

Q.6	Attempt any two:		Total No. of Questions: 6	Total No. of Printed Pages: 4
i.	Write about legal and compliance associated with cloud computing.	5 4 5 1,2		Enrollment No.....
ii.	How the standards deal with cloud services and virtualization?	5 2 5 1,2		Faculty of Engineering
iii.	Differentiate the compliance for the cloud provider and compliance for the customer.	5 2 5 1,2		End Sem Examination Dec 2024



Knowledge is Power

Programme: B.Tech.

Branch/Specialisation: All

Duration: 3 Hrs.**Maximum Marks: 60**

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d. Assume suitable data if necessary. Notations and symbols have their usual meaning.

		Marks	BL	CO	PO	PSO
Q.1	i.	1	1	1	2	
	(a) Access control (b) Confidentiality					
	(c) Availability (d) All of these					
	ii.	1	1	1	2	
	Which one of the following refers to the technique used for verifying the integrity of the message?					
	(a) Digital signature					
	(b) Decryption algorithm					
	(c) Protocol					
	(d) Message Digest					
	iii.	1	1	22	2	
	Which of the following has infrastructure security managed and owned by the vendor?					
	(a) Hybrid					
	(b) Private/Community					
	(c) Public					
	(d) None of these					
	iv.	1	1	3	2	
	What are the three objectives of information security?					
	(a) Prevent, detect, respond					
	(b) Integrity, authenticity, and completeness					
	(c) Confidentiality, integrity, and availability					
	(d) Identification, authentication, non-repudiation					
	v.	1	1	3	2	

Marking Scheme

OE00056 (T) Cloud Security (T)

- Q.1 i. Which of the following refers to the violation of the principle if a computer is no more accessible? 1
(c) Availability
- ii. Which one of the following refers to the technique used for verifying the integrity of the message? 1
(d) Message Digest
- iii. Which of the following has infrastructure security managed and owned by the vendor? 1
(b) Private/Community
- iv. **What are the three objectives of information security?** 1
(c) Confidentiality, integrity, and availability
- v. How does the cloud complicate enterprise identity management? 1
(d) All of the above
- vi. Which of the following is true of the identity-as-a-service (IDaaS) model? 1
(c) Both (a) and (b)
- vii. SaaS providers manage and secure all the following except: 1
(b) Access controls
- viii. When is centralized cloud application monitoring most useful? 1
(a) When applications must span hybrid architectures
- ix. Which of the following services that need to be negotiated in Service Level Agreements? 1
(d) All of the mentioned
- x. Point out the correct statement: 1
(d) All of the mentioned

- Q.2 i. **How is Encryption different from Hashing?** 2
ii. **What is the difference between Symmetric and Asymmetric encryption?** 3
iii. Explain the concept of stream cipher and block cipher with the help of example?
Diagram - 2 Marks
Explanation with Example - 3 Marks
- OR iv. What do you understand by public-key cryptography explain with the help of example?
Diagram - 2 Marks
Explanation with Example - 3 Marks
- Q.3 i. Explain Cloud Security Design Principles? 2
ii. **Explain CIA triad and their importance in PaaS, IaaS and SaaS with help of example.** 8
Diagram - 3 Marks
Explanation with Example - 5 Marks
- OR iii. Explain the concepts of Infrastructure Security and also explain their different levels of Infrastructure Security with the help of example.
Network Level - 3 Marks
Host Level - 3 Marks
Application Level - 2 Marks
- Q.4 i. What is importance of Identity and Access Management in Cloud Computing? 3
ii. What is multi-Factor authentication. Explain the concept with example?
Diagram - 3 Marks
Explanation with Example - 4 Marks
- OR iii. Draw and explain the components of Identity and Access Management Architecture?
Diagram - 3 Marks

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Explanation with Example

- 4 Marks

[3]

Q.5 i. Write Short Note on Security Management in the Cloud? **4**

ii. Explain the Availability Management in IAAS? **6**

OR iii. Explain the Security Management in Cloud Computing? **6**

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i. Write about Legal and Compliance associated with Cloud Computing? **5**

ii. How the standards deal with cloud services and virtualization? **5**

iii. Differentiate the compliance for the cloud provider and compliance for the customer? **5**
