JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS

DEPARTMENT OF COMPUTER SCIENCE & SOFTWARE ENGINEERING

UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF **BUSINESS ADMINISTRATION WITH IT**

1ST YEAR 1ST SEMESTER 2015/2016 ACADEMIC YEAR

(NAIROBI LC)

COURSE CODE: SCS 101

COURSE TITLE: VISUAL BASIC PRORAMMING

EXAM VENUE: 9TH FLOOR

DATE:11:30- 01:30PM

EXAM SESSION:

TIME: 2HRS

INSTRUCTIONS

1. Answer Question 1 (Compulsory) and ANY other TWO questions
2. Candidates are advised not to write on the question paper
3. Candidates must hand in their answer booklets to the invigilator while in the examination room

Question 1   (30 marks)

a) Discuss some of the following visual basic programming components.

    i. Textboxes

    ii. Labels

    iii. Buttons

    iv. Picture boxes

    v. Checkboxes   (5 marks)

b) In VB programming explain the differences between Global Variable and Local Variable   (4 marks)

c)   Explain three advantages of Visual basic as a high –level language.

(3 marks)

d) Define what an Event driven programming language.

(2 marks)

e)   Explain using examples the usage of any three operators and precedence's to access modifiers in programming language.   (6 marks)

f) Outline and Explain **THREE** of each of any type of **DATA TYPES** used VB programming languages.   (6 marks)

g) A Dim statement is used to declare a variable and the data type from which its values are assigned, using example use Dim to declare variable and data type.

(4 marks)

Question 2 - (20 marks)

a) Explain the term **control structures** as used in VB programming.   [2 marks]
b) With the aid of flowchart constructs, describe each of the following control structures:
   i)   Selection
   ii) Sequence
   iii) Iteration   [12 marks]
c) Write a VB programming code that compute the sum of the two natural numbers.
                                                                              [6 marks]

Question 3 - (20 marks)

a) Write an assignment statement that assigns the variable iNum to 1 and iSum to 5.

b) Write a Visual Basic code that displays the string "HELLO WORLD" on OUTPUT.

                                                                              (6 Marks)

c) Explain the programming errors found when coding Visual basic   (6 marks)

Question 4 – (20 marks)

a) Describe the term **data structure** as used in programming   [2 marks]
b) Outline any FOUR *data structures* recognized in programming   [8 marks]
c) Distinguish between *compiling* and *testing* in reference to programming   [4 marks]
d) Write a statement to declare an integer type two dimensional array namely Table. The Table array consists of 3 row elements and 2 column elements.   [6 marks]

Question 5 – (20 marks)

a) Explain any THREE reasons for algorithm analysis.   [6 marks]
b) Outline the steps in the system development life cycle in their logical sequence.
                                                                              [6 marks]

c) Write a Visual basic code that Convert using fahrenheitTemp = 1.8*celsiusTemp+32
                                                                              [4 marks]
d) Differentiate between Optional Explicit and Option Strict   [4 marks]