Course Name: O Level (2nd Sem) **Subject: ICT**
Topic: Backup and Restore **Date: 15-04-20**

Backup and Restore: Backup and Restore are two different processes but complements of each other. Backup process refers to the steps we go through for having a dedicated copy of our important data. Backup provides additional security when we get our important data lost accidently.

Restore operation on the other hand, refers to the steps we go through for getting our data back from a previously created backup.

In more simple words, backup and restore is the utility that we use for creating backups in advance for being secured of any prospective loss of data.

Process 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'. Backup process starts.

Process 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 backups: Depending upon the data covered and time taken to complete the backup process, backups are of following three types:

1. Full backup: It is the most basic and complete type of backup operation. As its name implies, this type can make a copy of all the data including files, folders, settings, applications and more on the storage devices like hard drive, SSD, HDD, etc.

2. Incremental backup: It refers to backing up all the files that have changed since the last backup operation of any type of 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.

3. Differential backup: Differential backup refers to backing up the only changed files since the last full backup. 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.

Assignments:

1. Write the steps for creating backups.
2. Briefly discuss about different types of backups.