JS2 DIGITAL TECHNOLOGIES - Cloud Computing

Meaning of Cloud Computing:
Cloud computing is the use of the internet to access computer services such as storing files, using software, processing data and sharing information. Instead of keeping everything on your personal computer, you can use services provided by computers called servers over the internet.

Meaning of Cloud Storage:
Cloud storage is a type of data storage in which files are saved on remote computers managed by a service provider and accessed over the internet. The files may include documents, photographs, videos, music and other information. Instead of storing a file only on your computer's hard drive or flash drive, you can upload it to a cloud storage service.

Examples of Cloud Storage Services
A. Google Drive: Google Drive: Google Drive is an online storage service provided by Google. Users can store files, organise folders, share documents and access their files from supported devices. Website: drive.google.com

B. Dropbox: Dropbox is an online service that allows users to store, synchronise and share files across compatible devices. Website: dropbox.com

C. Microsoft OneDrive: OneDrive is a cloud storage service from Microsoft. It allows users to store files online and work with Microsoft Office documents.

Advantages of Cloud Storage:
Cloud storage has many benefits.

1. Access from different locations: Users can access their stored files from different places using compatible devices and an internet connection.

2. Easy file sharing: Files can be shared with other people through links or account permissions. Example: A teacher shares lesson notes with students using Google Drive.

3. Backup and recovery: Cloud storage can provide an extra copy of important files. If a computer is damaged, the online copy may still be available. However, cloud storage is not a guarantee against data loss. Users should check that files have uploaded successfully and understand the service's recovery options.

4. Saves space on a device: Storing some files online can reduce the amount of space used on a computer or phone.

5. Easy collaboration: Several people can work together on supported online documents and projects. Example: Students can collaborate on a group assignment using Google Docs.

Safety Precautions When Using Cloud Storage
Cloud storage is useful, but users must protect their files and accounts.

1. Use a strong password: Create a password that is difficult for other people to guess. Avoid using simple passwords such as `12345678` or your name alone.

2. Enable two-step verification: Where available, enable two-factor authentication or two-step verification. It adds another layer of protection to your account.

3. Never share your password: Do not give your password or verification codes to friends or strangers. A teacher or classmate should not need your password just to receive a shared file.

4. Use a trusted internet connection: Avoid accessing sensitive files on unfamiliar or untrusted networks. If using public Wi-Fi, be extra careful and ensure you are on the genuine service website.

5. Sign out on shared computers: If you use a school computer or cybercafé computer, sign out of your account when finished. Do not save your password on a computer used by other people.

6. Differences Between Cloud Storage and Local Storage

Cloud storage	Local storage
Files are kept on remote servers.	Files are kept on a device you use or control, such as a computer or flash drive.
Usually accessed through the internet.	Files can often be accessed without an internet connection.
Makes online sharing convenient.	Sharing may require a cable, flash drive or local network.
Can make files accessible from different locations.	Access may depend on having the storage device available.
Depends on account access and the service provider.	Depends on the device being available and functioning.

TICKET OUT: 1) Define cloud computing. 2) What is cloud storage? 3) Mention three examples of cloud storage services. 4) State five advantages of cloud storage.