Seat No.: Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

M. E SEMESTER – II • EXAMINATION – WINTER • 2014				
Subject code: 1722906 Date: 05-12			-2014	
Subject Name: Embedded and Real Time Systems Fime: 02:30 pm - 05:00 pm Total Marks: 70				
Instru				
	2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.		
Q.1	(a)	o. o.	07	
	(b)	Draw and explain function block diagram of 8051 microcontroller	07	
Q.2	(a)		07	
	(b)	Compare single-purpose, application-specific and general purpose processor	07	
		OR		
	(b)	Explain design challenges and optimizing design metrics related to Embedded systems	07	
Q.3	(a)	Write short note on: USART and PWM interfacing.	07	
	(b)	Write short note on: PIC(16F72) processor. OR	07	
Q.3	(a)	Write short note on: RISC Concepts	07	
	(b)	Explain I/O ports of microcontroller	07	
Q.4	(a)	Explain Semaphores-deadlock- process stack management	07	
	(b)	Explain Interrupts and Timers in detail OR	07	
Q.4	(a)	Explain different addressing modes of 8051 microcontroller with suitable examples.	07	
	(b)	Explain in detail round robin primitive rate monotonic foreground and background.	07	
Q.5	(a)	Explain Stepper Motor control using 8051 Microcontroller.	07	
	(b)	Explain ADC /DAC interfacing with microcontroller. OR	07	
Q.5	(a)	_	07	
•	(b)		07	
