

Enrollment No./Seat No.:

GUJARAT TECHNOLOGICAL UNIVERSITY
M.SC INTEGRATED - SEMESTER - VI EXAMINATION - SUMMER 2025

Subject Code: 1360303

Date: 14-05-2025

Subject Name: Fundamental of 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. Use of simple and non-programmable scientific calculators are permitted.**

	Marks
Q.1 (a) Explain any two challenges of cloud computing.	03
(b) Discuss Cloud Infrastructure Management.	04
(c) Explain VM provisioning and migration in action with a real-world example.	07
Q.2 (a) Differentiate between public and private clouds.	03
(b) Explain virtual machine migration with an example.	04
(c) Elaborate on virtualization technologies and their applications.	07
OR	
(c) Discuss in detail the architecture and types of cloud computing.	07
Q.3 (a) List any two cloud service models with a brief.	03
(b) Differentiate between SaaS, PaaS, and IaaS.	04
(c) Compare the features and applications of OpenStack, CloudSim, and Eucalyptus.	07
OR	
(a) Write two features of Windows Azure.	03
(b) Explain the role of cloud middleware.	04
(c) Discuss the design challenges in cloud infrastructure.	07
Q.4 (a) Name two tools used for cloud management.	03
(b) What is the significance of layered cloud architecture?	04
(c) Describe in detail the integration of private and public clouds.	07
OR	
(a) What is the role of a hypervisor?	03
(b) What is the use of OpenStack in cloud?	04
(c) Explain Inter Cloud Resource Management in depth.	07
Q.5 (a) What are the different layers in cloud computing?	03

- (b) List various technologies and tools used for PaaS. **04**
- (c) How can an enterprise build a private cloud using IaaS and PaaS? **07**
- OR**
- (a) Give a brief note on VM provisioning. **03**
- (b) Explain cloud resource provisioning. **04**
- (c) Analyze and explain different case studies on cloud-based services. **07**
