Module 2 {Installation and Maintenance of Hardware and Its components}

Topic: User Management

• Assignment Level Basic

1. What is user management?

Ans. User management is a system to handle activities related to individuals' access to devices, software, and services.

1. Why is user management needed?

Ans. User management offers a solution that helps IT keep control of users’ activities and bolster other security measures to protect files, applications, systems, and devices on-premises and in the cloud from unauthorized access by internal and external users.

• Assignment level intermediate:

1. Where can we access the user management?

Ans.1 In the Settings window, click Accounts, and then click Family & other users.

2.Click the account you want to modify, to display your options. Then click Change account type. Click to view a larger image. ...

3.In the Account type list, click Administrator. Then click OK.

2. What are the features of user management?

Ans.  End-to-end login process—convenient, secure login interface, supporting multiple login options.

• Assignment level Advance:

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

Ans. Include newly created user profiles in the application.

 Find a user's profile by searching for it.

 Add user tags to each of the profile users.

 Restrict and remove the ban users.

 You may export the information about your registered users.

2.Do a practical to change the password of the administrator from the user management tool.

Ans. In the "Open:" field, type compmgmt. msc , and then press Enter . Double-click the Users folder. On the right, in the list of local users, right-click the account name for the Administrator account, and select Set Password.

Topic: File and Folder Permission

• Assignment Level Basic:

1. What is file folder permission?

Ans. you specify what users are allowed to do within that folder, such as save and delete files or create a new folder.

1. What is the use of file and folder permission?

Ans. 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. You are not limited to choosing one of the standard permissions settings (Full Control, Modify, Read & Execute, List Folder Contents, Read, or Write).

• Assignment level Intermediate:

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

1. Ans. Open the folder's property menu. ...
2. Select read-only. ...
3. Copy as path. ...
4. Open your command prompt. ...
5. Change folder attributes via command line. ...
6. Remember your settings. ...
7. Communicate with other users. ...
8. Don't change system folders or files.

2.Write a step to give a file only admin permission.

Ans. Right-click on Program Files. Select Properties then the Security tab. Click Advanced and click Change Permissions. Select Administrators or your account.

• Assignment level Advance:

1. Do a practical to give the folder permission of read only in network.

Ans. **Making a Windows folder read-only**

* Right-click on the folder and select Sharing and Security from the pop-up context menu.
* Choose to share the folder, and give it a name.
* Click the Permissions button.
* Add specific users as necessary.

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2.Do a practical to change the ownership of the folder and the sub folders in it.

Ans. Sign in to your administrator account. ...

1. Navigate to the security option of the file or folder. ...
2. Locate the file or folder owner. ...
3. Find your account. ...
4. Navigate to the "Advanced Permissions" menu. ...
5. Select your account. ...
6. Choose permissions. ...
7. Verify your permissions.

Topic: Install OS

• Assignment Level Basic

1. What is OS?

Ans. An operating system (OS) is the program that, after being initially loaded into the computer by a boot program, manages all of the other application programs in a computer.

1. What are the types of OS?

Ans. Batch Operating System.

* Multi-Programming System.
* Multi-Processing System.
* Multi-Tasking Operating System.
* Time-Sharing Operating System.
* Distributed Operating System.
* Network Operating System.
* Real-Time Operating System.

• Assignment Level Intermediate

1.Do a practical to create bootable pendrive for kali Linux

Ans. Download and run Etcher.

Choose the Kali Linux ISO file to be imaged with “select image” and verify that the USB drive to be overwritten is the correct one. Click the “Flash!” button once ready.

2.Do a practical to create a bootable pendrive for windows 7

Ans. Start AnyBurn (v3. ...

1. Insert the USB drive you intend to boot from.
2. Click the button, "Create bootable USB drive". ...
3. If you have a Windows 7 installation ISO file, you can choose "Image file" for the source, and select the ISO file.

3.Do pendrive for creating a pendrive for mac os Mojave with unibeast.

Ans. Download and install TransMac on Windows 10. ...

1. Connect the USB flash drive. ...
2. Right-click the TransMac app and select the Run as administrator option.
3. Click the Run button. ...
4. Right-click the USB flash drive and select the “Format Disk for Mac” option from the left pane.

• Assignment level Advance:

1. Do a practical to install Kali Linux

Ans. Click Flash from a file, and navigate to the Kali Linux ISO/image file that you want to install into your USB. Click Select target and choose the USB drive where you want to make the bootable Kali Linux.

2.Do a practical to install windows 10

Ans. Done

3.Do a practical to install Mac os X

Ans. Yes

Topic: Clean Install

• Assignment Level Basic

1 What is clean install?

Ans. A clean install is an installation of an operating system on a computer where the hard drive is formatted and completely erased.

• Assignment Level Intermediate

1.What is the process for clean install

Ans. Open Settings.

