MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) Which of the following is NOT an example of an event in VB?
   A) Change focus of a control  B) Click a control
   C) Drag a control onto a form from the tool box  D) Change contents of a textbox
   Answer: C

2) The process of debugging is to ________.
   A) ensure that all of the documentation is complete
   B) ensure that the outputs are correct
   C) remove any syntax or run time errors
   D) both B and C
   Answer: D

3) What is the code to close a form?
   Answer: C

4) GUI (Graphical User Interface) applications ________.
   A) requires users to follow a predefined order
   B) requires users to know commands before using them
   C) are more complex for programmers to write
   D) more difficult to use
   Answer: C

5) Which of the following is NOT a feature of the use of Graphical User Interfaces?
   A) Programs that use a GUI are normally easier for the user to use
   B) GUIs are made of objects such as buttons, dialog boxes, and menus
   C) The use of a GUI makes programming much easier
   D) GUIs have helped influence the shift to object-oriented programming
   Answer: C

6) One feature of Event-Driven Programming is ________.
   A) an action takes place when a control such as button is pushed
   B) that each procedure is called in order
   C) that it is used by the earliest programming languages
   D) most event-driven programs are text based
   Answer: A

7) In Visual Basic we work with objects, which have ________.
   A) projects, solutions, and procedures  B) properties, methods, and events
   C) programmer preference  D) classes, actions, and disciplines
   Answer: B
8) What is the purpose of the Toolbox?
   A) To select controls with associated event procedures
   B) To select controls and place on an application form
   C) To select methods to be placed on the form
   D) To design user defined methods
   Answer: B

9) How would you get the Design window to display if it is not visible in your project?
   A) Double click the icon in the tool bar for the designer window.
   B) Click View on the menu bar, and then on the View menu click Designer.
   C) Press Shift+F9 on the keyboard.
   D) Select view designer in the edit menu.
   Answer: B

10) A VB keyword ________.
    A) should be used instead of the default names supplied by VB
    B) has a special purpose and cannot be used as a variable or other identifier
    C) can only be used to name VB controls
    D) is used to name the forms for VB projects
    Answer: B

11) Which is considered a valid step for developing a Visual Basic application?
    A) Create a flowchart or pseudocode version of each method
    B) Make a list of the controls needed
    C) Make a list of methods needed for each control
    D) all of the above
    Answer: D

12) Finding and fixing programming errors is called ________.
    A) debugging  
    B) recoding  
    C) fix- its  
    D) tuning
    Answer: A

13) If you want to display text which cannot be modified by the user, use the ________.
    A) Label control  
    B) TextBox control  
    C) Name control  
    D) Caption control
    Answer: A

14) Application software are programs that ________.
    A) perform general user needs
    B) performs diagnostic tests on secondary storage
    C) manage the computer's hardware devices
    D) controls the computers input/output
    Answer: A

15) Which of the following is NOT a Visual Basic Control?
    A) TextBox  
    B) Label  
    C) Form  
    D) Algorithm
    Answer: D

16) A TextBox control ________.
    A) is used to describe other controls on the form
    B) has the same function as a label control
    C) can be used to display graphical images
    D) is typically used to input data
    Answer: D
17) A ToolBar ________.
   A) allows the programmer to create user defined controls
   B) can be used as a shortcut for executing commands found in the menu
   C) allows the programmer to put controls on the form
   D) is difficult to use, since you must remember the commands

   Answer: B

18) What is the code used to display the words "Visual Basic" in a label named lblTitle?
   A) titleLabel.Name.Visual Basic
   B) "Visual Basic" = lblLabel.Text
   C) lblTitle.Text = "Visual Basic"
   D) lblTitle.Name = "Visual Basic"

   Answer: C

19) Which is true about txtName.Text?
   A) The property is txtName.
   B) The object is Text.
   C) The property is Text.
   D) Both answers A and C are correct.

   Answer: C

20) Flowcharts and pseudo code are ________.
   A) the actual VB program without input or output statements
   B) used to determine the controls required for a program
   C) statements that describe the programs input and output
   D) used to outline the solution to a problem

   Answer: D

21) When creating a VB application, you will initially ________.
   A) check for logic errors
   B) correct syntax errors
   C) change control properties
   D) write program statements

   Answer: C

22) How do you display a tooltip?
   A) Hold the mouse cursor over a button on the toolbar or toolbox for a few seconds
   B) Tab to the icon on the toolbar or toolbox so that it has the focus
   C) Double click an icon on the toolbar or toolbox
   D) Single click an icon on the toolbar or toolbox

   Answer: A

23) An object in Visual Basic ________.
   A) is a reusable self contained unit.
   B) is the data a program uses
   C) is an action performed by a method
   D) is a property of a control

   Answer: A

24) You want to find the perimeter of a rectangular room whose sides are represented by dblLength and dblWidth. The statement to find the perimeter of this room is ________. (The * means multiplication)
   A) dblPerimeter = dblLength x dblWidth
   B) dblPerimeter = 2 * dblLength + 2 * dblWidth
   C) dblPerimeter = 2 * dblLength
   D) dblPerimeter = dblLength + dblWidth

   Answer: B
25) What is the purpose of testing a program with sample data?
   A) To be sure that the user has input a valid number
   B) To check to see if the program will run
   C) To insure that the program handles the calculations correctly
   D) To be sure that there are no syntax errors in the program

   Answer: C

26) The CPU only processes instructions written in this language.
   A) machine language    B) Visual Basic    C) Java    D) Pseudo code

   Answer: A

27) All of the following are major hardware components of a typical computer system except ________.
   A) CPU    B) Main Memory    C) secondary storage    D) Operating System

   Answer: D

28) Programs should use comments (remarks) to ________.
   A) make a program run more efficiently
   B) make the code more understandable to human readers of the program
   C) make the code run faster
   D) make the program smaller in size

   Answer: B

29) The purpose of an algorithm is to ________.
   A) define user interface    B) analyze a problem
   C) specify problem requirements    D) describe problem solution

   Answer: D

30) The auto hide feature ________.
   A) will hide the controls on a form, until the programmer changes the status
   B) permanently remove the toolbox from the VB environment
   C) will cause the window to stay minimized as a tab along one of the edges of the screen until the mouse cursor is over the tab
   D) enables the programmer to hide a control on a form automatically

   Answer: C

31) When your program is in run time mode, you ________.
   A) can create the user interface    B) can interact with the program as it executes
   C) can save your program    D) can always edit your program

   Answer: B

32) Which is true of an Identifier?
   A) It is a programmer defined name.
   B) It is not part of the Visual Basic programming language.
   C) It has special meaning in VB.
   D) Both A and B are correct.

