

GUJARAT TECHNOLOGICAL UNIVERSITY

BE- SEMESTER- VII EXAMINATION – SUMMER 2026

Subject Code:3170719

Date:08-06-2026

Subject Name:Distributed System

Time:02:30 PM TO 05:00 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) Give any three example of Distributed Systems.	03
	(b) Define Distributed System. Give two Advantages and two Disadvantages of Distributed System.	04
	(c) What are the characteristics of Distributed System? Explain With example.	07
Q.2	(a) What is Fault Tolerance? Why it is used in Distributed System	03
	(b) Explain Firewall and DoS (Denial of Service)	04
	(c) Explain RPC with Example with its implementation.	07
	OR	
	(c) Explain RMI with Example with its implementation.	07
Q.3	(a) What is Attribute based Naming and Structured Naming?	03
	(b) Explain Scalability with example	04
	(c) Explain Different types of transparency in Distributed System.	07
	OR	
Q.3	(a) What is Distributed Web-based System? Give Example.	03
	(b) Give difference between Process and Thread	04
	(c) What is DFS? Explain its characteristics with example	07
Q.4	(a) What is Virtualization? How it is useful?	03
	(b) What is Code migration? When it is used?	04
	(c) Explain Bully Algorithm. Also give two advantage of bully algorithm.	07
	OR	
Q.4	(a) What is Multicasting? Explain with example.	03
	(b) What is CORBA? Compare : RMI and CORBA	04
	(c) Compare Ring Algorithm and Bully Algorithm. Which is better?	07
Q.5	(a) What is Logical Clock? How it is helpful in Clock Synchronization?	03
	(b) Explain Distributed Commit and Recovery with example.	04
	(c) Explain any one Algorithm for clock synchronization.	07
	OR	
Q.5	(a) Explain NTP (Network Time Protocol) and its use	03
	(b) Explain: Client Centric Consistency Model	04
	(c) How Authentication is different from Authorization? What are the common approaches of user Authentication?	07
