

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

III - B. Tech II-Semester Regular Examinations (BR23), MAY - 2026

CLOUD COMPUTING (CSE)

Time: 3 hours

Max. Marks: 70

Question Paper consists of Part-A and Part-B

*Answer ALL the question in **Part-A and Part-B***

PART-A (10X2 = 20M)

	Marks	CO	BL
1. a) Defining a cloud?	(2M)	CO1	BL1
b) Write characteristics of cloud computing.	(2M)	CO1	BL1
c) What are the elements of distributed computing?	(2M)	CO2	BL1
d) Define inter-process communication	(2M)	CO2	BL1
e) Write any two container platforms.	(2M)	CO3	BL1
f) What are the characteristics of virtualized environments?	(2M)	CO3	BL1
g) What is cloud security?	(2M)	CO4	BL1
h) What is cloud interoperability?	(2M)	CO4	BL1
i) What is Infrastructure as Code (IaC)	(2M)	CO5	BL1
j) Define edge computing and fog computing	(2M)	CO5	BL1

PART-B (5X10 = 50M)

2a. Explain the three service models (IaaS, PaaS, SaaS) in cloud computing with examples.	5(M)	CO1	BL2
b. Explain the role of cloud service providers with examples	5(M)	CO1	BL3
(OR)			
3a. Explain how cloud computing provides data storage and backup.	5(M)	CO1	BL3
b. Explain the advantages and disadvantages of cloud computing.	5(M)	CO1	BL2
4a. Explain various cloud enabling techniques in detail.	5(M)	CO2	BL3
b. Differentiate between distributed computing and grid computing.	5(M)	CO2	BL3
(OR)			
5. Explain Remote Procedure Calls (RPC) and their role in distributed systems.	10(M)	CO2	BL3
6. Explain the internal architecture of a virtual machine and container with diagrams.	10(M)	CO3	BL3
(OR)			
7a. Explain Docker and Kubernetes and their role in cloud computing.	5(M)	CO3	BL3
b. Explain the role of containers in DevOps and agile development.	5(M)	CO3	BL3
8. Explain cloud shared responsibility model with neat diagram.	10(M)	CO4	BL3
(OR)			
9a. Describe scalability, fault tolerance, and energy efficiency in cloud computing	5(M)	CO4	BL2
b. Explain federated cloud systems and their advantages and challenges	5(M)	CO4	BL3

10	Explain AWS Lambda and Open FaaS with architecture (OR)	10(M)	CO5	BL3
11a.	Explain Quantum cloud computing and its future scope	5(M)	CO5	BL3
b.	Explain IoT Architecture and its layers in cloud-centric	5(M)	CO5	BL3
