

ALLAMA IQBAL OPEN UNIVERSITY, ISLAMABAD
(Department of Computer Science)

WARNING

1. **PLAGIARISM OR HIRING OF GHOST WRITER(S) FOR SOLVING THE ASSIGNMENT(S) WILL DEBAR THE STUDENT FROM AWARD OF DEGREE/CERTIFICATE, IF FOUND AT ANY STAGE.**
2. **SUBMITTING ASSIGNMENTS BORROWED OR STOLEN FROM OTHER(S) AS ONE'S OWN WILL BE PENALIZED AS DEFINED IN "AIOU PLAGIARISM POLICY".**

Course: Network and System Administration (3444)
Level: BS (CS)

Semester: Autumn, 2012
Total Marks: 100

ASSIGNMENT No. 1

Note: All questions are compulsory and carry equal marks.

- Q. 1 What are the major responsibilities of system administrator? Also discuss the difference between the network administrator's responsibilities and system administrator's responsibilities with the help of an example from real life.
- Q. 2 Discuss how Windows 2000 is different from Windows NT Operating System with respect to their functionalities. Also write down the important features of windows 2000.
- Q. 3 Write down the important types of user accounts. Also differentiate the FAT & NTFS file system.
- Q. 4 What is meant by backup? Discuss different types of backups and their strategies.
- Q. 5 Write note on each of the following:
 - i) Installation and Configuration of DHCP
 - ii) Configuration of TCP/IP

ASSIGNMENT No. 2

Total Marks: 100

- Q. 1 What is the significance of RAID in Windows 2000? Also describe the different RAID levels. Which RAID level provides best fault tolerance?
- Q. 2 What is a Computer Virus? Differentiate different network viruses in detail. Also discuss Daily Preventive measures for prevention of network viruses.

- Q. 3 Why security administration is necessary? Discuss its objectives. Also discuss the levels of security.
- Q. 4 Write down the importance of network traffic analysis. Discuss its merits and demerits.
- Q. 5 Write note on each of the following:
- i) Security Issues in Unix Operating System
 - ii) Emergency Repair Disk
 - iii) Functions of Network Analyzer
 - iv) Security Administration Technologies
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3444 Network & System Administration Credit Hours: 4(3 + 1)

Recommended Book:

The Ultimate Windows 2000 System Administrator's Guide by Robert Williams, Mark Walla

Course Outlines:

Unit-1 Overview

Introduction to Network and System Administration, Objectives, Operations Administration, Resources Administration

Unit-2 Introduction to Windows 2000

What is Windows 2000, Windows 2000 Professional, Windows 2000 Server, Comparison Between Windows NT And 2000, Windows 2000 Features

Unit-3 Windows 2000 Installation, User Accounts, Groups and their Administration

Hardware Requirements, Disk Partition Procedure, Choosing A File System, Domains and Workgroups, Installation Procedure, Installing Devices and Network Components, Types of Users Accounts, Built-In User Accounts, Local User Accounts, Domain User Accounts, User Profiles, Group Policies

Unit-4 Backing Up, Restoring and Disaster Recovery

Backup Types, Backup Strategies, Remote Storage, Restoring Data, Disaster Protection, Power Issues, Hardware Failures, Implementing Software Raid, Windows 2000 Recovery Console, Emergency Repair Disk

Unit-5 Installing and Configuring Network Protocols

Configuring TCP/IP, Network Binding, Understanding Of Dynamic Host Configuration Protocol (DHCP), Installing And Configuration Of DHCP

Unit-6 Monitoring Network Resources

Monitoring Access to Shared Folders, Monitoring Access to Open Files, Monitoring Network Users, Administrative Messages to Users, Network

Printing, Managing Printer Pools, Password, Server, Network and Vendor Documentation, Change Control Process, Change Request

Unit-7 Security Administration

Objective of Security Administration, Security Administration at The Network Level, Security Administration at The End System Level, Security of The Resources, Computer Virus, Types of Viruses and Network Administration, Daily Preventive Measures, Measures to Be Taken After The System Is Infected By A Virus, Vaccine For Virus, Technologies About Security Administration

Unit-8 Network Analyzer

Network Analyzer Functions, Network Analyzers That Run On a Personal Computer, Workstation, Desktop Management, Desktop Management Products, Dedicated Network Analyzer, Dedicated Tester

Unit-9 UNIX Installation & Administration

Hardware and Software Requirements, Installation Process, Setting Peripheral Devices, Troubleshooting, Maintaining The File System, Maintaining User Accounts, Configuration Level, Backup And Restores, Security Issues

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