

TECHNICAL UNIVERISTY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATION FOR:
BACHELOR OF TECHNOLOGY IN INFORMATION TECHNOLOGY
(BTIT 13M/BSIT 12J)

EIT 4209: NETWORK SYSTEM ADMINISTRATION

SPECIAL/SUPPLEMENTARY EXAMINATION SERIES: MARCH 2014
TIME: 2 HOURS

Instructions to Candidates:

You should have the following for this examination

Answer Booklet

This paper consists of **FIVE** questions.

Attempt question **ONE (COMPULSORY)** and any other **TWO** questions

Maximum marks for each part of a question are as shown

This paper consists of **TWO** printed pages

Question One (Compulsory)

a) Explain the differences between the following terms:-

(20 marks)

- (i) Client and server
- (ii) Workgroup and domain
- (iii) File transfer protocol (FTP) and Hypertext Transfer Protocol (HTTP)
- (iv) Firewall and intrusion detection system
- (v) Administrator account and guest account

b) State any FOUR reasons why network administrators use network analyzers.

(4 marks)

- c) Explain the following terms:
 - (i) Active directory
 - (ii) System Administration
 - (iii) Network Administration

(6 marks)

Question Two

a) Explain TWO methods that can be used to swift on a switch.

(10 marks)

b) What are the challenges of system administration?

(6 marks)

c) Differentiate between peer-to-peer network operating system and client server network operating system. (4 marks)

Question Three

a) Using a diagram, briefly explain the layers of TCP/IP protocol suite.

(10 marks)

b) Explain THREE methods of detecting sniffers

(6 marks)

c) Differentiate between disk portioning and disk formatting

(4 marks)

Question Four

- **a)** The system administrator can chose various password options to protect access to a domain. Describe TWO such options. **(4 marks)**
- **b)** Explain THREE importance of the client-server model

(6 marks)

c) Explain FIVE benefits of window server 2008 active directory. .

(10 marks)

Question Five

- a) As a system administrator, it is important to understand the concept of a group scope so as to assign members to their correct respective groups. By citing one characteristic in each case, describe the following types of group scopes.
 (6 marks)
 - (i) Domain local
 - (ii) Universal group
 - (iii) Global group

b) Explain TWO methods that can be used to protect against intruders.

(4 marks)

c) Explain the components of the network analyzers.

(10 marks)