



(Knowledge for Development)

KIBABII UNIVERSITY
(KIBU)

UNIVERSITY EXAMINATIONS
2020/2021 ACADEMIC YEAR

END OF SEMESTER EXAMINATIONS
YEAR TWO SEMESTER TWO EXAMINATIONS

FOR THE DEGREE IN
(INFORMATION TECHNOLOGY)

COURSE CODE : BIT223

**COURSE TITLE : NETWORK ADMINISTRATION AND
MANAGEMENT**

DATE: 13/10/2021

TIME: 9.00 A.M-11.00 A.M

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTIONS ONE AND ANY OTHER TWO.

QUESTION ONE (COMPULSORY) [30 MARKS]

- a) Explain what the following terms in network management mean
- i. Managed device. (1 mark)
 - ii. Managing Entity. (1 mark)
 - iii. Network management protocol (1 mark)
 - iv. Management information base (MIB) (1 mark)
- b) State any three network management tools (3 marks)
- c) Define network administration (3 marks)
- d) Differentiate between a private and public network (4 marks)
- e) State the functions of DHCP (3 marks)
- f) Why do we need host name translation to the IP address? (5 marks)
- g) Why would you need network documentation yet the network is so small that is understandable by the administrator? (3 marks)
- h) Define network policy (3 marks)
- i) State two type of maintenance (2 marks)

QUESTION TWO [20 MARKS]

- a) Describe the information that are contained in network documentation (10 marks)
- b) list the activities cycled in the scope of network maintenance (5 marks)
- c) Maintenance tasks within the network administration can be grouped into five major categories, state the categories (5 marks)

QUESTION THREE [20 MARKS]

- a) Before we can identify vulnerabilities, we must first decide what we need to protect. Thus, the first step of a risk analysis is to identify the assets of the computing system which are available in our network settings. Identify these assets. (4 marks)
- b) State and explain any four network administration categories as per ISO (8 marks)
- c) Highlight any four messages exchanged between a DHCP server and client during allocation of IP addresses (8 Marks)

QUESTION FOUR [20 MARKS]

- a) You have been employed as a network administrator of Kibabii University. Describe how you will go around to troubleshoot network connection. **(7 marks)**
- b) In network management, explain the main jobs of a network manager/administrator. **(6 marks)**
- c) Differentiate between two types DNS Query **(4 marks)**
- d) Identify some information that can be retrieved while acquiring information for network monitoring? **(3 marks)**

QUESTION FIVE [20 MARKS]

- a) Describe network management by grouping basic operation? **(6 marks)**
- b) Discuss the metrics that are used to measure network performance **(9 marks)**
- c) What are the ethic codes of conduct of network administrator? **(5 marks)**