

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***UG/PG DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL-MAY 2026****Second Semester****Master of Computer Applications****PMCT2423-CLOUD COMPUTING TECHNOLOGIES****Regulations – 2024****Duration: 3 Hrs.****Maximum: 100 Marks****PART – A (ANSWER ALL QUESTIONS) (Marks 10*2=20)**

Q.No	Questions	BLT	CO	Marks
1.	How does RMI differ from RPC?	L1	1	2
2.	Can you explain why time synchronization is crucial in distributed systems?	L2	1	2
3.	List the different types of cloud service providers.	L1	2	2
4.	Interpret the purpose of resource pooling in cloud platforms.	L2	2	2
5.	Name two enabling technologies that support cloud infrastructure.	L1	3	2
6.	Illustrate how cloud is used in IoT (Internet of Things).	L2	3	2
7.	Define virtualization in the context of cloud computing.	L1	4	2
8.	Compare full virtualization and para virtualization.	L2	4	2
9.	List the major tools used in DevOps.	L1	5	2
10.	Explain how containers help in running microservices.	L2	5	2

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

Q.No	Questions	BLT	CO	Marks
11. a	Illustrate the architecture of Remote Procedure Call (RPC) and Remote Method Invocation (RMI), and compare their functionalities.	K2	1	16
	Or			
b	Interpret the role of time synchronization in distributed systems and explain logical clocks.	K2	1	16
12. a	Illustrate the cloud computing architecture by explaining the functions of clients, data centers, and distributed servers in service delivery.	K2	2	16
	Or			
b	Compare the features and functionalities of open-source cloud platforms such as Eucalyptus, OpenNebula, and OpenStack.	K2	2	16
13. a	Construct a cloud architecture using the NIST Cloud Computing Reference Model and describe the purpose of each component.	K3	3	16
	Or			
b	Apply the concepts of IaaS, PaaS, and SaaS to real-world applications and demonstrate how they impact cloud service usage..	K3	3	16

14.	a	Develop a cloud solution using Service-Oriented Architecture (SOA) and Web Services to support application integration.	K3	4	16
Or					
	b	Apply virtualization techniques for CPU, memory, and I/O devices in cloud environments and explain their significance.	K3	4	16
15.	a	Analyze the architectural differences between SOA and Microservices and explain how each model influences application development and deployment.	K4	5	16
Or					
	b	Categorize the components of a DevOps life cycle and examine their functions.	K4	5	16
