**Module 2 {Installation and Maintenance**

**of Hardware and Its components}**

**Topic: User Management**

**• Assignment Level Basic**

1. What is user management?

Ans. User management ek organizational function he jo users ko applications, device, network or cloud service jesi digital assets tak pahuchne or control karne me Saksham banata he.

2. Why is user management needed?

Ans. Controlling and managing user access to IT resources is a fundamental

security essential for any organization User management enables admins to

control user access and on-board and off-board users to and from IT resources.

**• Assignment level intermediate:**

1. Where can we access the user management?

Ans.

2. What are the features of user management?

Ans. 1) Front-end integration with adjustable with adjustable user privileges. 2)

Ability to create a variety of users, whether those are Members, Corporate

Members, Employees, Partners, Door Personnel, or Administrators. 3) A clean

listing of all users, with diverse possibilities for sorting and exporting.

**• Assignment level Advance:**

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

Ans. Done In Lab.

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

Ans. Done In Lab.

**Topic: File and Folder Permission**

**• Assignment Level Basic:**

1. What is file folder permission?

Ans. When you set permissions, you specify what 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.

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

Ans. Each file and directory will have three permission categories for all users

owner,group and other the owner group identifies the owner.

**• Assignment level Intermediate:**

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

Ans. Access the properties dialog box > select the security tab > click edit > in the group or user name section, select the user you wish to set permission for > in the permission section , use the checkboxes to select the appropriate permission level > click apply > than click ok.

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

Ans. 1) Open Windows Explorer 2)R-Click on Program file> Properties> Security Tab. 3) Click Advanced > Owner 4) Click Edit 5) Select Administrators > Put a checkmark in Replace owner on subcontainers & objects > Apply

**• Assignment level Advance:**

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

Ans. Done In Lab.

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

Ans. Done In Lab.

**Topic: Install OS**

**• Assignment Level Basic**

1. What is OS?

Ans. Operating system (OS) vo ek program he jo ek boot program dhvara shuru me computer me load hone ke baad computer me other application ko manages karta he.

2. What are the types of OS?

Ans. Types of OS.

[1] Windows OS [2] Linux OS [3] Mac OS

**• Assignment Level Intermediate**

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

Ans. Done In Lab.

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

Ans. Done In Lab.

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

Ans. Done In Lab.

**• Assignment level Advance:**

1. Do a practical to install Kali Linux.

Ans. Done In lab.

2. Do a practical to install windows 10

Ans. Done In Lab.

3. Do a practical to install Mac os X

Ans. Done In Lab.

**Topic: Clean Install**

**• Assignment Level Basic**

1. What is clean install?

Ans. Clean install vo ek software installation he jisme kisi bhi previous version ko mita diya jata he.

**• Assignment Level Intermediate**

1. What is the process for clean install?

Ans. Clean installation vah hardware ko mitane ki problems hone par platform

Ki ek new fresh copy installing karne ke process he.

2. what are the benefits of clean install?

Ans. A clean install can improve computer performance and speed.

**• Assignment level Advance:**

1. Do a clean installation of windows XP

Ans. Done In Lab.

2. Do a clean installation of windows 8

Ans. Done In Lab.

**Topic: Upgrade installation**

**• Assignment level basic**

1.What is upgrade installation?

Ans. Upgrade installation me is package par windows 10 ke liye sabhi operating system files ko badlne ke liye windows OS installer ka use karna involves he.

2.What is the benefit of upgrade installation?

Ans. improve stability, Being trusteorthy, well structured, Enjoy new features, Benefits of pricing, keep hardware healthy, Enhanced user interface.

**• Assignment level intermediate:**

1.Write down the steps of upgrade installation.

Ans. Click the Start menu > Click Settings > Click Update & security > Click Check for updates > Wait for updates to install > Restart the PC when prompted.

**• Assignment level advance.**

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

Ans. Done In lab.

**Topic: Partition & Formatting**

**• Assignment level Basic**

1. What is partitioning?

Ans. Partitioning numbers ko smaller parts me splitting karne ka ek way he jisse unke sath kam karna aasan ho jata he.

