



PRESIDENCY UNIVERSITY

BENGALURU

Roll No.																			
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End - Term Examinations - December 2025

Date: 11 - 12- 2025

Time: 09:30am - 12:30pm

School: SOIS-PG	Program: MCA (Master in Computer Application)		
Course Code: CSA4005	Course Name: Cloud Computing		
Semester: III	Max Marks: 100	Weightage: 50%	

CO - Levels	C01	C02	C03	C04
Marks	26	24	26	24

Instructions:

- (i) Read all questions carefully and answer accordingly.
- (ii) Do not write anything on the question paper other than roll number.

Part A

Answer ALL the Questions. Each question carries 2marks.

10Q x 2M=20M

1.	Outline how cloud computing enables flexible use of IT resources.	2 Marks	L2	C01
2.	Mention two simple advantages of moving from traditional systems to cloud services.	2 Marks	L1	C01
3.	Briefly state how virtualization reduces the need for physical machines.	2 Marks	L1	C02
4.	How does a hypervisor help in creating and managing virtual machines?	2 Marks	L2	C02
5.	How does autoscaling help cloud applications handle changing workloads?	2 Marks	L2	C03
6.	Summarize why monitoring cloud resources is important.	2 Marks	L2	C03
7.	Briefly describe how identity management controls user access in the cloud.	2 Marks	L2	C04
8.	Mention two simple benefits of using containers in cloud deployment.	2 Marks	L1	C04
9.	Outline how SaaS platforms helps in delivering software to users.	2 Marks	L2	C01
10.	How do Service Level Agreements (SLAs) help ensure dependable performance in cloud systems?	2 Marks	L2	C03

Part B

Answer the Questions.

Total Marks 80M

11.	a.	Discuss how the evolution of computing technologies led to the development of cloud computing.	8M	L2	C01
	b.	Explain how service models (IaaS, PaaS, SaaS) reshape organizational IT strategies.	6M	L2	C01
	c.	Illustrate with an example how cloud architecture supports scalability.	6M	L3	C01
Or					
12.	a.	Examine the role of cloud service providers in delivering large-scale computing capabilities.	6M	L2	C01
	b.	Discuss how different types of cloud deployment choices (public, private etc) can impact an organisation's level of control, security, and scalability.	10M	L2	C01
	c.	Explain how elasticity helps reduce cloud operational costs.	4M	L3	C01
Or					
13.	a.	Discuss how virtualization abstracts hardware resources to support multi-tenant cloud environments.	8M	L2	C02
	b.	Explain the significance of hypervisors in establishing secure virtual computing.	6M	L2	C02
	c.	Compare different types of virtualization with respect to performance and design.	6M	L3	C02
Or					
14.	a.	Analyse how virtualization helps reduce the number of physical servers required in a data center.	10M	L3	C02
	b.	Explain OS-level virtualization and its importance in lightweight cloud workloads.	6M	L2	C02
	c.	Analyse the importance of choosing the right implementation level (hardware, OS, application) in virtualization.	4M	L3	C02
Or					
15.	a.	Explain how cloud infrastructure mechanisms ensure availability and reliability of services.	8M	L2	C03
	b.	Discuss how monitoring and metering activities contribute to effective cloud management.	6M	L2	C03

	c.	Illustrate the role of load balancing in maintaining application responsiveness.	6M	L3	C03
Or					
16.	a.	Evaluate how QoS parameters influence user experience in cloud-based systems.	10M	L3	C03
	b.	Explain the significance of autoscaling in managing fluctuating cloud workloads.	6M	L2	C03
	c.	Explain how redundancy mechanisms enhance fault tolerance.	4M	L2	C03

17.	a.	Explain the importance of programming models in enabling scalable cloud application development.	8M	L2	C04
	b.	Describe the importance of identity and access management in cloud security.	6M	L2	C04
	c.	Illustrate how containers support microservices deployment in cloud applications.	6M	L3	C04
Or					
18.	a.	Analyse the significance of Docker in modern cloud-based application development.	10M	L3	C04
	b.	Explain how AWS development tools accelerate cloud application deployment.	6M	L2	C04
	c.	Explain the importance of Privileged Access Management (PAM) in cloud-based application development.	4M	L2	C04