



(Knowledge for Development)

KIBABII UNIVERSITY

**UNIVERSITY EXAMINATIONS
2020/2021 ACADEMIC YEAR**

**END OF SEMESTER EXAMINATIONS
YEAR ONE SEMESTER ONE EXAMINATIONS**

**FOR THE DEGREE OF BACHELOR OF SCIENCE
COMPUTER SCIENCE**

COURSE CODE : CSC 114

**COURSE TITLE : INTRODUCTION TO
COMPUTING ESSENTIALS I**

DATE: MONDAY 17TH, MAY 2021 TIME: 2:00 P.M – 4:00 P.M

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTIONS ONE AND ANY OTHER TWO.

QUESTION ONE [COMPULSORY] [30 MARKS]

a. Define the following terms:

- i. Register [2 Marks]
- ii. Peripheral [2 Marks]
- iii. Compiler [2 Marks]
- iv. Information [2 Marks]
- v. Byte [2 Marks]

b. Explain the term computer network to your colleague. [3 Marks]

c. State and explain any three resources that an operating system manages. [6 Marks]

d. Briefly detail three functions of the Utility programs in a computer. [3 Marks]

e. Carry out the following arithmetic calculations:

- i. $57248 + 36548$ [2 Marks]
- ii. $1111011_2 + 1010111_2 + 1101111_2$ [2 Marks]

f. With examples, differentiate between computer hardware and computer software, stating the function of each. [4 Marks]

QUESTION TWO [20 MARKS]

a. State and explain any five benefits that your institution can get by using the Internet. [5 Marks]

b. Based on the area of coverage discuss three physical sizes of computer networks. [9 Marks]

c. Describe six risks that an organization installing a computer network faces after completion of the installation. [6 Marks]

QUESTION THREE [20 MARKS]

- a. What is a computer system? [2 Marks]
- b. Discuss the different generations of computers. [10 Marks]
- c. Give four operations of CPU that make it important in a computing system. [4 Marks]
- d. Differentiate between System software and operating system. [4 Marks]

QUESTION FOUR [20 MARKS]

- a. Define computer booting [2 Marks]
- b. Explain different types of booting. [4 Marks]
- c. Explain the different types of programming language that are used in computing? [6 Marks]
- d. Detail the use of the following in computing:
 - i. Compiler. [2 Marks]
 - ii. Assembler. [2 Marks]
 - iii. Interpreter. [2 Marks]
- e. Differentiate between RAM and ROM [2 Marks]

QUESTION FIVE [20 MARKS]

- a. What are the basic operations of computer? [2 Marks]
- b. Modern computers operate on stored program concept. The control unit is designed to execute the stored program. Identify and explain FIVE tasks of control unit. [10 Marks]
- c. Give your understanding of the term general-purpose computers [4 Marks]
- d. Detail different ways that can be used to improve data security in a computing environment of a public secondary school. [4 Marks]