**Que 1)What is cloud?**

Cloud computing means storing or retrieving your personal data from your own little area on the internet.Nothing is stored on your local hard drive and then also it is accessible from any location, any device and at any time.

The cloud enables users to access the same files and application from almost any device as the computing and storage take place on servers in data center instead of locally on the user device.

Example:

= Instagram

We can login on instagram account from new phone as well and still find our own account in place, with all our photos and videos and also the conversation history.

= Dropbox or Google drive also.

**Que 2)what are the types of cloud**

**Types of cloud**

**1) Public cloud:**

This is the service run by external vendor that may include servers in one or multiple data centers. Public cloud is shared by multiple organisation.

It is the most economical option for users in which the service provider bears the expenses of bandwidth and infrastructure.

high reliability, lower costs, zero maintenance and on-demand scalability, the public cloud is not suitable for organizations operating with sensitive information as they have to comply with stringent security regulations.

**2)Private cloud:**

A private cloud is a server ,data center, or distributed network wholly dedicate to wholly one organization.

Large- and medium-scale financial enterprises and government agencies typically opt for private clouds.

**3)Hybrid cloud:**

It combines public and private and also include on-premises legacy servers. An organization may use their private cloud for some services and public cloud for others. And may sometimes use public cloud as backup for their private cloud.

businesses can use the public cloud for running high-volume applications like emails, and utilize private clouds for sensitive assets like financials, data recovery, and during scheduled maintenance and rise in demand.

**4) Multicloud**

It involve multiple public cloud . The organization with multicloud deployment rents virtual servers from external vendors. It can be hybrid type and vice versa.

**Que 3) What are the advantages and disadvantage of cloud?**

**Advantages:**

1. **Instant scalability:**

Cloud computing enables immediate scalability of infrastructure capacity depending on the business need. It is like having an unlimited IT resource, which can be scaled up and/ or down to meet user demands

1. **Anywhere accessibility:**

We can access that cloud from anywhere and also provide technology and high-speed internet connectivity.

3. **Increased speed and operational agility:**

Today, to cope with competition, businesses must have the ability to instantly scale their cloud capacity by accessing bandwidth demands from remote servers of a particular cloud service provider. If the business demand is more, the enterprise can turn up its computing capacity and IT resources availability with the click of a button. Such an ability improves organizational agility, productivity and efficiency making scope to experiment with new ideas and thereby, offering competitive advantage and the ability for the organization of any size to disrupt the market

1. **Reduced expenditure:**

With the cloud, enterprises can focus on building their business rather than investing in hardware infrastructure and data centers that either remain idle, or underutilized. Cloud costs, however, depend on the consumption -- a variable expense

1. **Automatic updates/ patches:**

When enterprises deal with several different kinds of software, operating systems, and applications from various vendors for their everyday operations, they have to have software and security updates rolled out from time to time. This is a very time-consuming process and the downtime for system maintenance means loss of productivity. A cloud service provider or a managed service provider can take care of these automatically, saving time and manual effort on maintenance.

**7. High security:**

Protecting sensitive, personally identifiable and/ or financial information is a considerable challenge for CIOs. Advanced cloud security features, however, have reduced the risks of information loss and cyber stealth

1. **Reduced carbon footprint:**

The cloud infrastructure significantly reduces power, IT infrastructure, and resource consumption by offering resources as per demand, thereby reducing e-waste and adverse impact on the environmental

1. **Flexibility:**

From closed cabins to bringing your internet-enabled devices to work, irrespective of the device type and/ or global location, cloud offers vast flexibility and empowerment to businesses as well as to their employees

1. **Enterprise collaboration:**

Company information no longer exists in silos (except confidential ones, of course). Centralized documentation control on cloud-based, file-sharing and social communication apps (like Slack, Yammer, etc) offers transparency and visibility into work processes, streamlining information flow and enabling better collaboration between teams, departments and employees seated in different time zones -- all of which leads to improved productivity and bottom line.

**Disadvantages:**

**1. Network Connection Dependency**

In order to reap the benefits of cloud computing, your business must always have an internet connection. Unfortunately, there is no way to get around this fact. You need a network in order to send files to the cloud and retrieve them.

**2. Security**

As the past few months have shown that not all cloud providers are as secure as they claim to be. As a business, you can’t afford to have sensitive information about your company or your clients fall victim to hackers. One of cloud computing’s greatest disadvantages is that you don’t always know which providers you can trust.

**3. Technical Issues**

If you experience any technical issues, you have no choice but to call your hosted technical support or help. You cannot fix your cloud computing problems in-house, and some providers do not offer around-the-clock technical support.

**Que 4 ) What is EC-2 in cloud?**

Ec-2 is nothing but the Elastic compute cloud .it is a web service that prevised secure, resizable compute capacity in the cloud. By this we can obtain and configure capacity with minimum friction.

An **EC2** instance is like a remote computer running Windows or Linux and on which you can install whatever software you want, including a Web server running PHP code and a database server.

EC2 also allows all users to build apps to automate scaling according to changing needs and peak periods, and makes it simple to deploy virtual servers and manage storage.

EC2 setups involves creating an Amazon Machine Image(AMI ),which includes an OS ,apps and configurations. That AMI is then loaded into the Amazon Simple Storage Service (S3) and it’s registered with EC2, at which point users can launch virtual machines as needed.