1. Click on Update & Security.
2. Click on Recovery.
3. Under the “Reset this PC” section, click the Get started button.
4. Click the “Remove everything” option.
5. Click the “Cloud Download”

2.what are the benefits of clean install?

Ans. A clean install enables users to regain control over the system by eliminating programs and files that have not been used for a long time, if ever.

• Assignment level Advance:

1. Do a clean installation of windows XP

* Ans. Insert the Windows XP Professional CD in your primary CD drive.
* Reboot the computer. ...
* After you see the Windows setup screen, press Enter to set up Windows XP.
* Press the F8 key to accept the end-user license agreement.

2.Do a clean installation of windows 8

Ans yes

Topic: Upgrade installation

• Assignment level basic

1.What is upgrade installation?

Ans. An upgrade installation is a process of installing a newer version of the Windows operating system to replace the existing version.

2.What is the benefit of upgrade installation?

Ans. Updating your OS can bring several advantages, such as faster and smoother operation of your device and applications, improved protection from malware, viruses, and hackers, more compatibility with other devices and software, and bug fixes  new features and functions that enhance your user experience and productivity,

• Assignment level advance.

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

Ans. Yes

Topic: Partition & Formatting

• Assignment level Basic

1.What is partitioning?

Ans. Partitioning is used to make solving maths problems involving large numbers easier by separating them into smaller units.

2.What is partition?

Ans. something that divides a room, office, etc. into two or more parts, especially a thin or temporary wall

3.What is format?

Ans.  formats the specified value(s) and insert them inside the string's placeholder.

• Assignment level Intermediate:

1.Do a Practical of mbr partition.

Ans.  done

2.Do a Practical of gpt partition

Ans.done

• Assignment level Advance:

1. Do a practical using cmd.

Ans .Done.

2.covert a partition to gpt by cmd.

Ans. Type CMD in the Search box.

1. Open Command Prompt, type DiskPart, and press Enter.
2. Type list disk and press Enter. (
3. Type select disk X. (
4. Now type clean and press Enter.
5. Type convert gpt and press Enter.

3.Format a partition using cmd.

Ans. Open Command Prompt As Administrator.

Opening the command prompt. ...

Use Diskpart. Using diskpart. ...

Type List Disk. ..

Select the Drive to Format. ...

Clean the Disk.

Create Partition Primary. ...

Format the Drive. ...

Assign a Drive Letter.

Topic: Transferring Files

• Assignment level Basic

1.What is transferring Files?

Ans. “File transfer is the process of copying or moving the exchange of data files between computer systems. file from one computer to another over a network or internet connection.

2. What are the ways of transferring files?

1. Ans. Cloud storage or web data transfers. ...
2. SSD and HDD drives via SATA cables. ...
3. Basic cable transfer. ...
4. Use software to speed up your data transfer. ...
5. Transfer your data over WiFi or LAN. ...
6. Using an external storage device or flash drives.

• Assignment level Intermediate:

1. How do we transfer files from one system to another?

1. Ans.Cloud storage or web data transfers. ...
2. SSD and HDD drives via SATA cables. ...
3. Basic cable transfer. ...
4. Use software to speed up your data transfer. ...
5. Transfer your data over WiFi or LAN. ...
6. Using an external storage device or flash drives.

2.Types of file transferring media.

Ans. USB, whatsapp ,data cabal

• Assignment level Advanced:

1. Do a practical to transfer files from one system to another via network.

Ans. Yes

2. DO a practical to transfer data from one hard disk to another.

Ans. Yes

Topic: Administrative tools

• Assignment Level Basic

1.WWhat are administrative tools?

Ans. Administrative Tools is a folder in the Windows 10 Control Panel.

2. What is the use of administrative tools?

Ans. Administrative tools help an organization manage its resources, including human resources, finances, and information technology (IT).

• Assignment level Intermediate:

1. List out the administrative tools.

Ans. open 'Control Panel', go to the 'System and Security' section and click on the 'Administrative Tools'.

2. What is disk management tools.

Ans. To open Disk Management, right-click or long-press the Start button and select Disk Management.

• Assignment Level Advanced

1. Do a practical to delete a driver and reinstall it from administrative tools.

Ans. yes

2. Do a practical to delete a partition and again create it with administrative tool

Ans.yes

3. Do a practical to create user with administrative tool.

Ans. Select Start > Settings > Accounts . Under Account type, select Administrator, and then select OK.Sign in with the new administrator account.

Topic: Windows Feature.

• Assignment Level Base

1. What is windows features?

Ans. start menu, task manager, taskbar, Cortana, file explorer, MS Paint, Browser, control panel

• Assignment level Intermediate

1. List out the windows features.

Ans. start menu, task manager, taskbar, Cortana, file explorer, MS Paint, Browser, control panel

2. What is the use of IIS?

Ans. nternet Information Services, also known as IIS  to exchange static and dynamic web content with internet users.

• Assignment level Advance:

1.Do a practical to re install IIS with windows feature.

