MURANGA UNIVERSITY COLLEGE

(A constituent College of Jomo Kenyatta University of Agriculture & Technology)

MAIN CAMPUS

SUPPLEMENTARY UNIVERSITY EXAMINATIONS

2014/2015 ACADEMIC YEAR

FIRST YEAR SECOND SEMESTER EXAMINATIONS

FOR THE DEGREE
OF
BACHELOR OF BUSINESS INFORMATION TECHNOLOGY (BBIT)

COURSE CODE: ICS2102

COURSE TITLE: INTRODUCTION TO COMPUTER PROGRAMMING

DATE: 7TH AUGUST 2015 **TIME: 2.00-4.00PM**

INSTRUCTIONS TO CANDIDATES

Question ONE (1) is compulsory
Answer THREE (3) questions

MRUC observes ZERO tolerance to examination irregularities

Question One

a) Outline the rules followed when writing scanf() statements in C programming. (6 marks)

b). By use of C programming language, write a program to call a function which returns the cube of a given number. (8 marks)

c) Define the following terms used while programming using C language. (6 marks)

i). Algorithm;

ii). Portability of a program.

iii). Recursion

d).Using examples of C program statements demonstration how While …. and Do ….. While are used while programming. (6Marks)

e). Differentiate between a reserved word and identifier in C programs and state two examples of each. (4 Marks)

Question Two

a) Using a *for loop*, write a C program to print multiplication tables from 1 to 5. (10 marks)

bi). Justify the use of functions while writing computer programs. (2 marks)

ii) Explain the following in relation to functions in C programs (8 marks)

I. User defined function
II. Function prototype
III. Local variable
IV. Structure

Question Three

a). Write a C program to calculate the average of a set of N numbers. (10 Marks)

b) Outline the stages during the compilation process of a C program. (10 marks)

Question Four

a). List four characteristics of a good Algorithm (4 Marks)

b). With examples, outline the elements necessary while declaring structure variables in C programming. (6 marks)

c) Write a program section using the "else .. if " to display the following grading system of an academic institution. (10 marks)

Average Marks	**Grade**
80 to 100	Honours
60 to 79	First Division
50 to 59	Second Division
40 to 49	Third Division
0 to 39	Fail