



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY**

(MMUST)

MAIN CAMPUS

UNIVERSITY EXAMINATIONS

MAIN EXAM

2023/2024 ACADEMIC YEAR

FIRST YEAR FIRST TRIMESTER EXAMINATION

**FOR THE DIPLOMA IN SECURITY INTELLIGENCE STUDIES/ DIPLOMA IN
DISASTER MANAGEMENT**

COURSE CODE: SEC/ CU / SM /BC/03/6

COURSE TITLE: DIGITAL LITERACY

DATE:05/12/2023

TIME: 2-4pm

INSTRUCTIONS TO CANDIDATES:

**Answer QUESTION ONE (COMPULSORY) AND ANY OTHER TWO
QUESTIONS**

TIME: 2 Hours

MMUST observes ZERO tolerance to examination cheating

Paper Consists of 2 Printed Pages. Please Turn Over



QUESTION ONE [24 MARKS] (Compulsory)

- a) Draw a well – labeled diagram showing the functional units of computer hardware. (4 Marks)
- b) Describe THREE functions performed by the CPU. (3 Marks)
- c) Can a Computer System work without an Operating System?
Discuss (8 Marks)
- d) Outline any THREE main features that make word processors popular programs. (3 Marks)
- e) Briefly describe FOUR factors contributing to Internet access and growth in Kenya. (4 Marks)
- f) Outline TWO ways of preventing piracy with regard to data and information. (2 Marks)

QUESTION TWO [18 MARKS]

- a) Computer systems need maximum security to prevent an unauthorized access. State six precautions that you would expect an organization to take to prevent illegal access to its computer-based systems. (6 Marks)
- b) Write in full hence, explain the term ICT (3 Marks)
- c) Explain the following major types of computer crimes in reference to Data Security and Control: (9 Marks)
 - i) Trespass.
 - ii) Hacking.
 - iii) Tapping.
 - iv) Cracking.
 - v) Piracy.
 - vi) Fraud.
 - vii) Sabotage.
 - viii) Alteration of data.
 - ix) Theft of computer time / Theft of service.

QUESTION THREE [18 MARKS]

- a) Explain THREE Differences and THREE Similarities between Internet and Intranet as used in Computer Network Technology (6 Marks)
- b) Define computer software? Describe FIVE various types of computer software. (12 Marks)

QUESTION FOUR [18 MARKS]

- a) One way of looking at a computer system is by describing the external behavior of each component and describing the interconnection structure and the controls required to manage the use of the interconnection structure. Discuss the view with respect to its structure and function. (12 Marks)
- b) Why is windows called GUI based operating system? (2 Marks)
- c) What are the various components of a database? (4 Marks)

QUESTION FIVE [18 MARKS]

- a) What is computer security? Mention various threats to computer security (10 Marks)
- b) Using a Diagram, describe any **FOUR** network topologies. (8 Marks)

