

THE KAVERY ENGINEERING COLLEGE
(An Autonomous Institution)

MCA DEGREE END SEMESTER THEORY EXAMINATIONS, NOV /DEC 2024

Second Semester

Master of Computer Applications

MC4203 - Cloud Computing Technologies

Regulations - 2021

Duration : 3 Hrs

Maximum : 100 Marks

PART – A(ANSWER ALL QUESTIONS) (Marks 10*2=20)

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
1.	Write the features of distributed systems.	RE	1	2
2.	What is FIFO ordered multicast?	RE	1	2
3.	Name the essential characteristics of cloud computing.	RE	2	2
4.	Compare Parallel Computing and Centralized computing.	UN	2	2
5.	What are the various components of NIST Cloud computing reference architecture?	UN	3	2
6.	Why do we need cloud storage?	UN	3	2
7.	Classify full virtualization and host based virtualization in terms of hardware virtualization.	UN	4	2
8.	Outline the advantages of server virtualization.	UN	4	2
9.	Define the term microservice.	RE	5	2
10.	List any four DevOps tools.	RE	5	2

PART – B (ANSWER ALL QUESTIONS) (Marks 5*13 = 65)

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
11.	a i Discuss in detail about distributed system models.	AN	1	7
	ii Write notes on remote procedure call and remote method invocation.	AN	1	6
	Or			
	b i Differentiate logical time and logical clocks.	AN	1	7
	ii Outline the concept of physical clock synchronization.	AN	1	6
12.	a Analyze and explain the cloud components in detail.	AN	2	13
	Or			
	b Examine in detail underlying principles of parallel and distributed computing.	AN	2	13
13.	a Construct the layered cloud architecture design and discuss elaborately.	AP	3	13
	Or			

	b	With a neat diagram, organize the cloud storage providers and amazon simple storage service S3.	AP	3	13
14.	a	Analyze in detail about the implementation level of virtualization.	AN	4	13
		Or			
	b	What is a virtual machine? Explain virtualization of I/O Devices.	AN	4	13
15.	a	Illustrate the various design patterns of microservices and how to deploy and maintaining microservices.	UN	5	13
		Or			
	b i	Explain the core elements of DevOps.	UN	5	7
	ii	Illustrate the life cycle of DevOps.	UN	5	6

*PART – C (Marks 1*15 = 15)*

<i>Q.No</i>		<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
16.	a	Evaluate and contrast the merits and demerit of Cloud deployment models: public, private, hybrid.	AN	3	15
		Or			
	b	Inspect how Desktop virtualization and Server virtualization is done in cloud computing	AN	4	15