

Seat No./Enrollment No.: _____

GUJARAT TECHNOLOGICAL UNIVERSITY
BACHELOR OF ENGINEERING – SEMESTER 6 – EXAMINATION – SUMMER 2026

Subject Code: 3164806

Date: 29/05/2026

Subject Name: CLOUD COMPUTING

Time: 10:30 AM TO 01:00 PM

Total Marks: 70

Instructions:

- 1. Attempt all questions.**
- 2. Make suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**
- 4. Simple and non-programmable scientific calculators are allowed.**

- Q.1** (a) Define Cloud Computing. Explain its Key characteristics. **03**
(b) Describe the advantages and challenges of Cloud Computing. **04**
(c) Explain the technologies and tools used in cloud computing in detail. **07**
- Q.2** (a) Explain SaaS model with its features. **03**
(b) Discuss services provided by IaaS. **04**
(c) Explain the different layers of Cloud Computing architecture with a diagram. **07**
- OR
- Q.2** (c) Explain various types of cloud (Public, Private, Hybrid) with their features and examples. **07**
- Q.3** (a) Explain load balancing in cloud computing. **03**
(b) Explain the working of a Hypervisor in cloud computing **04**
(c) List and discuss various types of virtualization. **07**
- OR
- Q.3** (a) What are the basic Issues of Securing the Cloud? **03**
(b) Differentiate between Type-1 and Type-2 Hypervisors. **04**
(c) Write a short note on CPU Virtualization. **07**
- Q.4** (a) Define Cloud Resource Management and state its importance. **03**
(b) Describe Single-tenancy and Multi-tenancy models. **04**
(c) Write a detailed note on virtual clusters and their management in cloud computing. **07**
- OR
- Q.4** (a) What is Platform Deployment in cloud computing? **03**
(b) Explain how to perform Disaster Recovery in Clouds. **04**
(c) Explain the concept of Virtual Machine (VM) provisioning and migration in cloud computing. **07**
- Q.5** (a) What is Storage Cloud Architecture? **03**
(b) Write a note on emerging cloud management standards. **04**
(c) Discuss Google App Engine and its applications. **07**

OR

Q.5	(a) Define Compute Cloud Architecture.	03
	(b) Write a short note on Cloud Administration.	04
	(c) Explain Eucalyptus architecture with a diagram.	07
