THE CATHOLIC UNIVERSITY OF EASTERN AFRICA
A. M. E. C. E. A

GABA CAMPUS - ELDORET

MAIN EXAMINATION

JANUARY – APRIL 2023

FACULTY OF SCIENCE

DEPARTMENT OF COMPUTER AND INFORMATION SCIENCE

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

CMT 307 .NET PROGRAMMING

DATE: April 2023	Duration: 2 Hours
INSTRUCTIONS: Answer Question ONE and any other TWO Questions	

Q1.

a) Define the following terms; **(4 Marks)**

    i) .Net

    ii) .Net Framework

    iii) Variable

    iv) Object

b) Explain components of .Net Framework **(6 Marks)**

c) Giving example for each differentiate between global variable and local variable **(6 Marks)**

d) Discuss the procedure of connecting Visual basic.Net form to a database **(7 Marks)**

e) Write a program in VB.Net using IF---ELSEIF---ELSE statement to display grades as follows; **(7 Marks)**

75 and above	A
55-74	B
45-55	C
31-44	D
30 and below	E

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Q2.

    a) List controls in Visual Basic.Net **(5 Marks)**

    b) Explain architecture of .Net Framework in VB.Net **(8 Marks)**

    c) Write a program to display student's Marks for CAT1 and CAT2, use the operators in your program to calculate the following; **(7 Marks)**

            i) Total value for two CATs

            ii) Average for two CATs

            iii) Multiply CAT1 by CAT2

Q3.

    a) Write syntax for declaring a variable and explain each part **(6 Marks)**

    b) Write a program to display a message "Welcome to CUEA- Gaba campus" when you click a command button and also displays your name in a textbox **(6 Marks)**

    c) Write a program using switch case in Visual Basic.Net **(8 Marks)**

Q4.

    a) Outline events you can use in Visual Basic.Net **(5 Marks)**

    b) Write a program using controls to display student's information when you load a form as follows; **(8 Marks)**

            i) First Name- Bob

            ii) Surname- Zawadi

            iii) Admission Number- 1020203

            iv) Telephone Number- 0110999999

    c) Write a syntax for displaying properties in a form and write a program to change any three properties in a control **(7 Marks)**

Q5.

    a) List any five data types you can use in Visual Basic.Net **(5 Marks)**

    b) Write a program to calculate circumference of a circle given pi = 3.14 as constant value and diameter be a value of your choice **(6 Marks)**

    c) Write a VB.Net program using Do----While loop **(5 Marks)**

    d) List rules you can follow when naming variables **(4 Marks)**

END

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