CHUKA   **UNIVERSITY**

UNIVERSITY EXAMINATIONS

RESIT/SPECIAL EXAMINATION

EXAMINATION FOR THE AWARD OF CERTIFICATE IN COMPUTER SCIENCE

COSC 00107: APPLICATION PROGRAMMING

STREAMS: CERT COMP SCI Y1S2   **TIME: 2 HOURS**

DAY/DATE: TUESDAY 10/08/2021   **8.30 A.M. – 10.30 A.M**

INSTRUCTIONS:
- Answer question **ONE** and **TWO** other questions
- Do not write anything on the question paper
- This is a **closed book exam**, No reference materials are allowed in the examination room
- There will be **NO** use of mobile phones or any other unauthorized materials
- Write your answers legibly and use your time wisely.
- Marks are awarded for clear and concise answers.

SECTION A (Answer ALL questions in this section)

QUESTION ONE (30 Marks)

a) State the function of each of the following widgets in a visual basic program (8 marks)
- I.   Check box
- II.   Textbox
- III.   List box
- IV.   Combo box

b) Outline two advantages of a visual basic programming language.   (2 marks)

c) Define a user interface   (2marks)

d) State any five difference between an GUI and a CLI   (5 marks)

e) Explain 4 elements found in graphical user interface   (4marks)

f) Name any three events in VB.NET   (3 marks)

g) Write Visual basic code that displays the text "Hello World" on a form   (6 marks)

SECTION B (Answer any TWO questions)

QUESTION TWO (20 Marks)

a) Under what circumstance would each of following errors occur in visual basic programming

    i.   Syntax errors   (2 marks)
    ii.   Run-time errors   (2 marks)
    iii.   Logic errors   (2 marks)

b) Write Visual basic code that displays the text "Hello World" on a form. (4 marks)
c) With the aid of an example ,explain the purpose of library functions in a Visual Programming Language (8 Marks)

QUESTION THREE (20 Marks)

a) Explain the term event driven programming languages (2 marks)
b) Write a visual Basic program that accepts five values through the use of input box function .the program should then determine the average and its appropriate grade .The average and grade should be displayed on a form. Use if....else if...else statement. (8 marks)
c) Distinguish between Visual programming and object-oriented programming (4 marks)
d) Outline each of the following events of a command button as used in visual programming

    (6marks)

    i.   MouseHover
    ii.   KeyPress
    iii.   MouseDown

QUESTION FOUR (20 Marks)

a) Explain the function of each of the following visual basic programming tools
    i. Menu bar   (2 marks)
    ii. Context menu   (2 marks)

b) Write Visual basic code that displays the text "my first code in VB.net" on a form. (5 marks)
c) Identify any THREE variables in the Visual Basic code below: (6 marks)

```
Private Sub cmdCompute_Click ()
pinResults.Cls speed = 80
timeWasted= 20
distance = speed * timeWasted
pinResults.Print distance
distance = 1000
timeElapsed = distance / speed
pinResults.PrinttimeElapsed
```

End Sub.

    d) List and explain any 5 types of user interfaces   (5marks)

QUESTION FIVE (20 Marks)

    a) Distinguish between Do…..while and Do…..until loop as used in visual basic programming.   (3marks)

    b) Assuming that the company you work for has asked you to identify a programming software to develop a payroll system. State four likely reasons that would lead you to choose visual basic programming language.   (8 marks)

    c) Name any three events in VB.NET   (3 marks)

    d) Explain the function of each of the following types of procedures in Visual Basic. (4marks)

        i. Function procedure

        ii. . Event procedure