

**KENYA METHODIST UNIVERSITY**  
**End of Trimester I Examination, April 2008**

**Faculty** : **Science and Social Studies**  
**Department** : **Computer and Information Sciences**  
**Unit Code** : **CISY 357**  
**Unit Title** : **Network Administration I**  
**TIME** : **2 Hrs**

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**Instructions:** Answer question one and any other two questions from section B

**SECTION A – Answer ALL question in this section**

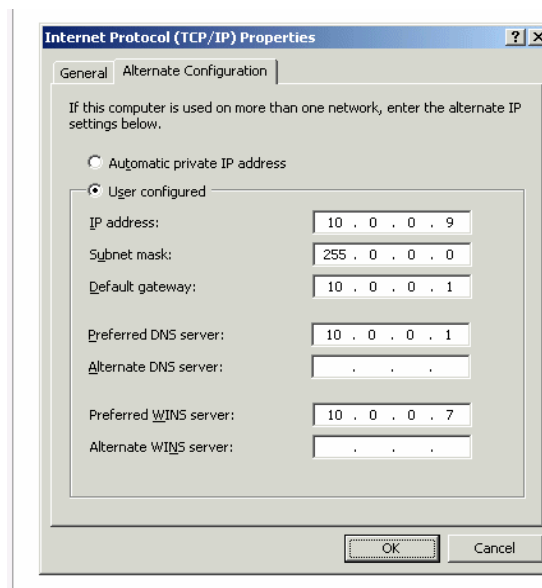
**Question One (30 marks):**

- 1) Briefly outline the three main roles played by the network adapter card (NIC) in network communication. (3 marks)
- 2) Briefly describe the role of DHCP in network administration (2 marks)
- 3) Distinguish between a static and dynamic IP address, and explain how each one is configured. (5 marks)
- 4) Briefly describe the Gateway Services for Netware (GSNW) and outline its role in a windows 2003 based network. What is the Client services for Netware? (5 marks)
- 5) Briefly describe the Internet Information Services (IIS). How does IIS 6.0, used in windows server 2003, differ from IIS 5.1? (3 marks)
- 6) What is Internet Connection Sharing (ICS)? (2 marks)
- 7) Briefly describe the following WINS server configuration options:
  - a) Renewal interval
  - b) Extinction interval. (4 marks)
- 8) Briefly outline the role played by an IPSec monitor. (2 marks)
- 9) Briefly describe the user password requirements for windows server 2003 domain (4 marks)

**SECTION B – Answer ANY TWO questions in this section**

**Question Two (20 marks):**

- 1) Briefly describe the following roles in network administration:
  - a) Network manager
  - b) Network technician (4 marks)
- 2) Windows server 2003 supports two licensing modes. Distinguish between these two modes (2 marks)
- 3) Write short notes on the following IPsec parameters:
  - a) Mode of operation
  - b) Security protocols (5 marks)
- 4) One of the key decisions to make before installing windows server 2003 is the type of installation to make. Briefly describe the two options. (4 marks)
- 5) The following diagram shows the alternate configuration tab on the WINS server.
  - a) When are the entries in this tab necessary/utilized? (2 marks)
  - b) Briefly describe the top three entries. (3 marks)



**Question Three (20 marks):**

- 1) Briefly describe how you would create a new user account in windows server 2003 (5 marks)
- 2) State any three network services for windows clients (3 marks)
- 3) What do you understand by dual boot? (2 marks)
- 4) What is Active Directory Service (AD)? (2 marks)

- 5) Briefly describe the following terms as used with active directory service;
- a) Forest
  - b) Transitive trust (4 marks)
- 6) Briefly describe the four steps required in DHCP address assignment (4 marks)

**Question Four (20 marks):**

- 1) Distinguish between Basic NAT and PAT (2 marks)
- 2) Give any two types of NAT (2 marks)
- 3) The typical network administration workload is divided into three categories. State the three categories (3 marks)
- 4) State any two aspects involved in the change management process (2 marks)
- 5) DHCP in windows server 2003 is made up of three basic components. State and briefly describe the components (6 marks)
- 6) A key enhancement to DHCP in windows server 2003 is the integration of DHCP with DNS;
- a) What is the importance of this integration? (2 marks)
  - b) Outline the three options for avoiding failed DNS lookups for DHCP-registered clients when using static DNS service (3 marks)