

		Register Number		2	1	C	S	R	0	1	4
VELALAR COLLEGE OF ENGINEERING AND TECHNOLOGY											
(An Autonomous Institution, Affiliated to Anna University, Chennai)											
Continuous Assessment Test - I						QP Set		1		Regulations-2018	
Programme	B.E - CSE		Semester:	5	Max. Marks:	50		Duration	1.5 Hrs		
Course Code & Title:		21CSE21- CLOUD COMPUTING									
Class: 21CS5A&B		Date: 11.09.2023				Time: 11.00 am – 12.30 pm					
Knowledge Levels (KL)	K1 – Remembering			K3 – Applying			K5 – Evaluating				
	K2 - Understanding			K4 – Analysing			K6 – Creating				

Part A – 10x2 = 20 Marks

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|-----|---|-----|----|
| 1. | Write about capacity planning with its types. | CO1 | K1 |
| 2. | Compare horizontal scaling with vertical scaling. | CO1 | K2 |
| 3. | Mention the common reasons a cloud consumer would use and invest in a PaaS environment. | CO1 | K1 |
| 4. | Distinguish between private and public cloud? Give real time examples. | CO1 | K2 |
| 5. | List out the pros and cons of cloud computing. | CO1 | K1 |
| 6. | List the characteristics of multitenant technology. | CO2 | K1 |
| 7. | Identify the demands and issues related to performance overhead in OS-based virtualization. | CO2 | K2 |
| 8. | Compare multitenancy with virtualization | CO2 | K2 |
| 9. | What is Bare-metal hypervisor? | CO2 | K2 |
| 10. | Define the role and benefit of virtualization in cloud. | CO2 | K2 |

Part B – 2x15 = 30 Marks

- | No. | Question | Marks | CO | KL |
|-----|--|-------|-----|----|
| 11. | (a) (i) Illustrate the risks arise and challenges in implementing cloud computing. | 7 | CO1 | K2 |
| | (ii) Compare and contrast different cloud delivery models. | 8 | CO1 | K2 |
| OR | | | | |
| (b) | (i) Elucidate different cloud characteristics. | 7 | CO1 | K2 |
| | (ii) Analyze the most critical cloud computing challenges pertaining to cloud consumers that use IT resource located in public clouds. | 8 | CO1 | K2 |
| 12. | (a) (i) Examine the process of converting a physical IT resource into a vertical resource focusing on the creation and deployment of virtual servers through server virtualization technology. | 15 | CO2 | K2 |
| | OR | | | |
| (b) | (i) Briefly discuss about Datacenter technology and Multitenant technology. | 15 | CO2 | K2 |

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Continuous assessment-2				Semester-5		QP-SET-2		Regulations – 2018 Ver.4		
Programme: CSE		Max. Marks: 50		Duration		1.5 Hrs				
Course Code & Title:		21CSE21- CLOUD COMPUTING								
Date: 18.10.2023					Time: 2.30 AM to 4.00 PM					
Knowledge Levels (KL)		K1 - Remembering		K3 - Applying			K5 – Evaluating			
		K2 - Understanding		K4 – Analysing			K6 – Creating			

Part A - 5 x 2 = 10 Marks

No.		CO	KL
1.	Mention the workload distribution functions related to a load balancer.	CO3	K2
2.	Name the typical monitoring variables available in pay-per-use monitor.	CO3	K1
3.	What is the use of a state management device?	CO3	K1
4.	Compare monitoring agent and resource agent.	CO3	K2
5.	What is automated scaling listener?	CO3	K1
6.	Give some examples of resource pools.	CO4	K1
7.	What is the use of thin-provisioning technology in elastic disk provisioning architecture?	CO4	K2
8.	Outline the need of dynamic scalability architecture.	CO4	K2
9.	How will you reduce IT resources over utilization and under utilization in cloud.	CO4	K2
10.	What are the core functions performed by resilient watchdog system.	CO4	K1

Part B – 2x15 =30 Marks

No	Question	Marks	CO	KL
11.	(a) Write in detail about Remote Administration system and cloud Storage Device mechanism in detail with suitable diagrams.	15	CO3	K2
	(b) (i) Explain the use of multi device broker and SLA monitor in detail.	7	CO3	K2
	(ii) Discuss resource cluster and state management database system in detail.	8	CO3	K2
12.	(a) Compare redundant storage architecture, hypervisor clustering architecture and resource pooling architecture in terms of usage, functionalities and mechanisms used.	15	CO4	K2
	(b) Describe Elastic Resource Capacity Architecture, Service load balancing architecture and cloud bursting architecture in detail.	15	CO4	K2

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Continuous assessment-3				Semester-5		QP-SET-1		Regulations – 2018 Ver.4							
Programme:		CSE		Max. Marks:		50		Duration		1.5 Hrs					
Course Code & Title:		21CSE21- CLOUD COMPUTING													
Date: 18.11.2023								Time: 2.30 AM to 4.00 PM							
Knowledge Levels (KL)		K1 - Remembering			K3 - Applying			K5 - Evaluating							
		K2 - Understanding			K4 - Analysing			K6 - Creating							

Part A - 10 x 2 = 20 Marks

No	Question	CO	KL
1.	What is the use of a hashing function?	CO5	K2
2.	Write about the process of hardening. Give some examples.	CO5	K2
3.	What is called resource segmentation?	CO5	K1
4.	Differentiate secret key cryptography and public key cryptography.	CO5	K2
5.	What are the ways DoS attack can be launched?	CO5	K2
6.	What is Risk? What are the two metrics that can be used to determine risk for an IT resource?	CO5	K2
7.	What is malicious service agent?	CO5	K1
8.	Define virtualization attack?	CO5	K1
9.	How will you protect confidentiality and integrity of data in cloud?	CO5	K2
10.	What is digital signature?	CO5	K1

Part B - 2x15 =30 Marks

No	Question	Marks	CO	KL
11.	(a) Describe the two types of encryption and the Public Key Infrastructure with the steps involved during generation of certificates by a Certificate Authority.	15	CO5	K2
	(b) i) Give short notes on the hashing and digital signature cloud security mechanism.	8	CO5	K2
	ii) Describe basic security terms relevant to cloud computing and its associated concepts.	7	CO5	K2
12.	(a) Discuss the components of Identity and Access Management, Single Sign-on mechanism, Cloud Based Security Groups and Hardened Virtual Server Images in detail.	15	CO5	K2
	(b) Describe in detail about various types of threat agents and cloud security threats.	15	CO5	K2