



THE TECHNICAL UNIVERSITY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION
TECHNOLOGY

UNIVERSITY EXAMINATION FOR:
BACHELOR OF TECHNOLOGY IN INFORMATION TECHNOLOGY
(BTech. IT 11M)

EIT 4209: NETWORK SYSTEM ADMINISTRATION

SPECIAL/SUPPLEMENTARY EXAMINATION

SERIES: FEBRUARY 2013

TIME: 2 HOURS

Instructions to Candidates:

You should have the following for this examination

- *Answer Booklet*

This paper consist of **FIVE** questions

Answer 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 difference between the following terms:

- (i) Risk and penetration
- (ii) Threat and vulnerability

(8 marks)

b) State any **TWO** reasons why network administrations use network analysers.

c) Explain the difference between the following terms:

- (i) "Transmission Control Protocols" and "File Transfer Protocol"
- (ii) "Client" and "Server"
- (iii) "Domain" and "Workgroup"

- (iv) “Firewall” and “Intrusion Detection System”
- (v) “Administrator account” and “Guest Account”

Question Two

- a) Explain the term “computer virus” (2 marks)
- b) Explain any **FOUR** methods that could be used to detect sniffers on the network. (8 marks)
- c) Explain the term “Network Security” (2 marks)

Question Three

- a) Explain any **FIVE** types of servers you are likely to find in large organizations. (10 marks)
- b) Explain the following types of groups.
 - (i) Security groups
 - (ii) Distribution groups
 - (iii) Global group
 - (iv) Universal group
 - (v) Domain local group(10 marks)

Question Four

- a) Explain the following terms:
 - (i) Network analyzer
 - (ii) Systems administrator
 - (iii) Honey pot(8 marks)
- b) (i) State any **FOUR** valuable information assets that MPUC must safeguard. (4 marks)
- (ii) Explain the difference between the following terms: (4 marks)
- c) State any **FOUR** characteristics of client-server system. (4 marks)

Question Five

- a) Critically discuss any **TWO** types of attacks to networked computers and recommend defences against both attacks. (4 marks)
- b) State any **THREE** advantages and disadvantages of client-server relationship. (6 marks)
- c) Explain any **TWO** components of a client server system. (2 marks)
- d) Explain the difference between the following terms:
 - (i) “Desktop Operating System” and “Network Operating System”
 - (ii) “Local User Account and “Domain User Account”(8 marks)