**Assignment 1 – Cloud Introduction**

**Q.1) What is cloud?**

- Cloud **computes resources on rent.**

- It can be used as a virtual machine, storage of data, for computing we can access it from anywhere.

- We use the product which is virtually created on cloud, resources are available to us on demand and we pay for particular resources (like RAM,core,HD) depending on our use and time and the costing model.

- **Rent -> Pay as you go**

3 types of cloud : Public (Anyone can see it)

Private (Owned by one organization)

Hybrid (public + private)

- Different vendors are there like Amazon, Microsoft, Google, Oracle, IBM,etc.

These vendors create cloud and make it available to us and charge us depending on our demand and time we use their resources.

- Examples of public cloud :

1) Amazon – AWS (Amazon Web Services)

2) Microsoft – Azure

3) Google – GCP (Google Cloud Platform)

- It can be said as delivery of computing services like storage, servers, on internent.

**Q2) What are advantages of cloud?**

1. **On demand resource availability**.
2. We have to pay for the resources which we are using depending on time we are using it.
3. Flexibility to change the configurations anytime.
4. Flexibility to stop the use of instance when we don’t need one.
5. Whenever we are using internet on cloud instance it gives **100Gbps** speed (in case of AWS) that means fast speed free of charge internet access, so **high speed** is one of the biggest advantage.
6. We can change extend RAM size at any time, and will be charged for that extended RAM for that time only that means **on demand scale up & down.**
7. We can access the virtual instance remotely.
8. Charged for resources only when we use them and we can release resources whenever needed.
9. **Easy data transfer** from local->instance on cloud and vice versa.
10. Storage capacity can be changed, system configurations can be changed.