Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

M.E. SEMESTER III–EXAMINATION (Remedial)– WINTER 2015

Subject code: 730203 **Date: 07/12/2015**

Subject Name: Real Time Systems

Time: 2:30 PM to 5:00 PM **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	Define Real Time System and Explain some of the real time systems.	**07**
	(b)	Explain in brief Hard and Soft real time systems.	**07**
Q.2	**(a)**	Explain various benchmarks for Real Time System.	**07**
	(b)	Explain Distributed Clock Synchronization in Distributed Real Time System.	**07**
		OR	
	(b)	Explain the capabilities of commercial Real Time Operating System.	**07**
Q.3	**(a)**	Explain RTCP.	**07**
	(b)	Explain the scheduling of subtasks on each processor in Multiprocessor system.	**07**
		OR	
Q.3	**(a)**	Discuss various issues in Resource Reservation with respect to Real Time Communication.	**07**
	(b)	Explain in brief off-line and on-line scheduling.	**07**
Q.4	**(a)**	Explain the properties of Real Time System.	**07**
	(b)	Explain Feedback control scheduling in Uni-processor Real Time System.	**07**
		OR	
Q.4	**(a)**	Explain Misconception about Real Time System.	**07**
	(b)	Explain fault tolerance in Multi-processor Real Time System.	**07**
Q.5	**(a)**	Discuss various location policies in Distributed Real Time System.	**07**
	(b)	Explain RTLinux in brief	**07**
		OR	
Q.5	**(a)**	Explain concurrency control in real time databases.	**07**
	(b)	Explain Real Time CORBA.	**07**

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