



# TECHNICAL UNIVERSITY OF MOMBASA

## INSTITUTE OF COMPUTING AND INFORMATICS

### DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

#### UNIVERSITY EXAMINATION FOR:

DICT/MAY/2019

ECS 2102: COMPUTER WORKSHOP PRACTICE

END OF SEMESTER EXAMINATION

**SERIES: AUGUST 2019**

**TIME: 2 HOURS**

**DATE:** Pick Date Aug 2019

#### Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **FIVE** questions. Attempt question ONE (Compulsory) and any other TWO questions.

**Do not write on the question paper.**

#### Question ONE (30 marks)

- a) Explain the following terms:
- i. Blackout
  - ii. Brownout
  - iii. Raceways
  - iv. Computer Virus
  - v. System file checker
- (5 marks)
- b) State and explain **four** classes of fire extinguishers. (8 marks)
- c) There are two ESD tools, name and explain each tool. (4 marks)
- d) Explain **six** electrical safety guidelines that will prevent electrical fires and injuries in a computer workshop. (6 marks)
- e) State and explain **five** recommendations before disposing old computer parts. (5 marks)
- f) Explain any **two** computer workshop rules. (2 marks)

**Question TWO (15 marks)**

- a) Describe **five** major considerations when designing a computer lab. **(10 marks)**
- b) Explain **five** future job opportunities available for a student with computer workshop practices skills. **(5 marks)**

**Question THREE (15 marks)**

- a) Distinguish between ESD and EMI. Give a suitable example on each. **(5 marks)**
- b) Using a sketch diagram, explain any **five** hand tools used in a computer workshop. **(10 marks)**

**Question FOUR (15 marks)**

- a) Discuss any **five** disadvantages of computer workshop skills in the society. **(10 marks)**
- b) To help shield against power fluctuation problems, use power protection devices to protect the data and computer equipment, state and explain **two** power protection devices. **(5 marks)**

**Question FIVE (15 marks)**

- a) Explain lab security and controls of the following: **(10 marks)**
  - i. Computer viruses
  - ii. Unauthorized access
  - iii. Theft
  - iv. Fire
- b) You are a computer tech savvy at Twig Errands Company. Your senior technician has reported to you five continuous beep sounds from a PC, you were suspecting a memory failure. Briefly explain how to troubleshoot the computer issue. **(5 marks)**