U.S.N.										

B.M.S. College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

July 2024 Semester End Main Examinations

Programme: B.E. **Semester: V**
Branch: Information Science and Engineering **Duration: 3 hrs.**
Course Code: 22IS5PCCLC **Max Marks: 100**
Course: Cloud Computing

Instructions: 1. Answer any FIVE full questions, choosing one full question from each unit.
2. Missing data, if any, may be suitably assumed.

Important Note: Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Revealing of identification, appeal to evaluator will be treated as malpractice.

			UNIT - I	*CO*	*PO*	Marks
1	a)		An enterprise application working on traditional database planned to migrate to the cloud. Illustrate the seven steps of migration.	*CO1,CO2*	*PO1*	**10**
	b)		Identify the Infrastructure as a Service [IAAS] providers features with respect to cloud computing.	*CO2*	*PO1*	**10**
			OR			
2	a)		With the paradigm, explain the Convergence of various advances leading to the advent of cloud computing.	*CO1,CO2*	*PO1*	**07**
	b)		List the key challenges of Infrastructure as a Service [IAAS] when building a cloud infrastructure. Identify and explain which software toolkit is responsible for it.	*CO1,CO2*	*PO1*	**07**
	c)		Highlight the concept of High availability of Virtual Machine [VM] with an example.	*CO1,CO2*	*PO1*	**06**
			UNIT - II			
3	a)		Depict the life cycle of a virtual machine and also explain the steps of provisioning a virtual server	*CO2*	*PO1*	**10**
	b)		Illustrate live migration's mechanism and how memory of an virtual machine states are being transferred, through the network, from one host A to another host B.	*CO2*	*PO1*	**10**
			OR			
4	a)		Differentiate between live migration and cold migration with example. Identify the reasons for migration.	*CO2*	*PO1*	**10**
	b)		Build and explain Web Services-I [WS-I] protocol stack and its related specifications.	*CO2*	*PO1*	**10**

			UNIT - III			
	5	a)	Illustrate with a neat diagram, the Uber's application disaggregated into a set of micro services that communicate with each other by considering six microservices.	*CO3*	*PO2*	**06**
		b)	Explain HTTP with respect to micro service. And also identify six basic operations that can be used in HTTP messages.	*CO1,2*	*PO1*	**08**
		c)	Illustrate with a neat diagram, proxy for a service mesh and to use the service how an external entity contacts the proxy.	*CO3*	*PO2*	**06**
			UNIT - IV			
	6	a)	List and explain the three principles that helps to define security practices in detail with respect to protecting remote access.	*CO1*		**10**
		b)	i) How privileged access management provides better security for cloud computing ii) "Security is taken care even in tradition infrastructure". Provide the ways of security management for the same.	*CO1*		**10**
			UNIT - V			
	7	a)	Caching can be used at multiple levels of the hierarchy, show how it works for data flow in either direction.	*CO3*	*PO2*	**10**
		b)	How does cloud providers attempt to minimize network latency in two different ways?	*CO3*	*PO2*	**05**
		c)	"To serve different applications, edge facilitates various level of hierarchy". Illustrate with one possible arrangement.	*CO3*	*PO2*	**05**

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