## UNIVERSITY EXAMINATION 2017/2018

## YEAR III SEMESTER II EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY BIT 2118: APPLICATION PROGRAMMING I

INSTRUCTIONS
Answer Question One and any other two questions

## SECTION ONE <br> QUESTION ONE [30 MARKS]

a) Explain THREE properties of an object (6 marks)
b) Write a VB program to display "Welcome to Visual Basic tutorial" message. (6marks)
c) Write down the output generated by the following VB code segment. (4 marks)

Private Sub Form_Activate ()
Print $20+10$
Print 20-10
Print 20 * 10
Print 20 / 10

## End Sub

d) Outline THREE steps in Building a Visual Basic Application (3 marks)
e) Write a VB code that can allow input of two numbers in a text controls and display results
in a label control (6 marks)
f) Define the following terms (5 marks)
i. Event
ii. Event- driven
iii. Method
iv. Interface

## SECTION TWO

QUESTION TWO [20 MARKS]
a) Outline the varies steps to follow to make a GUI and database connection [6 marks]
b) Using a two-dimension array and selection sort algorithm, rearrange the following numbers from the smallest to biggest number. 23, 2, 3, 34, 6. [14 marks]

## QUESTION THREE [20 MARKS]

a) Name the following list of arithmetic operators and give example on how they are used. (10 marks)

Operators
i. ${ }^{\wedge}$
ii. *
iii. /
iv. Mod
v. $\$
b) Rewrite the following Case program using IF..Then..Else control structure (10 marks)

Dim mark As Single
Private Sub Compute_Click()
'Examination Marks
mark $=$ mrk.Text
Select Case mark
Case 0 to 49
comment.Caption = "Need to work harder"
Case 50 to 59
comment.Caption = "Average"
Case 60 to 69
comment.Caption = "Above Average"
Case 70 to 84
comment.Caption $=$ "Good"
Case Else
comment.Caption $=$ "Excellence"
End Select
End Sub

## QUESTION FOUR [20 MARKS]

a) Write the syntax of a If.....Then.....Else control structure (5 marks)
b) Write a program using for... Next loop to generate you name 10 times (5 marks)
c) Other than textbox and label list and state the properties of control found in the tool box.
(10 marks)

## QUESTION FIVE [20 MARKS]

a) Design a graphical user interface with one textbox and a command button. Write a click event code that does the following when button is clicked. [6 marks]
i. display the word "Hello Mark" on the textbox
ii. Button caption changes to "OK"
iii. Form caption changes to "Microsoft"
b) Write a program code that uses for loop control to access five contents of one dimension array and multiply each content by 2 before printing it. [14 marks]

