**What is the different between Permissions vs. User rights?**

**Ans**: **Permissions** specify which type of access to allow on an object.

**User Right**: Rights are similar to permissions, but they are applied to user accounts or groups and apply to the tasks that these user accounts can perform on a computer.

**User Rights assignment tasks:**

User Rights assignment tasks are a set of policies under the local policies group within the local security policy management console.

**What is authentication and what does it do?**

**Authentication**: Authentication is a way for an entity (অস্তিত্ব, স্বত্তা) to verify who you are when you use a service.

**Use**: Windows use authentication to prove that the people using a computer system are who they claim to be.

**How do Windows authenticate users accessing the system?**

Windows can authenticate a user account in several was to prove the identity of the person at the keyboard; these include:

* User name and password
* Smart cards
* Certificates
* Biometric authentication

**What is the purpose of User Account Control?**

User Account Control was created to ensure that most user accounts cannot perform actions that could damage the operating system.

**Which setting is the default option for UAC?**

Notify me only when apps make changes to my computer.

**How do certificates work?**

Certificates use public keys to bind digital signatures to identities. Certificates are issued for identities by CAs.

**Which certificate store would contain your personal smart card certificate?**

The Smart Card Trusted Roots store.

**Local Security Policy console**

**When connecting your sign-in to a Microsoft account, what is the maximum length for the password?**

The maximum length for a Microsoft account password is 16 characters. This allows the account to work with the current cloud-based authentication these accounts use

**True or false: Accessing resources by using a smart card-enabled sign-in provides the same security as user name and password.**

**False**. Because a smart card requires something you have (the smart card) and something you know (a pin number), the sign-in process is more secure because others cannot guess a smart card.

**What is the concept of Disk Management?**

The concept of disk management has been useful in understanding how disks are used for Microsoft Windows. The disk Management utility provides an overview of all the disks within a compute.

**How many type of Disk?**

There are two type of disk:-

1. **Basic**: A basic disk is the most common type of disk windows use. This disk type can contain partitions that segregate information stored on a physical disk. Basic disk use Master Boot Record (MBR) partitioning style. We can create maximum 4 primary partitions in basic disk.
2. **Dynamic**: A dynamic disk support options that are not available on a basic disk, including volumes that span multiple disks and fault-tolerant volumes. We can create maximum 128 primary partitions in Dynamic disk. Dynamic disk use GUID partition Table (GPT) partition style.

**What is difference between Basic disk and Dynamic disk?**

1. Basic disk support partitions but Dynamic disk support volumes.
2. Basic disk use Master Boot Record (MBR) partitioning style. Dynamic disk use GUID partition Table (GPT) partition style.
3. Basic disk allows maximum 4 primary partitions but Dynamic disk allows maximum 128 primary partitions.

**How many type of Partition?**

The two types of partitions available for use on a basic disk are:-

* Primary
* Extended

**How many type of Volume?**

The five types of volume available for use on a dynamic disk are:-

* Simple
* Spanned
* Striped
* Mirrored
* Raid-5

**What are Disk Defragmenter and Disk Cleanup?**

**Disk Defragmenter**: Files become fragmented as they are used; as a result,they are not optimally placed on the disks within a computer. This fragmentation can slow performance of the system over time. Disk Defragmenter can help solve these problems and improve performance of both computer and the files it contains.

**Disk Cleanup**: Disk Cleanup is a straightforward utility that helping us find the files and folders that are stored on our computer but might not need to be stored. For examples, software installation files and temporary Internet files, and allows us to clean up.

**What is CHKDSK?**

CHKDSK is a command prompt utility designed to correct errors found in hard disks. CHKDSK performs disk repair to help correct problems with the drives themselves. CHKDSK /F this switch fixes errors found on the disk.

**CHKDSK runs in several phases in the following order:**

1. File system structure
2. File system indexes
3. Security descriptor
4. USN journals

**How can you connect to a virtual hard drive (VHD) file by using DiskPart?**

The attach command connects VHD files. **Attach “x:\path to filename.vhd”** attach the virtual hard disk at that path.

**What is DiskPartutility?**

DiskPart is a command-line utility it might be used when performing maintenance on or troubleshooting a computer. DiskPart utility works directly with disk, volumes and partitions.

**How many ways you can open Disk Management utility?**

There are three ways we can open Disk Management utility:-

1. Search for Disk Management

**What is File system?**

**File system:** S

**Access control lists can be one of two types:-**

Discretionary Access Control Lists (DACLs):

System Access Control Lists (SACLs):

**Inheritance and cumulative effectiveness**

Inheritance allows permissions to cascade downward to child objects from a parent object. Inheritance makes assigning permissions much easier because it is not always necessary to assign permission directly.

**When you need to Audit?**

Whereas too little will not provide all the information necessary to monitor correctly what is occurring within our environment.

**What do you understand about Taking Ownership?**

Taking ownership of a file or folder can grant him or her right to change permissions on the object. TakingOwnership might be necessary when the original owner of the object has left the organization and others within the organization need access to the object.

**What is Encrypting File System?**

Encrypting File System (EFS) is a method used to encrypt files and determine who can access the files.

**What is BitLocker?**

BitLocker is a whole disk encryption method available in Windows 8 professional and enterprise editions. BitLocker encrypts files to make their access secure by the owner of the file.