Seat No.:	Enrolment No.
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GUJARAT TECHNOLOGICAL UNIVERSITY

MCA - SEMESTER-III • EXAMINATION – WINTER • 2014

	Sub Tin	oject Code: 2630004 oject Name: Operating Systems (OS) ne: 10:30 am - 01:00 pm Total Marks: 70 ructions:	
		 Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks. 	
Q.1	(a) (b)	Explain Readers/Writers problem in detail Explain the objective of OS and mention working of various management modules.	07 07
Q.2	(a) (b)	Explain Deadlock prevention and detection technique. Briefly discuss three types of processor scheduling. OR	07 07
	(b)	What is Process? Explain PCB in details.	07
Q.3	(a) (b)	Discuss User Level Thread and Kernal Level Thread. What is RAID? Explain various levels of RAID. OR	07 07
Q.3	(a) (b)	What is Real time Scheduling? Explain the Characteristics of Real –Time Operating System. What is Virtual Memory? What are the techniques used to manage it by operating system?	07 07
Q.4	(a) (b)	Explain Producer Consumer problem. How we can solve it in terms of OS concepts. Explain Internal Fragmentation and External Fragmentation.	07 07
	(0)	OR	07
Q.4	(a) (b)	Explain Dining Philosopher problem. How we can solve in terms of OS concepts. What is RPC? Explain in details.	07 07
Q.5	(a) (b)	Explain various disk scheduling algorithm. Explain I/O buffering and Record blocking. OR	07 07
Q.5	(a) (b)	Explain Distributed Processing with client server computing and clustering. Explain Fair-Share Scheduling and Gang scheduling.	07 07
