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Enrollment No:		Exam Seat No:			
		C. U. SHAH UNIVERSITY			
		Summer Examination-2022			
Subje	ect Nam	ne : Distributed Systems			
Subje	ect Code	e: 4TE08DSY1 Branch: B.Tech (CE)	Branch: B.Tech (CE)		
Seme	ster: 8	Date: 02/05/2022 Time: 11:00 To 02:00 Mark	ks: 70		
(1 (2 (3) Instru) Draw	of Programmable calculator & any other electronic instrument is prohibited. actions written on main answer book are strictly to be obeyed. In neat diagrams and figures (if necessary) at right places. The suitable data if needed.			
Q-1		Attempt the following questions:	(14)		
	-	What are the main Characteristics of Distributed systems?			
	,	What is Mutable File System? Define Datagram.			
		What are the three major modes of communication in distributed systems?			
	e)	What are the different types of System Model?			
	f)	What are the classical problems of synchronization?			
	_	What is Name Space?			
		What is marshalling?			
	i)	What is DNS Specified?			
	j) k)	What is DNS Spoofing? What are the major differences between Thread and Process?			
	1)	What is SOAP?			
	,	What are the different IPC mechanisms?			
	,	What are the main functions of Proxy?			
Atten	npt any	four questions from Q-2 to Q-8			
Q-2		Attempt all questions	(14)		
•	a)	List out the design issues in Distributed System. Explain Transparency in detail.	(07)		
	b)	Compare Microkernel and Monolithic System in detail with it's diagram	(07)		



Explain Berkley clock Synchronization algorithm with an example. Discuss the main features of ATM technology

Attempt all questionsWhat is a RPC? Explain RPC Execution process in detail with diagram.

Q-3

Q-4

a)b)

a)

Attempt all questions

(14)

(07)

(07)

(14)

(07)

	b)	Which are the different techniques to avoid deadlock in Distributed Operating System?	(07)
Q-5		Attempt all questions	(14)
	a)	What is Load Balancing? Explain any one algorithm of load balancing.	(07)
	b)	What is process migration? What are the main steps involved in process migration.	(04)
	c)	Differentiate Stateful and Stateless server?	(03)
Q-6		Attempt all questions	(14)
	a)	What is consistency? Discuss the various consistency models used in DSM system	(07)
	b)	What is physical clock? What is logical clock? Explain how to implement logical clock in distributed system?	(07)
Q-7		Attempt all questions	(14)
	a)	Explain the technique to avoid the faults in distributed systems	(07)
	b)	What is thread? Compare user level thread with kernel level thread.	(07)
Q-8		Attempt all questions	(14)
	a)	Briefly define Distributed System. What are the advantages of Distributed System?	(07)
	b)	List file Accessing models. Discuss any two of them.	(07)

