



MURANG'A UNIVERSITY COLLEGE
(A constituent College of Jomo Kenyatta University of Agriculture and Technology)
UNIVERSITY EXAMINATIONS 2014/2015
YEAR TWO SEMESTER ONE EXAMINATION FOR THE DIPLOMA IN
INFORMATION TECHNOLOGY
SCI 1201: COMPUTER REPAIR AND MAINTENANCE

COURSE: DIT

DAY/TIME: Wednesday 8:30Am-10:30Am

TIME: 2HRS

DATE: 19th August 2015

INSTRUCTIONS: Answer question one and any other two questions

QUESTION ONE

- a. Describe the boot process of a computer system [5 Marks]
- b. Explain FOUR settings which you can configure in the BIOS set-up [4 Marks]
- c. Describe how you would clean and perform preventive maintenance on the following computer equipments
 - i. Monitor
 - ii. Laser Printer
 - iii. Scanner [6 Marks]
- d. It is of great importance to have a systematic routine while disassembling a computer to avoid problems. Describe this disassembly routine. [6Marks]
- e. Give an explanation, diagnosis and recommendation for the following problems in computer hardware.
 - i. Power supply not functioning
 - ii. No video displayed
 - iii. No bios start up screen [9Marks]

QUESTION TWO

- a. Define the term motherboard form factor. Give four types of motherboards [4 Marks]
- b. Discuss the application areas of the following
 - i. Anti static wrist strap
 - ii. SIMM tester
 - iii. Hand hold vacuum cleaner
 - iv. Protocol analyzer. [8Marks]
- c. Describe FIVE different components of the motherboard providing the functions of each of the components. [5Marks]
- d. Apart from Intel range of processors name three other manufacturers of processors [3Marks]

QUESTION THREE

- a. Explain any three types of expansion buses [6 Marks]
- b. Differentiate between a surge suppressor and an uninterruptible power supply.[3Marks]
- c. Explain the following terms as they relate to PC maintenance
 - i. Power on Self Test
 - ii. Boot Order
 - iii. Resolution [6Marks]
- d. Define the term documentation in relation to PC assembly and explain the three levels of documentation [5Marks]

QUESTION FOUR

- a. Outline four functions provided by the power supply unit [4 Marks]
- b. Discuss the process of upgrading Memory (RAM) in a computer and issues related to it. [4 Marks]
- c. Explain the term ergonomics as used in computer maintenance. [2 Marks]
- d. Discuss four factors to consider when upgrading a computer processor [8 Marks]
- e. Describe the essence of a CMOS battery in a desktop computer system [2 Marks]