



**THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE**

**(A Constituent College of JKUAT)**

(A Centre of Excellence)

# **Faculty of Engineering & Technology**

**DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY**

**CERTIFICATE IN INFORMATION TECHNOLOGY & MAINTENANCE**

(CICTM M12)

**ECT 1103: ICT FUNDAMENTALS**

**SPECIAL/SUPPLEMENTARY EXAMINATION**

**SERIES: OCTOBER 2012**

**TIME: 2 HOURS**

**Instructions to Candidates:**

You should have the following for this examination

- *Answer Booklet*

This paper consist of **FIVE** questions  
Answer question **ONE** and any other **TWO** questions  
Maximum marks for each part of a question are as shown  
This paper consists of **TWO** printed pages

**SECTION A (COMPULSORY)**

**Question One (20 marks)**

- a) Define the terms:
  - i) Computer software
  - ii) Information technology **(4 marks)**
- b) Give **SIX** qualities of a System Analyst. **(6 marks)**
- c) List **SIX** factors to consider when buying an application software. **(6 marks)**
- d) Describe the functions of the following system utilities:-
  - i) Language translators
  - ii) Loaders **(4 marks)**

**SECTION B (Answer Any Two Questions)**

**Question Two (20 marks)**

- a) What is importer security? **(2 marks)**
- b) Describe **SIX** environmental computer security threats. **(12 marks)**
- c) Give **SIX** benefits of using computers in management. **(6 marks)**

**Question Three (20 marks)**

- a) Illustrate the functional organization of a computer system. **(8 marks)**
- b) Give your projected characteristics of future computer generations. **(4 marks)**
- c) Differentiate between RAM and ROM. **(4 marks)**
- d) List **FOUR** advantages of application packages over customized applications. **(4 marks)**

**Question Four (20 marks)**

- a) Differentiate between system software and application software. **(2 marks)**
- b) Describe **SIX** functions of operating system software. **(12 marks)**
- c) Give **SIX** measures to control computer viruses. **(6 marks)**

**Question Five (20 marks)**

- a) Define ergonomics in relation to ICT. **(2 marks)**
- b) Describe **SIX** features of ergonomic design. **(12 marks)**
- c) Give **SIX** characteristics of earlier computer generations. **(6 marks)**