NAME:

Write your answer in the blank line next to each question.

1. The arguments appearing in a Call statement must match the parameters in the appropriate Sub or Function header in all but one of the following ways. Which one?
   (A) Number of arguments (B) Names of arguments (C) Data type of arguments (D) Order of arguments

2. The arguments appearing in a Call statement must match the parameters in the How many times will PETE be displayed when the following lines are executed?
   
   For c As Integer = 15 to -4 Step -6
   lstBox.Items.Add("PETE")
   Next

3. Given that x = 7, y = 2, and z = 4, the following If block will display "TRUE". (T/F)
   
   If (x > y) And (y > z) Then
       txtBox.Text = "TRUE"
   End If

4. CDAABCDB will be the output of the following program when the button is clicked. (T/F)
   
   Private Sub btnDisplay_Click(...) Handles btnDisplay.Click
       Dim word, result As String
       word = "ABCD"
       result = Rotate(word)
       result = Rotate(result & word)
       txtBox.Text = result
   End Sub
   
   Function Rotate(ByVal var As String) As String
       Dim varlength As Integer
       varlength = var.Length
       Return var.Substring(1) & var.Substring(0, 1)
   End Function

5. Based on what it returns, what would be a better name for the function "Mystery" in the following program?
   
   Private Sub btnDisplay_Click(...) Handles btnDisplay.Click
       Dim sentence As String, result As String
       sentence = "Socrates is a man."
       result = Mystery(sentence)
       txtBox.Text = result
   End Sub
   
   Function Mystery(ByVal sentence As String) As String
       Dim position As Integer
       position = sentence.IndexOf(" ")
       Return sentence.Substring(0, position)
   End Function

   (A) FirstWord (B) LastWord (C) FirstLetter (D) LastLetter
6. What will be the output of the following program when the button is clicked?

```vba
Private Sub btnDisplay_Click(...) Handles btnDisplay.Click
    Dim name As String = "Washington"
    Select Case name
        Case "George"
            txtBox.Text = "George"
        Case "Wash"
            txtBox.Text = "Wash"
        Case "WASHINGTON"
            txtBox.Text = "WASHINGTON"
        Case Else
            txtBox.Text = "Washington"
    End Select
End Sub
```

(A) WashWashington  (B) Washington (C) WASHINGTONWashington  (D) No output

7. Consider the following event procedure that calls a user-defined function named Cube, which returns the cube of a number.

```vba
Private Sub btnDisplay_Click(...) Handles btnDisplay.Click
    Dim num, result As Double
    num = CDbl(InputBox("Enter a number to cube:"))
    result = Cube(num)
    txtBox.Text = "The cube of " & num & " is " & result & "."
End Sub
```

Which of the following is a correct Function definition for Cube?

1. Function Cube(ByVal var As Double) As Double
   Return var ^ 3
   End Function
2. Function Cube(ByVal num As Double) As Double
   Return num ^ 3
   End Function

(A) 1 only         (B) 2 only            (C) Both 1 and 2                (D) Neither 1 nor 2

8. What word(s) will appear in the list box when the button is clicked?

```vba
Private Sub btnDisplay_Click(...) Handles btnDisplay.Click
    Dim num As Integer = 5
    If num = 2 Then
        lstBox.Items.Add("Two")
    ElseIf num > 3 Then
        lstBox.Items.Add("Great")
    ElseIf num = 5 Then
        lstBox.Items.Add("Equal")
    End If
End Sub
```

(A) Two, Great, and Equal     (B) Great and Equal         (C) Great            (D) Equal

9. Which value for x would make the following condition true: x >= 5

(A) x is equal to 7                     (B) x is equal to 5
(C) x is equal to 5.001              (D) all of the above
10. Why is the following Select Case block invalid in Visual Basic?

```vbnet
Select Case myName.Substring(0, 1)
    Case myName < "D"
        txtBox.Text = "Your name starts with A, B, or C."
End Select
```

(A) There should not be a standard conditional statement in a value list.
(B) There are not enough Case statements.
(C) There is no selector.
(D) `myName.Substring(0, 1)` is not valid where it is.

11. What will be the output of the following lines of code?

```vbnet
Dim phrase As String = "A penny saved is worth nothing."
If phrase.IndexOf("pen") <> -1 Then
    txtBox.Text = CStr(phrase.IndexOf("pen"))
Else
    txtBox.Text = CStr(-1)
End If
```

(A) pen  (B) 2  (C) 0  (D) A penny saved is worth nothing.

12. What will be displayed in the list box when the following code runs? (Choose two.)

```vbnet
Select Case num
    Case 6, 7, 11
        lstBox.Items.Add("W")
    Case Is < 7
        lstBox.Items.Add("X")
    Case Is > 5
        lstBox.Items.Add("Y")
    Case Else
        lstBox.Items.Add("Z")
End Select
```

(A) Z can never be displayed.
(B) W, X and Y will be displayed if the value of `num` is 6
(C) W and Y will be displayed if the value of `num` is 7
(D) Y will be displayed if the value of `num` is 12

13. What is displayed when the button is clicked?

```vbnet
Private Sub btnDisplay_Click(...) Handles btnDisplay.Click
    Dim a, b as String
    Dim x as Integer
    a = "How now brown cow."
    b = "brown"
    x = FindIt(a, b)
    txtBox.Text = CStr(x)
End Sub

Function FindIt(ByVal z1 as String, ByVal z2 as String) As Integer
    Dim x as Integer
    x = z1.IndexOf(z2)
    return x
End Function
```

(A) "How now"  (B) 8  (C) 0  (D) An error
14. What is displayed when the button is clicked?

```vbnet
Private Sub btnDisplay_Click(...) Handles btnDisplay.Click
    Dim x, y, z, result As Double
    x = 3
    y = 4
    z = 1
    result = CInt(Int(Norm(x, y, z)))
    txtBox.Text = CStr(result)
End Sub

Function Norm(ByVal x As Double, ByVal y As Double, ByVal z As Double) As Double
    Return Math.Sqrt(x^2 + y^2 + z^2)
End Function
```

15. What is wrong with the following Call statement and its corresponding Sub statement?

```vbnet
MyProcedure("The Jetsons", 1000, 209.53)
Sub MyProcedure(ByVal var1 As Double, ByVal var2 As Double, ByVal var3 As Double)
```

(A) It is not valid to pass something like "The Jetsons."
(B) Constant values like 1000 cannot be passed, only variables.
(C) var1 is not of the same data type as "The Jetsons."
(D) Nothing is wrong with them.

16. Which one of the following is true about arguments and parameters?

(A) Arguments appear in Call statements; parameters appear in Sub statements.
(B) Parameters appear in Call statements; arguments appear in Sub statements.
(C) They are synonymous terms.
(D) They are completely unrelated in a program.

17. What will be displayed by the following program when the button is clicked?

```vbnet
Private Sub btnDisplay_Click(...) Handles btnDisplay.Click
    Dim s As Double
    s = 0
    For k As Integer = 1 To 5
        If k / 2 = Int(k / 2) Then
            s += k
        End If
    Next
    txtBox.Text = CStr(s)
End Sub
```

(Problems 18 – 20) Do Exercises #2 (p 248), #8 (p 265) and #10 (p 265). Put answers in the table.

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