



MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2016/2017

**SECOND YEAR SECOND SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF SCIENCE IN INFORMATION
TECHNOLOGY**

MAIN CAMPUS

CIT 204: NETWORK ADMINISTRATION AND MANAGEMENT

Date: 12th June, 2017

Time: 8.30 - 11.30 am

INSTRUCTIONS:

- Answer ALL questions in SECTION A and any other TWO from SECTION B
- Write your registration number on all sheets of the answer book used.
- Use a NEW PAGE FOR EVERY QUESTION attempted, and indicate number on the space provided on the page of the answer sheet.
- Mobile phones and PDAs are NOT allowed in the examination room.



SECTION A: COMPULSORY QUESTION {30 MARKS}

QUESTION 1

-
- a) Explain any **FIVE** responsibilities of the network administrator. (5 Marks)
-
- b) Explain any **FIVE** possible outcomes of poor network administration and management. (5 Marks)
- c) Describe any **FIVE** areas covered by network management activities. (5 Marks)
- d) Identify ways in which user training aids in effective network management and administration. (5 Marks)
-
- e) Explain the role of each of the following services pointing out how each aids in network management.
- i. DHCP Server service (1 Marks)

 - ii. Authentication Service (1 Marks)

 - iii. DNS server service (1 Marks)

 - iv. Routing and Remote Access Service (1 Marks)

 - v. Remote Access Dial-In User Service (1 Marks)
- f) Discuss any **FIVE** software maintenance (5 Marks)
-

SECTION B: ANSWER ANY TWO QUESTIONS (20 MARKS EACH).

QUESTION 2

- a) Discuss the preparation, planning and management of Network Operating Systems upgrade. (8 Marks)
- b) Describe the key activities in network asset management. (8 Marks)
- c) Write down a summary plan for physical network security implementation. (6 Marks)

QUESTION 3

- a) Discuss network hardware maintenance activities; highlight what each activity is aimed at achieving. (8 Marks)
- b) Recommend a user support strategy for an enterprise network with several branches (8 Marks)
- c) Discuss ways in which a network administrator can be up to date with emerging network security challenges. (4 Marks)

QUESTION 4

- a) Explain the role of Policies in network management and administration (8 Marks)
- b) Describe any **FOUR** tasks that can be automated by the network administrator (4 Marks)
- c) Discuss a plan for implementing a decentralized authentication while ensuring centralized change management for an enterprise with multiple branches (8 Marks)

QUESTION 5

- a) A financial institution runs integrated mission critical applications that generate significant amounts of data on a daily basis. Recommend a backup strategy, pointing out key activities in the strategy. (6 Marks)
- b) Discuss the key pillars of disaster recovery planning and management. (8 Marks)
- c) Design an asset tracking procedure (6 Marks)

END OF EXAMS