

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI (NEW) EXAMINATION – WINTER 2018

Subject Code:2160710

Date:04/12/2018

Subject Name:Distributed operating 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.

		MARKS
Q.1	(a) What are the differences between remote procedure call and local procedure call?	03
	(b) Differentiate tightly coupled and loosely coupled multiprocessor system.	04
	(c) What are the goals of the building a distributed system? Describe performance of a distributed system	07
Q.2	(a) What is the difference between replication and file caching?	03
	(b) Discuss the desirable features of a good message-passing system.	04
	(c) Explain Mutual Exclusion using Distributed Algorithm in DOS.	07
	OR	
	(c) Discuss the importance of Synchronization in DOS. Which algorithms are useful for synchronize of clock in DOS?	07
Q.3	(a) What is the job of Server stub in RPC?	03
	(b) Explain various Trends in Distributed File System?	04
	(c) Explain Sequential Consistency with reference to DSM.	07
	OR	
Q.3	(a) What is naming system? Explain desirable features of good naming system in brief.	03
	(b) What is DNS? Explain What are the Main Functions of Domain Names?	04
	(c) Explain implementation issues in distributed shared memory system	07
Q.4	(a) Describe various Access Control Mechanism.	03
	(b) Which are the characteristics features of system-oriented name in naming system?	04
	(c) What is the process migration? Explain process migration in heterogeneous system.	07
	OR	
Q.4	(a) What is buffering? Explain different types of buffering in brief.	03
	(b) List various methods of passive attacks on computer system.	04
	(c) What is Real Time Distributed System? Explain the types of Real Time Distributed System.	07
Q.5	(a) Explain Thrashing and False sharing in Distributed shared memory.	03
	(b) Explain (1) Worms (b) Logic bomb.	04
	(c) Explain architecture of Distributed web-based system.	07
	OR	
Q.5	(a) Explain wait-die Deadlock prevention approach.	03
	(b) Explain Java RMI	04
	(c) Explain the replication for web hosting system with example.	07