Dura	ion: 3Hrs Marks:80	
N.B.	1) Question no. 1 is compulsory. 2) Attempt any three from remaining five questions.	99
Q1.	Solve any four	
a.	Compare cloud computing service models	05
b.	Compare public and private cloud	05
c.	Explain benefits of Cloud computing for an educational institute.	05
d.	What is XEN? Discuss the elements of virtualization.	05
e.	what is hypervisor? What are its functions? List the types of hypervisors with examples.	05
Q2.		
a.	Explain full virtualization and paravirtualization with neat diagrams.	10
b.	Explain Infrastructure-as-a-Service (SaaS) with suitable examples.	10
Q3. a.	List the components of open stack? Explain Open stack architecture with its services and modes of operations.	10
<b>b.</b>	List and discuss the implementation level of virtualization with neat diagram	10
Q4.		
a.	Explain AAA model with neat diagram and examples	10
b.	Explain cloud applications in healthcare system. Explain how data analytics is performed on cloud.	10
Q5.		
a.	Explain the architecture of Mobile Cloud Computing along with the Benefits and challenges of Mobile Cloud computing?	10
b.	Explain Eucalyptus opensource cloud architecture with a neat diagram.	10
Q6.	Write a note on (any 4)	20
1.	Storage services offered by any cloud vendor	
2.	Cloud security	
3.	Identity management as service	
4.	Software as a service	
5,	Virtualization	
6.	Cloud migration techniques	

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