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VIVEKANANDHA COLLEGE OF ENGINEERING FOR WOMEN
[AUTONOMOUS INSTITUTION AFFILIATED TO ANNA UNIVERSITY, CHENNAI]
Elayampalayam – 637 205, Tiruchengode, Namakkal Dt., Tamil Nadu.

Question Paper Code: 50031

B.E. / B.Tech. DEGREE END-SEMESTER EXAMINATIONS – JAN. 2026

Sixth Semester

Computer Science and Engineering
U19CS625 - CLOUD COMPUTING
(Regulation 2019)

Time : Three Hours

Maximum : 100 Marks

Answer ALL the questions

Knowledge Levels (KL)	K1 – Remembering	K3 – Applying	K5 - Evaluating
	K2 – Understanding	K4 – Analyzing	K6 - Creating

PART – A

(10 x 2 = 20 Marks)

Q.No.	Questions	Marks	KL	CO
1.	List the advantages of public cloud over private cloud.	2	K2	CO1
2.	How would you ensure the security of data stored in the cloud for a financial application?	2	K1	CO1
3.	Note any two limitation of virtualization.	2	K2	CO2
4.	Compare type 1 or type 2 hypervisor.	2	K1	CO2
5.	Sketch the enterprise multitier architecture.	2	K2	CO3
6.	Distinguish between demand driven and event-driven resource provisioning.	2	K2	CO3
7.	Illustrate borrowed virtual-time scheduling in cloud computing.	2	K2	CO4
8.	List any four benefits of Apache Hadoop.	2	K2	CO4
9.	What are the policies for risk management?	2	K2	CO5
10.	Demonstrate Virtual Machine Security in Cloud Computing.	2	K2	CO5

PART – B

(5 x 13 = 65 Marks)

Q.No.	Questions	Marks	KL	CO
11. a)	Discuss the underlying parallel and distributed computing principles adopted by cloud in the IT sector and brief the drawbacks incurred.	13	K2	CO1

		(OR)			
	b)	i. Your company is facing high cloud service costs. What strategies would you use to optimize these expenses without compromising performance?	7	K3	CO1
		ii. Describe the infrastructure requirements for Cloud computing.	6		
12.	a)	Outline the problems in virtualizing in CPU, I/O and memory devices and suggest how it could be overridden for efficient utilization of cloud services.	13	K3	CO2
		(OR)			
	b)	Highlight the key points and identify the distinctions in different approaches of virtualization levels. Discuss their relative advantages, short comings and limitations. Also identify example systems implemented at each level.	13	K2	CO2
13.	a)	Examine layered architectural development of the cloud platform for IaaS, PaaS and SaaS applications over the Internet.	13	K3	CO3
		(OR)			
	b)	i. Describe about inter cloud resource management.	7	K3	CO3
		ii. What is Message Oriented Middleware? Discuss in detail.	6		
14.	a)	For a SaaS application, who will be responsible to provide security for the infrastructure? Will it be cloud service provider or the cloud service consumer? Who will be responsible to ensure compliance with a privacy standard? Formulate your views about it.	13	K4	CO4
		(OR)			
	b)	i. Evaluate the security governance and virtual machine security.	7	K2	CO4
		ii. Elucidate the purpose of IAM? Describe its functional architecture with an illustration.	6		
15.	a)	Explain the security architecture design of a cloud environment and relate how it can be made possible to include such measures in BTL6 Creating a typical banking scenario.	13	K3	CO5
		(OR)			
	b)	i. Write and Discuss Security Architecture Design in Cloud.	7	K4	CO5
		ii. Explain the major security challenges in cloud.	6		

PART – C

(1 x 15 = 15Marks)

Q.No.	Questions	Marks	KL	CO
16. a)	Discuss the regulatory issues of cloud computing and the government policies.	15	K4	CO5
	(OR)			
b)	Compare public clouds and private clouds in each of the following four aspects. Also identify their differences, advantages and shortcomings in terms of design technologies and application flexibility. i. Technology leveraging and IT resources ownership. ii. Provisioning methods of resources including data and VMs and their management. iii. Workload distribution methods and loading polices. iv. Security precautions and data privacy enforcement.	15	K4	CO1