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(Knowledge for Development)

KIBABII UNIVERSITY

(KIBU)

UNIVERSITY EXAMINATIONS
2023/2024 ACADEMIC YEAR

END OF SEMESTER EXAMINATIONS
YEAR TWO SEMESTER TWO EXAMINATIONS

FOR DIPLOMA
(INFORMATION TECHNOLOGY)

COURSE CODE : **DIT 078**
COURSE TITLE : **SYSTEMS ADMINISTRATION**

DATE: 5/12/2023

TIME: 2.00 P.M. – 4.00 P.M.

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTIONS ONE AND ANY OTHER TWO.

QUESTION ONE (COMPULSORY) [24 MARKS]

- a) State five Roles of System Administrator. [4 Marks]
- b) List and explain five Server types. [10 Mark]
- c) What are minimum requirements for installing a server? [4 Marks]
- d) A virtual Machine is a software that creates a virtualized environment between the computer platform and the end user for the user to operate the software. What are the benefit of virtual machine?
- e) Explain the term PowerShell and states four function of PowerShell? [6 Marks]

QUESTION TWO [18 MARKS]

- a) Explain the following terms as used in Server administration, DHCP and DNS. [4marks]
- b) What Is Domain? [2marks]
- c) Differentiate between Domain Controller and Active Directory? [4marks]
- d) Why do we use DHCP? [2marks]
- e) State and explain the two main Email Servers. [6marks]

QUESTION THREE [18 MARKS]

- a) What is a Server? [2marks]
- b) What are the primary Subsystem that make up a server? [4marks]
- c) Explain the function of Server Manager. [4marks]
- d) State Eight Different Roles in Windows Server? [8marks]

QUESTION FOUR [18 MARKS]

- a) What Is Domain? [1 Mark]
- b) Differentiate the following terms:
 - i. Domain Controller and Active Directory? [4 Marks]
 - ii. System administration and Network administration [4 marks]
- c) Why do we use DHCP? [2 Marks]
- d) Configuration management is the administration of state in hosts or network hardware. Host state is configured by a variety of methods. Highlight the methods. [4 Marks]
- e) Explain the following terms as used in Server administration, DHCP and DNS. [3 Marks]

QUESTION FIVE [18 MARKS]

- a. What is proxy server?? [2 marks]
- b. Outline FIVE reasons to use proxy servers [10 marks]
- c. One of Linux's many advantages over Windows is that it is more secure, Explain three factors that makes Linux superior in security. [6 marks]