

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII (NEW) EXAMINATION – WINTER 2022****Subject Code:3170719****Date:12-01-2023****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 a distributed system? List out the advantages of Distributed System.	03
(b) Explain how simple client-server communication is done.	04
(c) Discuss the issues related to designing a Distributed System.	07
Q.2 (a) Define Remote Procedure Call (RPC), Virtualization, Replication.	03
(b) What is Interceptor? Explain briefly.	04
(c) What is Code Migration? Explain reasons for code migration.	07
OR	
(c) Explain Message-Oriented Communication in detail.	07
Q.3 (a) Define identifiers, names and addresses.	03
(b) Briefly explain iterative name resolution technique.	04
(c) Explain Layered Architecture in detail.	07
OR	
Q.3 (a) What is cryptography? Explain in brief.	03
(b) Write short note on Data-centric consistency model.	04
(c) Explain Ring algorithm in detail.	07
Q.4 (a) What is multicasting? List the characteristics of multicasting.	03
(b) Write short note on Process Resilience.	04
(c) Explain Bully algorithm in detail.	07
OR	
Q.4 (a) What is digital signature? Explain briefly.	03
(b) Explain Firewall in detail.	04
(c) Explain Authorization Management in detail.	07
Q.5 (a) What is Denial of Service? Explain briefly.	03
(b) What is RMI (Remote Method Invocation)? Explain briefly.	04
(c) Explain Distributed File System in details.	07
OR	
Q.5 (a) Discuss Non-persistent HTTP connection in briefly.	03
(b) What is CORBA? Explain briefly.	04
(c) Explain Distributed Commit in detail.	07