   Answer: D
33) Which of the following FormBorderStyle values will create a Border that can be resized, closed, minimized, or maximized?
A) Sizable  B) Fixed3D  C) None  D) FixedDialog
Answer: A

34) What will the following section of code do?

Private Sub btnExit_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnExit.Click
Me.Close()
End Sub

A) Log off the current user  B) Nothing  C) Close the current form  D) Shut down the computer
Answer: C

35) Event procedures are also known as ________.
A) properties  B) controls  C) keywords  D) event handlers
Answer: D

36) The ________ property of a label determines if the label can be seen by the user.
A) Visible  B) Font  C) Selected  D) Size
Answer: A

37) If you accidentally delete a control you can restore it with the ________.
A) Redo button on the standard toolbar  B) Find button on the standard toolbar  C) Restore property  D) Undo button on the standard toolbar
Answer: D

38) Assume you have a Button control named btnDisplayList. Which is the correct name for an event procedure that will be executed when the user clicks on the control?
A) _Click btnDisplayList  B) btnDisplayList_ClickButton  C) btnDisplayList_ClickEvent  D) btnDisplayList_Click
Answer: D

39) You can display the Code window in all of the following ways except ________.
A) click View on the menu bar, and then click Code command  B) click View code button on the Solution Explorer window  C) click Project on the menu bar, and then click Show all files  D) press the F7 key
Answer: C

40) You can end an application that is running in Visual Basic .NET in all of the following ways except ________.
A) click the close button on the applications window  B) click the down arrow on the Debug list box, and then click on release  C) click Debug on the menu bar, and then click Stop Debugging on the Debug menu  D) double click the Stop Debugging Icon on the extended Tool Bar while the program is running
Answer: B
41) In the properties window, a few of the properties, including the Name property are enclosed in ________ to make them appear at the top of the alphabetical list.
   A) quotes  B) parenthesis  C) asterisks  D) brackets
   Answer: B

42) This property is used to automatically adjust an image to fit the size of the PictureBox control it is displayed in.
   A) SizeAdjust  B) AutoAdjust  C) AutoSize  D) SizeMode
   Answer: D

43) Intellisense ________.
   A) allows the user to easily modify properties for a control at design time
   B) provides some automatic code completion while developing a program
   C) is a feature that will help the programmer use proper naming conventions
   D) provides hints about the input data requested from the user
   Answer: B

44) Which of the following is not a valid value for the FormBorderStyle property?
   A) FixedSingle  B) Fixed3D  C) Sizable  D) FixedDouble
   Answer: D

45) You can view the properties window when the project is available by doing any of the following actions except ________.
   A) go to the view menu and the clicking properties.
   B) pressing the Ctrl/Alt/P keys
   C) by clicking on the properties icon above the Solutions explorer window
   D) pressing the F4 key
   Answer: B

46) During design time a control will ________ when the Visible property is set to false.
   A) be active  B) be inactive  C) be displayed  D) not be visible
   Answer: C

47) When you have an item selected and then you press the F1 key, the ________ is displayed.
   A) tool-tip for the item  B) context-sensitive help
   C) the solution explorer window  D) properties window
   Answer: B

48) Choose the correct assignment statement for a Label control named lblTitle that would align the control's text with the middle and center of the control's bounding box?
   A) lblTitle.TextAlign = _ ContentAlignment.MiddleCenter
   B) lblTitle.TextAlign = MiddleCenter
   C) lblTitle.TextAlign = ContentAlignment.Center
   D) lblTitle.TextAlign = Middle
   Answer: A

49) The properties of the controls are listed ________.
   A) solution explorer window  B) in the options window
   C) in the properties window  D) in the project window
   Answer: C
50) You save a Visual Basic .NET project in all of the following ways except ________.
   A) click the Save Project button on the standard toolbar
   B) click the Save All button on the standard toolbar
   C) click File on the menu bar, and then click Save All on the File menu
   D) press Ctrl+Shift+S on the keyboard

   Answer: A

51) You can run an application in all of the following ways except ________.
   A) click the start button on the toolbar
   B) press the F5 key
   C) click Debug on the menu bar, and then click Start on the Debug menu
   D) press the Ctrl F4 keys

   Answer: D

52) When you select an existing control on a form during design time ________.
   A) the project will automatically be saved
   B) the tool box will be visible
   C) the sizing handles appear
   D) its color changes to dark blue

   Answer: C

53) Programs should use comments (remarks) to ________.
   A) make a program run more efficiently
   B) help with program design
   C) make the code more understandable
   D) assist with debugging a program

   Answer: C

54) A ________ is a section of code that may be hidden from view, or collapsed.
   A) code segment
   B) code window
   C) a sub procedure
   D) code region

   Answer: D

55) You lock all of the controls on a form during design time by ________.
   A) clicking Window on the Menu Bar, then clicking Lock Controls
   B) left-clicking the form, then clicking Locked on the properties window
   C) right-clicking the form, then clicking the lock controls icon on the toolbar
   D) right-clicking on an empty spot on the form, and selecting the Lock Controls option from the pop up menu

   Answer: D

56) If you want to prevent the user from resizing, minimizing, or maximizing a window, you would change the form's ________ property.
   A) WindowState
   B) FormBorderStyle
   C) MinMaxSize
   D) ShowInTaskBar

   Answer: B

57) All of the following steps allow you to delete a control from a form except ________.
   A) select the control, then hit the delete key
   B) select the control, and then click on the delete icon in the menu bar
   C) select the control, then select delete from the edit menu
   D) select the control, and then use the cut option on the menu bar

   Answer: B
58) A Label control’s ________ property allows a label to change size to fit the amount of text in its text property.
A) Visible  B) Size  C) Autosize  D) TextAlign
Answer: C