2. What is partition?

Ans. Partition harddisk ka ek logical division he jise operating system or files system dhwara ek separate unit ke roop me mana jata he.

3. What is format?

Ans. A format is a preestablished layout for data. A computer progam accepts data as input in a certain format, processes it and provides it as output in the same or another format.

**• Assignment level Intermediate:**

1. Do a Practical of mbr partition.

Ans. Done In Lab.

2. Do a Practical of gpt partition.

Ans. Done In Lab.

**• Assignment level Advance:**

1. Do a practical using cmd.

Ans. Done In Lab.

2. covert a partition to gpt by cmd.

Ans.

3. Format a partition using cmd.

Ans. open Commmand Prompt As Administrator, 2) Use Diskpart 3) Type list

Disk 4) select the Drive to format

**Topic: Transferring Files**

**• Assignment level Basic**

1. What is transferring Files?

Ans. File transfer is the process of copying or moving a file from one computer

to another over a network or internet connection.

2. What are the ways of transferring files?

Ans. [1] 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?

Ans. [1] 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. The fastest and easiest way to transfer from PC to PC is to use the

company’s local area networkas the transfer medium. With both computers

connected to the network, you can map the hard drive ofone computer as a

hard drive on the other computer and then drag and drop files between computersusing Windows explorer.

**• Assignment level Advanced:**

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

Ans. Done In Lab.

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

Ans. Done In Lab.

**Topic: Administrative tools**

**• Assignment Level Basic**

1. What are administrative tools?

Ans. Administrative tools is a folder in the control panel.

2. What is the use of administrative tools?

Ans. These folders contain tools for system administrators and advanced usrers.

**• Assignment level Intermediate:**

1. List out the administrative tools.

Ans. [1] component service [2] computer management [3] defragment and optomize drives [4] desktop.ini [5] disk cleanup [6] event viewer [7] iscsi intiator [8] lpocal security policy [9] odbc data sources (32-bit) [10] odbc data sources (64-bit) [11] performance monitor [12] print management [13] resource monitor [14] services [15] system configuration [16] system information [17] task scheduler [18] windows firewall with advanced security [19] windows memory diagnostic.

2. What is disk management tools

Ans. Disk management vo windows me ek system utility he jo aapko advanced storage tasks ko karne me prform karta he.

**• Assignment Level Advanced**

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

Ans. Done In Lab.

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

Ans. Done In Lab.

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

Ans. Done In Lab.

**Topic: Windows Feature.**

**• Assignment Level Base**

1. What is windows features?

Ans. Windows Microsoft dhwara viksit ek graphical operating system he. Yah users ko files ko dekhne or store karne, software chalane, game khelne, video dekhne or internet se connect hone ka way provide karne ki anumati deta he.

**• Assignment level Intermediate**

1. List out the windows features.

Ans. [1] control panel [2] cortana [3] desktop [4] device manager [5] disk cleanup [6] event viewer [7] file explorer [8] internet browser [9] Microsoft paint [10] notepad [11] notification area [12] power user tasks menu [13] registry editor [14] settings [15] start and start menu [16] system information [17] taskbar [18] task manager [19] windows search box.

2. What is the use of IIS?

Ans. IIS Microsoft ka ek flexible general purpose web server he jo requested HTML pages or files ki seva ke liye windows system par chalta he.

**• Assignment level Advance:**

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

Ans. Done In Lab.

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

Ans. Done In Lab.

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

Ans. Done In Lab.

**Topic: Backup & Restore**

**• Assignment level Basic:**

1. What is backup?

Ans. Backup ek esi process he jo prabhavi roop se do version banana ke liye aapki sabhi files, data or information ki copy banati he ek aapke orginal device ke liye or ek backup ke liye.

2. What is Restore?

Ans. System restore some system files or windows registry ka snapshot leta he or unhe restore points ke roop me save karta he.

3. What is the need of backup

Ans. Hamari files delet ho jaye to

**• Assignment level Intermediate.**

1. What are the tools of backup?

Ans. Ashampoo, Cobian Backup, FileFort Backup, BackUp Maker, Comodo

Backup, Everyday Auto Backup, Iperius Backup, MutalBackup.

