



# **THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE**

(A Constituent College of JKUAT)

*Faculty of Engineering & Technology*

**DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY**

**DIPLOMA IN INDUSTRIAL MICROBIOLOGY & BIOTECHNOLOGY  
[DIMBT 11M]**

**EIT 2230: INFORMATION TECHNOLOGY**

**END OF SEMESTER EXAMINATIONS**

**SERIES: DECEMBER 2011**

**TIME: 2 HOURS**

## **Instructions to Candidates:**

You should have the following for this examination

- *Answer Booklet*

This paper consist of **FIVE** questions in **TWO** sections **A & B**

Answer question **ONE (COMPULSORY)** and any other **TWO** questions

Maximum marks for each part of a question are as shown

This paper consists of **THREE** printed pages

## SECTION A (COMPULSORY)

### Question 1 [30 Marks]

- a) Explain the following terms:  
(i) Hardware  
(ii) Software  
(iii) Formatting  
(iv) ALU (8 marks)
- b) State three examples of each of the following hardware  
(i) Input devices  
(ii) Output devices  
(iii) Memory (9 marks)
- c) Explain the difference between the following  
(i) a workbook and a worksheet in Ms Excel  
(ii) Bit and Byte (8 marks)
- d) Perform the following conversions  
(i)  $210_{10}$  to Binary  
(ii)  $1101001101_2$  to Decimal (5 marks)

## SECTION B (ANSWER ANY TWO QUESTIONS)

### Question 2 [20 Marks]

- a) ICT has increased the choice of career opportunities globally. Identify and briefly explain four ICT career opportunities in your country. (8 marks)
- b) Define the term information technology. (2 marks)
- c) State four advantages of computers (4 marks)
- d) List the major elements of a computer system. (6 marks)

### Question 3 [20 Marks]

- a) Explain the meaning of the following terms.  
i Form factor  
ii Virtual memory  
iii Firmware (6 marks)
- b) Flash disks have become the storage media of choice today as opposed to floppy diskettes. Describe 4 characteristics of the flash disk that make it to be preferred to the floppy diskette. (4 marks)
- c) Operating Systems can be classified on the basis of user interface. Describe any TWO types (6 marks)

- d** Explain the classification of computer software giving examples.  
(4marks)

**Question 4 [20 Marks]**

- a** As a student was working on her computer, the mouse failed before she could complete her assignment. State the keyboard keys she would use to perform the following tasks:
- i Place data from a clipboard to a document.
  - ii Save the current document
  - iii Terminate an application that is not responding.
  - iv Switch between running programs
- (4 marks)
- b** State the precautionary measures one should take before: connecting to the internet; allowing other people to use your computer; or share files with others. (4 marks)
- c** Microsoft Office is a commercial office suite of inter-related desktop applications. Briefly explain the 3 main applications in this suite. (6 marks)
- d** Distinguish between a file, a folder, and the root directory (6 marks)

**Question 5 [20 Marks]**

- a** Outline the history of computers, stating the major technological inventions of each generation. (10 marks)
- b** Explain any three applications of the internet (6 marks)
- c** When you want to buy a computer, explain two main factors you will consider. (4 marks)