59) What is the resulting value after the following function call is executed: FormatNumber(73.394, 1)?
A) 73.4  B) 73.3  C) 73  D) 73.39
Answer: A

60) Each of the Visual Basic data types has a ________ method, which returns a string representation of the variable calling the method.
A) Convert  B) String  C) ToText  D) ToString
Answer: D

61) When you assign a value of one data type to a variable of another data type, Visual Basic .NET attempts ________.
A) Implicit conversion  B) Explicit conversion  C) String conversion  D) Boolean conversion
Answer: A

62) The statement to declare a local variable named Index (note: the prefix has intentionally been left out) that will store whole numbers is:
A) Dim index As Integer  B) Dim Integer As Index  C) Dim index As Whole  D) Dim index As String
Answer: A

63) What will be the value of intAnswer after execution of these statements?

```
Const intNumA As Integer = 6
Const intNumB As Integer = 4
Const intNumC As Integer = 2
    intAnswer = intNumA + intNumB * intNumC
```
A) 20  B) 48  C) 14  D) 6
Answer: C

64) Variables declared within a button's click-event are ________ variables.
A) local  B) private  C) global  D) module-level
Answer: A

65) The order in which controls receive the focus is called the ________.
A) tab order  B) control order  C) sequence order  D) focus order
Answer: A
66) What is the value of intE after the following section of code is executed?

```vbnet
Dim intC As Integer
Dim intD As Integer
Dim intE As Integer
intC = 20
intD = 3
intE = intC \ intD
```

A) 6.66667  B) 0  C) 6  D) 7

Answer: C

67) Which of the following is not a valid data type?

A) Real  B) Integer  C) String  D) Decimal

Answer: A

68) What is the result after evaluating the following expression: 24 Mod 9?

A) 5  B) -6  C) 6  D) 2

Answer: C

69) The ________ is used to perform string concatenation.

A) percent symbol (%)  B) dollar sign ($)  C) pound symbol (#)  D) ampersand symbol (&)

Answer: D

70) The ________ lets you view the TabIndex of each of the controls on the form.

A) TabIndex viewer  B) TabIndex order mode  C) tab order selection mode  D) sequence selection mode

Answer: D

71) Which of the following is the correct way to declare a variable that will be used to store the first name of student?

A) Dim first.name as Char  B) Dim firstname as Char[]  C) Dim strFirstName as String  D) Dim str.FirstName as String

Answer: C

72) What is the default value of the Date Data type?

A) 12:00:00 PM January 1, of the year 1  B) 12:00:00 AM January 1, 2000  C) 12:00:00 PM January 1, 2000  D) 00:00:00 , Date unspecified

Answer: D

73) What is the default value of the Boolean data type?

A) 0  B) 1  C) False  D) True

Answer: C

74) Which of the following is not a valid rule for naming variables?

A) Names may contain digits.  B) Names may contain underscores.  C) Names may contain letters.  D) Names may contain spaces.

Answer: D
75) If you want to execute code automatically when a form is displayed, you can place the code in the form's _______ event procedure.

   A) GotFocus  B) Load  C) Focus  D) KeyPress

Answer: B

76) The statement to declare strName as a variable that can hold text is _______.

   A) Dim strName As Word  B) Dim strName As Text
   C) Dim strName As String  D) Dim strName As Single

Answer: C

77) What is the error in the following code?

   Private Sub btnCalculate_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnCalculate.Click
      ' Declare some variables
      Dim sngNumber1 As Single
      Dim sngNumber2 As Single
      Dim sngSum As Single

      ' Get the 2 numbers
      sngNumber1 = (txtNumber1.Text)
      sngNumber2 = (txtNumber2.Text)

      ' Calculate their sngSum... is the next line working?
      sngSum = sngNumber1 + sngNumber2

      ' Display the result
      lblSum.Text = sngSum.ToString
   End Sub

   A) The sngSum variable was declared as the wrong data type.
   B) The variable name sngNumber1 was misspelled.
   C) A local variable is misplaced.
   D) A conversion function such as CSng was not used.

Answer: D

78) What is the value of dblOutcome after the following section of code is executed?

   Dim dblA as Double
   Dim dblB as Double
   Dim dblC as Double
   Dim dblOutcome as Double
   dblA = 45
   dblB = 30
   dblC = 3 * dblA/dblB
   dblOutcome = 2 * dblC + 15

   A) 24  B) 80  C) 0  D) 39

Answer: A
79) In a program, you clear a text box with code ________.
   A) by clicking the clear button
   B) by setting the focus on the control and using the delete key
   C) by setting the focus on the control and using the back space key
   D) by assigning a blank to the text property

   Answer: D

80) The following code will copy the text from a TextBox named txtInput into a Label called lblDisplay.
   A) lblDisplay.Text = txtInput.Text
   B) txtInput = lblDisplay
   C) lblDisplay = txtInput
   D) txtInput.Text = lblDisplay.Text

   Answer: A

81) Which of the following would be the correct command to remove all the leading and trailing spaces in a textbox named txtStudentID?
   A) Dim strStudentID as String
      strStudentID = txtStudentID
   B) Dim strStudentID as String
      strStudentID = txtStudentID.Text
   C) Dim strStudentID as String
      strStudentID = txtStudentID.Text.Trim()
   D) Dim strStudentID as String
      strStudentID = RemoveSpaces(txtStudentID.Text)

   Answer: C

82) What is the value of sngTaxes when the following program segment runs, assuming the user enters 60000 into the txtSalary textbox?

