THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of JKUAT)
(A Centre of Excellence)

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

DIPLOMA IN INFORMATION TECHNOLOGY
(DIT 10M)

ECS 2301: NETWORK MANAGEMENT

END OF SEMESTER EXAMINATION
SERIES: AUGUST 2012
TIME: 2 HOURS

<u>**Instructions to Candidates:**</u>
You should have the following for this examination
- *Answer Booklet*

This paper consist of **FIVE** questions in **TWO** sections **A** & **B**
Answer 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
<u>**SECTION A (COMPULSORY)**</u>

Question One (30 marks)

a) Define the following terms: **(6 marks)**
    (i) Network management
    (ii) Data communication
    (iii) Network architecture

b) Name any **FOUR** data communication hardware. **(4 marks)**
c) Classify networks according to the geographical distances they cover. **(3 marks)**
d) Outline **THREE** drawbacks of the divide and conquer method. **(3 marks)**
e) Name the **TWO** types of network architecture at a logical level. **(3 marks)**
f) Outline **TWO** duties of the help desk. **(3 marks)**

<u>**SECTION B (Answer Any Two Questions)**</u>

Question Two (20 marks)

a) Draw a diagram showing troubleshooting while identifying the chronological scope of the problem. **(10 marks)**

b) Identify the **FIVE** key elements in network management. **(5 marks)**

c) Outline **TWO** benefits and two limitation of the contention method of media access. **(5 marks)**

Question Three (20 marks)

a) Explain **FIVE** functions of a network manager. **(10 marks)**

b) Briefly explain the following elements of network management. **(10 marks)**
    i) Security management
    ii) Accounting management

Question Four (20 marks)

a) List **SEVEN** questions that help the network manager to identify a problem pertaining to physical connectivity of the network. **(10 marks)**

b) Discuss the following media access methods. **(10 marks)**
    i) Polling
    ii) Token passing

Question Five (20 marks)

a) List **EIGHT** steps undertaken when trouble shooting a network. **(8 marks)**

b) Outline **FIVE** security threats to a network. **(5 marks)**

c) State **FOUR** trouble shooting tools. **(4 marks)**

d) What does the acronym SOAP stand for? **(3 marks)**