(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 ADMINISTARTION 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)**