

## MURANG'A UNIVERSITY OF TECHNOLOGY

# SCHOOL OF COMPUTING AND INFORMATION TECHNOLOGY

#### DEPARTMENT OF COMPUTER SCIENCE

#### UNIVERSITY ORDINARY EXAMINATION

2018/2019 ACADEMIC YEAR

# SECOND YEAR FIRST SEMESTER EXAMINATION FOR DIPLOMA IN INFORMATION TECHNOLOGY SCS 052-COMPUTER MAINTENANCE AND REPAIR

**DURATION: 2 HOURS** 

DATE: 16/4/2019

TIME: 2-4 P.M.

#### **Instructions to candidates:**

- 1. Answer question One and Any Other Two questions.
- 2. Mobile phones are not allowed in the examination room.
- 3. You are not allowed to write on this examination question paper.

#### SECTION A: ANSWER ALL QUESTIONS IN THIS SECTION

#### **QUESTION TWO (30 MARKS)**

- (a) Describe any five components of a motherboard. (5marks)
- (b) Describe the three types of system documentation. (6marks)
- (c) Explain any five factors to consider when purchasing a hard disk. (5marks)
- (d) State the importance of the following system support tools. (6marks)
  - i. Hemostats
  - ii. LAN tester
  - iii. Chip Inserter and Extractor
  - iv. File outlet tester
  - v. Multi-meter
- (e) Installing the OS on a desktop PC is often a very different problem than installing a corporate database server. Outline any three ways to install an operating system on a desktop PC.
  (6marks)
- (f) State any two functions of a power supply unit. (2marks)

#### SECTION B – ANSWER ANY TWO QUESTIONS IN THIS SECTION

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

- a) Describe any three functions of a system bus. (6marks)
- b) Outline any four monthly maintenance procedures you should perform. (4marks)
- c) Differentiate between a surge suppressor and an uninterrupted power supply.(2marks)
- d) Describe the procedure of disassembling a computer and the issues related to it.(8marks)

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

- a) Describe the following types of maintenance giving an example of each:
  - i. Active maintenance
  - ii. Passive maintenance (4marks)
- b) Describe any three types of motherboard form factor. (6marks)
- c) Explain any three functions of BIOS. (6marks)
- d) Explain any two types of interfaces of connecting mouse. (4marks)

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

(a) State any five functions of a RAM tester. (5marks) (b) Describe any two types of the following components: (4marks) i. Input devices ii. Output devices (c) Differentiate between the following terms. (6marks) i. RAM and ROM ii. Microprocessor and floating point unit iii. DIN5 and PS/2 (d) Describe the boot process of a computer. (5marks)