



# THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of Jkuat)

*Faculty of Engineering and Technology*

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION  
TECHNOLOGY

CERTIFICATE IN COMPUTER MAINTENANCE & NETWORK  
TECHNOLOGY  
(CMNT 10A)

**EIT 1119: COMPUTER MAINTENANCE**

**END OF SEMESTER EXAMINATIONS**

**SERIES: AUGUST/SEPTEMBER 2011**

**TIME: 2 HOURS**

## **Instructions to Candidates:**

You should have the following for this examination

- *Answer booklet*

Answer question **ONE (COMPULSORY)** in section **A** and any other **TWO** questions from section **B**

This paper consists of **THREE** printed pages

## **SECTION B (30 marks)**

### **Question 1 (Compulsory)**

- a) Briefly explain **THREE** types of printer technologies used in computing, stating **TWO** primary components for each (12 marks)
- b) Explain **FOUR** factors to be considered when selecting a printer (8 marks)
- c) Outline at least **THREE** troubleshooting and solution steps when the system behavior listed is observed
  - (i) The monitor screen is shaking
  - (ii) When you start the computer, you get error message “Windows/System32/config/system” file missing or corrupt (6 marks)
- d) Briefly explain **TWO** display technologies used in computing (4 marks)

## **SECTION A (40 marks)**

### **Question 2 (20 marks)**

A firewall is a critical component of a systems security infrastructure  
Required:

- a) Using a well labeled diagram, describe a NAT firewall system (8 marks)
- b) Highlight **FOUR** firewall techniques used in a computing environment (8 marks)
- c) Outline **TWO** effects of viruses on computing hardware (4 marks)

### **Question 3 (20 marks)**

- a) Briefly describe the installation procedures for each of the following hardware components
  - (i) Memory Module (3 marks)
  - (ii) VGA card (3 marks)
  - (iii) Power Supply Unit (3 marks)
  - (iv) Hard Disk (3 marks)
- b) Highlight **TWO** safety precautions to be observed when installing a motherboard (4 marks)
- c) Explain any **TWO** ways in which a computer could report a hardware error (4 marks)

### **Question 4 (20 marks)**

- a) Explain any **FIVE** security threats posed by the internet (10 marks)
- b) Outline the stepwise procedure for installing a printer on a computer (8 marks)
- c) State **TWO** types of scanner technologies used in IT field (2 marks)

**Question 5 (20 marks)**

- a) Explain the following:
  - (i) Memory
  - (ii) Processor
  - (iii) Expansion slot
  - (iv) Form factor
  - (v) Operating system (10 marks)
- b) Distinguish between:
  - (i) Warm and cold booting
  - (ii) ROM and RAM (4 marks)
- c) List any **FOUR** secondary storage devices (4 marks)
- d) List any **TWO** BIOS setting that a technician can set or configure (2 marks)