MERU UNIVERSITY COLLEGE OF SCIENCE & TECHNOLOGY

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University Examinations 2011/2012

FIRST YEAR, FIRST SEMESTER EXAMINATIONS FOR THE DEGREE OF BACHELOR OF COMMERCE

HBC 2109: FOUNDATIONS OF COMPUTER SYSTEMS

DATE: APRIL 2012   **TIME: 2 HOURS**

INSTRUCTIONS: *Answer question **one** and any other **two** questions*

QUESTION ONE - (30 MARKS)

a) System software consists of programs that co-ordinate the activities of hardware and other programs. Briefly identify four common functions of systems software.   (4 Marks)

b) Distinguish between the following terms
    i.   RAM and ROM
    ii. Touchpad and touch screen
    iii. Internet and extranet   (6 Marks)

c) Choice of storage devices is influenced by different factors. Explain any six of these factors.
                                                                                     (6 Marks)

d) State four advantages of E-mail(Electronic Mail)   (4Marks)

e) Computers can be grouped in several ways. Briefly discuss super computers and mini – computers.   (4 Marks)

f) Compare and contrast Manual and electronic spreadsheets.   (6 Marks)

QUESTION TWO (20 MARKS)

a) A computer file is a collection of information initially created in memory and then stored with a file name on a secondary storage. State and explain six types of computer files.   (6 Marks)

b) Outline the steps on how to start a computer up to the point of typing a personal letter.
                                                                                     (4 Marks)

c) Describe four commonly known application software with suitable examples.   (4 Marks)

d) What are the advantages of using the database-oriented approach of organizing data?
                                                                                     (6 Marks)

QUESTION THREE (20 MARKS)

a) Describe briefly the steps that a programmer has to follow in the program development lifecycle.

(6 Marks)

b) Differentiate between dot matrix and laser printers.   (4 Marks)

c) What is the role of the following features in Microsoft Word?   (4 Marks)

    i.   Word wrap

    ii.   Auto text

    iii.   Thesaurus

    iv.   Page Setup

d) Sheryl realized that the coming up of a new university carried with it business opportunities like typing students projects and developing software for the university among other. She decided to buy a suitable computer and approached you for advice. Kindly advice her on the factors to consider.   (6 Marks)

QUESTION FOUR (20 MARKS)

a) Briefly describe the features of object oriented programming languages giving their advantages.

(6 Marks)

b) Outline the advantages and disadvantages of developing customized software.   (4 Marks)

c) Briefly describe the components that make up the central processing unit (CPU).   (6 Marks)

d) Identify four advantages of document creation with Ms Word as compared to a conventional typewriter.   (4 Marks)

QUESTION FIVE (20 MARKS)

a) Perform the following computations.   (4 Marks)

    i.   Find the decimal equivalent to the hexadecimal number $A2B.D4_{16}$

    ii.   Subtract 1111 from 1100 using complementary method.

b) Outline the advantages and disadvantages of networks.   (6 Marks)

c) Identify six precautions that should be adopted to protect passwords and users against discovery.

(6 Marks)

d) Differentiate between the following terms;   (4 Marks)

    i.   Header and Title

    ii.   Cut and paste and copy and paste