Seat No.: Enrolment No.	Seat No.:	Enrolment No.
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Subject Code: 650012

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA - SEMESTER-V • EXAMINATION – SUMMER 2013

Date: 20-05-2013

Subj	ect Na	ame: Software Development for Embedded Systems	
	Time: 02.30 pm - 05.00 pm Total Marks: 7		
Instru	2. N	ttempt all questions. Iake suitable assumptions wherever necessary. igures to the right indicate full marks.	
Q.1	(a)	Define Following Terms:- 1. Unit cost 2. Transistors 3. Decode Instruction 4. System call 5. Time to market 6. nMOS transistor 7. interrupt Service routine	07
	(b)	Explain following:- 1. Design Technology 2. Sequential Logic 3. Testing and debugging	02 02 03
Q.2	(a)	Explain Short note and Define: 1. Characteristics of Embedded System 2. Optimizing the FSMD 3. What is Cache Memory [define only)	03 03 01
	(b)	Define Watchdog Timers? Explain with ATM Timeout Example OR	07
	(b)	What is Real time Clock? Explain functionality of Real time clock also discuss Application of Real time clock	07
Q.3	(a)	Explain Memory write and storage ability for different types RAM and ROM also justify what is the difference between volatile and nonvolatile memory	07
	(b)	Explain Microprocessors Interfacing I/O Addressing	07
		OR	
Q.3	(a)	Contrast between OTP ROM and EPROM also discuss NVRAM	07
	(b)	Short note on DMA for Microprocessor interfacing	07
Q.4	(a)	Explain Requirement Specification for Digital Camera also draw the block diagram for digital Camera	07

	(b)	What is Host and Target Machine give the idea about how target machine run what exactly required to run target machine run OR	07
Q.4	(a)	Explain Design for Digital Camera also draw first implementation for block diagram for design digital camera	07
	(b)	Discuss Getting Embedded Software into the target System	07
Q.5	(a)	Define Simulators? Discuss various useful abilities for Simulators	07
	(b)	What you understand DOS based Program explain Overall Program Structure for DOS Program	07
		OR	
Q.5	(a)	Short note on Laboratory Tools	07
	(b)	Discuss DBGMAIN.C and DISPLAY.C Modules for Tank Monitoring System	07
