

## Cloud Computing

### Sessional Assignment

<b><u>Name: Sami Ahmed</u></b>	<b><u>ID: 13222</u></b>
<b><u>Program: BSSE</u></b>	<b><u>Module: Sec A</u></b>

**Q1:** Explain in detail Service Oriented Architecture (SOA) in cloud computing.

**Ans:** Service-Oriental Architecture (SOA) is a form of architecture where applications use the resources available on a network. In this facility, services are provided in the form of applications, over the Internet.

- SOA allows users to pool large amounts of resources from existing services to create applications.
- SOA incorporates a set of design principles that facilitate the development of a program and provides a means of integrating objects into a unified and limited system.
- SOA packages are performance-based in a set of usable functions, which can be integrated into different software systems with different business backgrounds.

**Q2:** Explain in detail prominent security threats to the cloud computing.

**Ans:** The most common and prominent security threads on a cloud computer are as follows.

- Data integrity is the most important issue of Data Breach is the incident where an unauthorized person steals sensitive / personal data.
- A data key is also a thread in a computer company in the cloud often referred to as a vendor-lock and is a situation where a customer using a service cannot easily switch to a competitor's product or service.
- Data deletion is a residual symptom of data loss.
- Data recovery can be difficult in the event of a server failure or failure.
- Data space is the introduction of the idea that data should be stored closer to the processing but makes things more complex for simple applications.

**Q3:** Explain in detail Cloud Infrastructure Mechanisms.

**Ans:** Basic building blocks for cloud environments, inclusive

### **Im Logical Network Perimeter:**

Network characterization that establishes a virtual network boundary. Their objectives are:

- Separate IT resources in the cloud from unauthorized users.
  - Separate IT IT services from the cloud from non-users.
  - Select cloud IT services for cloud consumers.
  - Controlling the bandwidth available from different IT resources.
- **Virtual Server:**

A type of software that provides a virtual server. Used by the cloud provider for sharing services. In other words Virtual server means virtual machine.

- **Device Cloud Storage Device:**

Storage devices are specifically designed for a cloud-based environment. The doors to this storage can be seen. Able to provide skills allocation support to the operating system used.

- **Cloud Monitoring:**

A lightweight and independent software system responsible for collecting and processing IT resource usage data.

e.g. amount of data, payment amount, time of use, etc.

- **Lication Response Feedback:**

Multiple creation of similar IT resources. Feedback is often made when the availability and performance of IT resources needs to be improved.

Environment Environment Learned:

The descriptive component of the PaaS (Platform as a Service) is a cloud delivery model that represents a defined, cloud-based framework that is developed by a set of IT resources that are already installed, ready to use and customized by the cloud consumer. It is usually installed with the Software Development Kit (SDK).