _____ keyword indicates that procedures are contained in a DLL.
- 4.6 When a value is placed into memory location, it is known as _____ read-in.
- 4.7 The _____ property limits the number of characters input in a **Textbox**.
- 4.8 Lists and table of values are stored in _____
- 4.9 The MDI application must have at least two forms, the parent form and one or more _____ form.
- 4.10 The open, Save, Font and color dialogs are all _____.

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

5.

- a) Explain the difference between **Resume** and **Resume Next** in an error handler in the call list.
- b) Explain what happens when an error is raised in a procedure that does not contain an error handler.
- c) Explain with description the properties and methods of **err** object.

(5+5+5)

6.

- a) What do you understand by User-defined data types? Explain and illustrate.
- b) Write a procedure called **Factorial** that accepts input argument as integer and returns the output as factorial of that input argument.

(7+8)

7.

- a) How multiple data items, range of data items and logical expression handled in a Select Case End Select structure? Illustrate
- b) Describe the variations of a Do.....Loop structures, stating clearly the purpose of each?
- c) What are the different Windows appears at the start of Visual Basic (Ver6). How each Window can be viewed?

(5+5+5)

8.

- a) Differentiate between implicit variable declaration and explicit variable declaration by running a VB program.
- b) Differentiate between ListBox and ComboBox controls. List basic properties of these.
- c) Write the source code for drawing methods of VB such as Circle and Line.

(5+5+5)

9.

- a) What do you understand by event procedure? How does it differ from sub procedure and function procedure?
- b) Explain the three ways to create Active X controls.
- c) Explain the key objects of ADO model that enable programmers to retrieve set of records from a given data source.

(5+5+5)