   Dim sngSalary As Single = 0
   Dim sngTaxes As Single = 0
   sngSalary = CSng(txtSalary.Text)
   If (sngSalary > 50000) Then
      sngTaxes = .40 * sngSalary
   End If
   If (sngSalary > 40000) Then
      sngTaxes = .30 * sngSalary
   End If
   If (sngSalary > 30000) Then
      sngTaxes = .20 * sngSalary
   Else
      sngTaxes = .10 * sngSalary
   End If

   A) 24000  B) 6000  C) 18000  D) 12000

   Answer: D
83) Choose the correct Select Case statement which will check the value of a variable intMyNum and process as following:

- value 1 or 7 or 15: add 100 to the variable
- value 2 or 9 or 21: add 150 to the variable
- value 3 or 6 or 13: add 200 to the variable
- none of the above: print "Cannot find it"

A) Select Case intMyNum
   Case value = 1 Or value = 7 or value = 15
       intMyNum += 100
   Case value = 2 Or value = 9 or value = 21
       intMyNum += 150
   Case value = 3 or value = 6 or value = 13
       intMyNum += 200
   Case else
       txtOutput.Text = "Cannot find it"
End Case

B) Select Case intMyNum
   Case value = 1, 7, 15
       intMyNum += 100
   Case value = 2, 9, 21
       intMyNum += 150
   Case value = 3, 6, 13
       intMyNum += 200
   Case else
       txtOutput.Text = "Cannot find it"
End Case

C) Select Case intMyNum
   Case 1, 7, 15
       intMyNum += 100
   Case 2, 9, 21
       intMyNum += 150
   Case 3, 6, 13
       intMyNum += 200
   Case else
       txtOutput.Text = "Cannot find it"
End Case

D) Select Case Value
   Case intMyNum = 1 Or 7 or 15
       intMyNum += 100
   Case intMyNum = 2 Or 9 or 21
       intMyNum += 150
   Case intMyNum = 3 Or 6 or 13
       intMyNum += 200
   Case else
       txtOutput.Text = "Cannot find it"
End Case

Answer: C
84) You want to check the variable sngSales, and change a label lblMessage to say "Great Year" if the value is at least 50,000. Which of the following code segments does this?

A) If sngSales < 50000 Then
   lblMessage.Text = "Great Year"
End If

B) If sngSales <= 50000 Then
   lblMessage.Text = "Great Year"
End If

C) If sngSales > 50000 Then
   lblMessage.Text = "Great Year"
End If

D) If sngSales >= 50000 Then
   lblMessage.Text = "Great Year"
End If

Answer: D

85) What is the value of the String variable strSecond after the following code is executed?

Dim strFirst, strSecond As String
strFirst  = "1 2 3 Button My Shoe"
strSecond = strFirstName.ToUpper

A) "123BUTTONMYSHOE"   B) "BUTTON MY SHOE"
C) "1 2 3 BUTTON MY SHOE"   D) "1 2 3 button my shoe"

Answer: C

86) What would the following code return - with proper understanding of the If ... Then ... ElseIf statement when the score of 85 is entered?

If intScore > 60 Then
   Grade = "Passed"
ElseIf intScore > 70 Then
   Grade = "Your mother still loves you"
ElseIf intScore > 80 Then
   Grade = "Your parents would be Proud"
ElseIf intScore > 90 Then
   Grade = "Your family is proud of you"
End If

A) Passed                B) Your parents would be Proud
C) Your mother still loves you   D) Your family is proud of you

Answer: A

87) The Dim statement for a class-level variable must be outside any procedure, and between the _______ statement and the _______ statement.

A) Public Class, End Class   B) Private Sub, End Class
C) Private Sub, End Sub     D) Public Class, End Sub

Answer: A
88) The first character in a string has an index of ________.
   A) I  B) -1  C) the length of the string - 1  D) 0
   Answer: D

89) Visual Basic .NET uses ________ to store characters, such as A, B, and C in memory.
   A) BCD code  B) ASCII code  C) Extended ASCII code  D) Unicode
   Answer: D

90) You want to check that the user has entered a value into a text box named txtBox, and respond with the appropriate message if no value has been entered. Which of the following code segments does this?
   A) If txtBox.Text <> "blank" Then
      MessageBox.Show(" data has been entered")
      End If
   
   B) If txtBox.text = "    " Then
      MessageBox.Show("No data has been entered")
      End If
   
   C) If txtBox <> "" Then
      MessageBox.Show("data has been entered")
      End If
   
   D) If txtBox.Text = "" Then
      MessageBox.Show("No data has been entered")
      End If
   
   Answer: C
91) What line of code would produce the following MessageBox (assume the value of intAnswer is 39)?

![MessageBox Image]

A) MessageBox(intAnswer.ToString, "Result", MessageBoxButtons.OK, MessageBoxIcon.Question)

B) MessageBox(intAnswer, "Result", MessageBoxButtons.YesNo)

C) MessageBox(intAnswer.ToString, "Result", MessageBoxButtons.OK, MessageBoxIcon.Information)

D) MessageBox(intAnswer.ToString, "Result", MessageBoxButtons.OK, MessageBoxIcon.Question)

Answer: C

92) To remove the spaces at the end of a string called strAddress and display the result in label lblAddress, you would use which of the following statements?

A) lblAddress.Text = strAddress.TrimEnd

B) strAddress.TrimEnd = lblAddress.Text

C) lblAddress.Text = strAddress.Trim

D) lblAddress.Text = TrimStart

Answer: A

93) What is displayed in lblMessage.Text after the following code segment is executed?

```vbnet
Dim strName1 As String = "Jim"
Dim strName2 As String = "John"
If strName1 > strName2 Then
    lblMessage.Text = "Jim is greater"
Else
    lblMessage.Text = "John is greater"
End If
```

A) Jim is greater  B) True  C) False  D) John is greater

Answer: D
94) Considering the logic of the If ... Then... Else statement, what will be the result of the following code if a score of 88 is entered?

```vbscript
If intScore < 80 Then
    grade = "C"
Else intScore > 80 Then
    grade = "A"
End If
```

A) "A"  B) A  C) C  D) It will not run

Answer: D

95) Which of the following statements will display a message box with the text "line 1" on one line, and the text "line 2" on another line?

A) MessageBox.Show("line 1" & ControlCharsCrLf & "line 2")
B) MessageBox.Show("line 1" & ControlChars.Crlf & "line 2")
C) MessageBox.Show("line 1" & "\n" & "line 2")
D) MessageBox.Show("line 1" "line 2")

Answer: B

96) You want to determine whether a variable, sngPayAmount, is between 1200 and 1400 inclusively. If the value is in the range change the lblMessage text to say "Pay amount is in the range" Which of the following code segments will accomplish this?

