TECHNICAL UNIVERISTY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATION FOR:
BACHELOR OF TECHNOLOGY IN INFORMATION TECHNOLOGY
(BTIT J13)
EIT 4209: NETWORK SYSTEM ADMINISTRATOR

END OF SEMESTER EXAMINATION
SERIES: AUGUST 2013
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** 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 following terms: **(6 marks)**
   (i)   Rookkit
   (ii)   Active directory

b) State any **THREE** characteristics of client-server system.   **(3 marks)**

c) Distinguish between the following terms:
   (i)   "Client" and "Server:
   (ii)   "Firewall" and "Intrusion Detention System"
   (iii)   "Disk Partition" and "Disk Formatting"

(iv) "Domain" and "Workgroup" **(16 marks)**

d) Explain any **FIVE** reasons why system administrators use network analysis. **(5 marks)**

Question Two

a) Using appropriate diagrams, explain the principles of operation of:
(i) Client-server relationship
(ii) Peer-to-peer relations **(6 marks)**

b) Administrative tools enable network administrators to add, search and change computer and network settings ad active directory objects. Explain any five administrative tools used in Microsoft server 2003/8/12 **(10 marks)**

c) Working with Groups instead of individuals users helps simplify network maintenance and administration. Explain the following types of groups:
(i) Security groups
(ii) Distribution groups **(4 marks)**

Question Three

a) As our computing infrastructures have grown more network-centric and much of our lives revolve around networked computers, attackers have deviced clever means for undermining computer communications. NSA of USA is known for this, thanks to Snowden. Critically discuss any **FIVE** types of attacks and recommend defences against them. **(10 marks)**

b) You are tasked with installation of Ms server 2008 for a certain company. Explain to the management the following types of accounts.
(i) Local user account
(ii) Domain user account
(iii) Guest user account
(iv) Limited user account
(v) Administrative user account **(10 marks)**

Question Four

a) A company with various branches in Kenya has tasked you for advice on setting up a network for the branches. The company requires different types of servers installed. Discuss any **FIVE** types of servers, justifying their acquisition. **(10 marks)**

b) (i) Explain the term "physical security" **(2 marks)**
(ii) As an Information Security Officer of TUM, discuss any **FOUR** physical counter-measures you would take ward of attackers. **(8 marks)**

Question Five

a) A security plan identifies and organizes the security activities for a computing system. The plan is both a descriptive of the current situation and a plan for improvements. Discuss any **FIVE** issues that must be addressed by every security policy. **(10 marks)**

b) (i) Explain the term "global group" **(2 marks)**

(ii) Describe the characteristics of global groups. **(8 marks)**