WOMEN'S UNIVERSITY IN AFRICA

Addressing gender disparity and fostering equity in University Education

FACULTY OF MANAGEMENT AND ENTREPRENEURIAL SCIENCES

BSc HONOURS DEGREE IN INFORMATION SYSTEMS

BSc HONOURS DEGREE IN COMPUTER SCIENCE

MAIN PAPER

IS122: **VB.NET**

HCS121: **VISUAL LANGUAGES AND PROGRAMMING**

INTAKE 26: **FIRST YEAR SECOND SEMESTER**

INTAKE 2: **FIRST YEAR SECOND SEMESTER**

TIME: 2 HOURS AFTERNOON

INSTRUCTIONS TO CANDIDATES

Answer any **four** questions.

QUESTION 1

a) Explain the following controls in programming

      i.   Textbox;

      ii.   Listbox and combobox;

      iii.   Radio button; and

      iv.   Checkbox   [8]

b) Define the following terms as used in VB.NET programming

      i.   Variable;   [2]

      ii.   Readline and writeline;   [4]

      iii.   Syntax;   [2]

      iv.   Function;   [2]

      v.   Encapsulation; and   [3]

      vi.   Constructor and Destructor   [4]

QUESTION 2

a) Explain using examples any two control structures as used in VB.NET programming. [12]

b) Write a console program that will ask for 10 numbers. The program will then display the sum of these numbers and the average.   [13]

QUESTION 3

a) Write a program that enters the length, width and depth of a rectangle swimming pool. Calculate the volume of water required to fill the pool and display this volume.   [15]

b) Write a program that displays random numbers between 1 and 6 until a six is generated.

      [10]

QUESTION 4

a) (i) Explain Built in Dialog Boxes?   [4]

    (i) Discuss File Handling & Directory Handling in detail?   [4]

    (ii) Explain the Components of ADO.Net?   [4]

    (iii)Write the procedure to Access the Databases in VB.net using Database Explorer? [4]

    (iv)What is Exception Handling explain with example?   [4]

b) Write a console application that asks for your forename and then your surname and then displays both names on the same line   [5]

QUESTION 5

a) Write a console application that calculates the area and circumference of a circle where radius is entered of a circle where pi is declared as a constant [10]

b) Write a console program that asks for three numbers and then displays the largest of the three numbers [10]

c) Write a program that displays all numbers between 1 and 10 000 [5]

QUESTION 6

Using snippets of code explain how files are accessed using the StreamReader and StreamWriter classes. [25]

END