TECHNICAL UNIVERSITY OF MOMBASA

INSTITUTE OF COMPUTING AND INFORMATICS

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATION FOR:

DIPLOMA INFORMATION COMMUNICATION TECHNOLOGY

ECS 2207: NETWORK DESIGN AND IMPLEMENTATION

SPECIAL/ SUPPLEMENTARY EXAMINATION

SERIES: SEPTEMBER 2018

TIME: 2HOURS

DATE: Sep2018

Instructions to Candidates
You should have the following for this examination
-Answer Booklet, examination pass and student ID
This paper consists of **FIVE** questions. Attempt question ONE (Compulsory) and any other TWO questions.
Do not write on the question paper.

Question 1

   a. List and explain the FOUR fundamental network design goals   (8 marks)

   b. Differentiate between Peer to Peer and Client-Server computing   (4 marks)

   c. Describe the any FOUR roles of a network administrator   (4 marks)

   d. Provide reasons why an organization may require to implement a computer network   (4 marks)

Question 2

   a. Define the roles of any FIVE types of computer servers   (10 marks)

   b. Explain the functions and types of network operating system   (10 marks)

Question 3

   a. List any FOUR properties of a user account   (4 marks)

b. Given a user account explain the different permissions that can be configured (6 marks)

c. An employee who quits from an organization can have his user account left intact, deleted or suspended.

    i. Give a possible reason for each of the THREE actions.

    ii. State an advantage and disadvantage in each case. (10 marks)

Question 4

a. Differentiate between user rights and group rights (6 marks)

b. Explain the following terminologies

    i.   Workgroups

    ii.   Domains

    iii.   User profile

    iv.   Password policy (8 marks)

c. Define the following terms

    i. Bus and Tree topologies

    ii. TCP/IP

    iii. Intranet (6 marks)

Question 5

a. List and describe any FIVE system monitoring system services. (10 marks)

b. Explain how RAID provides a fault tolerant system (4 marks)

c. Explain the how one may troubleshoot Problems with a Network Printer (6 marks)