



(Knowledge for Development)

KIBABII UNIVERSITY

(KIBU)

**UNIVERSITY EXAMINATIONS
2022/2023 ACADEMIC YEAR**

**END OF SEMESTER EXAMINATIONS
YEAR THREE SEMESTER TWO EXAMINATIONS
FOR THE DEGREE OF BACHELORS OF SCIENCE
(INFORMATION TECHNOLOGY)**

**COURSE CODE : BIT 322
COURSE TITLE : SYSTEM ADMINISTRATION**

DATE: 27/04/2023 TIME: 09.00 A.M.-11.00 A.M. 2HRS

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTIONS ONE AND ANY OTHER TWO.

QUESTION ONE (COMPULSORY) [30 MARKS]

- a) What is system administration (2 Marks)
- b) Differentiate between a service pack and patches (4 Marks)
- c) Define a server software and give three examples of the server software explaining their functions (12 Marks)
- d) What is the clustering and state any two benefits (6 Marks)
- e) Discuss any three features of Windows Server 2012 Datacenter Edition (6 marks)

QUESTION TWO [20 MARKS]

- a) Discuss active directory (4 Marks)
- b) State and explain the three main objects in active directory (6 Marks)
- c) Discuss any five functions of a system administrator (10 Marks)

QUESTION THREE [20 MARKS]

- a) What is virtualization (2 Marks)
- b) State and explain any four benefits of virtualization (8 Marks)
- c) *Defense-in-depth* provides multiple layers of defense to protect a networking environment, using a diagram highlight the layers involved (10 Marks)

QUESTION FOUR [20 MARKS]

- a) Task scheduling is an important aspect in an organization. Briefly explain what task scheduling entails. (4 Marks)
- b) Discuss the two (2) benefits of DNS (4 Marks)
- c) State four functions of server manager in windows server (4 Marks)
- d) State any four security features in server software like windows sever datacenter (8 Marks)

QUESTION FIVE [20 MARKS]

- a) 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. List any four hardware specifications that are typical of server machines

(4 Marks)

b) State and explain five reasons why Linux is mostly preferred to run systems in organization

(10 marks)

c) Explain any three tools used for server monitoring

(6 Marks)