



Visual Basic

I. True or false.

(2x5 = 10)

1. Visual basic has been evolved from textual basic language. (True)
2. A wizard is intelligent software which can do most of the work with no effort. (True)
3. Application cannot recognize many Mouse move events in quick succession. (False)
4. Conditional operators let you compare one visual basic data value to another. (True)
5. Data source is not the name of a data control. (False)

II. Fill in the blank. (2x5 =10)

1. The project explorer window contains a View Code, View Object and Toggle Folder.
2. Integer values contain relatively small values between -32,768 and 32,767.
3. We can place graphic on three controls which are form, picture box and image box
4. MDI stands for Multiple Document Interface.
5. ODBC stands for Open Database Connectivity.

III. Answer the following Questions in three- four sentences. (2x 15 = 30)

Q.1. Define Visual Basis.

Ans:- Visual basic, as the name basic with visual implies, basic (beginner's all purpose system instruction codes) used to be supposed a very friendly high level language for learning programming skills using commands written in simple English , and also using graphical user interface where users can suffice their needs by handling mouse instead of typing commands using the keyboard. Since it inception, visual basic has been a great boon as a programming tool for the software developers while learners find it still easier to learn how to develop application programs.

Q. 2. What are minimum requirement to load VB on your computer?

Ans:-The minimum requirements that the computer should atleast have are as follows:-

- Windows Operation System(any edition)
- 486 Processor
- 16MB RAM

Hard disk having 250 MB or above space

Q.3. What is Project Explorer Window?

Ans:- The project window being known as project explorer window lists the components used in the current project in a tree structure. It can be expand and shrink the detail by clicking the plus or minus signs that appear next to the objects. The project explorer window contains a toolbar consisting of three buttons which are view code, view object and toggle folder button.

Q.4. What is Variable is VB?

Ans:-Variable are placeholders which are used to store values; they have names and data types. The data type of a variable determines how the bits representing those values are stored in the computer's memory. When a variable is declared, we can also assign a data type for it. All variables have a data type that determines what kind of data they can store.

Q.5.What are Data Type?

Ans:-Variable are used to store values and the users while giving names to the variables provide information what type of values the variable will contain. Types of values are called data type

Q.6. What is an Arrays and what are the three type of array in VB?

Ans:- A basis of comparison structure for sorting data in any programming language is an array. Whereas individual variable can hold single entities, such as a number, data or string, array can hold sets of related data. An array has a name, as does a variable and the value stored in it can be accessed by an index.

The three type of array in VB are; Fixed-size of static array, dynamic array, multidimensional array.

Q.7. What is Menu in VB?

Ans:- Menus are probably, the most prevalent and common elements of a graphical user interface. We come across every time a Menubar at the top of the window of the application, we open. We click the main menu to display the sub-menus inside and select the sub-menus as desired. Actually, menus or sub-menus are in the guise of commands in graphical user interface.

Q.8. What is Textbox Control?

Ans:- A textbox is used when we want the user to type something, such as an answer to a prompt. When you want to collect values, such as name and address information a default value is helpful for user and visual basic program can supply an initial value.

Q.9. How can be Slider add in your Toolbox?

Ans:- Slide control is, by default not available in the toolbox. To add a slider control right click on the toolbox and select component Or, click the project menu and select component- select the Microsoft windows common control 6.0.

Q.10. What are the three classes of error encounter to the programmer?

Ans:- The three type of error developed during the programming period are syntax errors, logical error and run time errors.

Q.11. What is Form in VB?

Ans:- In Visual Basic, the form is the basic entity that works as a container for all the controls that make up the user interface. When a visual basic application is executing, each window it displays is actually a form.

Q.12. Illustrate with the statement for loading and unloading forms?

Ans:- To load and unload forms, we use load and unload statements. To load a form, the following syntax is used-

Load FormName

While, to unload a form the syntax is-

Unload FormName

The form name is the name of the form to be loaded or unloaded. While the show method shows and loads a form, the **Load statement** doesn't show the form. Once a form is loaded, it take up all the require resources. So, to free them you should unload the form, when it is no longer needed.

Q.13. Constructs a circle on the form with random Fillstyle and Fillcolor property setting as click by the mouse.(p-522)

```
Ans:- Private sub Form_Mousedown (button as integer, shift as integer, x as single, y as single)
Fillcolor=QBcolor(rnd*15) 'choose random fillcolor.
Fillstyle=int(rnd*8) 'choose random fillstyle.
Circle (X,Y),250 'draw a circle.
End sub
```

Q.14. What are the primary objective to be keep in mine while creating a design in database.

Ans:- The primary objective to be keep in mine while creating a design in database are,

(i) Eliminate redundant data.

- (ii) Be able to locate individual records quickly.
- (iii) Make enhancement of the database easy to implement.
- (iv) Keep the database easy to maintain.

Q.15. What are the ODBC Drivers?

Ans:- ODBC drivers are the DLLs, containing the functions that let you connect to various databases. There are separate drivers for each database type. For many standard formats, such as PC database and SQR servers, these drivers are provided with visual basic. For other databases, the ODBC drivers are provided by the server manufacturer.

IV. Short question and answer. (5x5 =25)

Q.1. What are the three Visual Basic Edition?

Ans:-Visual Basic is a powerful tool for learning programming skills as well as a grand platform for the software development activities. Thus, it comes in a range to meet with the needs of various levels of professionals. They are as follows:

1. **Visual Basic Enterprise Edition:** this edition of visual basic is specially meant for team programming environments and client/server computing where applications distribute processing and data among several computers.
2. **Visual Basic Professional Edition:** the professional edition provides all those features, that make professional programmers get the most from the visual basic environment. This edition includes a complete set of tools and wizards that help you package and distribute applications.
3. **Visual Basic Learning Edition.** The learning edition of visual basic keeps all, one needs to get started with programming. It comes with Microsoft developer network (MSDN) CDs containing full documentation online.

