



*(The University Of Choice)*

**MASINDE MULIRO UNIVERSITY OF  
SCIENCE AND TECHNOLOGY  
(MMUST)**

**MAIN CAMPUS**

**UNIVERSITY EXAMINATIONS  
2022/2023 ACADEMIC YEAR  
FIRST YEAR FIRST SEMESTER EXAMINATIONS  
CERTIFICATE  
IN  
INFORMATION TECHNOLOGY**

**COURSE CODE: ITC 010**

**COURSE TITLE: INTRODUCTION TO ICT**

**DATE: 05/12/2022**

**TIME: 09:00-10:30AM**

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**INSTRUCTIONS TO CANDIDATES**

Answer Questions ONE and ANY OTHER TWO.

**TIME: 1 Hour 30 Minutes**

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 3 Printed Pages. Please Turn Over. ►

**QUESTION ONE (24 MARKS)-COMPULSORY**

- a. What does the acronym "ICT" stand for? (1mark)
- b. Distinguish between the following: (8marks)

- i. Supercomputers and Microcomputers

- ii. LAN and WAN

- iii. Hardware and Software

- iv. Input devices and Output devices

- c. Outline any two differences between the early computer systems of 1930-1970 and the

- modern computer systems in use today. (2marks)

- d. Giving examples, briefly describe FOUR major application softwares. (4marks)

- e. i. What do the initials "CPU" stand for? (1mark)

- ii. Outline the three parts of the CPU and their functions. (3marks)

- f. Describe THREE factors to be considered in the selection and acquisition of software and

- hardware. (3marks)

- g. Define the term "Ergonomics". (2marks)

**QUESTION TWO (18 MARKS)**

- a. Draw a well labelled diagram that displays a model of a computer system. Citing

- appropriate examples, describe the various devices that make up the computer system. (8marks)

- b. There are several factors that determine the performance of a CPU. Describe THREE and

- give examples where necessary. (6marks)

- c. Printers can be divided into two: Impact printers and Non-impact printers. Differentiate

- between the two and give examples of each. (4marks)

**QUESTION THREE (18 MARKS)**

- a. Discuss the benefits of communication networks. (10marks)

- i. Define the term "network topology". (2marks)

- ii. Clearly and with well-labelled illustrations differentiate between a ring topology and a

- star topology. (6marks)

**QUESTION FOUR (18 MARKS)**

- a. The use of computers has greatly increased over the last few decades. People now use

- computers and keyboards as a daily way of communicating, working, and even for

- entertainment.

- i. Which health condition has emerged due to the repetitive motion of typing and sitting

- in a fixed position for long hours? (1mark)

- ii. Describe THREE ways how the above condition (i) can be prevented. (6marks)

- b. The use of ICT requires ensuring the safety of computer hardware, software and data. Describe TWO measures to ensure the security of each of the following:
- i. Computer hardware (2marks)
  - ii. Computer software (2marks)
  - iii. Data stored in computers (2marks)
- c. Explain FIVE roles of a system administrator. (5marks)

**QUESTION FIVE (18 MARKS)**

- a. Unethical behavior in ICT is the incorrect use of ICT in a way that intrudes on the privacy of others or their intellectual property rights thereby creating ethical dilemmas. Describe FOUR examples of unethical behavior in the use of ICT. (8marks)
- b. i. Identify emerging trends in ICT (5marks)
- ii. Outline the challenges/opportunities of the emerging trends you have listed in (i) above on ICT (5marks)

