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”, “C++”, “fox pro”. **(4 Marks)**

Question THREE

(a). Describe the following program design tools:

(i). Pseudocode
(ii). Flow Chart **(6 Marks)**

(b). Explain **THREE** control structures in Visual Basic giving an 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 lblGreeting.

(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)**