Q.2. Syntax for usingMouseDown with the move method. Give one example of placing mouse location at the centre of the control?

Ans:- Private sub Form_Mousedown(button as integer, shift as integer, x as single, y as single)

Command1.move X,Y

End sub.

Private sun form_moveDown(button as integer, shift as integer, X as single, y as single)

Command1.move(X-command1.width/2)

```
(Y-command1.height/2)
```

```
End sub
```

Q. 3. Show the Code for using the Mousedown with the line method? Explain how Mousemove work?

```
Ans:- Private Sub Form_Mousedown(button as integer, shift as integer, x as single, y as single)
```

```
Line -(x,y)
```

```
End sub
```

```
Private Sub Form_Mousemove(button as integer, shift as integer, X as single, Y as single)
```

```
Line -(x,Y)
```

```
Circle (x,Y), 50
```

```
End sub
```

Q.4. Give the code procedure to determine whether circle uses the radius argument as the x-radius or the y-radius of an ellipse?

Ans:- The following procedure illustrates how different aspects values determine whether circle uses the radius argument as the x-radius or the y-radius of an ellipse:

```
Private sub form_click()
```

```
‘draw solid ellipse.
```

```
Fillstyle=0
```

```
Circle(600,1000),800,,,3
```

```
‘Draw empty ellipse.
```

```
Fillstyle= 1
```

```
Circle (1800,1000),800,,,1/3
```

```
End sub
```

Q.5. What are the code for drawing a pie with a slice removed also give the code for timer control?

```
Ans:- Private sub Form_Click()
```

```
Const PI=3.14159265
```

```
Circle(3500,1500), 1000,,-PI/2,-PI/3
```

```
End sub.
```

```
Private Sub Tmrtimer1_Timer()
```

```
‘Add one to the display
```

```
Txt1.text = txt1.text+1
```

End sub

V. Long type question and answer. (5x3=15)

Q.1. Give the example of passing arguments by reference.

Ans:- Passing arguments by reference gives the procedure access to the actual variable. The called procedure passes the address of the variable in memory so that the procedure can change its value permanently. In earlier versions of basic and visual basic, this was the only argument passing mechanism.

Start a new visual basic project and enter the following function definition in the form's code window:

```
Function Add(num1 as integer, num2 as integer) as integer
```

```
Add=num1+num2
```

```
Num1=0
```

```
Num2=0
```

```
End function
```

Now place a command button on the form and enter the following code in the button' click event:

```
Dim A as integer, B as integer
```

```
A=10
```

```
B=30
```

```
Sum= add(a,b)
```

```
Debug.print a
```

```
Debug.print b
```

```
Debug.print sum
```

Q.2. Give one example of drawing a triangle by connecting three point.

Ans:- private sub Form_Mousemove(Button As Integer, Shift As Integer, X As Single, Y As Single)

'set x-coordinate of starting point.

```
CurrentX=1500
```

'set Y-coordinate of starting point.

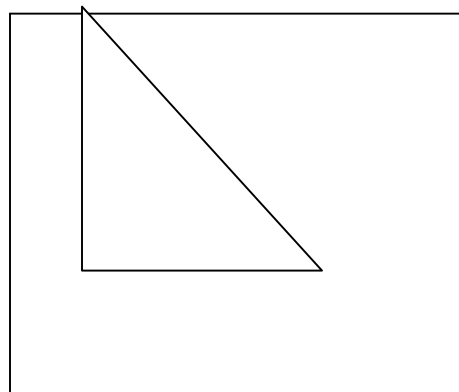
```
currentY=500
```

'draw line down and right of starting point.

```
Line -(3000,2000)
```

'draw line to the left of current point.

```
Line -(1500,2000)
```



'draw line up and right to starting point.

Line -(1500,500)

End sub

Q.3. Explain how the three Mouse Events can be used together.

Ans:- The mouse up event occurs when the user release the mouse button. MouseUp is a useful companion to the MoueDown and MouseMove events. The example below illustrates how all three events can be used together.

The move and draw application is more useful of it allows drawing only while the mouse button is held down and stops drawing when the button is released. To do this, the application would have to respond to three actions.

- The user presses the mouse button(MouseDown)
- The users moves the mouse pointer(MouseUp)
- The users releases the mouse button(Mouseup)

MouseDown and MouseUp will tell the application to turn drawing ON and OFF. You specify this by creating a form-level variable that represents the drawing state. Type the following statement in the declarations section of the form code module:

```
Dim DrawNow As Boolean
```

DrawNow will represent two values: true will mean "draw a line," and false will mean "do not draw a line."

Because variables are initialized to 0(false) by default, the application starts with drawing off. Then the first line in the MouseDown and MouseUp procedures turn drawing On and Off by setting the value of the form-level variable DrawNow.

```
Private sub Form_MouseDown (Button As Integer, Shift As Integer, x As Single, Y As single)
```

```
DrawNow = True
```

```
Current = X
```

```
Current = Y
```

```
End sub
```

```
Private sub Form_Mou$seup(button as integer, shift as integer, z as single, y as single)
```

```
Drawnow = False
```

```
End sub
```

The mousemove procedure draws a line only if Drawnow is true. Otherwise, it takes no action:

```
Private sub form_mousemove(button as integer, shift as integer, X as single, Y as single)
```

```
If drawnow then line -(x,y)
```

End sub

Each time the user presses a mouse button, the MouseDown event procedure is executed and turns drawing on. Then as the user holds the mouse button down, the mousemove event procedure is executed repeatedly as the pointer is dragged across the screen.

