18AI734

Model Question Paper-1 with effect from 2019-20 (CBCS Scheme)

USN | | | | | | | | | | |

Seventh Semester B.E. Degree Examination

CLOUD COMPUTING & VIRTUALIZATION

TIME: 03 Hours **Max. Marks: 100**

Note: 01. Answer any **FIVE** full questions, choosing at least **ONE** question from each **MODULE**.

		Module – 1	
Q.1	**(a)**	With a neat diagram **explain** the Cloud computing delivery models and services and **list** out the major challenges faced by cloud computing	**10M**
	(b)	**Write a note** on i) Ethical issues in cloud computing ii) Cloud vulnerabilities iii) Cloud storage diversity and vendor lock-in	**10M**
		OR	
Q.2	**(a)**	With a neat Sketch, **discuss** the applications of Cloud computing at Amazon	**10M**
	(b)	**Explain** Open-source software platforms for clouds	**10M**
		Module – 2	
Q.3	**(a)**	**Explain** the life cycle of workflow and a computer program with a neat diagram Explain the basic workflow patterns in cloud computing.	**10M**
	(b)	**Illustrate** the MapReduce programming model along with its features.	**10M**
		OR	
Q.4	**(a)**	With a neat sketch **show how** the applications of GrepTheWeb is used in cloud computing	**10M**
	(b)	**Discuss the methods to** implement High-performance computing on a cloud?	**10M**
		Module – 3	
Q.5	**(a)**	**Contrast the features of** Full virtualization with paravirtualization.	**8M**
	(b)	**Explain** Virtual machine monitors with a neat diagram.	**8M**
	(c)	**List** out the features of Layering and virtualization?	**4M**
		OR	
Q.6	**(a)**	**Explain** CaseStudy: Xen a VMM based paravirtualization	**8M**
	(b)	**Summarize** the techniques to compare Performance of virtual machines?	**4M**
	(c)	**Discuss the ways to** optimize network virtualization?	**8M**
		Module – 4	
Q.7	**(a)**	**Explain** the Policies and mechanisms for resource management.	**6M**
	(b)	**Outline** the features of utility-based model for cloud-based Web services.	**6M**
	(c)	**Determine the** Stability of a two-level resource allocation architecture.	**8M**
		OR	
Q.8	**(a)**	**Write a note on** Resourcing bundling: Combinatorial auctions for cloud resources.	**6M**
	(b)	**Discuss the methods to** implement Scheduling algorithms for computing clouds.	**7M**
	(c)	**Explain** Scheduling Map Reduce applications subject to deadlines, Resource management and dynamic scaling?	**7M**
		Module – 5	

Q.9	**(a)**	**Write a note on** Privacy and privacy impact assessment, Trust, Operating system security.	**10M**
	(b)	**Discuss** Virtual machine Security, Security of virtualization, Security risks posed by shared images	**10M**
OR			
Q.10	**(a)**	**Explain the techniques required** to launch an EC2 Linux instance and connect to it.	**10M**
	(b)	**Demonstrate** the use of S3 in java and Cloud-based simulation of a distributed trust algorithm.	**10M**

Table showing the Bloom's Taxonomy Level, Course Outcome and Programme Outcome				
Question		**Bloom's Taxonomy Level attached**	**Course Outcome**	**Programme Outcome**
Q.1	(a)	L1	CO1	PO1
	(b)	L2	CO1	PO1
Q.2	(a)	L2	CO1	PO2
	(b)	L1	CO1	PO2
Q.3	(a)	L1	CO1	PO3
	(b)	L2	CO1	PO3
Q.4	(a)	L2	CO1	PO3
	(b)	L2	CO1	PO3
Q.5	(a)	L2	CO2	PO3
	(b)	L1	CO2	PO4
	(c)	L2	CO2	PO4
Q.6	(a)	L1	CO2	PO5
	(b)	L2	CO2	PO6
	(c)	L2	CO2	PO6
Q.7	(a)	L1	CO2	PO9
	(b)	L2	CO2	PO12
	(c)	L2	CO2	PO5
Q.8	(a)	L2	CO2	PO6
	(b)	L2	CO2	PO6
	(c)	L1	CO2	PO9
Q.9	(a)	L2	CO3	PO9
	(b)	L2	CO3	PO4
Q.10	(a)	L2	CO3	PO5
	(b)	L2	CO3	PO12

Bloom's Taxonomy Levels	**Lower order thinking skills**		
	Remembering(knowledge):L_1	Understanding Comprehension): L_2	Applying (Application): L_3
	Higher order thinking skills		
	Analyzing (Analysis): L_4	Valuating (Evaluation): L_5	Creating (Synthesis): L_6