A) If sngPayAmount > 1200 Or sngPayAmount < 1400 Then
   .Text = "Pay amount is in the range"
   End If

B) If sngPayAmount >=1200 And sngPayAmount <=1400 then
   lblMessage.Text = "Pay amount is in the range"
   End If

C) If sngPayAmount >=1200 And sngPayAmount <=1400 then
   lblMessage.Text = "Pay amount is in the range"
   End If

D) If sngPayAmount <=1200 Or sngPayAmount >= 1400 Then
   lblMessage.Text = "Pay amount is in the range"
   End If

Answer: C

97) This statement tests the value of an expression once and then uses that value to determine the result.

A) If ... then ... Else  B) If ... Then ... ElseIf
C) Select Case ... Case Else  D) If ... Now Then ... Never

Answer: C

98) Given that A is a True statement and B is a True statement, what is the value of the following logical expression?

A Xor B

A) False  B) True  C) 0  D) 1

Answer: A
99) Which of the following methods can you use to convert a string to an Integer?
   A) CNumber          B) CInt          C) IntC          D) CInteger
   Answer: B

100) A control’s ________ event is triggered just before the focus shifts to another control whose CausesValidation property is set to true.
    A) Verifying          B) Validating      C) Verified      D) Validated
   Answer: D

101) A counter is a ________ that can be incremented or decremented each time a loop runs.
    A) method          B) integer          C) statement      D) variable
   Answer: D

102) What’s wrong with the following code?

   For intIndex = 5 To 1
      ListBox.Items.Add (intIndex )
   Next

   A) In VB.Net, you must specify Next intIndex.
   B) You need to specify a negative step size in order to execute the loop.
   C) You cannot add a number to a list box.
   D) intIndex is not a proper Loop control variable.
   Answer: B

103) This method will erase all the items in the list box.

   Answer: C

104) What is the difference in execution between the two following sections of code?

   ‘Example 1
   Dim intCounter as Integer
   intCounter = 0
   Do While intCounter < 10
      lstOutput.Items.Add(intCounter * intCounter )
   Loop

   ‘Example 2
   Dim intCounter
   For intCounter = 0 to 9
      lstOutput.Items.Add(intCounter * intCounter )
   Next intCounter

    A) The first example will execute one more time than the 2nd example.
    B) They will both do the same thing.
    C) The 1st example will not do anything.
    D) The 2nd example will execute one more time than the 1st example.
   Answer: B
105) How would you get scroll bars on your list box?
   A) Set the scrollFlag of the listbox to True
   B) Visual Basic .NET will automatically add a scroll bar to the list box when it contains more items than can be displayed.
   C) If you set the CheckedListBox flag at design time, then you will get scroll bars at run time.
   D) You cannot get scroll bars for a list box, only for a ComboBox.
   Answer: B

106) Which of the following code fragments finds the average of 5 numbers input via an input box and displays the result in lblResult using a Do While statement?

A) intCount = 0
   intSum = 0
   Do While intCount < 5
       Value = CInt(InputBox("enter a number"))
       intSum = intSum + value
       intCount += 1
   Loop
   Avg = intSum/5
   lblResult.Text = sngAvg.ToString

B) intCount = 0
   intSum = 0
   Do While intCount <= 5
       value = CInt(InputBox("enter a number"))
       intSum = intSum + value
   Loop
   Avg = intSum/intCount
   lblResult.Text = sngAvg.ToString

C) intCount = 5
   intSum = 0
   Do While intCount = 5
       intSum = CInt(InputBox("enter a number"))
       sngAvg = intSum/intCount
       lblResult.Text = sngAvg.ToString
   Loop

D) intCount = 5
   intSum = 0
   Do While intCount <= 5
       value = CInt(InputBox("enter a number"))
       intSum = intSum + value
       sngAvg = intSum/ intCount
   Loop
   lblResult.Text = sngAvg.ToString

   Answer: A

107) This provides a simple way to gather input without placing a text box on a form.
   A) Message Boxes       B) List Boxes       C) Text Boxes       D) Input Boxes
   Answer: D
108) All of the following are styles of Combo Boxes, except ________.
   A) Simple Combo Box       B) Drop-Down Combo Box
   C) Drop-Down List Combo Box D) List Combo Box

   Answer: D

109) The ToolTip is a ________ that allows the user to create a small box that displays when the user places the mouse over the control.
   A) method          B) control          C) property         D) function

   Answer: B

110) What is wrong with the following code?

```vbnet
intCount = 0
Do While intCount < 10
   lstOutput.Items.Add ("Good Job")
Loop
```

   A) The count should start at -1  
   B) This should be a For ... Next Loop. 
   C) The text string Good Job should not have the " marks around it. 
   D) The loop will never stop.

   Answer: D

111) Which loop is a pretest that first initializes a counter variable and then increments the counter variable at the end of each iteration?

   A) The Do While Loop 
   B) The For ... Next Loop 
   C) The Count... Until Loop 
   D) The Do Until Loop

   Answer: B

112) If a procedure is called more than once in a program, the values stored in the procedure's local variables will persist only if declared with the ________ keyword.

   A) Public       B) Static       C) Dim        D) Const

   Answer: B

113) What is wrong with the following function?

```vbnet
Public Function sum(ByVal intA As Integer, ByVal intY As Integer) As Integer
   Dim intAns As Integer
   intAns = intX + intY
End Function
```

   A) intAns should not be declared in the Function 
   B) parameters a and b should be ByRef parameters 
   C) the Function does not return a value 
   D) the Function heading should be replaced with:

   ```vbnet
   sum(ByVal intA As Integer, ByVal intY As Integer, _
       ByRef intAns As Integer)
   ```

   Answer: C
114) What is the problem with the following Sub procedure?

```vbnet
Sub DisplayValue(Dim intNumber As Integer)
    This displays a value.
    MessageBox.Show(intNumber.ToString)
End Sub
```

A) intNumber doesn't need to be converted to a string
B) Dim should not be used in the parameter variable declaration
C) scope of procedure must be declared
D) all are problems

Answer: B

115) Which is the correct general format to declare a variable that remains the same between procedure calls?

A) Static variableName As DataType
B) VariableName As static = x
C) Sub Static variableName ( )
D) Dim variableName As Static

Answer: A

116) What is the correct way to declare the variable intNumCalls at the top of a Function that would keep track of the number of times that function has been called?

