

Name of Faculty: Dr. Virendra Kumar Tiwari

Designation: Professor

Department: LNCT-MCA

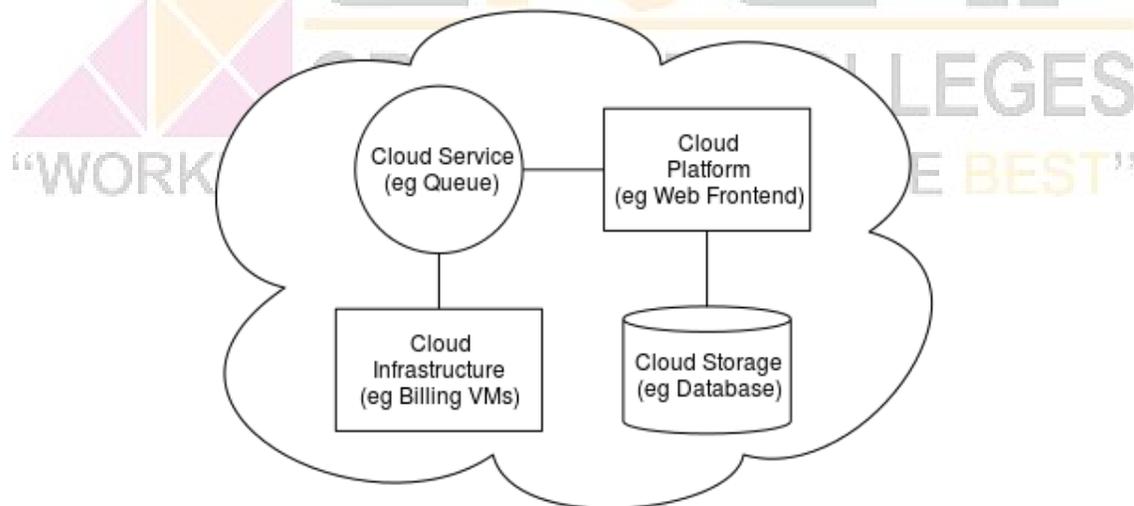
Subject: 402-Information Storage Management

Unit: V

Topic: *Architectural Framework*

## Architectural Framework

**Cloud computing architecture** refers to the components and subcomponents required for cloud computing. These components typically consist of a front end platform (fat client, thin client, mobile device), back end platforms (servers, storage), a cloud based delivery, and a network (Internet, Intranet, Inter cloud). Combined, these components make up cloud computing architecture.



- **Cloud client platforms**

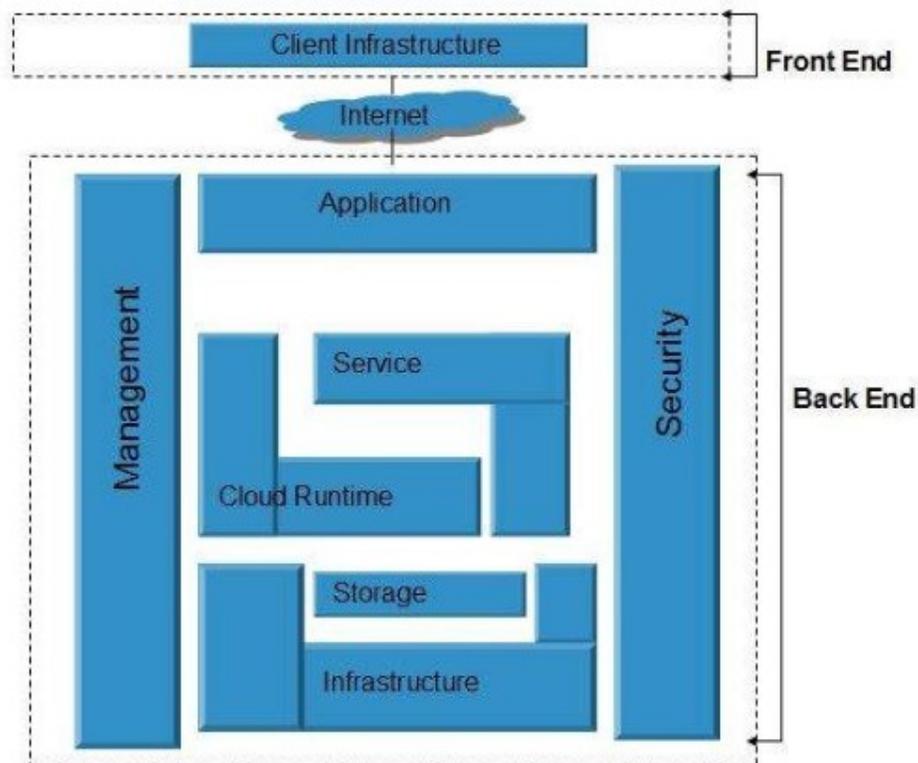
Cloud computing architectures consist of front-end platforms called clients or cloud clients. These clients are servers, fat (or thick) clients, thin clients, zero clients, tablets and mobile devices that users directly interact with. These client platforms interact with the cloud data storage via an application (middleware), via a web browser, or through a virtual session.

Virtual sessions in particular require secure encryption algorithm frameworking which spans the entire interface.

Cloud Computing architecture comprises of many cloud components, which are loosely coupled. We can broadly divide the cloud architecture into two parts:

- Front End
- Back End

Each of the ends is connected through a network, usually Internet. The following diagram shows the graphical view of cloud computing architecture:



- Front End

The **front end** refers to the client part of cloud computing system. It consists of interfaces and applications that are required to access the cloud computing platforms, Example - Web Browser.

- Back End

The **back End** refers to the cloud itself. It consists of all the resources required to provide cloud computing services. It comprises of huge data storage, virtual machines, security mechanism, services, deployment models, servers, etc.

- It is the responsibility of the back end to provide built-in security mechanism, traffic control and protocols.
- The server employs certain protocols known as middleware, which help the connected devices to communicate with each other.

**Assignment:**

Que-1. Explain Architectural Framework in cloud computing.