

1. cloud computing refers to both the applications delivered as services over the internet.

2. Users subscribe to the service and establish with the service provider a Service level agreement defining the quality-of-service parameters.

3. what is private cloud?

Ans The cloud is implemented within the private premises of an institution and generally made accessible to the members of institution or a subset of them.

4. what is public cloud?

Ans The cloud is open to wider public.

5. what is hybrid cloud?

Ans The cloud is the combination of public & private clouds and most likely identifies a private cloud that has been augmented with resources or services hosted in a public cloud.

6. what is community cloud?

Ans The cloud is characterised by a multi administrative domain involve in different.

deployment models & it is specifically designed to a specific industry.

7. Define IaaS (Infrastructure-as-a-service)?

Ans IaaS delivers infrastructure on demand in the form of virtual hardware storage & Networking.

8. Define PaaS?

Ans Platform-as-a-service (PaaS) delivers scalable and elastic run-time environment on demand & host the execution of applications.

9. Define SaaS?

Ans Software-as-a-service (SaaS) provides applications ^{sp} services on demand.

Ex: Photo editing, document management etc.

10. Example for IaaS Provider?

Ans Amazon S3, Amazon EC2.

11. Example for PaaS provider?

Ans Microsoft Azure, Aneka, Google App Engine.

12. Example for SaaS provider?

Ans Facebook, Twitter.

13. what are the three major categories of cloud computing services?

Ans 1. IaaS

2. PaaS

3. SaaS

14. IaaS Solutions deliver infrastructure in the form of virtual hardware, storage and networking.

15. Software - as-a-service solutions provide applications and services on demand.

16. Platform - as-a-service solutions are middle step in the cloud reference model stack.

17. List some of the characteristics of cloud?

Ans 1. on-demand access

2. Ubiquitous

3. shared pooling

4. Elasticity

5. pay per use

6. Energy efficiency

18. Security in terms of confidentiality, secrecy and protection of data in a cloud environment is import challenge in cloud.

19. Define distributed system?

Ans It is a collection of independent computers that appears to its users as a single coherent system.

20. what are the technologies play vital role in the realization of cloud computing?

Ans

1. Distributed Computing
2. virtualization
3. web 2.0
4. SOA (Service Oriented Architecture)
5. utility computing.

21. write some of the properties of distributed system?

Ans Heterogeneity, openness, scalability, transparency, concurrency, continuous availability and independent failures.

22. what are three main milestones in Distributed system?

Ans Mainframe Computing, cluster Computing and grid Computing.

23. what is cluster computing?

Ans A computer cluster is a set of loosely or

tightly connected computers that work together.
So, that in many respects they can be viewed as
a single system.

24. what is grid computing?

Ans A computing grid was a dynamic
aggregation of heterogeneous computing nodes
& its scale was nation wide or even world wide.

25. Define Virtualization?

Ans In computing, virtualization refers to the
acts of creating a virtual version of
something, including virtual computer hardware
platforms, storage devices, & computer network
resources.

26. web 2.0 brings interactivity and flexibility
into web pages.

27. write some of the examples of web 2.0
applications?

Ans Google Documents, Google maps, Flickr,
Facebook, Twitter, youtube etc.

28. what is the difference b/w parallel &
distributed computing?

Ans

parallel computing

1. Multiple process executes multiple instructions with shared memory
2. parallel implies a tightly coupled system

Distributed computing

1. collection of independent computers that appear to the user as a single coherent system.
2. Distributed refers to wider class of system including tightly coupled.

29. what is an SIMD architecture?

Ans

An SIMD computing system is a multiprocessor machine capable of executing the same instruction on all the CPUs but operating on ~~me~~ different data streams.

30. Major categories of parallel computing system?

Ans

1. single-instruction, single-data (SISD) systems
2. single-instruction, Multiple-data (SIMD) "
3. Multiple-instruction, single-data (MISD) "
4. Multiple-instruction, Multiple data (MIMD) "

31. Describe the different levels of parallelism that can be obtained in a computing system?

Ans

1. large grain (or task level)
2. medium grain (or control level)

- 3. fine grain (or data level)
- 4. very fine grain (multiple - instruction issue).

32. what is a distributed system? what are the components that characterize it?

Ans A distributed system is a collection of independent computers that appears to its users as a single coherent system.

33. what is an architectural style, and what is its role in the context of a distributed system?

Ans Architectural styles are mainly used to determine the vocabulary of components & connectors that are used as instances of the style together with a set of constraints on how they can be combined.

Architectural styles for distributed systems are helpful in understanding the different roles of components in the system & how they are distributed across multiple machines.

34. List the most important software architectural styles.

Ans

1. Data-centered
2. Data flow
3. virtual machine
4. call & return
5. Independent Components

35. what are the fundamental systems architectural styles?

Ans

1. client server
2. peer-to-peer.

36. what is the most relevant abstraction for inter-process communication in a distributed system?

Ans

shared memory, remote procedure call (rpc) & message passing.

37. Discuss the most important model for message based communication.

Ans

38. what is the difference b/w distributed object and RPC?

Ans Distributed object frameworks leverage the basic mechanism introduced with RPC & extend it to enable the remote invocation of object methods & to keep track of references to objects made available through a network connection.

39. Discuss CORBA?

Ans CORBA is a specification introduced by the Object Management Group (OMG) for providing cross-platform & cross-language interoperability among distributed components.

40. What is SOA?

Ans SOA is an architectural style supporting service orientation. It organizes a software system into a collection of interacting services.