



Maratha Vidya Prasarak Samaj's

Rajarshi Shahu Maharaj Polytechnic, Nashik

Udoji Maratha Boarding Campus, Near Pumping Station, Gangapur Road, Nashik-13.

RSM POLY

Affiliated to MSBTE Mumbai, Approved by AICTE New Delhi, DTE Mumbai & Govt. of Maharashtra, Mumbai.

Subject :- Cloud Computing (22624)



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SYLLABUS

Chapter No.	Name of chapter	Marks With Option
1	Fundamentals of Cloud Computing	12
2	Virtualization	18
3	Storage in Clouds	24
4	Cloud Monitoring and management	20
5	Security in Cloud Computing	18
6	Trends and future in Cloud Computing	16
Total Marks :-		108



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BOARD THEORY PAPER PATTERN
FOR ALL BRANCHES

Q.1		Attempt any FIVE	5*2=10
	a)	Define virtualization	
	b)	List down the risks from multi-tenancy with respect to various cloud environments.	
	c)	Define MapReduce computation	
	d)	Define computation	
	e)	Implement storage virtualization at the server level	
	f)	State the advantages of cloud service deployment.	
	g)	List down the properties of cloud computing	
Q.2		Attempt any THREE	3*4=12
	a)	Explain the service models of distributed and cloud computing in detail.	
	b)	List the Pros and Cons of cloud computing.	
	c)	Briefly discuss the NIST cloud computing reference architecture	
	d)	Write short notes on Desktop virtualization.	
Q.3		Attempt any THREE	3*4=12
	a)	Differentiate between Grid computing, Distributed computing and cloud computing	
	b)	Describe the characteristics of cloud computing environments	
	c)	Explain Virtual LAN(VLAN) and virtual SAN(VSAN) in Cloud Computing	
	d)	Describe the top threats identified by cloud security alliance(CSA) of cloud computing.	
Q.4		Attempt any FOUR	3*4=12
	a)	Explain the service models of distributed and cloud computing in detail.	
	b)	Discuss with example the elastic utility computing architecture for linking your programs to useful systems	
	c)	Explain the Hadoop distributed file system architecture with diagrammatic illustration	
	d)	Explain the architecture and working principle of MapReduce	
	e)	Write short notes on risk management in cloud.	
Q.5		Attempt any TWO	2*6=12
	a)	Explain the different levels of virtualization implementation	



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	b)	With a neat diagram, explain the architecture of OpenStack system
	c)	Write a note on security challenges in cloud computing.
Q.6		Attempt any FOUR 2*6=12
	a)	Discuss briefly (i) Security governance. (ii) Security monitoring
	b)	Discuss different methods of resource provisioning and platform deployment in detail with a neat diagram
	c)	Explain the various design challenges for effective cloud computing environment



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CLASS TEST - I

PAPER PATTERN

Syllabus:-

Unit No.	Name of the Unit	Course Outcome (CO)
1	Fundamentals of Cloud Computing	CO-624.1
2	Virtualization	CO-624.2
3	Storage in Clouds	CO-624.3

Q.1	Attempt any FOUR 4*2=8Marks	Course Outcome (CO)
a)	Define virtualization	CO-624.1
b)	List down the risks from multi-tenancy with respect to various cloud environments.	CO-624.2
c)	Explain the different levels of virtualization implementation	CO-624.3
d)	List the Pros and Cons of cloud computing.	CO-624.1
e)	State the advantages of cloud service deployment.	CO-624.2
f)	Implement storage virtualization at the server level	CO-624.3
Q.2	Attempt any THREE 3*4=12 Marks	
a)	Discuss different methods of resource provisioning and platform deployment in detail with a neat diagram	CO-624.3
b)	Explain the various design challenges for effective cloud computing environment	CO-624.2
c)	Briefly discuss the NIST cloud computing reference architecture	CO-624.1
d)	Write short notes on Desktop virtualization.	CO-624.2



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CLASS TEST - II PAPER PATTERN

Syllabus:-

Unit No.	Name of the Unit	Course Outcome (CO)
4	Cloud Monitoring and management	CO-624.4
5	Security in Cloud Computing	CO-624.5
6	Treads and future in Cloud Computing	CO-624.6

Q.1	Attempt any FOUR	4*2=8Marks	Course Outcome (CO)
a)	List down the risks from multi-tenancy with respect to various cloud environments.		CO-624.4
b)	Define MapReduce computation		CO-624.5
c)	With a neat diagram, explain the architecture of OpenStack system		CO-624.4
d)	Write a note on security challenges in cloud computing.		CO-624.4
e)	Write short notes on risk management in cloud.		CO-624.4
f)	Discuss with example the elastic utility computing architecture for linking your programs to useful systems		CO-624.5
Q.2	Attempt any THREE	3*4=12 Marks	
a)	Explain the service models of distributed and cloud computing in detail.		CO-624.4
b)	Discuss different methods of resource provisioning and platform deployment in detail with a neat diagram		CO-624.5
c)	Discuss briefly Security governance.		CO-624.4
d)	Discuss briefly Security monitoring		CO-624.5



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COURSE OUTCOME (CO)

COURSE:- CLOUD COMPUTING(22624)

PROGRAMME: - ALL

CO.NO	Course Outcome
CO-624.1	Fundamentals of Cloud Computing
CO-624.2	Virtualization
CO-624.3	Storage in Clouds
CO-624.4	Cloud Monitoring and management
CO-624.5	Security in Cloud Computing
CO-624.6	Trends and future in Cloud Computing