Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

ME – SEMESTER III (NEW) – EXAMINATION – WINTER-2016

Subject Code: 2730208 **Date:25/10/2016**

Subject Name: Cloud Computing

Time:02:30 pm to 05:00 pm **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	Discuss the common features available in VIM (Virtual Infrastructure Manager).	**07**
	(b)	Define cloud. Mention any two major differences between cloud computing and distributed computing. Which are the desired features of a cloud?	**07**
Q.2	**(a)**	Explain private cloud. What are the characteristics of private cloud? Mention any two vendors or frameworks that provide IaaS in private cloud.	**07**
	(b)	Discuss virtual machine provision process along with steps to provide virtual machine.	**07**
		OR	
	(b)	1. Mention any one difference between cloud computing and grid computing.	**01**
		2. Explain the following terms briefly: SOA, hypervisor, utility computing.	**06**
Q.3	**(a)**	What is live migration? Explain logical steps that are used to achieve live migration.	**07**
	(b)	Discuss Eucalyptus along with its architecture.	**07**
		OR	
Q.3	**(a)**	What can be the effect of live migration on a running web server? Which are the tools that provide live migration? How they provide live migration?	**07**
	(b)	Explain dynamic management of VM using OpenNebula.	**07**
Q.4	**(a)**	Briefly discuss deployment models of cloud along with their advantages and disadvantages.	**07**
	(b)	Explain market-oriented cloud architecture.	**07**
		OR	
Q.4	**(a)**	What are the major differences between SaaS and PaaS? What are the characteristics of SaaS?	**07**
	(b)	Discuss reservation-based provisioning of virtualized resources.	**07**
Q.5	**(a)**	1. Briefly explain machine imaging.	**03**
		2. Briefly explain Xen Hypervisor.	**04**
	(b)	Discuss how can we achieve virtualization of CPU, Memory and I/O Devices.	**07**
		OR	
Q.5	**(a)**	Discuss identity management and access control in cloud.	**07**
	(b)	Discuss various vulnerabilities possible for virtualized environments.	**07**

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