R.P.C.E.T. LIBRARY BANGALORE-49

CBCS SCHEME

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BIS613D

Sixth Semester B.E./B.Tech. Degree Examination, June / July 2026
Cloud Computing and Security

Time: 3 hrs. Max. Marks: 100

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

		Module – 1	M	L	C
Q.1	a.	Explain the Platform Evolution of different computer technologies with a neat diagram.	10	L2	CO1
	b.	Outline eight reasons to adopt the cloud for upgraded internet applications and web services.	08	L2	CO1
	c.	Briefly explain Message Passing Interface (MPI).	02	L2	CO1
		OR			
Q.2	a.	Summarize all VM primitive operations with relevant diagram.	10	L2	CO1
	b.	Illustrate various system attacks and network threats to the cyber space, resulting in 4 types of losses with neat diagram.	10	L2	CO1
		Module – 2			
Q.3	a.	Demonstrate the architecture of a computer system before and after virtualization.	10	L2	CO2
	b.	Compare physical versus virtual cluster.	10	L2	CO2
		OR			
Q.4	a.	Construct the Live migration process of a VM from one host to another.	10	L3	CO2
	b.	Develop a architecture of live wire for intrusion detection using a dedication VM.	10	L3	CO2
		Module – 3			
Q.5	a.	Outline six design objectives for cloud computing.	06	L2	CO3
	b.	With neat diagram, build a cloud ecosystem with private cloud.	08	L3	CO3
	c.	Organize functional modules of GAE.	06	L2	CO3
		OR			
Q.6	a.	Identify basic requirements for managing the resources of a data center.	08	L3	CO3
	b.	Summarize six open challenges in cloud architecture development.	08	L2	CO3
	c.	Write a note on AWS.	04	L2	CO3

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		Module – 4			
Q.7	**a.**	Demonstrate surfaces of attacks in a cloud computing environment with neat diagram.	**08**	**L2**	**CO4**
	b.	List out the top cloud security threats of CSA2016.	**06**	**L1**	**CO4**
	c.	Select four widely accepted fair information that " Consumer oriented commercial websites that collect personal identifying information from or about consumers online would be required to comply with.	**06**	**L3**	**CO4**
		OR			
Q.8	**a.**	Summarize the design goals of X_{gan}.	**06**	**L2**	**CO4**
	b.	Explain mobile devices and cloud security.	**06**	**L2**	**CO4**
	c.	Model an overview of reputation system design options.	**08**	**L3**	**CO4**
		Module – 5			
Q.9	**a.**	Outline important cloud platform capabilities.	**10**	**L2**	**CO5**
	b.	Organize the steps involved in Map Reduce.	**10**	**L3**	**CO5**
		OR			
Q.10	**a.**	Explain with a neat diagram how data flows if running a Map Reduce job at various task trackers using the hadoop library	**10**	**L2**	**CO5**
	b.	Explain data mutation sequence in GFS with diagram.	**10**	**L2**	**CO5**

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