



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

**UNIVERSITY EXAMINATIONS
2022/2023 ACADEMIC YEAR SEMESTER 1**

**FOR THE DIPLOMA
IN
INFORMATION TECHNOLOGY**

COURSE CODE: DIT 050

COURSE TITLE: IT ESSENTIALS

DATE: 06/12/2022

TIME: 02:00-04:00PM

INSTRUCTIONS TO CANDIDATES

Answer **SECTION A** and **ANY OTHER TWO** questions **IN SECTION B**.

TIME: 2 Hours

MMUST observes **ZERO** tolerance to examination cheating

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

QUESTION ONE (24MKS)

1. Explain the following terms as used in computer science:
 - (a) Data. (1 mark)
 - (b) Program. (2 marks)
 - (c) Data processing. (2 marks)
 - (d) Information. (2 marks)
2. (a) What are peripheral devices? (1 mark)
(b) Give two examples of peripheral devices. (1 mark)
3. Give four differences between today's computers and the first generation computers. (4 marks)
4. Explain four reasons which make laptop computers suitable for personal computing work. (4 marks)
5. (a) What is the computer Motherboard? (1 mark)
(b) State any four components found on the computer motherboard. (2 marks)
- 6 Identify four problems associated with the introduction of computers in a society. (4 marks)

QUESTION TWO (18MKS)

A school bought a computer system. The hardware items supplied include: a 800 MHz processor, 640 MB of RAM, a sound card, speakers, a monitor, a keyboard, a 120 GB hard disk, a floppy disk drive, a CD -Read/Write drive, a mouse, a modem, an inkjet printer, and a joystick. The software supplied include: an operating system, a BASIC interpreter, and the following packages: spreadsheets, graphics, word processor, art, database and games.

- a. List three input devices from the given specifications. (3 marks)
- b. Explain the meaning of the following:
 - a. 800 MHZ (2 marks)
 - b. 640 MB of RAM (2 marks)
 - c. 120 GB hard disk (2 marks)
- c. Some of the students in the school use the computer to do homework. Name the package used to:
 - (i). Do calculations and draw graphs. (1 mark)
 - (ii). Write an essay. (1 mark)
 - (iii). Make a poster. (1 mark)

- d. Students enjoy playing noisy computer games.
- (i). Which two hardware items are needed to produce sound? (2 marks)
 - (ii). Which input device is only used for playing games? (1 mark)
- e. Give three reasons why one might purchase a computer with a one year warranty instead of a three year warranty. (3 marks)

QUESTION THREE (18MKS)

- a. Define the term Computer crime. (2 marks)
- b. Differentiate between Data Security and Data Integrity. (2 marks)
- c. Give the three types of data that should be protected in a computer. (3 marks)
- d. State five possible ways of preventing data loss from a computer. (5 marks)
- e. 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)

QUESTION FOUR (18MKS)

- a) using a well labeled diagram illustrate the basic computer organization and all its functional units (6 Marks)
- b) Explain the three functional units of the central operating unit (6 Marks)
- c) List and explain three output devices in a computer (3 Marks)
- d) List three possible factors that you would consider when buying a computer monitor. (3 marks)

QUESTION FIVE (18MKS)

2. (a). Explain how computers are used in the following areas to process data. (18 marks)
- i). Supermarket.
 - ii). Hospitals.
 - iii). Banks.
 - iv). Hotels.
 - v). Homes.
 - vi). Schools/education centres.
 - vii). Industries.
 - viii). Police station.
 - ix). Transport industry.
 - x). Offices.