TECHNICAL UNIVERISTY OF MOMBASA

Faculty of Engineering & Technology

UNIVERSITY EXAMINATION FOR:
BACHELOR OF TECHNOLOGY IN INFORMATION TECHNOLOGY
(BTIT 12S)

EIT 4209: NETWORK SYSTEM ADMINISTRATION

END OF SEMESTER EXAMINATION
SERIES: APRIL 2014
TIME: 2 HOURS

<u>**Instructions to Candidates:**</u>
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) Define the following terms with suitable examples: **(8 marks)**
  (i) Workgroup
  (ii) Domain Name system
  (iii) NTFS
  (iv) Client-based processing

b) Permission is normally granted to specific level of access for groups and users, explain any THREE common permissions used in networking. **(3 marks)**

c) Outline any TWO types of resource that can be shared in a network. **(2 marks)**

d) With suitable example, differentiate the following. **(8 marks)**
  (i) Peer to peer and client-server relationship
  (ii) Domain user account and local user account

      (iii) Email names and display names

      (iv) Standard permission and special permission.

e) State and explain THREE methods used to detect sniffers on a network. **(6 marks)**

f) In details define a directory service; explain the basic functionality of a directory with its benefit.

    (3 marks)

Question Two

a) An Administrator uses administrative tools to change computer settings and directory objects. Explain any THREE tools used with its function. **(6 marks)**

b) With a suitable diagram, explain the components of a client server architecture. **(6 marks)**

c) Explain FOUR challenges with solutions that a system administrator is likely to encounter in network administration. **(8 marks)**

Question Three

a) Outline the guidelines that must be considered for creating a user account. **(4 marks)**

b) How can you manage access to shared files using offline caching? **(2 marks)**

c) Explain any THREE ways how a network can be secured. **(6 marks)**

d) Define a universal group, state and explain the characteristics of a universal group.

    (8 marks)

Question Four

a) In detail explain the THREE methods available to install windows server 2008. **(6 marks)**

b) Explain the services offered by the client-server architecture. **(6 marks)**

c) State and explain the components of a network analyzer. **(8 marks)**

Question Five

a) Explain the benefit of using a password in a networked system and briefly explain any TWO guidelines for what constitutes a reasonable password. **(3 marks)**

b) How are intruders using sniffers and explain FOUR ways on how we can safeguard network against sniffers. **(10 marks)**

c) Outline the steps of installing windows 2008 server. **(7 marks)**