

✓ Basic Cloud Computing Concepts (Simple Explanations)

◆ 1. What is Cloud Computing?

Ans: Cloud computing means using the internet to access computing resources like servers, storage, databases, and software instead of using your own computer or physical hardware.

◆ 2. What are the types of Cloud Environments?

Ans:

- **Public Cloud:** Services shared with everyone (e.g., AWS, Google Cloud).
 - **Private Cloud:** Used by only one organization.
 - **Hybrid Cloud:** Mix of public and private clouds.
-

◆ 3. What are the service models of Cloud Computing?

Ans:

- **IaaS (Infrastructure as a Service):** Provides hardware (like servers).
👉 Example: AWS EC2
 - **PaaS (Platform as a Service):** Provides tools to develop apps.
👉 Example: Google App Engine
 - **SaaS (Software as a Service):** Provides ready-to-use software.
👉 Example: Gmail, Google Docs
-

◆ 4. What are some examples of Cloud Service Providers?

Ans:

- Amazon Web Services (AWS)
 - Microsoft Azure
 - Google Cloud Platform (GCP)
 - IBM Cloud
 - Oracle Cloud
-

◆ **5. What is virtualization in cloud computing?**

Ans: It means creating virtual versions of hardware like servers and storage. It helps in running multiple operating systems on one physical machine.

◆ **6. What are the advantages of Cloud Computing?**

Ans:

- Cost-effective (pay only for what you use)
 - Scalable (can grow easily)
 - Accessible (from anywhere)
 - Secure (offers backup and recovery)
 - No need to maintain hardware
-

◆ **7. What are regions and availability zones in AWS?**

Ans:

- **Region:** A geographic area (like Mumbai, Tokyo).
 - **Availability Zone (AZ):** A group of data centers within a region.
-

◆ **8. What is elasticity in cloud?**

Ans: It means automatically increasing or decreasing resources as needed.

◆ **9. What is scalability?**

Ans: It means the system can grow (scale up or out) to handle more traffic or data.

◆ **10. What is pay-as-you-go model?**

Ans: You only pay for the services you use, like using electricity or mobile data.

◆ **11. What is a Virtual Machine (VM)?**

Ans: A VM is a software-based computer that runs inside a physical computer.

◆ **12. What is a Cloud Storage Service?**

Ans: It lets you save your files online instead of a local hard drive.

👉 Example: Amazon S3, Google Drive

◆ **13. What is high availability?**

Ans: It means your service or application is always running, even if something fails.

◆ **14. What is load balancing?**

Ans: It distributes traffic across multiple servers to keep everything running smoothly.

◆ **15. What is serverless computing?**

Ans: You write and run code without managing servers.

👉 Example: AWS Lambda

◆ **16. What is a cloud region vs. a data center?**

Ans:

- **Data Center:** A physical place with servers.
 - **Region:** A collection of data centers in one area.
-

◆ **17. What is a container in cloud?**

Ans: A lightweight, portable unit that packages code and its dependencies.

👉 Example: Docker

◆ **18. What is a cloud deployment model?**

Ans: It defines how the cloud services are made available:

- Public
- Private

- Hybrid
 - Community
-

◆ **19. What is a cloud-native application?**

Ans: An app built specifically to run in the cloud using tools like containers, microservices, etc.

◆ **20. What is cloud monitoring?**

Ans: It is keeping track of performance, errors, and usage of cloud resources.

✅ **Tip: How to Answer General Viva Questions?**

If you're ever unsure, start with:

“Cloud computing is a way to...” and then explain in your own words based on the concepts above.