30.

(University of Choice)

MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY (MMUST)

MAIN CAMPUS

UNIVERSITY EXAMINATIONS
2022/2023 ACADEMIC YEAR

FIRST YEAR FIRST SEMESTER EXAMINATION
FOR THE DIPLOMA IN IT

COURSE CODE: DIT 052

COURSE TITLE: RAPID APPLICATION DEVELOPMENT

DATE: 14/04/2023   **TIME**: 2:00-4:00PM

INSTRUCTIONS TO CANDIDATES

- Answer **Questions ONE** and **ANY OTHER TWO**.

TIME: 1 Hour 30 Mins

MMUST observes ZERO tolerance to examination cheating

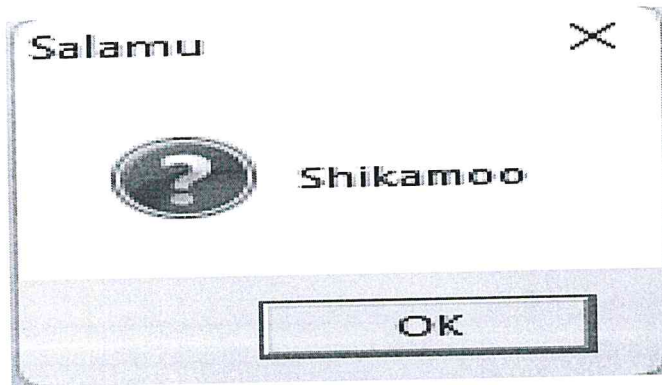This Paper Consists of 3 Printed Pages. Please Turn Over. ▶

Question #1:

a) Define the following terms as they are used in visual basic   [3Marks]

    a. Loop

    b. Variable

    c. Constant

b) Explain the use of the following controls in VB programming   [4Marks]

    i.   Label

    ii.   Textbox

    iii.   Option button

    iv.   Frame

    v.   Timer

c) Use a For Next loop to write a program that prints even numbers between 1 and 21   [4Marks]

d) List and explain any two properties of Adodc control   [2Marks]

e) How does a list box differ from a combo box?   [2Marks]

f) State any THREE Data types in VB and give examples of each   [3Marks]

g) Distinguish between an inputbox and a message box in vb   [2Marks]

h) Using with end with loop in vb, write a program that assigns a label1 the following properties

    i.   Caption=your name

    ii.   Font=arial

    iii.   Back ground color=Blue

    iv.   Font color=white   [4Marks]

SECTION B

Question 2 [18 Marks]

a) Ken wants to write a program to add two numbers in a Visual basic program. Declare variables that he might use in the program   [3Marks]

b) Comment are important part of coding. Explain with an examples how comments can be written in Vb?   [4Marks]

c) Write a visual basic code that displays the following message box   [4Marks]

Salamu ✕

? Shikamoo

OK

d) Explain three uses of comments in visual basic programming [3Marks]

e) Differentiate between the following [4Marks]

    i.   Text box and Label

    ii.   Combo box and list box

Question 3 [18 Marks]

a) The following table shows a grading system used by Swinang Academy

Score	Grade
0-39	D
40-59	C
60-79	B
80-100	A

Write a visual Basic program that accepts Score using a textbox say text1 and displays the grade on a label4 when a command button is clicked [7Marks]

b) Consider the following code

```
Dim num as integer
For num = 35 To 27 step -1

Form1.Print num

Next
```

Write the output of the above code [3Marks]

c) Name two disadvantages of visual programming [2Marks]

d) In a lottery game there are only TWO winning numbers 2 and 9. Using select statement write a visual basic program to which accepts a number and displays whether it's a winning number or not on a message box [6Marks]

Question 4 [18 Marks]

a. Assume Mpesa Withdrawal charges are as follows

Amount	Charges
Less than 500	27
501 to 2500	28
2501 to 5000	51
Above 5,000	72

Write a visual basic program using case statement that accepts Amount using an input box and then displays the amount charged on a message box [7Marks]

a. The following is a vb code

Dim x as String
x=inputbox("How are You", "Nakusalimia")

