THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

FACULTY OF ENGINEERING

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

DIPLOMA IN ARCHITECTURE 10/
DIPLOMA IN CONSTRUCTION 10
DIPLOMA IN CC/
DBC 10 DCC/DBC 10, HDB 10 , CA 10

INTRODUCTION TO COMPUTER SCIENCE

SEMESTER 1 EXAMINATION
SERIES: APRIL/MAY 2010
TIME : 2 HOURS

Instructions to candidates:

You must have the following for this examination :
- Answer booklet
- Mathematical tables / calculator

This paper consists of **FIVE** questions
Answer question **ONE** from section **A** and any other **TWO** questions from section **B**.

Question ONE

a) i. Define the term computer.

  ii. Briefly discuss the four basic computer operations **(15marks)**

b) Explain why computer is a powerful tool **(3marks)**

c) Define the term "volatile" in the context of computer memory. **(2marks)**

d) Explain the following terms:

- Data

- Information

- Small office / home office (SOHO)

- The power user

- A home user **(10marks)**

Question TWO

a) Briefly explain **FOUR** ways to safeguard safety of computers. **(8marks)**

b) i. State **THREE** categories of computers.

  ii. Briefly describe uses of each of above 2b(i). **(12marks)**

Question THREE

a) Explain how system software interacts with application

  software. **(6marks)**

b) Briefly describe **THREE** causes of virus attack on computers. **(6marks)**

c) Define the following terms:

- Single user/single tasking

- A single user / single tasking

- A multitasking

- A multi-user operating system

- Virtual memory (VM), **(8marks)**

Question FOUR

a) Explain the following terms:
    i)   Arithmetic and logic Unit
    ii)   Control unit
    iii) System Unit   **(6marks)**

b) Distinguish between the following:
    i)   Random Access Memory (RAM) and Read Only
          Memory (ROM)
    ii)   Primary storage and secondary storage   **(4marks)**

c) Briefly explain **FOUR** objectives of an operating system.   **(10marks)**

Question FIVE

a) Many software applications are designed specifically for
    use at home or for personal or educational use. Explain
    any three of these applications.   **(6marks)**

b) Explain the functions of the following devices:
    i.   Optical disks
    ii.   Motherboard
    iii. Network Interface Card
    iv.   Flash memory   **(8marks)**

c) Explain the difference between:
    i.   An impact printer and non-impact printer
    ii.   Graphical User Interface and Textual User Interface. **(6marks)**