



*(Knowledge for Development)*

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

**UNIVERSITY EXAMINATIONS**  
**2020/2021 ACADEMIC YEAR**

**END OF SEMESTER EXAMINATIONS**  
**YEAR THREE SEMESTER TWO EXAMINATIONS**

**FOR THE DEGREE IN**  
**(INFORMATION TECHNOLOGY)**

**COURSE CODE : BIT322**

**COURSE TITLE : SYSTEM ADMINISTRATION AND  
MAINTENANCE**

**DATE: 14/10/2021**

**TIME: 9.00 A.M-11.00 A.M**

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**INSTRUCTIONS TO CANDIDATES**

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

### QUESTION ONE (COMPULSORY) [30 MARKS]

- a) Define the following (5 marks)
- i. System administration
  - ii. System administrator
  - iii. Clustering
  - iv. Server manage
  - v. A service pack
- b) In regard to configuration of system backups, what will the system administrator configure? (3 marks)
- c) State any three windows server platforms (3 marks)
- d) What are the functions of Network access protection (4 marks)
- e) Describe the two types of active directory structure (6 marks)
- f) What is the relationship between a forest and a tree in active directory (4 marks)
- g) When describing defense in depth a security system is supposed to be set in layers, state these layers (5 marks)

### QUESTION TWO [20 MARKS]

- a) Discuss examples of core server security practices (10 marks)
- b) Define firewall (2 marks)
- c) Describe security templates and how you can use them to help deploy and manage security policies (8 marks)

### QUESTION THREE [20 MARKS]

- a) What is auditing and its functions (8 marks)
- b) List some of events to audit (5 marks)
- c) What is windows server update services (3 marks)
- d) Why is linux considered to be more secure than windows (4 marks)

### QUESTION FOUR [20 MARKS]

- a) Discuss the reason why one will consider virtualizing of servers (10 marks)
- b) What are the functions of event viewer (5 marks)

- c) State the types of data collectors that make up a data collector (3 marks)
- d) What is functions of performance monitors (2 marks)

**QUESTION FIVE [20 MARKS]**

- a) What is a backup (2 Marks)
- b) Define active directory domain services (5 Marks)
- c) Differentiate between application server and web server (3 Marks)
- d) You are employed as a system administrator of Kibabii University, since the server room is usually kept at a very low temperature you cannot sit there. Explain three methods you will help you access your server computer from your office machine. (6 Marks)
- e) Define a server software and give three examples of the server software explaining their functions (5 Marks)