23CSPE322

MANGALORE INSTITUTE OF TECHNOLOGY & ENGINEERING

(A Unit of Rajalaxmi Education Trust®, Mangalore)
Autonomous Institute affiliated to VTU, Belagavi, Approved by AICTE, New Delhi
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Model Question Paper

Sixth Semester B.E Degree Examination

Cloud Computing

Time: 3 Hours (180 Minutes)   **Max. Marks: 100**

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M: Marks, L: RBT (Revised Bloom's Taxonomy) level, C: Course outcomes.

		Module -1	**M**	**L**	**C**
Q1	a.	With a neat diagram, describe cloud computing and its historical development from mainframes to Web 2.0.	8	L2	CO1
	b.	Explain the services provided by: i) Amazon Web Services ii) Microsoft Azure iii) Google App Engine	6	L2	CO1
	c	Explain utility computing and Service Oriented Architecture (SOA) in cloud computing context.	6	L2	CO1
Q2	a.	Explain differences between parallel and distributed computing with examples	8	L2	CO1
	b.	Classify computer systems into SISD, SIMD, MISD, MIMD architectures and explain each type with examples.	6	L2	CO1
	c.	Explain the elements of distributed computing.	6	L2	CO1
		Module- 2			
Q3	a.	Discuss in detail about various characteristics of virtualized environments with suitable examples.	6	L2	CO2
	b.	Illustrate machine reference model and hardware level virtualization with diagram.	8	L3	CO2
	c.	Use the architecture of the Xen Hypervisor to explain its advantages and disadvantages.	6	L3	CO2
		OR			
Q4	a.	Explain the pros and cons of virtualization in cloud computing environment.	6	L2	CO2
	b.	Organize various types of virtual machine migration with an example and provide suitable diagram.	8	L3	CO2
	c.	Illustrate the architecture of Microsoft Hyper-V with diagram and its use in cloud computing.	6	L3	CO2
		Module – 3			
Q5	a.	Organize the components of Cloud Computing Architecture using a neat diagram.	6	L3	CO3
	b.	Illustrate Platform as a service reference model with neat diagram.	8	L3	CO3
	c	What is SaaS? Illustrate SaaS with suitable examples in cloud computing.	6	L3	CO3
		OR			
Q6	a.	Organize the different types of cloud using a neat diagram.	6	L3	CO3
	b.	How does Cloud Computing help to reduce the time to market applications and to cut down capital expenses? Illustrate with different pricing models.	8	L3	CO3
	c	Use the concept of Cloud Computing to list and explain its major challenges.	6	L3	CO3
		Module – 4			

Q7	a.	Describe Cloud Security risks with a suitable example.	6	L2	CO4
	b.	Discuss in detail about privacy and privacy impact assessment in detail	6	L2	CO4
	c.	Illustrate the various security risks posed by shared VM images and management OS with an example.	8	L3	CO4
OR					
Q8	a.	Describe in detail about VM security.	6	L2	CO4
	b.	Explain security of virtualization.	6	L2	CO4
	c.	Illustrate Cloud security defense strategies with example.	8	L3	CO4
Module – 5					
Q9	a.	Explain the working and basic features of Amazon EC2 in detail.	6	L2	CO4
	b.	Describe the architecture of Google App Engine with a neat diagram	6	L2	CO4
	c	Illustrate application services of Google AppEngine with examples.	8	L3	CO4
OR					
Q10	a.	Explain the storage services provided by Microsoft Azure in detail	6	L2	CO4
	b.	Describe an application of cloud computing technology in biology.	6	L2	CO4
	c	Illustrate with example CRM and ERP implementations based on Cloud Computing technologies.	8	L3	CO4

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