(Knowledge for Development)

KIBABII UNIVERSITY

(KIBU)

UNIVERSITY EXAMINATIONS
2021/2022 ACADEMIC YEAR

END OF SEMESTER EXAMINATIONS
YEAR TWO SEMESTER TWO EXAMINATIONS

FOR DIPLOMA
(INFORMATION TECHNOLOGY)

COURSE CODE   :   DIT 078

COURSE TITLE   :   SYSTEMS ADMINISTRATION

DATE: 23/11/2022   TIME: 11.00 A.M. – 1.00 P.M.

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTIONS ONE AND ANY OTHER TWO.

QUESTION ONE (COMPULSARY) [24 MARKS]

[5 Marks]

a) Define the following terms as used in system administration.
   i.   System administrator
   ii. System
   iii. Proxy
   iv. Operating system
   v.   Hardware

b) User management is about interfacing humans to computers. This brings to light a number of issues. Identify these issues.   [5 Marks]

c) Configuration management is the administration of state in hosts or network hardware. Host state is configured by a variety of methods. Highlight the methods.   [4 Marks]   [5 Marks]

d) Identify at least five traits of a system administrator.   [5 Marks]

e) What Does a Sysadmin Do?

QUESTION TWO [18 MARKS]

[6 Marks]

a) A system administrator is a jack of all trade, discuss.   [6 Marks]

b) Identify and describe different types of system administrators.   [6 Marks]

c) Explain the skill set required of the System administrator.

QUESTION THREE [18 MARKS]

[10 Marks]

a) Outline the IEEE classification of software anomalies.

b) An important subset of faults is formed by *component faults*. Discuss categories of component faults.   [8 Marks]

QUESTION FOUR [18 MARKS]

[6 Marks]

a) Security threats can be categorized into three, discuss.   [8 Marks]

b) Explain the four basic elements in security   [4 Marks]

c) What will happen if the system is compromised?

QUESTION FIVE [18 MARKS]

[6 Marks]

a) Discuss the three main components in a human–computer system.

b) Identify and describe different weather and environments and explain how they are important for operation.   [5 Marks]

c) Proper handling of hardware is at the heart of system administration. Explain the do's and don'ts vis-à-vis handling hardware.   [7 Marks]