Module01

1. Why Study Cloud Computing Phenomenon?
   ❑ **Adoption** of cloud computing is significantly **rising** in organisations.
   ❑ Cloud computing is seen as a **leading technology** in the coming decade.
   ❑ Cloud is driving **optimization and innovation** of business models in organisations
   ❑ Trends li

2. What is Cloud Computing?
   A **model** for enabling **on-demand network access** to a
   shared pool of configurable **computing resources**, (e.g.,
   servers, storage, networks, applications, and services) that
   can be rapidly **provisioned and released** with minimal
   management effort or service provider interaction.

3. What has cloud been called in the past?
   Centralised Computing - Grid Computing - Distributed Computing - On demand Computing - Hosting - Application Service Provider (ASP)

4. Essential cloud characteristics and benefits (ORRBM)?
   cloud characteristics :
      O : On-demand self-service
      R : Resource pooling
      R : Rapid elasticity
      B : Broad network access
      M : Measured service

5. Consumers use **web-based self-service portal** to view a service catalog and request cloud services

6. Resource usage can be **monitored, controlled, and reported**, providing transparency for both the provider and consumer of the utilized.

7. What is Cloud Benefits?
   cloud benefits :
      Business agility - Reduces IT costs - High availability - Flexibility of access - Flexible scaling - Business continuity - Increased collaboration - Masked complexity - Simplified infrastructure management - Application development and testing

8. What is the difference between (Iaas,Pass,Sass)?
   IaaS : Infrastructure as a Service The consumer **does not** manage or
   Control the underlying cloud infrastructure. User **control over** operating systems,
   storage, and deployed applications; and possibly limited control of select networking
   components , (e.g., host firewalls).

PaaS : Platform as a Service The consumer **does not manage or control** the underlying cloud infrastructure including network, servers, operating systems, or storage. User **has control over** the deployed applications and possibly configuration settings for the application-hosting environment.

SaaS : Software as a Service The consumer **does not** manage or control the underlying cloud infrastructure including network, servers, operating systems, storage, or even individual application capabilities. The applications are accessible from various client devices through either a thin client interface, such as a web browser, (**e.g., web-based email, or a program interface**.)

9. Cloud services brokerage (CSB) is **an IT role and business model** between cloud provider and one or more consumers of that service.

10. What is Categories of Cloud Services Brokerage?
Service intermediation - Service aggregation - Service arbitrage

11. A cloud deployment model specifies how a cloud infrastructure is **built**, **managed, and accessed**.

12. What is the difference between cloud deployment models(Public,Private,Community,Hybird)?

Public Cloud: Shared by everyone, like a public park.

Private Cloud: Used by one organization only, like a private backyard.

Community Cloud: Shared by a group of similar organizations, like a communal garden.

Hybrid Cloud: A mix of public and private clouds, like having a private backyard and a public park membership.