MURANG'A UNIVERSITY COLLEGE

(A Constituent College of Jomo Kenyatta University of Agriculture and Technology)

University Examinations 2015/2016

FIRST/SECOND YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN HUMAN RESOURCE MANAGEMENT

HBC 2109: FOUNDATIONS OF COMPUTER SYSTEMS

COURSE: B.Sc. HRM **TIME: 2HRS**

DAY/TIME: 9.00-11.00PM **DATE: 22ND APRIL 2016**

Instructions: Answer Question 1 and Any Other Two.

QUESTION ONE (30mks)

a) Define the following terms. (6mks)

i. Computer

ii. Computer hardware

iii. Bit

iv. Byte

v. Data

vi. RISC processor

b) Microsoft office suite offers several programs that help in word processing, spreadsheet processing, and presentation among other things. Answer the following questions

i. Describe how you save your assignment in a word document? (2mks)

ii. What is the difference between 'save' and 'save as'? (2mks)

iii. What does 'Formatting' mean as relates to a MS Word processor? (1mk)

iv. What do 'Formulas' do as relates to Excel spreadsheet? (1mk)

v. What is the difference between a bar graph and a pie chart? (2mks)

c) Name and describe four major categories of computers (4mks)

d) Draw a block diagram of a basic computer system. Clearly label and explain the functions of each of the major parts (8mks)

e) Over time there has been various processor generations. What characterized processors of generation one compared of those of generation two (4mks)

QUESTION TWO (20mks)

a) Answer the following

i. What are the categories of computer software? In each case describe what is meant by each category of software (4mks)

ii. A utility program performs a specific task, usually related to managing a computer, its devices, or its programs. Name and describe 4 common utility programs. (4mks)

b) There are several programing language generations

i. Describe what a 3rd generation language (3GL) is. Give an example of such languages. (2mks)

ii. Describe the 1st and 2nd generation languages and how they differ from the 3rd generation language. (3mks)

c) What are 3 design features that have been the characteristics of RISC processors? Give a brief description in each case. (3mks)

d) The performance of various processor types varies and is normally calculated using a common equation.

i. Write down this equation (2mks)

ii. How does CISC utilise the formula compared to RISC in order to optimally operate. (2mks)

QUESTION THREE (20mks)

a) Define the following terms. In each case give two examples. (6mks)

i. Word processor software

ii. Spreadsheet software

b) Computers have various language categories some that require translators

i. What is a computer language translator? (2mk)

ii. Name three kinds of language translators. Indicate what each is used for(3mks)

iii. In each of the language translators named above give 3 advantages in each case (9mks)

QUESTION FOUR (20mks)

a) There are various computer languages just like there are human languages

i. Name and describe the two main classification of computer languages (2mks)

ii. For each of the classification named in question (a) above, give 2 advantages and 2 disadvantages in each case (8mks)

iii. For each of the classification named in question (a) above, give at two examples in each case(4mks)

iv. Convert the following numbers into their binary equivalent? (4mks)

i. 49

ii. 121

v. Convert 00100100 to decimal. (2mks)