A) Dim intNumCalls as Static Integer
B) Dim intNumCalls as Integer
C) Static intNumCalls as Integer
D) You can't do this with VB.NET — declare intCalls as a Class-Level Variable

Answer: C

117) Which of the following calls does not pass in valid arguments to the following GetANumber subprocedure?

```vbnet
Sub GetANumber(ByVal intNumber as Integer)
    ' does some code
End Sub
```

A) GetANumber(intX)  B) GetANumber(CInt(txtNumber.Text))
C) GetANumber(intX + 3, intY)  D) GetANumber(3 + 5 * 8 + intX)

Answer: C
118) Which of the following is a correctly written Sub procedure that uses an input box to get an integer, which is returned to the calling program?

A) Public Sub GetInput ( )
   Dim intNumber As Integer
   intNumber = CInt(InputBox("Enter an Integer"))
   End Sub

B) Public Sub GetInput( ByRef intNumber As Integer)
   intNumber = CInt(InputBox("Enter an Integer"))
   End Sub

C) Public Sub GetInput( ByRef intNumber As Integer)
   intNumber = CInt(InputBox("Enter an Integer"))
   Return intNumber
   End Sub

D) Public Sub GetInput( ByVal intNumber As Integer)
   intNumber = CInt(InputBox("Enter an Integer"))
   End Sub

Answer: B

119) Which of the following can be returned by a function?

A) String values  
B) Boolean values
C) nonnumeric values
D) All of the above

Answer: D

120) If you want to prevent statements from outside a form from accessing a procedure, you set the access specifier to ________ in the procedure's declaration.

A) Scope  
B) Public
C) Static
D) Private

Answer: D

121) A ________ is a special variable in a Sub or Function heading that receives an argument's value/address from a calling procedure.

A) original argument  
B) parameter
C) temporary variable
D) constant

Answer: B
122) Which is the correct way to write the Function Square that receives a input parameter that is an integer and returns the square of that parameter as an integer?

A) Function Square(ByRef intNum) As Integer
   Dim dblAns as Double
   dblAns = intNum * intNum
   Return dblAns
   End Function

B) Function Square(ByRef intNum) As Double
   Return intNum * intNum
   End Function

C) Function Square(ByRef intNum as Integer) As Integer
   Return intNum * intNum
   End Function

D) Function Square(ByRef intNum)
   Return intNum * intNum
   End Function

Answer: C

123) Which of the following does not apply to using Sub procedures and functions?

A) It will make it easier to maintain and modify code.
B) The execution time is significantly reduced.
C) You can modularize an application's code.
D) You can write code once, and have it performed in many places.

Answer: B

124) The purpose of a compiler is to ________.

A) aid the programmer in developing GUIs
B) aid the programmer in commenting his/her code
C) convert a program from one programming language such as basic to C++
D) convert a program from a programming language to machine code

Answer: D

125) Which of the following is NOT an acceptable name for a label?

A) lblLastName    B) lblState      C) lblFirstName    D) lbl Address

Answer: D

126) This is a transparent rectangular area that defines the control's size.

A) Bounding region   B) Limiting region    C) Bounding box    D) Size mode region

Answer: C

127) Event procedures are a type of ________ procedure.

A) module    B) sub     C) method     D) function

Answer: B
128) What property would you change if you want to place the name on the top of a form named MyFirstForm?
   A) Form1.Tag   B) Form1.text   C) Form1.name   D) Form1.caption
   Answer: B

129) Which statement is correct with respect to a project?
   A) A project is a container that holds a solution.
   B) Visual studio creates a folder to hold the solution and project.
   C) A project is created and must belong to a solution.
   D) Both B and C are correct.
   Answer: D

130) Compile time errors ________.
   A) are not syntax errors
   B) cause the program to halt because an attempt was made to perform an invalid input operation
   C) are errors such as misspelled key words or incorrect use of operators
   D) are run-time errors found while the program is running
   Answer: C

131) What is the purpose of using the following type of structure?
   Try
       Some statements
   Catch
       Other Statements
   End Try
   A) This is not a valid structure for VB.NET.
   B) to try different types of commands to see which one will give you the correct answer
   C) in order to catch any run-time errors such as divide-by-zero and not have the program shut down
   D) to use for debugging your program, you'll remove this structure when you are sure your program works correctly
   Answer: C

132) Which of the following has the highest order of precedence in arithmetic expressions?
   A) Operators are not significant; all calculations are evaluated from left to right
   B) Exponentiation
   C) Addition and subtraction
   D) Multiplication and division
   Answer: B

133) Which is true of the CInt function?
   A) It converts letters to numbers.
   B) Floating-point numbers that are passed to CInt are rounded to the nearest whole number.
   C) It cannot convert a string such as "247" to an integer.
   D) Floating-point numbers that are passed to CInt completely lose their fractional part.
   Answer: D

134) The ________ control(s) can have the focus.
   A) Button   B) TextBox and Button
   C) TextBox   D) Label
   Answer: B
135) Declaration statements ________.
   A) are only used for variables and are not needed for constants
   B) give variables and constants names, and specify the type of data they will hold
   C) are only allowed in the Declarations section of a form
   D) both answers B and C are correct
Answer: B

136) All of the following are advantages of using named constants except ________.
   A) they can be used instead of keywords
   B) the value of the constant cannot be changed within the program
   C) they help make the program more self documenting, since they can describe the meaning of the constant value.
   D) it is easier to make widespread changes to a named constant throughout a program
Answer: A

137) You can break up long lines of code, so they can fit in the code window by ________.
   A) typing a space, followed by an underscore and then hitting the enter key
   B) hitting the ctrl/enter keys
   C) hitting the enter key where you want to end the line
   D) typing a hyphen where you want to break the line and then hitting enter key
Answer: A

138) The value returned by passing "#45.25" to the CSng function is ________.
   A) 0
   B) 45.25
   C) 45.3
   D) No value is returned. The program stops with a runtime error.
Answer: D

139) You can perform all of the following actions with variables except ________.
   A) copy and store values entered by the user, so they may be manipulated
   B) convert a variable to a constant
   C) remember information for later use in the program
   D) perform arithmetic on values
Answer: B

140) Which is NOT true of a class-level variable?
   A) declared outside a procedure
   B) not local to any procedure
   C) can be used outside the form
   D) can be declared anywhere between Public Class and End Class
Answer: C

141) Because only one radio button in a group can be selected at any given time, they are said to be ________.
   A) independent
   B) mutually exclusive
   C) asynchronous
   D) mutually independent
Answer: C
142) What is the resulting string that is stored in the String variable strSnip at the end of the code segment?

