



RV COLLEGE OF ENGINEERING®
Department of Computer Science and Engineering
CIE-I: Question Paper

Course : (Code)	DISTRIBUTED AND CLOUD COMPUTING (22MCN1B2T)	Semester : I Max Marks: 50 + 10
Date : March 2024	Duration : 120 minutes	Staff : Prof MSS
Name :	USN :	Section : 1st M.Tech CSE/CNE

Answer All Questions

Sl.no	Questions	Marks	L1-L6	CO
Part – A				
1.1	What are the challenges in designing a distributed system?	02	L3	CO2
1.2	List the characteristics of private cloud?	02	L2	CO1
1.3	List the design objectives of HPC and HTC.	1	L1	CO1
1.4	What are some of the key features of Cloud Computing?	02	L3	CO2
1.5	What is high availability (HA) feature in Distributed Cloud environment?	02	L2	CO1
1.6	Give an example of bare metal hypervisor.	01	L1	CO3
Part – B				
2.a	Describe in detail about VM provisioning and migration technique with relevant case study	05	L4	CO3
2.b	Discuss in detail about the hardware assisted virtualization with respect to CPU, Memory and I/O Devices	05	L2	CO4
3.	A good understanding of how clusters and MPPs work collectively will pave the way toward understanding larger grids and clouds. Discuss the several issues and challenges in developing the cluster.	10	L3	CO3
4	Running a parallel program on a distributed computing system has several advantages. Discuss how multicore CPUs and multithread technologies have evolved over years.	10	L4	CO2
5	According to the abstraction level of the capability provided and the service model of providers, how can the cloud services be classified.	10	L3	CO2
6	Discuss the various basic and advanced features of software toolkit responsible for this orchestration of resources in virtual environment (VIM).	10	L3	CO1



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CIE-II: Question Paper

Course: (Code)	DISTRIBUTED AND CLOUD COMPUTING (22MCN1B2T)	Semester: I
Date: April 2024	Duration: 120 minutes	Staff: Prof MSS
Name:	USN:	Section: 1st M. Tech CSE/CNE

Answer All Questions

Sl.no	Questions	Marks	L1-L6	CO
Part - A				
1.1	List any four CRUD operations in REST.	02	L3	CO2
1.2	State any four parallel and distributed computing systems.	02	L2	CO2
1.3	Define cold migration.	02	L1	CO1
1.4	State the different levels of Virtualization.	02	L2	CO4
1.5	What is para virtualization?	02	L3	CO3
Part - B				
2.a	What is the different message-oriented middleware for supporting distributed computing?	05	L3	CO3
2.b	Show that multilevel architectures are common workflow even in computing, database and sensors.	05	L2	CO2
3	Write and explain about programming on Amazon AWS and Microsoft Azure.	10	L4	CO2
4.a	How is GFS different from traditional file system? Describe its architecture and highlight the advantages.	05	L4	CO4
4.b	Explain how MapReduce software framework can be used to counting the number of occurrences of each word in a collection of documents?	05	L3	CO4
5	Describe with a neat diagram Intel assisted hardware: CPU and memory virtualization.	10	L3	CO3
6	Explain the different steps of Live migration in VM with a neat flow diagram.	10	L4	CO4