

**W1-2-60-1-6**

JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

# **UNIVERSITY EXAMINATIONS 2016/2017**

EXAMINATION FOR THE DIPLOMA IN DESKTOP APPLICATIONS

**DIT 0303 : PROGRAMMING DESKTOP APPLICATIONS**

**DATE: APRIL 2017 TIME: 1.30 HOURS**

**INSTRUCTIONS:**

**ANSWER QUESTION ONE [COMPULSORY] AND ANY OTHER TWO QUESTIONS**

**==========================================================**

**QUESTION ONE [COMPULSORY][30 MARKS]**

1. Define the following terms as used in programming
2. Data types [1 mark]
3. Variables [1 mark]
4. Identifiers [1 mark
5. Constants [1 mark]
6. Desk top application [1 mark]
7. Highlight four features that make CB NET a widely used programming language [4 marks]
8. Describe the syntax for the following selection control structures
9. If - Then [2 marks]
10. If - Then else [2 marks]
11. Using a for loop, write a VB Net program that will be used to displace odd numbers between 20 and 50 [3 marks]
12. State at least four components of a VB Net integrated development environment [2 marks]
13. Write a visual basic Net program that would prompt a user to enter two integers through a text box. The program should then check which of the two integers is larger and subtract the smaller integer from the larger integer. The program then displays the result on a label. Attach the code to a command button click event [5 marks]
14. Given that X=5 and Y= 2, evaluate each of the following VB-Net expressions

(i) X-0.8/Y+(Xx2) [2 marks]

(ii) X-Y><5 and Y<> X –YA2 [2 marks]

1. Write a VB-Net program that promotes a user to enter a name of a student. The program then accepts the marks of the student in five subjects and computes the average mark. The program then displays the name and average mark of the student through the use of text boxes. Attach the code to a command button click event [3 marks]

**QUESTION TWO**

1. With the aid of a diagram differentiate the use of do while and do until iteration control structure [8 marks]
2. State and explain four unary operations used in VB Net [7 marks]

**QUESTION THREE**

1. State five variables namely conventions in programming [5 marks]
2. Write a VB net program that accepts two numeric values and an operator (t or \* or 1 or -) through the use of textboxes and then perform the appropriate operation. The program should then display the answer on a label. Use select case construct to determine the operation [10 marks]

**QUESTION FOUR**

1. State and explain three categories or control structures as used in VB Net [6 marks]
2. Differentiate between a structure and a function as used in programming [4 marks]
3. Highlight at least three differences between pass by value and pass by reference as used in VB Net [5 marks]