Sketch what will be printed when the code is executed [3Marks]
b. Explain the use of the following controls in vb [3Marks]
  i. Adodc
  ii. Option Button
  iii. Check box
c. What action is performed by the following codes [5Marks]
  i. Form1.Caption = "Stop Watch"
  ii. List4.AddItem Text1.text
  iii. Label2.Caption ="Green Text"
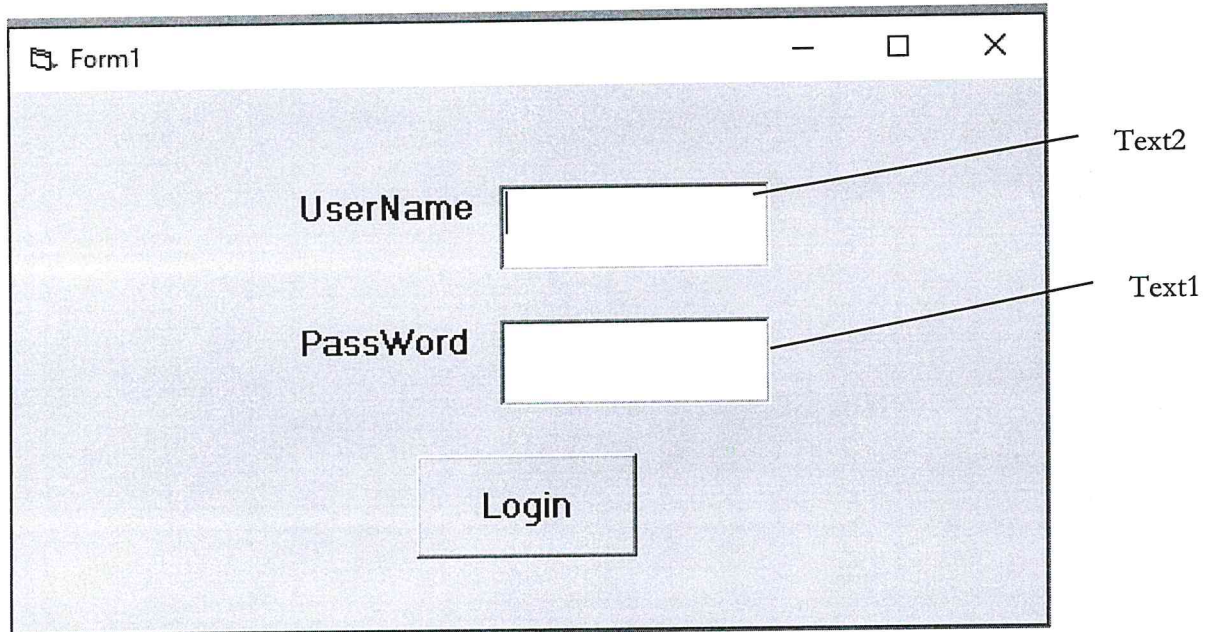 iv. Frame.Backcolor=vbMagenta
  v. Check1.Enabled = True

Question 5 [18 Marks]

a. State whether each of the following variable declaration are valid or invalid giving a reason for your answer [5Marks]
  i. Dim string as string
  ii. Dim answer_123 as integer

iii. Dim &number as integer

iv. Dim aREA as float

v. Dim string as name

b. Consider the following Login form

Write the code for the login button assuming that the table connected has username and password fields. If a user enters the correct details then a message box displays "Login Success" else "Wrong username/password"   [5Marks]

c. The following is variable declaration and assignment segment in visual basic program

Dim a, b, c, d as integer

Dim x as double

a=8

b=5

c=7

d=1

Determine the value of x in each of the following assignment statements

i. x=b^d/2-c   [2Marks]

ii. x=a mod 2/b*c   [2Marks]

iii. x=a+b*c/b*a   [2Marks]

iv. y=c/d+a^c/*b   [2Marks]