Ans. done

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

Ans done

3.Do a practical to disable internet explorer in windows feature

Ans done

Topic: Backup & Restore

• Assignment level Basic:

1.What is backup?

Ans.  The process of backing up data is pivotal to a successful disaster recovery plan.

2. What is Restore?

Ans.off to on

3. What is the need of backup

Ans.Backups protect against human errors, hardware failure, virus attacks, power failure, and natural disasters.

• Assignment level Intermediate.

1. What are the tools of backup?

Ans Backup software handles processes such as data deduplication that reduce the amount of physical space required to store data.

2.How do we restore?

Ans. In the search box on the taskbar, type control panel, and then choose it from the list of results.

1. In the Control Panel search box, type recovery.
2. Select Recovery > Open System Restore.

3. How to create a restore point?

Ans. In the search box on the taskbar, type Create a restore point, and select it from the list of results.

1. On the System Protection tab in System Properties, select Create.
2. Type a description for the restore point, and then select Create > OK.

• Assignment level Advance:

1. Do a practical to create restore point.

Ans. done

2.Do a practical to restore from restore point.

Ans. done

3.Do a practical to take backup from another system.

Ans. done

4. Do a practical to take backup backup with a recuva backup tool.

Ans. done

Topic: Disk Management

• Assignment level Basic:

1. What is Disk management?

Ans.Click Start -> Run -> type compmgmt. msc -> click OK. Alternatively, right-click on the My Computer icon and select 'Manage'. In the console tree, click Disk Management.

2. What is the use of disk management?

Ans. Disk management is the process of organizing and maintaining the storage on a computer's hard disk.

3. What are the merits of Disk management tool?

Ans. Disk Management in Windows helps you perform advanced storage tasks like initializing a new drive and extending or shrinking volumes.

• Assignment level Intermediate:

1.Where can we find the disk management tool?

Ans. To open Disk Management, right-click (or long-press) the Start button and select Disk Management

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

Ans. artitioning 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.

• Assignment level Advance:

1.Do a practical to create a new partition with disk management tool.

Ans. done

2.Do a practical to convert from MBR to gpt from disk management tool

Ans. done

3. Do a practical to create new partition from existing partition.

Ans. done

Topic: Device Management

• Assignment level Basic:

1.What is Device Management?

Ans. Device management in an operating system means controlling the Input/Output devices like disk, microphone, keyboard, printer, magnetic tape, USB ports, camcorder, scanner, other accessories, and supporting units like supporting units control channels.

2. What is the need of device management?

Ans. Device management enables organizations to administer and maintain devices, physical computers, mobile devices, and IoT devices.  critical component of any organization's security strategy.

3. What are the benefits of Device management?

Ans.  IT teams to manage and remotely monitor mobile devices in real time.

• Assignment level Intermediate:

1. Where can we access device management?

Ans. Click the. (Start) button.

In the Start Menu, click Settings.

In the SETTINGS window, click Devices.

In the DEVICES screen, click Printers & scanners or Connected devices, and the Related Settings category,

click Device manager.

2.List out the devices connected to the device management.

Ans. Open Device Manager. Click on the View tab. Click on Devices by connection. The display is now rearranged by connection.

•Assignment level Advance:

1. Do a practical to add a device with device management tool.

Ans. done

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

Ans. done

Topic: Physical security

• Assignment Level Basic

1. Why physical security needed?

Ans. Physical security aims to protect people, property, and physical assets from any action or event that could lead to loss or damage.

2.what is physical security?

Ans. protection of personnel, hardware, software, networks and data

• Assignment Level Intermediate

1. list out the ways of physical security.

Ans.  tall perimeter fences, barbed wire, clear signs stating that the site has active security, commercial video cameras and access controls.

2.How to protect system from malfunctioning due to electrical fluctuation?

Ans. Surge protectors. Use power strips or surge-protected protectors. ...

Uninterruptible power supplies. Consider utilising a UPS to filter out voltage spikes or sags, and a UPS offers battery backup during power outages. ...

Surge protective devices.

Topic: Firewall settings

• Assignment level basic

1.What is firewall?

Ans. A firewall is a computer network security system that restricts internet traffic in to, out of, or within a private network.

2. Why is firewall needed?

Ans. provide protection against outside cyber attackers by shielding your computer or network from malicious or unnecessary network traffic.

• Assignment level Intermediate:

1. What are the features of firewall?

Asn. A Firewall is a network security device that monitors and filters incoming and outgoing network traffic based on an organization's previously established security policies.

2.Describe types of firewall

Ans. packet filtering firewall.

circuit-level gateway.

application-level gateway (aka proxy firewall)

stateful inspection firewall.

next-generation firewall (NGFW)

• Assignment level advance:

* 1. Do a practical to allow anydesk through firewall.

Ans. done

* 1. do a practical to turn off the services of firewall

ans. done

3.Do a practical to block ip messenger to access the network.

Ans. done