

**COE 444 - Internetwork Design and Management
Spring 2003 (Term 022)**

Homework 12

Date: Saturday, May 31, 2003

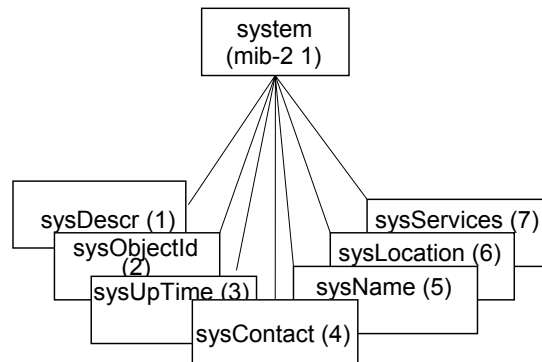
Q1. According to the OSI framework for network management, what are the principle functional areas of network management? Briefly describe some of the tasks that fall under each area.

Q2. Indicate the correct OSI functional network management area of each of the following tasks:

- Assign network addresses to computers.
- Maintain configuration scripts of network devices.
- Logging and resolution of network problems.
- Troubleshooting of network problems.
- Monitor network traffic and collect statistics.
- Management and distribution of authentication and encryption keys.
- Elaborate disaster recovery procedures.
- Develop algorithms to prorate charges to users.

Q3. Problems: 1, 2, 4, 5, 7, 9, and 11 (from chapter 5: “Network Management - Principles and Practice” by Mani Subramanian, 2000)

Q4. You are given the System Group in MIB-II



The following is the system information on 172.16.46.2 Hub

Title: System Information: 3com_hub1
Name or IP Address : 172.16.46.2

System Name : 3com_hub1
System Description : 3Com LinkBuilder FMS, SW version: 3.02
System Contact : Mr. Ahmad Mohammad
System Location : Lab22-413
System Object ID : .iso.org.dod.internet.private.enterprises.43.1.8.5
System Up Time : (2475380437) 286 days, 12:03:24.37
System Services : 1

An SNMP manager obtains information about this hub by sending queries to the hub's SNMP agent. Complete the following message sequence diagram using only GetNextRequest and GetResponse messages.

