UNIVERSITI TUN HUSSEIN ONN MALAYSIA
ANSWER SCHEME
TEST
SEMESTER II
SESSION 2021/2022

COURSE NAME : VISUAL PROGRAMMING

COURSE CODE : DAT 21103

PROGRAMME CODE : DAT

EXAMINATION DATE : JULY 2022

DURATION : 1 HOUR

INSTRUCTION : 1. ANSWERS **ALL** QUESTIONS.

2. THIS TEST IS CONDUCTED VIA **CLOSE BOOK.**

3.STUDENTS ARE **PROHIBITED** TO CONSULT THEIR OWN MATERIAL OR ANY EXTERNAL RESOURCES DURING THE EXAMINATION CONDUCTED VIA CLOSED BOOK

THIS QUESTION PAPER CONSISTS OF **ELEVEN (11)** PAGES

SECTION A (30 MARKS)

Q1 Visual Basic responds to events using which of the following?
A   A code procedure
B   An event procedure
C   A form procedure
D   A property

Q2 What property of controls tells the order they receive the focus when the tab key is pressed during run time?
A   Focus order
B   Focus number
C   Tab index
D   Control order

Q3 The Properties window plays an important role in the development of Visual Basic applications. It is mainly used
A   to change how objects look and feel.
B   when opening programs stored on a hard drive.
C   to allow the developer to graphically design program components.
D   to set program related options like Program Name, Program Location, etc.

Q4 An algorithm is defined as
A   a mathematical formula that solves a problem.
B   a tempo for classical music played in a coda.
C   a logical sequence of steps that solve a problem.
D   a tool that designs computer programs and draws the user interface.

Q5 Determine the compound condition that evaluates True if one or both conditions are True.
A   `txtMark.Text > 0 Or txtMark.Text < 100`
B   `txtMark.Text > 0 And txtMark.Text < 100`
C   `Not txtMark.Text = 100`
D   `txtMark.Text > 0`

Q6 Which of the following arithmetic operations has the highest level of precedence?
A   + -
B   * /
C   ^ exponentiation
D   ( )

Q7 Identify the proper syntax when using a message dialog box.
A   `MessageBox.Show("Hi there", "Hi")`
B   `MessageBox.Show("Hi there",, "Hi")`
C   `MessageBox.Show('Hi there, Hi')`
D   `MessageBox.Show('Hi there', 'Hi')`

Q8 Identify the output of the following statement.

```
txtBox.Text = FormatCurrency(1234.567)
```

A $1234.567
B   1,234.57
C $1234.57
D $1,234.57

Q9   The output for coding syntax of `Asc("A")` is 65. Identify the output for syntax `Asc("C")`.

A   66
B   67
C   68
D   C

Q10   The output for coding syntax of `Asc("A")` is 65. Identify the output that will be displayed by syntax `txtBox.Text = Chr(65) & "BC"`

A   ABC
B   A BC
C   656667
D   Not enough information in available

Q11 The three main logical operators are _____, _____, and _____.

A   And, Or, Not
B   And, Not, If
C   Or, Not, If
D   False, And, True

Q12   Identify value for x would make the statement `Not (x >= 5)` condition is **TRUE**.

A   x is equal to 7
B   x is equal to 4
C   x is equal to 5.001
D   x is equal to 5.000

Q13 What happens to a variable declared locally inside a Sub procedure after the procedure terminates?

A   It maintains its value even after the End Sub statement executes.
B   It no longer existed after the End Sub statement executes.
C   It loses its value temporarily after the End Sub statement executes, but regains that value upon re-entry to the Sub procedure.
D   It is reset to its default value.

Q14 If you keep a variable undeclared, it is automatically taken as to which of the following data type in Visual Basic?

