



(Knowledge for Development)

**KIBABII UNIVERSITY**  
**(KIBU)**

MAIN CAMPUS

UNIVERSITY EXAMINATIONS

END OF SEMESTER EXAMINATION

2021 / 2022 ACADEMIC YEAR

FIRST YEAR FIRST SEMESTER EXAMINATION

FOR THE DIPLOMA IN

(INFORMATION TECHNOLOGY)

COURSE CODE: DIT 050

COURSE TITLE: IT ESSETIALS

DATE: **20/05/2022** TIME: 9.00 A.M. – 11.00 A.M.

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2HRS

**INSTRUCTIONS TO CANDIDATES:**

**ANSWER QUESTION ONE AND ANY OTHER TWO.**

Paper Consists of 3 Printed Pages Please Turn Over   
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**QUESTION ONE (COMPULSORY) [24 MARKS]**

- a) Write brief notes on the following types of computers. **[10marks]**
- i. Microcomputers
  - ii. Mainframe computer
  - iii. Laptop
  - iv. Notebooks
  - v. Supercomputers
- b) Using suitable examples differentiate between RAM and ROM **[4marks]**
- i. RAM
  - ii. ROM
  - iii. Bit
  - iv. Byte
- c) State any six differences between the early computer systems of 1930-1970 and the modern computer systems in use today. **[6marks]**
- d) Explain four ways in which computers are used in education **[4marks]**

**QUESTION TWO [18 MARKS]**

- a) Using suitable diagram describe the physical components that make up a modern computer system. **[10marks]**
- b) With the help of suitable examples, describe briefly the function of each of the components named. **[8marks]**

**QUESTION THREE [18 MARKS]**

- a) Define the following term secondary storage device? **[2marks]**
- b) Briefly describe two types of magnetic storage device **[4marks]**
- c) Name the different types of network topologies and brief its advantages **[5marks]**
- d) Explain two types of computer software **[4marks]**
- e) Outline two components that influence the performance of a computer system. **[3marks]**

**QUESTION FOUR [18 MARKS]**

- a) Define the term "data communication" and state its importance **[4marks]**
- b) Describe the three different types of cables that are used in data communication. **[6marks]**
- c) Distinguish between the following technologies **[8marks]**
- i. peer-to-peer networking
  - ii. Cloud computing

**QUESTION FIVE [18 MARKS]**

- a) Briefly describe the following network concept **[4marks]**
- i. Local Area Network
  - ii. Wide area network
- b) State any THREE factors you should consider when selecting a site to install computers and explain briefly why they are important. **[6marks]**

c) State and explain any five characteristics of a supplier you should avoid **[8marks]**