# BAL BHARATI PUBLIC SCHOOL, PITAMPURA, DELHI – 110034

### SUBJECT: COMPUTER SCIENCE

#### CLASS - X

### <u>CHAPTER - SOCIETAL IMPACTS OF IT</u> (CONT'D)

#### **Guidelines**:

Dear students read the notes carefully and thereafter attempt the quiz.

#### **Introduction:**

In this lesson, we shall study about the one of the most important but most of time overlooked activity 'DATA BACKUP'

#### **Subtopics**

- DATA BACKUP
- NEED OF DATA BACKUP
- BACKUP DEVICES
- TYPES OF DATA BACKUP

This video shall give you an overall view of what we are going to study in the chapter.

https://www.youtube.com/watch?v=7kHkcp6KCNc

#### **DATA BACKUP**

Backup is a process of making an extra copy of your data and storing it in a different location on your computer. This copied data can be used in case of emergency. However, backing up data regularly is must but it is being overlooked.

#### WHY DO WE NEED A BACKUP?

The following points emphasise the necessity of backup:

- The data can be damaged due to the magnetic field. Since, computer storage medium is fully magnetic.
- The data can be damaged due to virus infection.
- The data can be damaged due to natural disaster.
- The data can be damaged due to failure of operating system.
- The data can be destroyed due to electrical hazards.

#### **BACKUP DEVICES**

The following are some storage devices and locations to consider:

- CD (Compact Disc)
- DVD (Digital Versatile Disk)
- External hard disk
- USB flash drive
- Memory stick
- Online Storage

You can take the backup of your data by performing Copy and Paste operations. However, now-a-days most operating systems also provide a backup tool to take backups of the data on the computer.

#### **TYPES OF DATA BACKUP**

There can be two types of data backup, which are as follows:

#### (i). Full Backup

It contains complete backup of a specific database or set of file groups or files and logs to allow for recovering data and is stored in compressed form.

There are some limitations to it. Since, the volume of data is large, the process is slow and it is not possible to take overnight backup due to constraints in time and storage space.

#### (ii). Differential Backup

It is a type of backup that contains only the data or files that have been altered or created after the last full backup. This is known as the base of the differential or the differential base. This type of backup is taken almost immediately after the base backup and are generally smaller and faster than base backup. After a period of time, as a database is updated, the size of the data in differential backups increases. This makes the process of both data backup and restoration slower. Occasionally, provide a new differential base for another series of differential backups.

Watch this video to get a better understanding of both types of data backups,

https://www.youtube.com/watch?v=o-83E6levzM

#### **ONLINE DATA BACKUP**

 Online backup is a very convenient method for restoring data, it can be done from anywhere in the world. It is the type of offsite data backup.
 In online data backup, any files or folders are backed up onto a remote server through the Internet. In this type of backup, providers automatically copy the selected data to a remote hard driver. You can easily restore your data in case of data loss by connecting to the remote server.

#### **ADVANTAGES OF ONLINE BACKUP**

The advantages of online backup are as follows:

- 1. Data is available anywhere in the world at any time.
- 2. Provides a high level of security as your data is encrypted before it is sent to the remote server.
- 3. No hardware to maintain or repair the backup.
- 4. Keeps your backup safe from threats, such as theft, fire, earthquake and other such disasters as the backup is stored on a remote server.
- 5. Backups are done automatically, making your time more productive.

## This presentation shall help you understand the merits of online backup.

https://www.slideshare.net/webwej/why-choose-online-backup

#### **ASSIGNMENT:**

Attempt this quiz to test your learning! The quiz can only be attempted if you are logged in with your official ID.

https://forms.gle/kCwzCAo6z54sauzB6