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 –
CMNT2K 11M

ECT 1104: HARDWARE INSTALLATION & MAINTENANCE

SPECIAL/SUPPLEMENTARY EXAMINATION

SERIES: OCTOBER 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
Maximum marks for each part of a question are clearly shown.

SECTION A (30 marks)

Question 1 (Compulsory)

a) Give **TWO** example of utility software (2 marks)

b) What is hard disk fragmentation (2 marks)

c) Describe **TWO** pointing devices and how they are used to input data (4 marks)

d) Describe the items needed for installing IDE hard drive (4 marks)

e) Describe the following types of RAM (4 marks)

    (i) SDRAM
    (ii) RDRAM

f) Name **FOUR** motherboard connectors/slots found inside the system unit (4 marks)

g) Suppose you switch on your computer, a single beep is heard and the power-LED is on but the monitor does not although it is connected to the power source which is also non-describe the steps you would take to trouble shoot the problem. (3 marks)

h) Suppose your computer is on but the icon for the DVD drive is not appearing under My Computer, what could be the problem? (3 marks)

i) List **FOUR** precautions to be taken handling computer components (4 marks)

SECTION B (40 marks)

Question 2 (20 marks)

a) Describe the following CMOS features
    (i) IDE HDD-Auto-Detection (2 marks)
    (ii) Date and Time (2 marks)
    (iii)   Drive A and B (2 marks)

b) List **TWO** functions of BIOS (5 marks)

c) Describe **THREE** ways to update the BIOS (9 marks)

Question 3 (20 marks)

The system unit of a microcomputer is the integral part of a computer, Describe the components of the system unit. (20 marks)

Question 4 (20 marks)

a) Describe the step by step procedures for installing a SDRAM on the motherboard (10 marks)

b) Describe with examples the storage media categories below.
   (i) Primary storage media (8 marks)
   (ii) Tertiary storage media (2 marks)

Question 5 (20 marks)

a) Briefly illustrate the functions of the CPU (6 marks)

b) Explain briefly how RAM works (6 marks)

c) Give the pre-requisite for upgrading Video Card on the computer (4 marks)

d) Describe the steps to be taken when installing the motherboard (4 marks)