A   Char
B   Integer
C   Object
D   String

Q15   What will be the output of the following Visual Basic code, If the intnumber variable is 110?

```
If intnumber<=100 Then
        Intnumber=intnumber*2;
Else
        Intnumber=intnumber*3;
EndIf
```

A　　180
B　　330
C　　156
D　　270

Q16　Identify the value of `StudScore(2)` in the following program segment.

```
Dim StudScore(4) As Integer
StudScore = {98, 97, 96, 95, 94}
```

A　　98
B　　97
C　　96
D　　95

Q17　What will be the output of the following Visual Basic code?

```
Dim intScores As Integer = {78, 83, 75, 90}
Array.Sort(intScores)
```

A　　90,83,78,75
B　　78,75,83,90
C　　78, 83, 75,90
D　　75,78, 83,90

Q18　Who developed Visual Basic?
A　　Symantec
B　　Oracle
C　　Microsoft
D　　Bill Gates

Q19　_____ is the process of finding and removing errors.
A　　Checking
B　　Compiling
C　　Debugging
D　　Quick Watch

Q20　Identify visual basic control that is used to display text but user cannot change it directly.
A　　Textbox
B　　Label
C　　Button
D　　Listbox

Q21　The _____ allows direct exit from a For loop, Do loop, sub procedure, or function procedure.

    A   `Break`
    B   `Exit Do`
    C   `Exit For`
    D   `Exit`

Q22 Identify the property that is used to change name of the command button.
    A   Text
    B   Caption
    C   Name
    D   Anchor

Q23 Identify visual basic control that allows multiple answers to be selected?
    A   RadioButton
    B   ComboBox
    C   CheckBox
    D   GroupBox

Q24 To attach a scroll bar to the textbox , the property of textbox should be set to_____.
    A   Multiline = True
    B   Scrollbar = True
    C   SingleLine = False
    D   Visible = True

Q25 The event that occurs when certain key of keyboard is pressed is called _____ .
    A   KeyType
    B   KeyPress
    C   KeyEnter
    D   MouseOver

Q26 The text property of a text box behaves like a _____ data type.
    A   String
    B   Integer
    C   Double
    D   Text

Q27 Which statement is **TRUE** if `strName` is declared in two different Sub procedures.?
    A   The program will malfunction when it is executed.
    B   When the value of strName is changed in one Sub procedure, it will also be changed in the other Sub procedure.
    C   Visual Studio's smart editor will alert you that this is an error before the program is executed.
    D   The two variables will be local to their respective Sub procedures.

Q28 The Properties window plays an important role in the development of Visual Basic applications. It is mainly used _____ .
    A   to change how objects look and feel
    B   when opening programs stored on a hard drive
    C   to allow the developer to graphically design program components
    D   to set program related options like Program Name, Program Location, etc.

Q29 An algorithm is defined as _____ .
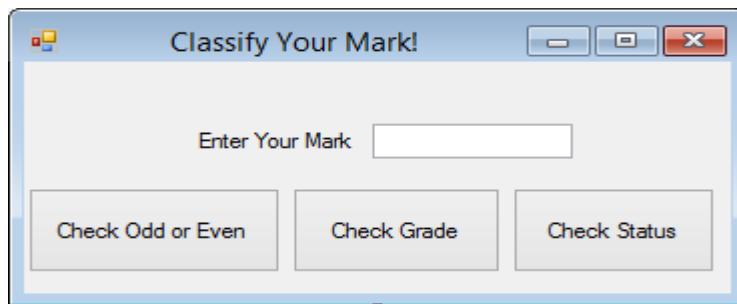
A	a mathematical formula that solves a problem
B	a tempo for classical music played in a code
C	a logical sequence of steps that solve a proble
D	a tool that designs computer programs and draws the user interface

Q30 Identify the value that will be assigned to the numeric variable x when the following statement x = 2 + 3 * 4 is executed.

