Cloud Computing Definitions

What is Cloud Computing?
Delivery of computing services over the internet for innovation and scalability.

Why Cloud Computing?
Preferred for scalability, cost-efficiency, and global accessibility.

Characteristics of Cloud Computing
Includes on-demand service, broad access, resource pooling, elasticity, and measured service.

Cloud Computing Architecture
Structure of cloud systems including front-end, back-end, and network components.

Components of Cloud Computing Architecture
Includes client infrastructure, applications, services, runtime, storage, and management.

Difference between Cloud Computing and Grid Computing
Cloud delivers services online; grid connects computers for collaborative tasks.

How does cloud computing work
Uses remote servers accessed via the internet to host applications and services.

Cloud Computing Applications
Used in storage, backup, development, analytics, and virtual desktops.

What are the Security Risks of Cloud Computing
Includes data breaches, insecure APIs, and loss of data control.

Public Cloud
Cloud infrastructure available to the public via third-party providers.

Advantages of Public Cloud
Cost-effective, scalable, and provider-managed.

Disadvantages of Public Cloud
Limited control and potential security concerns.

Private Cloud
Cloud infrastructure dedicated to a single organization.

Advantages of Private Cloud
Greater control, security, and customization.

Disadvantages of Private Cloud
Higher cost and maintenance responsibility.

Hybrid Cloud
Combines public and private clouds for shared data and applications.

Advantages of Hybrid Cloud
Flexible, scalable, and secure for sensitive data.

Disadvantages of Hybrid Cloud
Complex management and security challenges.

Community Cloud
Shared cloud infrastructure for organizations with common concerns.

Advantages of Community Cloud
Collaborative, cost-effective, and tailored.

Disadvantages of Community Cloud
Limited scalability and shared responsibility.

IaaS
Infrastructure as a Service provides virtualized computing resources online.

PaaS
Platform as a Service offers tools for application development online.

SaaS
Software as a Service delivers applications via the internet.

AWS
Amazon's cloud platform offering computing, storage, and services.

Azure
Microsoft's cloud service for building and managing applications.

GCP
Google's cloud platform for storage, computing, and machine learning.