

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

MBA - SEMESTER- III • EXAMINATION – WINTER 2021

Subject Code: 1539614

Date: 28/02/2022

Subject Name: Cloud Computing

Time: 10:30 am to 01:30 pm

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a)** Give definition of following terms: **14**
1. Cloud
 2. Virtualization
 3. Web based application
 4. Cloud Mashups
 5. Mobile cloud
 6. Jungle cloud
 7. On demand computing
- Q.2 (a)** Explain various types of cloud with proper examples. **07**
- (b)** Explain reference model of cloud computing with proper examples. **07**
- OR**
- (b)** Explain various characteristics of cloud computing with necessary examples. **07**
- Q.3 (a)** Explain data security in cloud computing. **07**
- (b)** Explain SOA foundation with necessary examples. **07**
- OR**
- Q.3 (a)** Explain Grid for data storage in cloud computing. **07**
- (b)** Explain various application of cloud computing in IT industry. **07**
- Q.4 (a)** Explain difference between Google based cloud services and Amazon based cloud services. **07**
- (b)** Explain need for cloud computing tools with proper examples. **07**
- OR**
- Q.4 (a)** Explain various types of virtualizations with proper examples. **07**
- (b)** Explain role of enterprise data storage in cloud computing. **07**

Q.5

Loudoun Water, a public utility in Northern Virginia, delivers water to over 80,000 customers in Loudoun County. As the county’s population expanded and more residents came to rely on Loudoun Water, the utility found the situation offered a unique opportunity to re-invent itself: The utility was asking more than ever from its IT infrastructure, and it needed that infrastructure to be secure, flexible, and available around the clock. Loudoun Water decided that a transition from an on-premise to infrastructure as a service solution, hosted on Azure, could provide the scalability and reliability it needed—not only supporting the demands of its organization and customer base now, but also promising a better way to handle future growth and challenges. In addition, cloud-based automation would open the door for greater overall efficiency and cost management, while a concurrent program of resource reskilling offered the promise of improved productivity and work capacity in needed technical areas.

Deloitte and Loudoun Water collaborated to design and build a reliable and scalable SAP solution on Microsoft Azure Cloud on Deloitte’s Open Cloud management platform. Deloitte cloud architects advised the utility’s network team in architecting and developing a secure network architecture that included periodic security upgrades built to withstand repeated outages, or even a disaster. Over the course of 18 weeks, the team designed and built an end-to-end SAP architecture that met Loudoun Water’s needs, including eliminating performance issues that had recurred in the past. The result is a public utility that has transformed into a Kinetic Enterprise with the ability to continuously evolve. From its new foundation of future facing systems, the organization can more effectively handle an increasing workload and prepare for anticipated growth. Deloitte’s approach to the cloud transformed how Loudoun Water solved its IT challenges, and paved the way to scale innovative solutions quickly for its growing customer base

- Q.5**
- (a)** What are the advantages to Loudon Water by applied cloud services? **07**
 - (b)** Other than mentioned cloud services, Which are the other cloud computing service Loudon water could take to improve their efficiency? **07**
- OR**
- (a)** What are the possible security threats to Loudon water? **07**
 - (b)** If Loudon water continues to use their same system, which type of loss they can have? **07**
