



THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of Jkuat)

Faculty of Engineering and Technology

DEPARTMENT OF ELECTRICAL AND ELECTRONIC ENGINEERING

**DIPLOMA IN TECHNOLOGY
TELECOMMUNICATION & INFORMATION ENGINEERING V
COMPUTER SCIENCE ENGINEERING IV**

EET 3503: COMPUTER INSTALLATION & MAINTENANCE II

END OF SEMSTER EXAMINATIONS

SERIES: AUGUST/SEPTEMBER 2011

TIME: 2 HOURS

Instructions to Candidates:

You should have the following for this examination

- *Question paper*
- *A Non-programmable calculator*

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

This paper consists of **THREE** printed pages

Question 1 (Compulsory)

- a) Describe the term maintenance and state why it is necessary to computers (2 marks)
- b) Outline the **FOUR** types of maintenance programs and state **TWO** advantages and **TWO** disadvantages for each type. (20 marks)
- c) Explain the procedure of restoring a computer system whose hard disk has crashed. (8 marks)

Question 2

- a) State **THREE** causes of equipment failure and their remedies (6 marks)
- b) Describe the following types of trouble shooting techniques.
 - i) Systematic (8 marks)
 - ii) Half-split (2 marks)
- c) Deduce the following IBM POST error codes;
 - i) 1XX
 - ii) 2XX
 - iii) 3XX
 - iv) 5XX (4 marks)

Question 3

- a) Explain the meaning of the following AMI BIOS beep codes;
 - i) 2 short beeps
 - ii) 7 short beeps (2 marks)
- b) Name **THREE** common problems with computer systems (3 marks)
- c) State the effects of the following actions;
 - i) Connecting a USB and a PS/2 keyboard on the same computer
 - ii) Fitting a RAM memory module loosely or the other way round
 - iii) Placing high wattage speakers next to a CRT video display unit
 - iv) Shifting the position of a computer that is on and running a program (8 marks)
- d) Design a diagnostic flowchart for a computer system (7 marks)

Question 4

- a) Explain the term defragmentation and state its importance as used in the computer world. (4 marks)
- b) Design the following documents;
 - i) A job card
 - ii) A maintenance form (16 marks)

Question 5

- a) Outline the requirements of a computer workshop (10 marks)
- b) Name **FIVE** upgradable parts in a computer system (5 marks)
- c) Explain the function of the following programs
 - i) Anti-virus
 - ii) Scan disk (5 marks)