

First: put a Tick (✓) in front of the correct statement and a cross (✗) in front of the wrong statement for each of the following sentences:

NO.	Question	Answer
1	One of the advantages of VB.NET is dealing with different types of data.	(✓)
2	One of disadvantage of VB.NET is dealing with different types of data.	(✗)
3	All the data entered into the VB.NET program language are stored temporarily in the computer memory.	(✓)
4	All types of data saved in the memory occupy the same storage space.	(✗)
5	A good programmer is the one who improves the rationalization of storage space in the computer memory. <i>بالله الامارات</i>	(✓)
6	The value of the student's total grades is classified within the <b>integer</b> data types.	(✗)
7	The value of the student's name is classified in the <b>Miscellaneous</b> data types.	(✗)
8	The value of the student gender "male" or "female" is classified within the <b>Miscellaneous</b> data types "Boolean".	(✓)
9	Image of a student can be classified within the character data types.	(✗)
10	The value of the employee's salary can be classified within non-integer numeric data types. <i>لدرجة</i>	(✓)
11	Each data element stored in computer memory occupies a particular storage space and a particular range of values according to its data type. <i>بشكل</i>	(✓)
12	The data element <u>identifies</u> the storage space it occupies in computer memory and knowing the minimum and the maximum for its value.	(✓)
13	The term variables in vb.net means stores in the computer memory, which has type and name.	(✓)
14	Declaring a variable in VB.NET means determining its name and data type. <i>المتغير</i>	(✓)
15	The declaration of variables in the language VB.NET helps rationalize the use of the computer memory.	(✓)
16	Declaration of variables is a matter of formality, because VB.NET languages recognize the variables and determine the type automatically.	(✗)
17	The following statement "Dim F_name As String" is to declare the name of a variable "String" and type "F_name".	(✗)
18	The following data element "Dim F_name As String" is to declare the name of a variable "F_name" and type "String".	(✓)
19	The declaration statement for variables is determined by the variable name and type.	(✓)
20	The declaration statement for the variables is determined by the name, type and fixed value. <i>المتغير</i>	(✗)
21	"55City" variable name is a considered a wrong variable name because it begins with a number. <i>المتغير</i>	(✗)
22	"55City" is considered a variable correct name.	(✗)
23	"Name" is considered a correct variable name in event procedure level ( <b>enrichment</b> ).	(✗)
24	"Name" is considered a correct variable name in form/class level ( <b>enrichment</b> ).	(✓)
25	"Dim" is used to declare variables.	(✓)
26	"Dim" is used to declare constants.	(✗)
27	The command "Const" is used in the declaration of the variables.	(✗)
28	The command "Const" is used in the declaration of the constants.	(✓)

NO.	Question	Answer
29	Constants in VB.NET language are stores of a computer memory which have the name and the value that does not change during the running of the program.	(✓)
30	Constants in VB.NET language are stores of a computer memory which have name and value can change during the running of the program.	(X)
31	The error in the result of any equation is a Syntax Error.	(X)
32	The error in the result of any equation is a Logical Error.	(✓)
33	Error that appears while you run or execute a VB.NET program is called Syntax Error.	(X)
34	Error that appears during the execution of VB.NET program is Run time Error.	(✓)
35	The final value of the variable X after the execution the following equation "X = 3 + 2 * 4" is (11).	(✓)
36	The final value of the variable X after execution the following equation "X = 3 + 2 * 4" is (20).	(X)

**Second: Select the appropriate answer to complete each of the following sentences:**

- The value of prices of desktop tools can be classified as..... data.  
a) integer  non- integer c) miscellaneous
- The value of the names of the subjects can be classified as ..... data.  
a) miscellaneous b) non- integer  string
- The type of data element temporarily stored in the computer memory defines:  
 storage space and the extent of its value  
b) Name and storage space  
c) Storage space and a storage value
- The right syntax to declare Salary variable is .....  
a) Dim Salary As Integer b) Dim Salary As Byte  Dim Salary As Decimal
- The right syntax to declare the city variable is .....  
 Dim City As String b) Dim City As Byte c) Dim City As Decimal
- The right syntax to declare the variable name F\_Name is .....  
a) Dim F\_Name As Integer  Dim F\_Name As String c) Dim F\_Name As Decimal
- The right syntax to declare the variable Gender is .....  
a) Dim Gender As Decimal b) Dim Gender As Integer  Dim Gender As Boolean
- The right syntax to declare the variable name F\_Name is .....  
a) Din F\_Name As String  Dim F\_Name As String c) Dim F\_Name As Char
- The error that appears after running a program VB.NET language is called .....  
a) Syntax Error b) logical Error  Runtime Error
- The error that appears while writing a code in a VB.NET language called.....  
 Syntax Error b) Logical Error c) Run time Error
- The error in the output result in language VB.NET code is called.....  
a) Syntax Error  Logical Error c) Run time Error
- The final output of the variable X for equation "X = 3 + 2 \* 4" is .....  
 11 b) 24 c) 20
- The final output of the variable Y for the equation "Y = 16 - 12/4 + 2" is .....  
a) 3 b) 11  15