Dim strSnip, strfullString as String = "Washington"
strSnip = strfullString.Substring(7, 3)

A) "Washing"  B) "Was"  C) "gto"  D) "ton"

Answer: D

143) You display a message box with the ________ method.

A) MessageBox.Display  B) MessageBox.Output  C) DisplayMessageBox  D) MessageBox.Show

Answer: D

144) Which of the following is true regarding the use of Class-Level Variables?

A) Class-level variables can be accessed by any procedure in the same form.
B) Class-level variables must be declared inside the first procedure called on the form.
C) You must declare the use of Class-Level Variable in EVERY procedure that uses the variable.
D) You should use Class-Level variables as much as possible in order to reduce the amount of memory used by your program.

Answer: A

145) Which is the correct general format for the method call that displays a message box?

A) MessageBox.Show (MessageBox, CaptionBox, ButtonsBox, IconBox, DefaultButton)
B) MessageBox.message (Caption, Buttons, Icon, DefaultButton)
C) MessageBox.show (Message, Caption, Buttons, Icon, DefaultButton)
D) A and B are both correct.

Answer: C

146) What value is returned by the IndexOf method if the search string is not found?

A) the length of the string - 1  B) 1  C) 0  D) -1

Answer: D

147) This keyword is required to use relational operators in a Case statement.

A) Is  B) To  C) If  D) else

Answer: A

148) Validation checks for all of the following except ________.

A) values that might cause problems  B) correct spelling
C) numbers in a range  D) items selected from a menu

Answer: B

149) What is displayed in lblSum after the following code segment is executed.

Dim intTotal As Integer = 0
For intOuter = 1 To 3
    For intInner = intOuter To 3
        intTotal += intOuter*intInner
    Next
lblSum.Text = intTotal.ToString

A) 16  B) 36  C) 9  D) 25

Answer: D
150) What is the difference in the execution of the Do Until Loop (first example) and the Do Loop Until (second example).

' First Example
sngPayAmount = 400
Do Until sngPayAmount > 150
' Processing Steps
  sngPayAmount = sngPayAmount - 50
Loop

'Second Example
sngPayAmount = 400
Do
  ' Processing Steps
    sngPayAmount = sngPayAmount - 50
Loop Until sngPayAmount > 150

A) The first loop will not be executed.
B) There is no difference between the 2 loops.
C) The test statements should be sngPayAmount >=150 in the second example so that the loop will be executed.
D) The first loop will execute 1 more time than the second loop.

Answer: A

151) Which property of the list box lstStudents indicates the number of items in the list?
   A) lstStudents.Count
   B) lstStudents.Items.Count
   C) lstStudents.Names.Count
   D) lstStudents.Names.Number

Answer: B

152) The first item in a list box has an index of ________.
   A) -1
   B) 1
   C) 0
   D) 2

Answer: C

153) The data in a list box is stored in the ________ property.
   A) Items.Count
   B) Items
   C) Insert
   D) Add

Answer: B

154) When calling a Sub Procedure, the arguments and the corresponding parameters must agree in all of the following ways except one of the following.
   A) The number of the arguments and the parameters must be the same.
   B) The type of the arguments and parameters must correspond.
   C) The names of the arguments and parameters must correspond.
   D) The order of arguments and parameters must correspond.

Answer: C

155) In break mode, pressing ________ will activate the Step Into command.
   A) F5
   B) Ctrl F5
   C) Shift F8
   D) F8

Answer: D
156) Which VB debugging command will allow the programmer to execute all of the procedures/functions in the program?
   A) Step Into   B) Step Out   C) Step Over   D) Step All
   Answer: A

157) When a Sub procedure has finished executing ________.
   A) the application enters break mode.
   B) the application terminates.
   C) the application branches back to the procedure call, and resumes executing at the next line.
   D) the application waits for the user to trigger the next event.
   Answer: C

158) Order the following arithmetic operators from highest precedence to lowest precedence.
   A) Exponentiation (the ^ operator), Multiplication and division, Modulus (the Mod operator), Integer division (the \ operator), Addition and subtraction
   B) Exponentiation (the ^ operator), Multiplication and division, Integer division (the \ operator), Modulus (the Mod operator), Addition and subtraction
   C) Exponentiation (the ^ operator), Multiplication and division, Integer division (the \ operator), Addition and subtraction, Modulus (the Mod operator)
   D) Exponentiation (the ^ operator), Modulus (the Mod operator), Multiplication and division, Integer division (the \ operator), Addition and subtraction
   Answer: B

159) The ________ control is used to gather input the user has typed on the keyboard.
   A) TextBox   B) ListBox   C) Button   D) Label
   Answer: A

160) Which would be the expected output shown in a label named lblResult from the following line of code?

   Dim dblGrossPay as Double
dblGrossPay = 3500
lblResult.Text = dblGrossPay("c")

   A) 3500.00   B) $3500.00   C) ($3500.00)   D) 3500.00000
   Answer: B

161) The declaration of an integer variable named intLength with an initial value of 12 is ________.
   A) Dim intLength As Integer =12   B) Dim intLength As Integer initialize to 12
   C) Dim intLength =12 As Integer   D) Dim intLength As Integer 12
   Answer: A
162) What would be the value of the variable dblCommission at the end running the following section of code?

```vbnet
Dim dblMonthlySales, dblCommRate, dblCommission as Double
dblMonthlySales = 6500.00
Select Case dblMonthlySales
    Case Is < 1000
        dblCommRate = 0.0
    Case 1000 to 4999.99
        dblCommRate = 0.05
    Case 5000 to 9999.99
        dblCommRate = 0.10
    Case Is >= 10000
        dblCommRate = 0.15
End Select
dblCommission = dblCommRate * dblMonthlySales
```

A) 325.00  B) 650.00  C) 0.00  D) 925.00

Answer: B

163) To get a copy of a string in all uppercase letters, use the ________ method of the String object.

