



(Knowledge for Development)

KIBABII UNIVERSITY
(KIBU)

UNIVERSITY EXAMINATIONS
2021/2022 ACADEMIC YEAR

END OF SEMESTER EXAMINATIONS
YEAR ONE SEMESTER TWO EXAMINATIONS

FOR THE DEGREE OF BACHELORS OF SCIENCE
(INFORMATION TECHNOLOGY)

COURSE CODE: BIT 322

**COURSE TITLE: SYSTEM ADMINISTRATION AND
MAINTENANCE**

DATE: 08/09/2022

TIME: 09:00 A.M – 11:00 A.M.

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTIONS ONE AND ANY OTHER TWO.

QUESTION ONE (COMPULSORY) [30 MARKS]

- a) Define the following terms **(10 Marks)**
- i. Server
 - ii. Client
 - iii. Patch
 - iv. Hotfix
 - v. Service pack
- b) You have recently joined ICT staff team of a leading regional bank. Your task is considering deploying new server machines as part of the institution's IT infrastructure upgrading: **(12 Marks)**
- i. List any five hardware specifications that are typical of server machines
 - ii. Discuss five roles characteristic of servers in such an organization
- c) List any five tasks of a system admin **(5 marks)**
- d) State any three performance counters on windows server **(3 marks)**

QUESTION TWO [20 MARKS]

- a) State and explain any four types of web servers **(8 Marks)**
- b) What is virtualization **(2 Marks)**
- c) State and explain any four benefits of virtualization **(8 Marks)**
- d) Name any two Virtualization software **(2 Marks)**

QUESTION THREE [20 MARKS]

- a) Define the following terms **(9 Marks)**
- i. Active directory
 - ii. User group
 - iii. Active directory domain
- b) State the procedure for adding a server roles on any windows server **(9 Marks)**
- c) What will the following command do in linux: apt-get install teamviewer **(2 Marks)**

QUESTION FOUR [20 MARKS]

- a) *Defense-in-depth* provides multiple layers of defense to protect a networking environment, using a diagram highlight the layers involved **(10 Marks)**

- b) State any five reasons as to why most system administrators will prefer running their services on linux as compared to windows server **(5 Marks)**
- c) Define security policy and list any three items to be configured under local security policy in windows server **(5 Marks)**

QUESTION FIVE [20 MARKS]

- a) State and explain five roles on Microsoft server 2012 **(10 marks)**
- b) What are the features of Microsoft server 2012 **(4 Marks)**
- c) State a procedure for scheduling a task in server 2012 **(5 Marks)**