EX.NO: 01	STUDY OF SYSTEM ADMINISTRATION AND NETWORK ADMINISTRATION
DATE:	

AIM:

To study about system administration and Network administration

SYSTEM ADMINISTRATOR:

System administrator, or sysadmin, is a person who is responsible for the upkeep, configuration, and reliable operation of computer systems; especially multi-user computers, such as servers. The system administrator seeks to ensure that the uptime, performance, resources, and security of the computers he or she manages meet the needs of the users, without exceeding the budget.

SKILLS:

- Entails a knowledge of operating systems and applications
- Problem solving Technique.
- To understand the behaviour of software in order to deploy it and for troubleshooting problem.

RESPONSIBILITIES OF SYSTEM ADMINISTRATOR:

- User account management
- Hardware management
- Perform file system backups, restores
- Install and configure new software and services
- Keep systems and services operating
- Monitor system and network ,Troubleshoot problems
- Maintain documentation
- Audit security ,Help users
- Performance tuning

NETWORK ADMINISTRATION:

A network administrator, sometimes called a systems administrator, is responsible for keeping an organization’s computer network up to date and running smoothly. Any company or organization that uses multiple computers or software platforms needs a network admin to coordinate the different systems. Network admins will especially be in high demand as companies and organizations invest in newer, faster technology and mobile networks.

SKILLS OF NETWORK ADMINISTRATOR:

Network admins are responsible for the backend networks, software and hardware as well as for the teams and end users they support. That means a network admin should have a combination of problem solving and people skills.

- **ANALYSING AND CRITICAL THINKING:**

Network admins need to explore and solve problems logically and consistently. “The ability to take the concepts you’ve learned in school and understand how they work and affect other concepts is the bread and butter of being a network administrator,” says Brad Meyer, systems administrator at Technology Advice.

- **TIME MANAGEMENT:**

Network admins juggle several projects, people and problems simultaneously. This means it’s essential to be organized in the present and looking ahead to prepare for what’s coming next. It’s like spinning plates with a little practice a network admin can keep everything balanced.

- **INTERPERSONAL SKILLS:**

Network admins work with a range of people, from network engineers to help desk employees to end users, explains Eric Jeffery, founder of IT solutions firm Gungon Consulting. He says bridging the gap between diverse groups of people requires patience and understanding.

- **LIFELONG LEARNING:**

The technology field is constantly changing, which means network admins must be willing to learn and evolve with it. Good network admins are able to adapt to new techniques and technologies throughout their careers.

RESPONSIBILITIES OF THE NETWORK ADMINISTRATOR:

As a network administrator, the tasks generally fall into the following areas:

- **DESIGNING AND PLANNING THE NETWORK:**

The first phase in the life cycle of a network involves creating its design, a task not usually performed by new network administrators. Designing a network involves making decisions about the 3 type of network that best suits the needs of your organization. In larger sites this task is performed by a senior network architect: an experienced network administrator familiar with both network software and hardware.

- **SETTING UP THE NETWORK:**

After the new network is designed, the second phase of network administration begins, which involves setting up and configuring the network. This consists of installing the hardware that makes up the physical part of the network, and configuring the files or databases, hosts, routers, and network configuration servers. The tasks involved in this phase are a major responsibility for

network administrators. You should expect to perform these tasks unless your organization is very large, with an adequate network structure already in place

- **MAINTAINING THE NETWORK :**

The third phase of network administration consists of on-going tasks that typically constitute the bulk of your responsibilities. They might include:

- ➢ Adding new host machines to the network
- ➢ Administering network security
- ➢ Administering network services, such as NFS services, name services, and electronic mail
- ➢ Troubleshooting network problems "Configuring Network Clients" explains how to set up new hosts on an existing network. "General Troubleshooting Tips" contains hints for solving network problems.

- **EXPANDING THE NETWORK:**

The longer a network is in place and functioning properly, the more your organization might want to expand its features and services. Initially, you can increase network population by adding new hosts and expanding network services by providing additional shared software. But eventually, a single network will expand to the point where it can no longer operate efficiently. That is when it must enter the fourth phase of the network administration cycle: expansion. Several options are available for expanding your network:

1. Setting up a new network and connecting it to the existing network using a machine functioning as a router, thus creating an internetwork.
2. Configuring machines in users' homes or in remote office sites and enabling these machines to connect over telephone lines to your network.
3. Connecting your network to the Internet, thus enabling users on your network to retrieve information from other systems throughout the world.
4. Configuring UUCP communications, enabling users to exchange files and electronic mail with remote machines.

RESULT:

Thus, system administration and network administration has been studied.