**Module-3**

**Installation and Maintenance of Hardware and Its Components**

1. **What is user management?**

User management is an organizational function that enables users to access and control digital assets, such as applications, devices, networks, and cloud services.

1. **Where can we access the user management?**

Control Panel\All Control Panel Items\User Accounts\Manage Accounts

1. **Why is user management needed?**

User management allows administrators to manage resources and organize users according to their needs and roles while maintaining the security of IT systems.

1. **Do a practical to create a user from user management**

Done in lab.

1. **Do a practical to change the password of the administrator from the user management.**

Done in lab.

**What is file folder permission?---sharing and ntfs What is the use of file and folder permission?**

When you set permissions, you specify what users are allowed to do within that folder, such as save and delete files or create a new folder. file fo lder permission is used to give file folder permission to the receiver like read, write, read/write, modify and full control.

1. **Write down the steps to give a folder read only permission.**

1. Right-click on the folder and select Sharing and Security from the pop-up context menu.

2. Choose to share the folder, and give it a name.

3. Click the Permissions button.

4. Add specific users as necessary.

5. Grant them read permissions by clicking the check box under the Allow column on the Read line.

1. **Write a step to give a file only admin permission.**

Right-click on Program Files \ Properties \ Security Lab \ Advanced \ Change Permissions \ Administrators OR Your Acoount.

1. **Do a practical to change the ownership of the folder and the sub folders in**

**it.**

Done in lab.

1. **What is OS?**

An operating system is the most important software that runs on a computer. It manages the computer’s memory and processes, as well as all of its software and hardware.

It also allows you to communicate with the computer without knowing how to speak the computer’s language.

1. **What are the types of OS?**
2. Windows
3. Linux
4. Macos
5. **Do a practical to create bootable pen drive for kali Linux and install os.**

Done in lab.

1. **Do a practical to create a bootable pen drive for windows 10 and install os.**

Done in lab.

1. **Do pen drive for creating a pen drive for mac os Big sur with unibeast.**

Done in lab.

1. **What is clean install?**

A clean install is a software installation process where the previous version is completely eradicated. This means that all data, settings, and applications from the previous installation are removed, and a fresh copy of the software is installed from scratch.

1. **What is upgrade installation?**

Upgrade installation refers to the process of updating or modifying an existing software, system, or application to a newer version, often with improved features, bug fixes, or enhanced performance. This process can involve overwriting the current installation, retaining some data and configurations, or migrating to a new hardware or infrastructure.

1. **Do a practical to upgrade from windows 8 to windows 10.**

Done in lab.

1. **What is partitioning?**

partitioning refers to dividing a physical disk or hard drive into logical sections, called partitions, to separate different operating systems, file systems, or data. This allows multiple operating systems to run on the same device, or to organize data in a more efficient and manageable way.

1. **What is partition?**

In computer if we have to create new storage we can separate our secondary storage from the total storage that’s called as partition.

1. **What is format?**

Format is the process of removing or erasing all the data from the disk.

1. **Format a partition using cmd.**

1. Run cmd as a administrator \ Type Diskpart \ Type List Disk \ Select drive to Formate \ Type Clean \ Type Create Partition Primary \ Format the drive using format fs=ntfs \ To assign a drive letter, you can type 'assign' .

1. **List out the administrative tools.**

Control panel \ System and Security \ Administrative Tools

Component Services

Computer Management

Defragment and Optimize Drives

Desktop.ini

Disk Cleanup

Event Viewer

iSCSI Initiator

Local Security Policy

ODBC Data Sources

Performance Monitor

Power Automate

Print Management

Quick Assist

Recovery Drive

Registry Editor

Remote Desktop Connection

Resource Monitor

Services

Task schedular

1. **What is disk management tools.**

It's used to manage the drives installed in a computer—like hard disk drives (internal and external), optical disk drives, and flash drives. It can be used to partition and format drives, assign drive letters, and much more.

1. **List out the operations we can do with disk management tool.**

Also search the “Disk Management” to show or do this operations.

Partitioning of the disk.

Formatting the disk.

Changing disk's name.

Shrinking a disk partition.

Extending a disk partition.

Deleting a disk partition.

Changing the file system of a driver.

1. **What is Device Management?**

A device manager is a windows utility that enables you to manage and configure hardware devices on your computer. It allows you to view a list of all installed hardware devices, view devices properties, update drivers, disable or enable devices. Troubleshoot issues, and configure hardware settings.

1. **Do a practical to delete a driver from the device management tool.**

Done in lab.

1. **What is windows features?**

Windows Features is tool of Windows that allows user to add or remove features from their computer that they may not want or use.

Major features like, start menu, task manager, control panel, file explorer, MS paint etc.

1. **Do a practical to install dotnet framework 3.5 with Windows feature.**

Done in lab.

1. **Do a practical to disable internet explorer in windows feature.**

Done in lab.

1. **What is backup and restore?**

Backup and restore refers to technologies and practice for making periodic copies of data and applications to a separate, secondary device and then using those copies to recover the data and application.

1. **What are the tools of backup?**
2. **Do a practical to restore from restore point.**

Done in lab.

1. **How to protect system from malfunctioning due to electrical fluctuation?**
2. **What is os base firewall? And configure inbound and outbound rule**
3. **Do a practical to block internet with firewall.**

Done in lab.