



THE TECHNICAL UNIVERISTY OF MOMBASA  
**Faculty of Engineering &  
Technology**

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY  
DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY  
(DICT 12J)

**EIT 2214: COMPUTER NETWORK MANAGEMENT**

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 **THREE** printed pages

### Question One (Compulsory)

- a) Describe the following network components giving an example of each:
- (i) Hosts
  - (ii) Shared peripherals
  - (iii) Networking devices
  - (iv) Networking media
- (4 marks)**
- b) Explain the use of the following commands:
- (i) Ipconfig/ALL
  - (ii) Tracert
  - (iii) Ping
- (6 marks)**
- c) Explain the following:
- (i) Full duplex transmission
  - (ii) Simplex
  - (iii) Logical address
  - (iv) Physical address
  - (v) Half-duplex
- (10 marks)**

### Question Two

- a) Explain the following as applied to network operating system:
- (i) Active directory
  - (ii) Domain controller
  - (iii) Domain
  - (iv) Universal naming system (UNC) give an example
- (8 marks)**
- b) State any **FOUR** network services provided by a typical network operating system. **(2 marks)**
- c) What does “RAID” stand for? Explain RAID level 0 and 1 stating the function of each. **(6 marks)**
- d) Explain protocol analyzer. **(4 marks)**

### Question Three

- a) Describe the functions of firewalls. **(2 marks)**
- b) Describe functions of only three types of proxy servers. **(6 marks)**
- c) Explain the precautions that you take to protect data on networks against threats. **(8 marks)**
- d) List any **FOUR** password policies. **(4 marks)**

### Question Four

- a) Distinguish between “permissions” and “rights” and state an example of each. **(4 marks)**
- b) Discuss issues addressed by network communication protocols. **(8 marks)**

- c) Explain the use of the following network devices.  
(i) Router  
(ii) Switch (4 marks)
- d) State characteristics of a strong password. (2 marks)
- e) List advantages of using a DHCP server to set IP addresses (2 marks)

**Question Five**

- a) Discuss the role of a network administration. (6 marks)
- b) State the functions of the following servers and the protocols used:  
(i) File server  
(ii) Web server  
(iii) Mail server  
(iv) DNS (8 marks)
- c) Discuss reasons for wanting install network in an organization. (4 marks)
- d) List any **TWO** media access protocols (2 marks)