A) ConvertToUpper  B) ToUpperCase  C) ToString  D) ToUpper

Answer: D

164) This function accepts a string as its argument and returns true if the string contains only numeric digits.

A) CInt  B) Val  C) IsNumber  D) IsNumeric

Answer: D

165) How many times will the message be displayed?

```vbnet
Dim intCount As Integer = 0
Do
    lstOutPut.Items.Add ("I love Visual Basic 2005")
    intCount += 1
Loop While intCount > 10
```

A) 1 time  B) 2 times  C) 10 times  D) It will not display the message.

Answer: A

166) These two properties can be used in code to automatically select the text in a text box.

A) Start, Length  B) SelectionStart, SelectionLength  C) Select, Section  D) Select, Length

Answer: B
167) Which of the following calls does not pass in valid arguments to the following `GetANumber` Sub Procedure?

```vba
Sub GetANumber(ByVal intNumber As Integer)
    ' does some code
End Sub
```

A) `GetANumber(Cint(txtNumber.Text))`
B) `GetANumber(3 + 5 * 8 + intX)`
C) `GetANumber(intX + 3, intY)`
D) `GetANumber(intX)`

Answer: C

168) Which of the following code is a correctly written function named `Average` that will accept three integers as parameters, calculate their average and return the result.

```vba
A) Private Function Average(ByRef intX As Integer, ByRef intY As Integer, ByRef intZ As Integer, ByRef Average As Double)
    Average = (intX + intY + intZ)/3
End Function

B) Private Function Average(ByVal intX As Integer, ByVal intY As Integer, ByVal intZ As Integer) As Single
    Return (intX + intY + intZ) / 3
End Function

C) Private Function Average(intX As Integer, intY As Integer, int Z As Integer) As Single
    Average = (intX + intY + intZ) / 3
End Function

D) Private Function Average(ByVal intX As Integer, ByVal intY As Integer, ByVal intZ As Integer) As Single
    Average = intX + intY + intZ / 3
    Return Average
End Function
```

Answer: B

169) What is the purpose of the `ListBox.Add` method?

A) The method will always put the item at the end of the list.
B) The method can be used to put an item anywhere in the list.
C) The method will always put the item at the beginning of the list.
D) The method will find the sum of all of the items in the list.

Answer: A
170) What is the value of intTotal after the following code is executed?

```vbnet
Dim intNumber1 As Integer = 2
Dim intNumber2 As Integer = 3
Dim intTotal As Integer
intTotal = AddSquares(intNumber1, intNumber2)

Public Function AddSquares(ByVal intFirst As Integer, ByVal intSecond As Integer) As Integer
    intFirst = intFirst * intFirst
    intSecond = intSecond * intSecond
    Return intFirst + intSecond
    intFirst = 0
    intSecond = 0
End Function
```

A) 0  B) 5  C) 13  D) 10

Answer: C

171) Which statement is not true regarding functions?

A) A function is a self contained to which you send input.
B) Functions can return several values at the same time.
C) A function can only return one value at a time.
D) There are many built-in functions such as abs(x).

Answer: B

172) A For Next loop begins with the following statement. What is the purpose of the Step clause?

```vbnet
For intX = 1 to 100 Step 5
```

A) To increment the loop control variable intX by 5.
B) To initialize the loop control variable to 5.
C) To specify the decrement value for the loop control variable intX.
D) To indicate the test condition for ending the loop.

Answer: A

173) What does it mean to pass an argument to a procedure by value?

A) That only a copy of the argument is passed to the procedure.
B) The procedure has access to the original argument and can make changes to it.
C) The address of the argument is actually passed to the procedure.
D) The name of the argument and the parameter must be the same in order to send data to the subprocedure.

Answer: A

174) The major difference between a List Box versus a Combo Box is ________.

A) nothing, the both behave exactly the same in VB.NET
B) a Combo Box will allow the user to enter text other than what is listed in the List
C) a List Box will take up less room on the form
D) a List Box will allow the user to enter text other than what is listed in the List

Answer: B
175) All of the following are true about functions except ________.
   A) you can assign the return value from a function to a variable
   B) you can return one or more values to the calling procedure/function
   C) you can use a function call in an expression
   D) you need to have a return statement in a function

   Answer: B

176) Setting this property to True will put the items in the list into alphabetical order.
   A) Selection    B) Sorted    C) Alphabetic    D) Organized

   Answer: D

177) Which of the following is a Sub procedure that will keep track of the number of times it was called?

   A) Private Sub KeepTrack( ByVal intCount As Integer)
     intCount += 1
     lstResult.Items.Add(intCount)
   End Sub

   B) Private Sub KeepTrack ( )
     Static intCount As Integer = 0
     intCount += 1
     lstResult.Items.Add(intCount)
   End Sub

   C) Private Sub KeepTrack (ByRef intCount As Integer )
     Dim intCount As Integer = 0
     intCount += 1
     lstResult.Items.Add(intCount)
   End Sub

   D) Private Sub KeepTrack ( )
     Dim intCount As Integer = 0
     intCount += 1
     lstResult.Items.Add(intCount)
   End Sub

   Answer: B

178) To get the number of items stored in a ListBox, you would use the ________ property.
   A) count    B) Items.count    C) Items    D) number

   Answer: B

179) If you do NOT provide an access specifier for a Sub Procedure then ________.
   A) it will be Public.    B) it will be Protected.
   C) it will be Private.    D) it will be Friend.

   Answer: A
180) What is wrong with the following Subroutine?

```vbscript
Sub GetName(ByVal strName as String)
    strName = InputBox("Enter your Name:")
End Sub
```

A) The name GetName is a reserved word and can't be used as a name of Subroutine.
B) The variable name strName is a reserved word and can't be used as a variable.
C) The syntax for the function InputBox is incorrect.
D) The variable strName will be changed in the sub, but all changes are lost when the sub ends.

Answer: D

181) What is an argument?

A) A local variable that retains its value between procedure calls.
B) A value passed to a procedure or function when it is called.
C) A reason not to create a procedure or function.
D) A variable that a parameter is passed into.

Answer: B

182) When an argument is passed to a procedure this way, the procedure has access to the original argument and may make changes to it.

A) ByRef  B) ByVal  C) ByDefault  D) ByAddress

Answer: A