2. How do we restore?

Ans. Right-click the Start button, then select Control Panel > System and Maintenance > Backup and 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.

**• Assignment level Advance:**

1. Do a practical to create restore point.

Ans. Done In Lab.

2. Do a practical to restore from restore point.

Ans. Done In Lab.

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

Ans. Done In Lab.

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

Ans. Done In Lab.

**Topic: Disk Management**

**• Assignment level Basic:**

1. What is Disk management?

Ans. Disk Management in Windows helps you perform advanced storage tasks

like initializing a new drive and extending or shrinking volumes.

2. What is the use of disk management?

Ans. Disk Management is a system utility in Windows that enables you to perform advanced storage tasks.

3. What are the merits of Disk management tool?

Ans. Disk Management is a system utility in Windows that enables you to perform advanced storage tasks.

**• 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.

• Assignment level Advance:

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

Ans. Done In Lab.

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

Ans. Done In Lab.

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

Ans. Done In Lab.

**Topic: Device Management**

**• Assignment level Basic:**

1. What is Device Management?

Ans. Device management enables organizations to administer and maintain devices, including virtual machines, physical computers, mobile devices, and IoT devices.

2. What is the need of device management?

Ans.

3. What are the benefits of Device management?

Ans. 1) Remote Device Access 2) Enhanced Security 3) Enhanced Update and

Support 4) Better Application Control 5) Device Tracking 6) Remote Device

Erase Capability 7) Better Device Compliance 8) Enables Auto Backup.

• Assignment level Intermediate:

1. Where can we access device management?

Ans. In the Start Menu, click Settings. In the SETTINGS window, click Devices. In the DEVICES screen, click Printers & scanners or Connected devices, and under the Related Settings category, click Device manager.

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

Ans. microphone, keyboard, printer, magnetic tape, USB ports, camcorder, scanner, other accessories.

• Assignment level Advance:

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

Ans. Done In Lab.

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

Ans. Done In Lab.

Topic: Physical security

• Assignment Level Basic

1. Why physical security needed?

Ans. The goal of IT security is to protect these assets, devices and services from being disrupted, stolen or exploited by unauthorized users, otherwise known as threat actors.

2. what is physical security?

Ans. At its core, physical security is about keeping your facilities, people and assets safe from real-world threats.

• Assignment Level Intermediate

1. list out the ways of physical security.

Ans. 1)Physical barriers 2) Natural surveillance. 3) Security lighting. 4) Alarm

systems and sensors. 5) Video surveillance. 6) Mechanical access control

systems. 7)Electronic access control systems. 8) Identification systems and

access policies.

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

Ans. 1) Verify electricity levels 2) Confirm that supply circuits are grounded

properly 3) Don't overload circuits 4) Use a UPS/surge protector 5) Properly

calculate UPS/surge protector capacity 6) Replace damaged or faulty

UPS/surge protectors 7) Protect telecommunications links 8) Test power

supplies 9) Maintain proper operating temperatures 10) Maintain proper

insurance

Topic: Firewall settings

• Assignment level basic:

1. What is firewall?

Ans. a firewall is a network security device that monitors incoming and outgoing network traffic andpermits or blocks data packets based on a set of security

2. Why is firewall needed?

Ans. Firewalls 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?

Ans. 1) unifieddd security management

2) threat prevention

3) applicstion and identity based inspection

4) hybrid ccloud support

v) scalable performance

5) applicstion and identity based inspection

6) hybrid ccloud support

7) scalable performance

8) threat prevention

9) applicstion and identity based inspection

10) hybrid ccloud support

11) scalable performance

12) threat prevention

13) applicstion and identity based inspection

14) hybrid ccloud support

15) scalable performance

16) applicstion and identity based inspection

17) hybrid ccloud support

18) scalable performance

2. Describe types of firewall

Ans. Ans: 1) packet filtering firewall

2) circuit level gateway

3) application level gateway

4) statefull inspeccction firewall

5) next generation firewall

• Assignment level advance:

1. Do a practical to allow anydesk through firewall.

Ans. Done In Lab.

2. Do a practical to turn off the services of firewall.

Ans. Done In Lab.

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

Ans. Done In Lab.