(University of Choice)
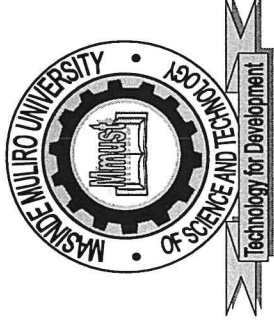
MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY (MMUST)

MAIN CAMPUS

UNIVERSITY EXAMINATIONS
2021/2022 ACADEMIC YEAR

FIRST SEMESTER EXAMINATIONS

FOR THE DIPLOMA
IN
INFORMATION TECHNOLOGY

COURSE CODE: DIT 052

COURSE TITLE: RAPID APPLICATION DEVELOPMENT

DATE: 27/04/2022 **TIME:** 12:00 – 2:00PM

- Answer Questions ONE and ANY OTHER TWO.

TIME: 1Hour 30Mins

MMUST observes ZERO tolerance to examination cheating

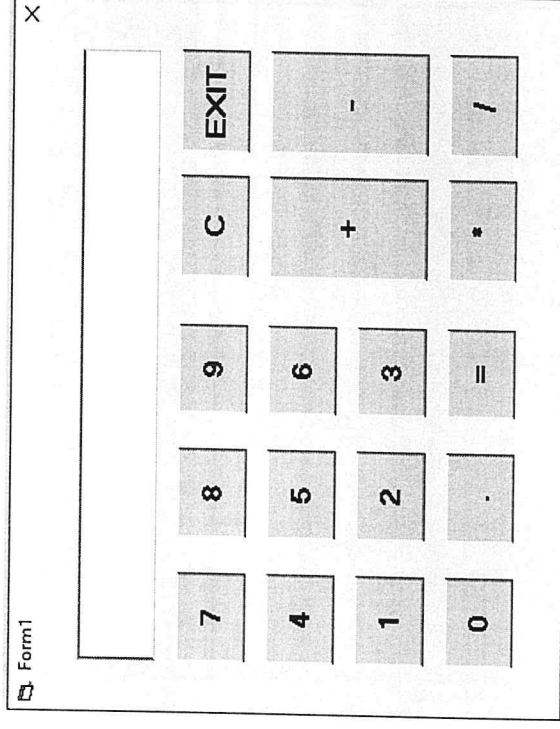This Paper Consists of 4 Printed Pages. Please Turn Over. ▲

SECTION A [24MARKS]

#Question 1[24Marks]

a) Explain how you save a project in VB   [2Marks]

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

c) Write an event procedure using a Do Until loop that prints numbers from 13 and 0 on a picture box (picture1)   [4Marks]

d) Explain the use of the following controls in VB

    a. textbox

    b. timer

    c. checkbox

    d. list box   [4Marks]

e) For each of the controls above give two properties   [4Marks]

f) Given label1. Write a code that will:-

    i. change the fore color of the label to blue

    ii. change the back color of the label to yellow

    iii. change the caption of the label to " VB PROGRAMMING"

    iv. set the font size to be 60   [4Marks]

g) Explain TWO ways how comments are written in VB   [2Marks]

h) Explain debugging as used in VB   [2Marks]

SECTION B

Question 2 [18 Marks]

a) Explain with an examples how comments can be written in Vb?   [4Marks]

b) Consider the calculator below

Form1

7	8	9	C	EXIT
4	5	6	+	-
1	2	3	=	*
0	.			/

i. Write the code for all the buttons [10Marks]

ii. Explain how you will lock the answer textbox and left align it [2Marks]

iii. Modify code for the exit button so that it requires confirmation before closing the program [2Marks]

Question 3 [18 Marks]

a) With the aid of a diagram and code explain how you can make a simple stop watch [6Marks]

b) Consider the form below

```
┌─────────────────────────────────── Form1 ─── — □ ✕ ─┐
│                                                       │
│  Fisrt Name     [_____]         Text1      │
│                                                       │
│  Last Name      [_____]         Text2      │
│                                                       │
│  Reg No         [_____]         Text3      │
│                                                       │
│  Date of Birth  [_____]         Text4      │
│                                                       │
│              ┌──────────┐                             │
│              │   SAVE   │                             │
│              └──────────┘                             │
│         ┌─────────────────────┐                       │
│         │ ◄ ◄ Adodc1  ▲  ▲ ►  │                       │
│         └─────────────────────┘                       │
└───────────────────────────────────────────────────────┘
```

i. Write an event procedure for the SAVE command to save the details of the form to the database (7mks)

ii. Write a code that sets focus in the first textbox (1mks)

iii. Write an event procedure to test if text1 is black and returns a message (2mks)

iv. Write another event procedure that tests if text1 contents are alphabets only and displays a message (2mks)

Question 4 [18 Marks]

a) What is the meaning of an array in VB? Give an example of how an array of I-D is declared [4Marks]

b) Write VB codes that adds the following items to a List box named List1 [Milk, Mala, cheese, yogurt] [4Marks]

c) Explain what the following code does [4Marks]

```
Private Sub Command1_Click()

    If Option1.Value = True Then

    MsgBox("Oh you are a " & Option1.Caption)

    ElseIf Option2.Value = True Then

    MsgBox("You are a " & Option2.Caption)

    Else:

    MsgBox(" You have chosen to conceal!")

    End If
```

d) Draw and design of a simple form with the above details in VB   [2Marks]

e) Write an event procedure using a Do While loop that prints even numbers between 1 and 30 on a picture box (picture1)   [4Marks]

Question 5 [18 Marks]

a. Design a simple form with student details: Regno, Firstname, Lastname, Gender and Date of Birth   [3Marks]

b. Which controls can be used to insert the following in the above form?   [1Mark]

   i.   Gender

   ii. Date of Birth

c. Assume you intent to connect the above form to an access database. Describe all the steps involved in the connection   [5Marks]

d. Design a simple login form with username and password and write login code that sets username as 'admin' and password as '5454' and will give a massage whether login is successful or failed.   [4Marks]

e. Write an event procedure using a Do Until loop that prints Odd numbers between 1 and 30 on a picture box (picture1)   [4Marks]