

TECHNICAL UNIVERISTY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY (DICT 13M – Y2 S2)

EIT 2207: NETWORK DESIGN & IMPLEMENTATION

END OF SEMESTER EXAMINATION SERIES: DECEMBER 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 <u>Maximum marks</u> for each part of a question are as shown

Question One (Compulsory)

- **a)** Define the following terms:
 - (i) Network Administrator
 - (ii) Network Operating System
 - (iii) Client Machine
 - (iv) Domain

(v) Active Directory

(10 marks)

b) What is a Role as defined in windows server environment.

(2 marks)

c) Differentiate between Hardware and Software RAID as used in computer servers.

(2 marks)

d) What is unique about the Administrator account that isn't found in other accounts?

(2 marks)

e) What is a domain controller?

(2 marks)

f) Mention at least TWO requirements needed for window 2008 R2 to be installed on a server.

(2 marks)

Question Two

A brand new HP Server has been purchased and delivered to your company. Your boss has instructed you to configure and deploy the new server as a domain controller. What are the steps you have to follow before you can install Windows 2008 R2. Detail each step and its importance to the deployment of the server.

(20 marks)

Ouestion Three

- **a)** Differentiate between the following types of installation:
 - (i) Using server core

(ii) Using GUI

(4 marks)

- **b)** Explain the following Roles as found in window:
 - (i) File services
 - (ii) Print services
 - (iii) Active Directory Domain Services
 - (iv) Web Server (ISS)

(v) DNS server

(10 marks)

c) Describe the steps needed to promote a server that's newly installed to a domain controller. Summarize the steps. (6 marks)

Question Four

a) List some of the functions and Roles of a Network Administration.

(10 marks)

- **b)** What are the core requirements needed for data centres in terms of the following:
 - (i) Security
 - (ii) Infrastructure
 - (iii) Hardware Requirements
 - (iv) Software needs

(v) Cabling (10 marks)

Question Five

- a) Outline the advantages and disadvantages of the following:
 - (i) Wired and Wireless Networks
 - (ii) Desktop OS and Network OS

(10 marks)

b) Explain why it is advisable to implement a domain based network model as compared to a workgroup. Explain your views and recommendations. (10 marks)