A	20
B	14
C	92
D	234
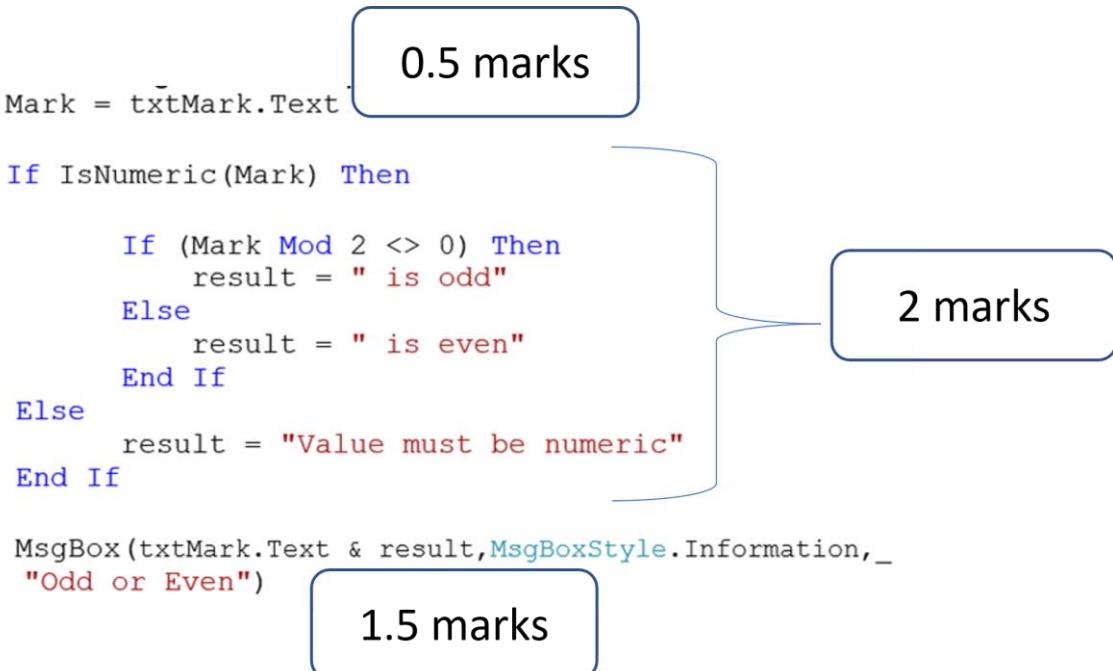
SECTION B (20 MARKS)

Q31 Write a program that will display a decision in a message box for the mark entered by the user at a Text Box called `txtMark` as per form and condition given below .

Classify Your Mark!
Enter Your Mark [   ]
Check Odd or Even   Check Grade   Check Status

(a) Write the code for the first button `btnOddEven`, using If-ElseIf statements that will classify whether the mark is an odd or even number.

(4 marks)

```
Mark = txtMark.Text                    0.5 marks

If IsNumeric(Mark) Then

        If (Mark Mod 2 <> 0) Then
            result = " is odd"
        Else                               2 marks
            result = " is even"
        End If
    Else
        result = "Value must be numeric"
End If

MsgBox(txtMark.Text & result,MsgBoxStyle.Information,_
    "Odd or Even")
                                        1.5 marks
```

(b) Write the code for the second button `btnGrade`, using If-ElseIf statements that will display the grade received, whether it is "A", "B", "C" or "D" based on table below.

Marks	Grade
80 to 100	A
60 to 79	B
40 to 59	C
Less than 40	D

(8 marks)

```
Mark = txtMark.Text          [0.5 mark]
  If Mark >= 80 And Mark <= 100 Then      [1 mark]
      Grade = "A"
  ElseIf Mark >= 60 And Mark < 80 Then    [1 mark]
      Grade = "B"
  ElseIf Mark >= 40 And Mark < 60 Then    [1 mark]
      Grade = "C"
  ElseIf Mark >= 0 And Mark < 40 Then     [1 mark]
      Grade = "D"
  Else
      Grade = "Out of Range"              [1 mark]
  End If

MsgBox("You Grade is"&Grade,MsgBoxStyle.Information, "Grade")   [2.5 mark]
```

(c) Write the code for the third button `btnStatus`, using Select Case statement that will display a messages of based on table below.

Marks	Status
0 to 49	Need to work harder
50 to 59	Average
60 to 69	Above Average
70 to 84	Good
85 to 100	Excellence

(8 marks)

```
Mark = txtMark.Text   [0.5 mark]
Select Case Mark
      Case 0 To 49
          Status = "Need to work harder"      [1 mark]
      Case 50 To 59
          Status = "Average"                  [1 mark]
      Case 60 To 69
          Status = "Above Average"            [1 mark]
      Case 70 To 84
          Status = "Good"                     [1 mark]
      Case 85 To 100
          Status = "Excellence"               [1 mark]
      Case Else
          Status = "Wrong entry, please reenter the mark"   [1 mark]
  End Select

  MsgBox(Status, MsgBoxStyle.Information, "Status")   [1.5 mark]
```

-END OF QUESTIONS –