B.E. 2008 (Computer Engineering)

Cloud Computing

Elective IV (Semester -II)

Time: 3 Hours Max. Marks : 100

Instructions to the candidates:

1) Answers to the two sections should be written in separate answer books.

2) Answer any three questions from each section.

3) Neat diagrams must be drawn wherever necessary.

4) Figures to the right side indicate full marks.

		SECTION I	
Q1)	a)	Comment on "Cloud and Virtualization".	[6]
	b)	What do you mean by pods, aggregation and Silos in terms of IAAS.	[4]
	c)	Enlist and Explain the challenges and obstacles while adopting cloud computing.	[8]
		OR	
Q2)	a)	What is administrating and monitoring cloud services? Enlist and Explain different tools used for administrating and monitoring cloud services	[8]
	b)	Enlist services provided by SAAS, PAAS and IAAS.	[6]
	c)	How do you relate cloud computing with Utility computing?	[4]
Q3)	a)	Why MASHUPS: user interface service is better than AJAX? Explain with Suitable Example	[8]
	b)	What is the difference between the virtual machines, host VMMs and native VMMs.	[8]
		OR	
Q4)	a)	Give the difference between SOAP/WSDL and REST.	[8]
	b)	Explain Multi-tenancy implementation using multiple schemas.	[8]
Q5)	a)	What is parallel efficiency? Discuss parallel efficiency for MapReduce model.	[8]
	b)	Explain architecture of Amazon Dynamo. How vector timestamp mechanism is used in this architecture?	[8]

		OR	
Q6)	a)	Explain with suitable example the MapReduce Model.	[8]
	b)	Explain with example how BigTable tables are stored on a distributed file system such as GFS or HDFS.	[8]

SECTION II

Q7)	a)	How you can plan for Disaster Recovery in cloud computing. Explain in detail	[8]
	b)	Discuss Identity Management and Access Control in Cloud Computing	[8]
		OR	
Q8)	a)	Explain various security threats and vulnerabilities inherent in virtualized system. Discuss VM specific Security Techniques.	[8]
	b)	What do you mean by Autonomic Security in Cloud Computing? Explain in detail Cloud Penetration Testing.	[8]
Q9)	a)	Explain Skytap Migration API in detail.	[8]
	b)	Enlist different cloud Monitoring tools and Explain any two in brief.	[8]
		OR	
Q10)	a)	What are the Operational level issues and End user level issues while adopting Mobile Cloud Computing?	[8]
	b)	Explain the following terms with reference to cloud computing. 1. Sky computing 2. Load Balancing	[8]
Q11)	a)	How you can achieve following features using Apache VCL? Explain in brief 1. Computer Access 2. File Saving 3. File Submission 4. Persistent Storage	[10]
	b)	Explain the various components of Xen Cloud Platform with suitable Diagram	[8]
		OR	
Q12	a)	What are the main features provided by Open Nebula and differentiate them in Public, private and hybrid cloud.	[10]
	b)	Discuss Goals and challenges associated with Eucalyptus.	[8]