

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***MCA DEGREE END SEMESTER THEORY EXAMINATIONS, NOV/DEC 2025***Second Semester**Master of Computer Applications***MC4203 / PMCT2423 – Cloud Computing Technologies***Regulations – 2021 & 2024**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.	State Distributed Systems.	L1	1	2
2.	What is the purpose of logical clocks in distributed systems?	L1	1	2
3.	Define Cloud Computing.	L1	2	2
4.	Name any two open-source cloud software platforms.	L1	2	2
5.	Difference between private cloud and public cloud.	L2	3	2
6.	List any two benefits of cloud storage.	L1	3	2
7.	Specify the use of virtualization.	L2	4	2
8.	Compare service oriented architecture and micro service.	L2	4	2
9.	Define micro services and its key characteristics.	L1	5	2
10.	Name two popular DevOps tools.	L1	5	2

*PART – B (ANSWER ALL QUESTIONS) (Marks 5*16 = 80)*

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
11.	a Explain in detail the different distributed architectural models and include specific examples that illustrate each model.	L2	1	16
	Or			
	b Outline the steps involved in performing Remote Method Invocation(RMI) using Remote Procedure Call (RPC) in distributed systems.	L2	1	16
12.	a Describe in detail about the applications of cloud computing across various platforms.	L2	2	16
	Or			
	b Explain the key principles, benefits, and challenges of parallel and distributed computing in cloud environments.	L2	2	16
13.	a Classify the different types of cloud services and its advantages.	L2	3	16
	Or			
	b Compare and contrast public, private, and hybrid cloud computing models, highlighting their benefits, limitations, and applications.	L2	3	16

14.	a	Identify the core principles of Service-Oriented Architecture (SOA) and explain how SOA enables effective service management in cloud-based applications.	L3	4	16
	Or				
	b	Construct a model for virtualization of CPU, memory, and I/O devices, detailing the impact on cloud performance and scalability.	L3	4	16
15.	a	Build a mini web service architecture using microservices, explain how each component interacts and contributes to the system's overall functionality.	L3	5	16
	Or				
	b	Identify the challenges of deploying and maintaining microservices in a cloud environment, and explain how DevOps tools and practices can be applied to effectively address these challenges.	L3	5	16