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# KIRIRI WOMENS' UNIVERSITY OF SCIENCE AND TECHNOLOGY UNIVERSITY EXAMINATION, 2022/2023 ACADEMIC YEAR FOR THE CERTIFICATE IN INFORMATION TECHNOLOGY CIT 1006- COMPUTER MAINTENANCE AND SUPPORT

Date: 1<sup>ST</sup> AUGUST 2022 Time: 2:30PM – 4:30PM

# INSTRUCTIONS TO CANDIDATES ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS QUESTION ONE (30 MARKS)

- a) The following terms are related to computer maintenance, give a definition for each term
  - i) PCI slotsii) Device Drivers(2 Marks)(2 Marks)
- b) State **Marks** difference between hardware and software as used in computers. (4 Marks)
- c) A computer system is an interconnection of various components. It's composed of both hardware and software. Outline at least **Marks** components of the motherboard. (4 Marks)
- d) The BIOS program controls the system during the initialization process in preparation for the operating system to be used. Outline **five** functions of the BIOS. (5 Marks)
- e) List **two** examples of the power supply connectors. (2 Marks)
- f) Achievers computer school bought computers for use in their computer laboratory. The lab technician is needed to create account for both the students and the teachers. Explain the step by step process to accomplish this task. (5 Marks)
- g) Define the term disk portioning and describe the step by step procedure for creating a partition on your disk drive (6 Marks)

## **QUESTION TWO (20 MARKS)**

- a) Define the term preventive maintenance as used in computer maintenance and outline Marks benefits when preventive maintenance is carried out appropriately. (6 Marks)
- b) Different computer models offer a variety of peripheral attachment/connections to the system. There are a variety of ports present on a computer for devices attachments. State and explain Marks types of ports.

  (8 Marks)
- c) "No operating system found" is a common computer problem error and discuss the error and give stepwise guides for addressing it. (6 Marks)

## **QUESTION THREE (20 MARKS)**

- a) It is important for a computer user to find and install software updates in order to have well performing computers. Updating software can be done in a variety of ways, Describe Marks ways of updating the software (8 Marks)
- b) There are several safety concerns (both for the lab manager and for the computer equipment) that need to be attended to when fixing hardware problems. Clearly outline three safety concerns.

(6 Marks)

c) Anita a technician, noted that a computer keyboard was dusty. Outline the basic steps she would take when cleaning it. (6 Marks)

#### **QUESTION FOUR (20 MARKS)**

- a) In order for a computer to successfully boot, its BIOS, operating system and hardware components must all be working properly. Describe the computer boot up process. (6 Marks)
- b) A computer professional needs to be careful when working on a proprietary machine; however special tools are often required. Describe at least Marks hand tools found in the toolbox.

(8 Marks)

c) Describe the step by step procedure for replacing a CPU in the computer system unit. (6 Marks)

#### **QUESTION FIVE (20 MARKS)**

- a) Identify and explain any three network tools used in network connectivity. (6 Marks)
- b) List down four components of a computer system that can be upgraded and explain why this should be done. (8 Marks)
- c) Discuss any three factors to consider when installing windows 10 operating system. (6 Marks)