

GUJARAT TECHNOLOGICAL UNIVERSITY

BE- SEMESTER- VII EXAMINATION – SUMMER 2026

Subject Code:3170717

Date:29-05-2026

Subject Name:Cloud Computing

Time:02:30 PM TO 05:00 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.

	MARKS
Q.1* (a) Define following Terms: (1) Cloud Computing (2) Virtualization (3) Multi-Tenant	03
(b) List the cloud characteristics and explain them briefly.	04
(c) Explain various Cloud Deployment Models. List out advantages & dis-advantages of each one Model.	07
Q.2 (a) Define PaaS. Give few examples of PaaS.	03
(b) What is Virtualization? Describe the need for Virtualization.	04
(c) With a block diagram, describe SaaS. Explain advantages & dis-advantages of SaaS.	07
OR	
(c) With a block diagram, describe IaaS. Explain advantages & dis-advantages of IaaS.	07
Q.3 (a) What are Hypervisors? Give difference between Type-1 & Type-2 Hypervisors.	03
(b) What do you mean by Instruction Set Architecture Level & Hardware Abstraction Layer Level Virtualization?	04
(c) List and discuss various types of virtualization?	07
OR	
Q.3 (a) What is the motivation behind Live VM Migration.	03
(b) Explain Physical & Virtual Clusters.	04
(c) Write a short note on CPU Virtualization	07
Q.4 (a) Write a short note on The Open Commons Consortium.	03
(b) Describe the Identity Management lifecycle.	04
(c) List the Cloud Security Risks and briefly explain each of them.	07
OR	
Q.4 (a) Write a short note on Collaboration as a Service.	03
(b) Explain in brief about the load balancing in cloud computing.	04
(c) With block diagrams, explain the mechanisms for encrypting data in the Cloud.	07
Q.5 (a) What do you mean by Identity and Access Management?	03
(b) Explain service level agreement (SLA) in cloud computing with example	04
(c) Discuss Open Stack cloud middleware along with its architecture.	07
OR	
Q.5 (a) What is Google App Engine? Why it is used?	03
(b) Write a short note on disaster recovery in cloud computing.	04
(c) Define: Eucalyptus. Draw & Explain the architecture of Eucalyptus in brief.	07
