


Name:													
Enrolment No:													
<b>UPES</b> <b>End Semester Examination, Dec 2024</b>													
<b>Course: Cloud Security and Management</b> <b>Program: B.Tech CS+CCVT (H/NH)</b> <b>Course Code: CSVT3024</b>		<b>Semester: V</b> <b>Time : 03 hrs.</b> <b>Max. Marks: 100</b>											
<b>Instructions:</b> a) Attempt all questions. b) Question number 9 and 11 has internal choices. Attempt any one													
<b>SECTION A</b> <b>(5Qx4M=20Marks)</b>													
S. No.		Marks	CO										
Q 1	Enlist the responsibilities for Provider and Customer in Infrastructure as a Service (IaaS), Platform as a Service (PaaS), Software as a Service (SaaS) when applying the Shared Responsibility Model.	4	CO1										
Q2	What are the key differences and advantages of using security groups in the cloud compared to conventional zoning methods?	4	CO1										
Q3	Match the following: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Kerberos</td> <td>Provides authentication, integrity but no confidentiality,</td> </tr> <tr> <td>IPSec</td> <td>Key Distribution Center</td> </tr> <tr> <td>AH protocol</td> <td>AAA protocol</td> </tr> <tr> <td>Certificate Authority</td> <td>Network Layer Security</td> </tr> <tr> <td>TACACS+</td> <td>Public Key Infrastructure</td> </tr> </table>	Kerberos	Provides authentication, integrity but no confidentiality,	IPSec	Key Distribution Center	AH protocol	AAA protocol	Certificate Authority	Network Layer Security	TACACS+	Public Key Infrastructure	4	CO2
Kerberos	Provides authentication, integrity but no confidentiality,												
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Q 4	What is SSL (Secure Sockets Layer), and how does it ensure secure communication between a client and a server over the internet?	4	CO3										
Q 5	Enlist and differentiate between different types of IAM.	4	CO3										
<b>SECTION B</b> <b>(4Qx10M=40Marks)</b>													
Q 6	Define the concept of trust in the context of cloud computing. Identify and describe in detail the different trust mechanisms used by cloud providers to secure data and build customer confidence	10	CO1										
Q 7	Explain the following: a) Infrastructure Security at Network and Host Level b) Operating System Security	(5+5)	CO2										
Q 8	Explain the key components and features of an AWS Virtual Private Cloud (VPC). How does a VPC enable secure communication between different resources within the cloud environment?	10	CO3										



	<p><b>a)</b> Define Industry 4.0 and explain its key characteristics. Additionally, examine the benefits and challenges organizations face in adopting Industry 4.0 technologies.</p> <p><b>b)</b> Explain the RAMI 4.0 (Reference Architectural Model for Industry 4.0) framework and its role in implementing Industry 4.0.</p> <p>.</p>	<p><b>(10+10)</b></p>	
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