Name: Enrolment No:	UPES UNIVERSITY OF TOMORROW

UPES
End Semester Examination, May 2024
Course: Cloud Computing Security & Management
Semester: VIII
Program: B TECH-CSE (ALL)   **Time : 03 hrs.**
Course Code: CSVT4014P   **Max. Marks: 100**

Instructions:

SECTION A
(5Qx4M=20Marks)

S. No.	Answer all the questions.	Marks	CO
Q1.	Describe the architectural framework of the cloud's service model.	4	CO1
Q2.	Interpret the concept of data governance within multi-cloud frameworks.	4	CO2
Q3.	Demonstrate homomorphic encryption elaborately.	4	CO3
Q4.	Examine the diverse characteristics of Secure tunneling protocols.	4	CO4
Q5.	Explain role-based access control elaborately.	4	CO5

SECTION B
(4Qx10M= 40 Marks)

	Answer any four questions.		
Q6.	Define cloud access security broker (CASB) and outline its benefits. Describe the architecture of a key distribution center (KDC) in brief.	6+4	CO1
Q7.	Describe the different approaches to container isolation and segmentation. Explain VM escape and discuss the various techniques used for reducing it.	5+5	CO2
Q8.	Examine the diverse obstacles encountered in ensuring the security of data in a multi-cloud environment. Illustrate the prerequisites for cloud provider compliance certifications.	6+4	CO3
Q9.	Examine the unique attributes of content delivery networks. Explain the operational fundamentals of Transport Layer Security (TLS/SSL) in a cloud context.	4+6	CO4
Q10.	Explain multi-factor authentication (MFA) in brief. Interpret the various facets encompassing single sign-on (SSO).	6+4	CO5

	SECTION-C **(2Qx20M=40 Marks)**		
	Answer any two questions.		
Q11.	Illustrate vulnerability assessment and provide an overview of its various types. Examine the various characteristics and operational aspects of Kerberos.	**8+12**	**CO3**
Q12.	Explain in a few words what data leakage prevention (DLP) is and how it works. Outline the numerous cloud-based secure data-sharing policies. Examine the various needs of data replication in any cloud system.	**9+6+5**	**CO4**
Q13.	Explain serverless and containerized systems in a nutshell. Compare the working principles of various network monitoring tools. Summarize the importance of subnetting and IP addressing to manage cloud resources.	**7+6+7**	**CO5**