- (14) The declaration statement of a variable "Dim X As String", means the declaration about .....
- A variable named X and type of character String.
  - Variable called string and its type X.
  - Unknown variable has no name and its type String.
- (15) The correct statement to declare a non-integer variable named Y is .....
- Dim Y As Decimal
  - Y As Decimal
  - Dim Y = Decimal
- (16) Choose the correct name of the variable "name of the student":
- st\_name
  - st name
  - Name\*\*
- (17) Choose the correct name of the variable "address of the employee":
- 5Cairo
  - E\_Address
  - (Address)
- (18) The names of the following variables are correct in level of class form1 except: (enrichment)
- St\_text
  - Text
  - st\_text
- (19) On declaration of a mathematical constant  $\pi$ , we use the code .....
- Dim Pi As Single
  - Dim Pi As Single = 3.14
  - Const Pi As Single = 3.14
- (20) On the declaration of constant gravity acceleration, we use the code .....
- Dim g As Single
  - Const g As Single = 9.81
  - Dim g As Single = 9.81
- (21) The declaration of variable number of family members C\_Family with initial value of 2 is:
- Dim C\_Family As Single = 2
  - Const C\_Family As Integer = 2
  - Dim C\_Family As Integer = 2
- (22) If there is an error in the result of a rectangular area calculation in a program, this error is considered .....
- Syntax Error
  - Logical Error
  - Run time Error
- (23) The error message that appears when you write the code "Dimension X As Byte", can be classified as .....
- Syntax Error
  - Logical Error
  - Run time Error
- (24) The final output of the equation "  $Y = 12 - 2 + 4 / 2$  " is .....
- 12
  - 7
  - 9
- (25) The final output of the equation "  $Y = 12 - (2 + 4) / 2$  " is .....
- 12
  - 7
  - 9

$$12 - 6 / 2$$

$$12 - 3 = 9$$

## Questions

(1) Answer the questions with the help of the following code:

```
If X >= 50 Then
    MsgBox("successful ")
End if
```

A- MsgBox is shown with the text "successful" when :

B- If the value of X equals 50, the result of executing code is

C. If the value of X equals 62, the result of executing code is

(2) Answer the following questions using the following code line:

```
If x < 0 Then msgbox (العدد موجب) else msgbox (العدد سالب)
```

A- Write the conditional expression in the preceding statement:

B- The code to be executed when the condition is true is:

C- The code to be executed when the condition is false is:

(3) Answer the following questions with the help of the screen and the code in the table:

Code	screen
<pre>Private Sub Button1_Click     Dim x As Single     x = Me.TextBox1.Text     If x &gt;= 50 Then         MsgBox("ناجح")     End If End Sub</pre>	

A- The purpose of the program is: *Show student status if succeed*

B- The code is executed if the event *clicks* occurred on *Button1* control tool.

C- Type of variable X in the code is *Single*.

D- "Me." In the code refers to *Current Form*.

E- We input the value (50) in the text box, the result of the implementation of the code is :

*MsgBox (" ناجح ")*

(4) Complete the following table with the required code, using the general syntax conditional statement "IF .. Then .. Else"

If Conditional Expression Then

Code

Else

Code

End if

So as to show a message box having the word "مصر" if the value of the variable "Country" is equal to the "Egypt" or message box having the word "Egypt" appears:

No	statement	code
1	Conditional expression	<code>..... If Country = "Egypt" ..... End If</code>
2	Result of achieving the condition "True"	<code>..... MsgBox("مصر") ..... End If</code>
3	Result of not achieving the condition "False"	<code>..... MsgBox("Egypt") ..... End If</code>

(5) Answer the following questions with the help of the code:

A. If the value of X = 76, the result of executing the code is:

..... MsgBox ("76")

B. If the value of X = 49, the result of executing Code is :

..... MsgBox ("أب")

C. Rewrite the code of "Block If" to appear on only one line.

`If X >= 50 Then MsgBox ("ع") Else MsgBox ("أب")`

```
Dim x As Single
x = Me.TextBox1.Text
If x >= 50 Then
    MsgBox("ع")
Else
    MsgBox("أب")
End If
```

(6) After studying the code, answer the following questions:

A- Modify the code so that the "الرقم زوجي" text appears in a label "Label2" and "الرقم فردي" text appears in a label "Label2" instead of the message box.

`Label2.Text = "الرقم زوجي"`  
`Label2.Text = "الرقم فردي"`

B- Replace the type of variable "N" to be "Integer"

`Dim N As Integer`

```
Dim N As Long
N = Me.TextBox1.Text
If N Mod 2 = 0 Then
    MsgBox("الرقم زوجي")
Else
    MsgBox("الرقم فردي")
End If
```

(7) The following code receives any number of a TextBox, and stores it in a variable, and then tests its value. If the number is even or odd, a Messagebox appears showing that.

**Required:** Retype the code after discovering the errors and correcting them so that the result of its implementation is right.

Dim X As Integer

N = Me.TextBox1.Text

```
Dim N As Integer
If N Mod 2 = 0 Then
    End If
```

If N Mod 2 = 0

MsgBox ("الرقم زوجي")

Else

MsgBox ("الرقم فردي")

(8) After studying the following code, answer the following questions:

```
Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button1.Click
    Dim degree As Single
    Try
        degree = Me.TextBox1.Text
        Select Case degree
            Case 0
                Me.Label2.Text = "صليو"
            Case Is < 0
                Me.Label2.Text = "تحت الصفر"
            Case Is > 0
                Me.Label2.Text = "فوق الصفر"
        End Select
    Catch ex As Exception
        MsgBox ("ادخل عدد")
        Me.TextBox1.Focus()
        Me.TextBox1.Text = ""
    End Try
End Sub
```

End Sub

Using Try.....Catch in code is enrichment – ask your teacher

(A) The purpose of the code is *Show temperature degree*

(B) If you learn that: "Degree = -3" the text appears in the message box is:

*Case Is > 0*

(C) The code is executed when the event *Click* occurs on control tool.....

(D) Type of variable "Degree" is *Single*