THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE

ADVANCE CERTIFACATE IN INFORMATION

TECHNOLOGY (ACIT)

FINAL EXAMINATIONS

APRIL/MAY 2010 SERIES

VISUAL BASIC PROGRAMMING

TIME: 2 hours

INSTRUCTIONS TO CANDIDATES

1. This paper consists of **TWO** Sections: **A** and **B**.
2. **Section A** has a total of 30 Marks. Answer **ALL** Questions from this section.
3. **Section B** has **FOUR** Questions of 20 Marks each.
   Answer any **TWO** Questions from this section.

SECTION A (30 MARKS) - COMPULSORY

Question ONE

(a).   Describe the procedure in creating a Visual Basic application.**(6 Marks)**

(b).   State any **THREE** numeric data types used in visual basic.   **(3 Marks)**

(c).   Explain the function of any **THREE** windows contained in the visual basic intergrated development environment (IDE).   **(6 Marks)**

(d).   State visual basic rules for naming variables.   **(3 Marks)**

(e).   Identify any **THREE** controls in visual basic.   **(3 Marks)**

(f).   Write a visual basic code to calculate TOTAL and AVERAGE of mark of FOUR subjects.   **(6 Marks)**

(g).   List any **THREE** arithmetic operators.   **(3 Marks)**

Section B (40 MARKS) ANSWER ANY TWO QUESTIONS

Question TWO

(a).   Explain the purpose of the following controls:

    (i).   Text box
    (ii).   Command button
    (iii).   Check box
    (iv).   Option box

    (8 Marks)

(b).   Explain any **FOUR** non numeric data types available in visual basics.   **(8 Marks)**

(c).   Write visual basic code to display the following options in a combo box named programs. "Visual Basic", "Pascal", "ctt", "fox pro".   **(4 Marks)**

Question THREE

(a).   Describe the following program design tools:

    (i).   Pseudocope
    (ii).   Flow Chart

    (6 Marks)

(b).   Explain **THREE** control structures in Visual Basic giving on example in each where applicable.   **(8 Marks)**

(c).   Develop a visual Basic code to output the following:

```
1
2    2
3    3    3
4    4    4    4
5    5    5    5
```
(6 Marks)

Question FOUR

(a).   Explain the following concepts as applied to Visual Basic:

(i).   Event
(ii).   Properties
(iii). Method
(6 Marks)

(b).   Describe any **FOUR** numeric data types used in Visual Basic.
(8 Marks)

(c).   Rewrite the following code using select structure:

If $x = 1$ then choice "A"
If $x = 2$ then choice "D"
If $x = 3$ then choice "C"
(4 Marks)

(d).   State the differences between **If/Then/Else** and **Select** case selection
structures.   **(2 Marks)**

Question FIVE

(a).   Describe the following properties of objects as used in Visual Basic.

(i).   Name
(ii).   Captain
(iii). Enabled
(6 Marks)

(b).   Describe the following terms as applied in IS management.

```
*
*    *
*    *    *
*    *    *    *
*    *    *    *
```
(4 Marks)

(c).   Write a single statement to accomplish each of the following:

   (i).   Explicitly declare the variables c;, ventor and num to be of type Integer.
   (ii).   Assign "Hello!" to the label lbeGreeting.
   (iii).   Assign the sum x, y and z to the variable sum. Assume that each variable is of type integer.
   (iv).   Assign the product of the integer variables r, i, m, e and s to the variable g.

(4 Marks)

(d).   Using flow charts, explain the **THREE** selection structures in Visual Basic.

(6 Marks)