# MACHAKOS UNIVERSITY

**University Examinations for 2017/2018**

**SCHOOL OF ENGINEERING AND TECHNOLOGY**

**DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY**

**FIRST YEAR FIRST SEMESTER EXAMINATION FOR THE DIPLOMA OF**

**EDUCATION**

**UCU 0101: INTRODUCTION TO COMPUTERS**

**DATE: 4/12/2017**                                         **TIME: 2.00-4.00 PM**

Instructions:
Answer question ONE and any other TWO questions
Don't write on this question paper

**QUESTION ONE**

a)      Differentiate between OCR and MICR as used in computers.            (4 marks)

b)      Outline **four** reasons why a mobile phone is regarded as a computer        (4 marks)

c)      Explain **three** benefits that the Education industry derives from ICT technologies.

(6 Marks)

d)      You have been requested to advice your manager on different computer Software, briefly
explain, giving examples, the **two** classes of software.                 (4 marks)

e)      Figure 1 show typical features used in word processing programs. State the function of
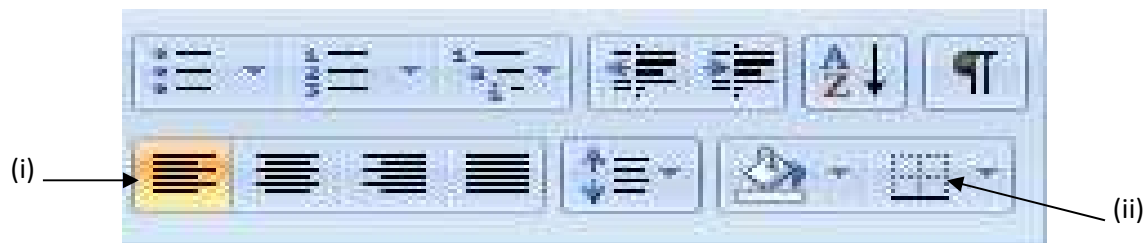each of the features labeled (i) and (ii).                                   (4 marks)



Figure 1

f)    Differentiate the following terms in relation to computers:

      i.     Soft copy and Hard copy

      ii.    Save and Save As

      iii.   Move and copy                                       (6 marks)

g) Outline **four** uses of the internet.                       (2 marks)

## QUESTION TWO

a)    In word processing, *indent* means moving the text away from the margin. Describe **two** types of indents.                (4 marks)

b)    List any **four** input/output devices used on an Automated Teller Machine.    (4 marks)

c)    Differentiate between the following terms as used in word processing:

      i.     Headers and Footers

      ii.    Landscape and portrait orientation              (4 marks)

d)    The table below was prepared by a word processing program; identify four formatting features used to on it.                      (4 marks)

| **BAOBI PARK** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **GAP ANALYSIS PROGRAMME** | | | | | | |
| **30th and 31st March 2014** | | | | | | |
| **DAY** | **8:30 – 10:00** | | **10:30 – 12:00** | | **2:00 -4:00** | |
| **Friday** | Presentation | **HB** | Group Work | **HB** | Group Work | |
| **Saturday** | Plenary | | Group Work | | Plenary | |

e)    A student from MUC wants to create a folder on the desktop to store the above table, state the procedure he/she would use.               (4 marks)
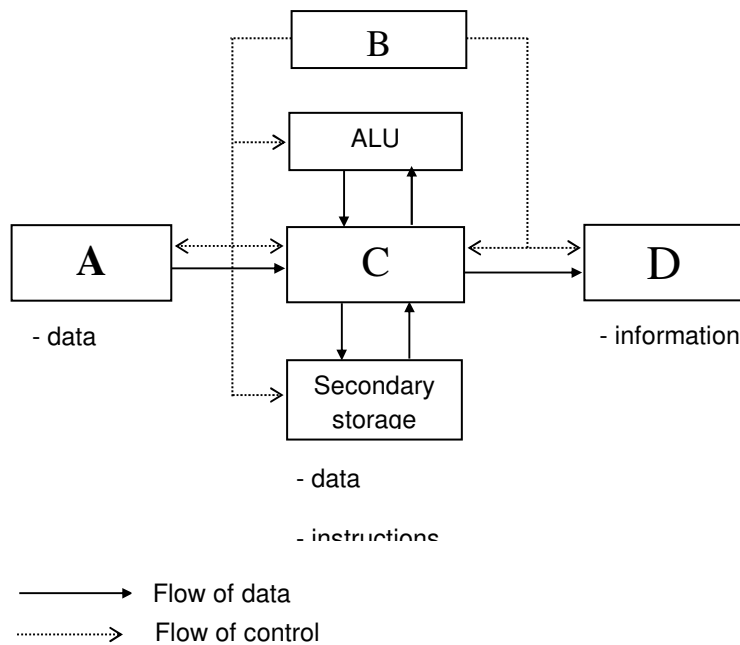
## QUESTION THREE

a)    Explain each of the following terms as used in computer software:

      i.     Compatibility;

      ii.    Portability.                            (4 marks)

b)    An export company has decided to computerize their operations; they have decided to buy computer packages instead of developing their programs. Describe **three** benefits they are going to realize from their decision.            (6 marks)

c)      Imagine you are a computer consultant, a client approaches you to advise him/her on the type of operating system to use on his/her computer:

     i.      Describe the term *operating system*.                                           (2 marks)

     ii.     Describe **two** types of operating system according to the number of users it supports.                                                                                      (4 marks)

d)      Outline **four** functionalities/operations of a mouse.                    (4 marks)

## QUESTION FOUR

a)      Mutiso is a businessman from Kitui town and intends to automate his business. Describe the factors he would consider before purchasing the computers to use.       (6 marks)

b)      Outline **two** advantages of laptops as compared to desktop computers.       (2 marks)

c)      Below is a block diagram of a digital computer system. Describe the function of the parts labeled A, B, C, and D.                                                              (8 marks)



- data

Flow of data

.................> Flow of control

d)  The computer has a primary memory which it uses while processing. Justify the need for secondary storage.                                                                   (4 marks)

## QUESTION FIVE

a)      Describe the term *computer/information security*.                         (2 marks)

b) Describe the following basic principles of data/information systems in relation to computer security;

    i. Confidentiality

    ii. Availability

    iii. Integrity

    iv. Authenticity                  (8 marks)

c) Describe the counter measures to the following computer crimes

    i. software piracy;

    ii. Unauthorized access.              (4 marks)

d) Differentiate the following pair of terms in relation to computer security

    i. Risk and Vulnerability

    ii. Threat and Attack

    iii. Hoax and Worm

    iv. Passive and Active attack         (6 marks)