Q.No.	Questions	Marks
1.a	What is Virtualization? Describe how Type-I (native VM) Hypervisor is efficient compared to Hosted VM and Dual-mode VM for cloud architecture.	[08]
b.	Explain why Virtualization is essential in cloud computing? Describe the Virtualization support at various levels and briefly explain the advantages and disadvantages OS Level virtualization.	[06]
c.	List and explain the various design objectives and architectural design challenges for setting up cloud-based software development platform/environment (IDE) in building and deploying software applications.	[06]
2.a	Explain the architecture and compare performance for the following technologies: a. Full Vs. Para Virtualization b. Micro-kernel Vs. Monolithic Hypervisor c. Physical Vs. Virtual Cluster	[08]
b.	Explain the platform evolution from High-Throughput Computing (HTC) and High-Performance Computing (HPC)	[06]

	explain the advantages and disadvantages OS Level virtualization.	
c.	List and explain the various design objectives and architectural design challenges for setting up cloud-based software development platform/environment (IDE) in building and deploying software applications.	[06]
2.a	Explain the architecture and compare performance for the following technologies: a. Full Vs. Para Virtualization b. Micro-kernel Vs. Monolithic Hypervisor c. Physical Vs. Virtual Cluster	[08]
b.	Explain the platform evolution from High-Throughput Computing (HTC) and High-Performance Computing (HPC) systems to Web 2.0 services, Internet clouds and Internet of Things with a neat diagram.	[06]
c.	List and explain the different computing paradigms and describe the basic Virtual Machine primitive operations with a neat diagram.	[06]