

# NIELIT Gorakhpur

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**Course Name: O Level (2nd Sem)**

**Subject: ICT**

**Topic Backup & Restore**

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## **Backup and restore:**

A backup is a copy of important data that is stored on an alternative location, so it can be recovered if deleted or it becomes corrupted. Depending on how often the data changes, how valuable it is, and how long it takes to back up determines how often to backup.

Restore operation on the other hand, refers to the steps we go through for getting our data back from a previously created backup. Data restore makes a usable copy of the data available to replace lost or damaged data and ensures the data backup is consistent with the state of the data at a specific point in time before the damage occurred.

### **Steps for creating backups:**

1. Open Control Panel from Start → Control Panel.
2. Open 'Backup and Restore' utility.
3. Click on 'Set up Backup'.
4. Select the backup destination and click next.
5. From the two options- 'Let Windows choose' and 'Let me choose', select the second one and click next.
6. Check on all the folders that you want to include in the backup and click next.
7. Click on 'Save settings and run backup' and then Backup process starts.

### **Steps for restoring:**

1. Right click on the backup file and select 'Restore Options' from the context menu.
2. Click on 'Restore my files from this backup'.
3. Click on 'Browse for folders' and add the folder that you want to restore. Click next.
4. From the two options- 'In the original location' and 'In the following location' select whichever is appropriate.
5. Click on 'Restore'. Restoration process starts.

## **Types of Backup:**

### **Full Backup:**

Full backup is a method of backup where all the files and folders selected for the backup will be backed up. When subsequent backups are run, the entire list of files and will be backed up again. The advantage of this backup is restores are fast and easy as the complete list of files are stored each time. The disadvantage is that each backup run is time consuming as the entire list of files is copied again.

### **Incremental backup:**

Incremental backup is a backup of all changes made since the last backup. With incremental backups, one full backup is done first and subsequent backup runs are just the changes made since the last backup. The result is a much faster backup then a full backup for each backup run. Storage space used is much less than a full backup and less then with differential backups. Restores are slower than with a full backup and a differential backup. For example, you create a full backup on Sunday. Then, the incremental backup performed on Monday only backs up the changed files since Sunday. And, the incremental backup on Tuesday will back up the changed files since Monday...

### **Differential backup:**

Differential backup is a backup of all changes made since the last full backup. With differential backups, one full backup is done first and subsequent backup runs are the changes made since the last full backup. The result is a much faster backup then a full backup for each backup run. Storage space used is much less than a full backup but more then with Incremental backups. Restores are slower than with a full backup but usually faster then with Incremental backups. For instance, a full backup is created on Sunday and a differential backup on Monday will only back up the changed files since Sunday. The differential backup on Tuesday will back up all files that have been changed since Monday and Tuesday.

### **Exercise:**

1. What is backup and restore in windows ?Explain with steps.
2. What are the different types of backups?Explain