	RV COLLEGE OF ENGINEERING® **Department of Computer Science and Engineering** **CIE-I: Question Paper**		
Course : (Code)	**DISTRIBUTED AND CLOUD COMPUTING (18MCN1B2T)**		**Semester : I**
Date :March 2023	**Duration :** 120 minutes		**Staff : Prof MSS**
Name :	**USN :**	**Section :**	**1st M.Tech CSE/CNE**

Answer All Questions

Sl.no	Questions Part - A	Marks	L1-L6	CO
1.1	What is an HPC and HTC system.	02	L1	CO2
1.2	State the difference between fine grain multithreaded processor and simultaneous multithreaded processors (SMT).	02	L2	CO1
1.3	What is hype cycle for emerging technologies.	1	L3	CO1
1.4	Identify the root technologies of cloud computing.	02	L1	CO2
1.5	What is HA feature in Distributed Cloud environment?	02	L2	CO1
1.6	Give an example of bare metal hypervisor.	01	L2	CO3
	Part – B			
2.a	What is Virtualization? Discuss design requirements of VM Middleware.	05	L3	CO1
2.b	Discuss VM Primitive Operations.	05	L4	CO2
3. a	Explain classification of system models for distributed and cloud computing	05	L3	CO1
3.b.	What are the major cluster design issues.	05	L4	CO3
4.a	Describe Parallel and Distributed Programming Models	05	L2	CO2
4.b	Discuss the performance and scalability issues related to distributed systems.	05	L3	CO2
5	What are the different layers and types of clouds?	10	L2	CO1
6	Discuss the various basic and advanced features of VIMs.	10	L4	CO4

COURSE OUTCOMES:

CO1.	Apply the distributed and cloud computing concepts to solve problems in computing domain.
CO2.	Analyse various architectures, work flow models and algorithms used to implement cloud and distributed systems.
CO3.	Design solutions using modern tools to solve applicable problems in cloud and distributed systems.
CO4.	Demonstrate effective communication, report writing and usage of modern tools for implementing cloud and distributed systems applications

	L1	L2	L3	L4	L5	L6	CO1	CO2	CO3	CO4
Marks	4	20	16	20	-	-	15	19	06	10

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

Course : (Code)	DISTRIBUTED AND CLOUD COMPUTING (18MCN1B2T)	Semester : I
Date : April 2023	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 properties of SOA.	02	L3	CO2
1.2	What are the layers of three tier enterprise architecture?	02	L2	CO2
1.3	Define cold migration.	02	L2	CO3
1.4	Mention any two vendors developing Xen Hypervisor.	02	L4	CO4
1.5	Mention the companies owning GAE, AWS and Azure	02	L3	CO3
	Part - B			
2.a	Discuss how resources are managed using CRUD operations and REST APIs.	05	L3	CO3
2.b	In SOA paradigm, how software is delivered and consumed over web as a medium and discuss technologies that make up web services.	05	L4	CO2
3. a	What is the different message-oriented middleware for supporting distributed computing?	05	L4	CO2
3.b.	Show that multilevel architectures are common workflow even in computing, database and sensors.	05	L3	CO3
4.a	Discuss programming model and infrastructure supported by Google App Engine.	05	L2	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	Show the different operational layers to create virtualization layer software like Hypervisor or VMM. Also discuss hardware assisted CPU virtualization and Memory virtualization.	10	L3	CO3
6	Explain the different techniques of VM migration.	10	L4	CO4

COURSE OUTCOMES:

CO1.	Apply the distributed and cloud computing concepts to solve problems in computing domain.
CO2.	Analyse various architectures, work flow models and algorithms used to implement cloud and distributed systems.

	RV COLLEGE OF ENGINEERING® Department of Computer Science and Engineering CIE-III: Question Paper		
Course : (Code)	DISTRIBUTED AND CLOUD COMPUTING (22MCN1B2T)		Semester : I
Date :May 2023	Duration : 120 minutes		Staff : Prof MSS
Name :	USN :	Section :	1st M.Tech CSE/CNE

AnswerAll Questions

Sl.no	Questions Part - A	Marks	L1-L6	CO
1.1	Google was born out of a research project at _____ University, with the company launched in _____ year.	02	L3	CO2
1.2	The underlying search engine consists of a set of services for _____ the Web and _____ and _____ the discovered pages.	02	L2	CO1
1.3	Mention the key performance features of Google.	02	L1	CO1
1.4	The _____, _____and _____ together provide data and coordination services to higher-level applications and services.	02	L3	CO2
1.5	Mention the various GFS interfaces.	02	L2	CO1
	Part - B			
2.a	Discuss Multi-threading technologies.	05	L3	CO3
2.b	Explain the GPU programming model.	05	L4	CO4
3. a	Discuss cluster architecture and single system image concept.	05	L4	CO4
3.b.	What is P2P architecture, how is it different from client server architecture	05	L3	CO3
4.a	What are the three basic services underlying google search engine.	05	L2	CO2
4.b	Discuss the architecture of Google physical infrastructure.	05	L2	CO2
5	What are the different choices for underlying communication paradigms used by Google infrastructure.	10	L2	CO2
6	Discuss the three services that together provide data and coordination services to higher level applications in Google infrastructure.	10	L4	CO4

COURSE OUTCOMES:

CO1	Apply the distributed and cloud computing concepts to solve problems in computing domain.
CO2.	Analyse various architectures, work flow models and algorithms used to implement cloud and distributed systems.
CO3.	Design solutions using modern tools to solve applicable problems in cloud and distributed systems.
CO4.	Demonstrate effective communication, report writing and usage of modern tools for implementing cloud and distributed systems applications

	L1	L2	L3	L4	L5	L6	CO1	CO2	CO3	CO4
Marks	5	16	16	23	-	-	5	20	12	23