Part - A

1. What is Grid Computing?

Grid computing is a processor architecture that combines computer resources from   various domains to reach a main objective. In **grid computing**, the **computers** on the network can work on a task together, thus functioning as a supercomputer.

2. What is QOS?

Grid computing system is the ability to provide the quality of service requirements necessary for the end-user community. QOS provided by the grid like performance, availability, management aspects, business value and flexibility in pricing.

3. What are the derivatives of grid computing?
There are 8 derivatives of grid computing. They are as follows:
- a) Compute grid
- b) Data grid
- c) Science grid
- d) Access grid
- e) Knowledge grid
- f) Cluster grid
- g) Terra grid
- h) Commodity grid

4. What are the features of data grids?

The ability to integrate multiple distributed, heterogeneous and independently managed data sources.
The ability to provide data catching and/or replication mechanisms to minimize network traffic.
The ability to provide necessary data discovery mechanisms, which allow the user to find data based on characteristics of the data.

5. Define – Cloud Computing.
Cloud computing, often referred to as simply "the cloud," is the delivery of on-demand computing resources—everything from applications to data centers—over the Internet on a pay-for-use basis. Storing and accessing data and programs over the Internet instead of your computer's hard drive

6. What is business on demand?

Business On Demand is not just about utility computing as it has a much broader set of ideas about the transformation of business practices, process transformation, and technology implementations.
The essential characteristics of on-demand businesses are responsiveness to the dynamics of business, adapting to variable cost structures, focusing on core business

competency, and resiliency for consistent availability.

7. What are the facilities provided by virtual organization?

The formation of virtual task forces, or groups, to solve specific problems associated with the virtual organization.
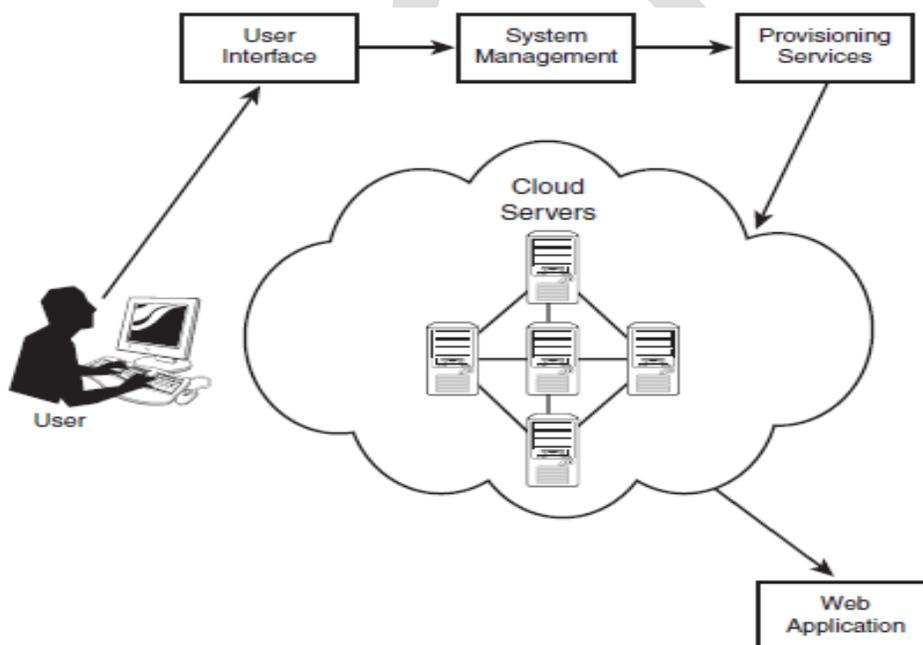The dynamic provisioning and management capabilities of the resource required meeting the SLA's.

8. What are the properties of Cloud Computing?
There are six key properties of cloud computing: Cloud computing is
- user-centric
- task-centric
- powerful
- accessible
- intelligent
- programmable

9. Sketch the architecture of Cloud.

10. What are the types of Cloud service development?
- Software as a Service
- Platform as a Service
- Web Services
- On-Demand Computing

11. What is meant by scheduler?

Schedulers are types of applications responsible for the management of jobs, such as allocating resources needed for any specific job, partitioning of jobs to schedule parallel execution of tasks, data management, event correlation, and service-level management capabilities.

12. What is meant by resource broker?

Resource broker provides pairing services between the service requester and the service provider. This pairing enables the selection of best available resources from the service provider for the execution of a specific task.

13. What is load balancing?

Load balancing is concerned with the integrating the system in order to avoid processing delays and over-commitment of resources. It involves partitioning of jobs, identifying the resources and queuing the jobs.

14. What is grid infrastructure?

Grid infrastructure forms the core foundation for successful grid applications. This infrastructure is a complex combination of number of capabilities and resources identified for the specific problem and environment being addressed.

15. Define – Distributed Computing.

Distributed computing is a field of **computer** science that studies **distributed** systems. A **distributed** system is a software system in which components located on networked **computers** communicate and coordinate their actions by passing messages. The components interact with each other in order to achieve a common goal.

PART – B

1) Explain in detail about virtual organization. (16)

2) Write about the scope of grid computing in business areas. (16)

3) Explain some of the grid application and their usage patterns. (16)

4) Write short notes on. (16)
a) Schedulers
b) Resource broker
c) Load balancing
d) Grid portals

5) What are the data and functional requirements of grid computing? (16)

6) Explain briefly about grid infrastructure. (16)

7) Describe in detail about the Technologies for network based systems? (16)