Seat No.: _		Enrolment No		
		GUJARAT TECHNOLOGICAL UNIVERSITY		
BE- VII <sup>th</sup> SEMESTER-EXAMINATION – MAY/JUNE- 2012				
Subject code: 171005 Date: 29/05			5/2012	
•		Name: Embedded Systems		
1 1			<b>Sotal Marks: 70</b>	
Instr				
		empt all questions.		
2. 3.		Make suitable assumptions wherever necessary. Figures to the right indicate full marks.		
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Q.1	(a)	Describe the principal features of the ARM architecture in detail.	07	
	<b>(b)</b>	Compare the microprocessor, microcontroller, and single purpose processors and gives their application example in day to day life.	07	
Q.2	(a)	List the IO types and explain any two types in detail.	07	
	<b>(b)</b>	Give the difference between RISC and CICS processors.	07	
		OR		
	<b>(b)</b>	Write a short note on 3-stage pipeline ARM organization.	07	
Q.3	(a)	Give the detail of kernel functions in an OS. What can be the function outside the kernel?	07	
	<b>(b)</b>	Write a short note on Real-Time Operating System and its services.  OR	07	
Q.3	(a)	Write a short note on hyper text transfer protocol.	07	
	<b>(b)</b>	Discuss the OS security issues and give important security functions OS should carried out.	07	
Q.4	(a)	Write a short note on CAN Bus.	07	
	<b>(b)</b>	Give detail characteristics of the Functions, ISR, and Task.  OR	07	
Q.4	(a)	Give the various methods of saving and optimizing the power needs.	07	
	<b>(b)</b>	Explain data processing instruction execution in ARM processor.	07	
Q.5	(a)	Write a short note on use of Socket function.	07	
	<b>(b)</b>	Explain the concept of condition execution in ARM processor. With compare to any other processor in what way it is differ.  OR	07	
Q.5	(a)	Give the properties of thumb instructions in ARM processor.	07	
	<b>(b)</b>	Write about a design process steps in embedded system.	07	

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