GUJARAT TECHNOLOGICAL UNIVERSITY
BE – SEMESTER- VII EXAMINATION-SUMMER 2023

Subject Code: 3170719   **Date: 19/06/2023**
Subject Name: Distributed System
Time: 10:30 AM TO 01:00 PM   **Total Marks: 70**
Instructions:
1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**
4. **Simple and non-programmable scientific calculators are allowed.**

			MARKS
Q.1	(a)	What is Distributed System? List out goals of distributed system.	03
	(b)	Compare Network operating system and Distributed system.	04
	(c)	Discuss the issues related to designing a Distributed System.	07
Q.2	(a)	Define scalability, Fault Tolerance and Replication	03
	(b)	Explain Client Server Architecture.	04
	(c)	What is Transparency? Explain various types of Transparency.	07
		OR	
	(c)	Explain merits and demerits of Distributed System in detail.	07
Q.3	(a)	What is multicasting? List the characteristics of multicasting.	03
	(b)	Compare Process and Thread.	04
	(c)	What is Clock Synchronization? Explain Berkeley algorithm in detail.	07
		OR	
Q.3	(a)	Explain Firewall in detail.	03
	(b)	Explain LDAP in detail.	04
	(c)	Define RPC. Explain implementation mechanism of RPC.	07
Q.4	(a)	What is cryptography? What is the use of cryptography?	03
	(b)	Explain Entry consistency and weak consistency.	04
	(c)	What is the objective of Election algorithm? Explain Ring election algorithm.	07
		OR	
Q.4	(a)	Define Terms: Name Space, Name server.	03
	(b)	Write short note on various security services.	04
	(c)	Explain Distributed File System in details.	07
Q.5	(a)	Briefly explain HTTP.	03
	(b)	Briefly explain apache web server.	04
	(c)	What is mutual exclusion? Categorize and compare mutual exclusion algorithms.	07
		OR	
Q.5	(a)	Explain CORBA's common Data Representation.	03
	(b)	Briefly explain distributed commit and recovery in distributed systems.	04
	(c)	Draw and explain architecture of SUN Network File System.	07

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