

**BONAM VENKATA CHALAMAYYA INSTITUTE OF TECHNOLOGY & SCIENCE
(AUTONOMOUS)**

I - M.Tech II-Semester Regular Examinations (BR23), July/Aug - 2025

**CLOUD COMPUTING
COMPUTER SCIENCE & ENGINEERING (58)**

Time: 3 hours

Max. Marks: 75

*Answer any Five Questions One Question for One UNIT
ALL the Question Carry Equal Marks*

UNIT-I		Marks	CO	BL
1.a)	Explain Network-Centric Computing and its applications.	7M	CO1	BL3
b)	Analyse key ethical issues and vulnerabilities in cloud computing.	8M	CO1	BL4
OR				
2.a)	Explain the architecture of distributed systems with suitable examples.	7M	CO1	BL2
b)	Explain logical clocks and message delivery rules in distributed systems.	8M	CO1	BL3
UNIT-II		Marks	CO	BL
3.a)	Explain cloud storage diversity and its impact on user experience and responsibility sharing.	7M	CO2	BL3
b)	Compare the cloud infrastructure of Amazon, Google, and Microsoft Azure.	8M	CO2	BL4
OR				
4.a)	Explain the MapReduce programming model with a suitable use case.	7M	CO2	BL3
b)	Analyze the role of Zookeeper in managing distributed cloud applications.	8M	CO2	BL4
UNIT-III		Marks	CO	BL
5.a)	Discuss the role of Virtual Machine Monitors (VMMs) in cloud environments.	7M	CO3	BL3
b)	Analyze how virtualization ensures performance and security isolation.	8M	CO3	BL4
OR				
6.a)	Explain the application of control theory in task scheduling within cloud environments.	7M	CO3	BL3
b)	Analyze the concept of two-level resource allocation architecture and its stability.	8M	CO3	BL4
UNIT-IV		Marks	CO	BL
7.a)	Explain the evolution of storage technologies and compare different storage models.	7M	CO4	BL3
b)	Compare Amazon S3 and Megastore in terms of scalability, consistency, and use cases.	8M	CO4	BL4
OR				
8.a)	Explain major cloud security risks and why security remains a top concern for cloud users.	7M	CO4	BL3
b)	Compare OS-level security and virtual machine security mechanisms in the cloud.	8M	CO4	BL4

UNIT-V

	Marks	CO	BL
9.a) Explain the steps involved in launching and managing EC2 instances on Amazon Web Services.	7M	CO5	BL3
b) Analyze the use of cloud-based simulation for a distributed trust algorithm or adaptive data streaming.	8M	CO5	BL4
OR			
10.a) Discuss the role of Google Web Toolkit in building scalable web applications on the cloud.	7M	CO5	BL3
b) Analyze the integration of Windows Live, Exchange Online, and SharePoint Services in Microsoft's cloud ecosystem.	8M	CO5	BL4
