GUJARAT TECHNOLOGICAL UNIVERSITY
M. E. - SEMESTER – I • EXAMINATION – WINTER • 2013

Subject code: 715401N   **Date: 23-12-2013**
Subject Name: Arm Processor Architecture and System Design
Time: 10.30 am – 01.00 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)**	How instruction execution is done in arm processor?	07
	(b)	Describe Acorn risc machine	07
Q.2	**(a)**	Explain the arm programmer model	07
	(b)	Describe the data processing instructions for arm programming	07
		OR	
	(b)	Describe the data transfer instructions for arm programming	07
Q.3	**(a)**	Describe about the arm development tools	07
	(b)	How bus structure is used in arm processor	07
		OR	
Q.3	**(a)**	Describe : UART	07
	(b)	Explain about : I2C and SPI interfaces	07
Q.4	**(a)**	Explain the requirement of Analog to Digital Convertor	07
	(b)	Describe : PWM Modulator	07
		OR	
Q.4	**(a)**	Explain R-2R Digital to Analog Convertor	07
	(b)	Describe about LPC2000 interrupt system	07
Q.5	**(a)**	Describe in details : Phase locked loop	07
	(b)	Describe : CAN controller in brief	07
		OR	
Q.5	**(a)**	What is meant by pipelining? Explain three stage pipelining in arm programming	07
	(b)	Explain control flow instructions are used in arm architecture.	07

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