Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER - V (NEW) EXAMINATION - WINTER 2015

Subje	ect l	Code: 2151001 Date:17/12/ 2015 Name: Microcontroller And Interfacing (EC)	
Time Instru		30am to 1:00pm Total Marks: 70	
mstruc	1. 2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a) (b)	ii) Compare Microprocessor with Microcontroller.	04 03 07
Q.2	(a) (b)	i) Harvard Architecture ii) RISC iii) DDR iv) I2C	07 07
	(b)	OR	07
Q.3	(a) (b)	Explain SPI bus Protocol in detail.	07 07
Q.3	(a) (b)		07 07
Q.4	(a) (b)	Assembly or C) to get the status of Switch and send it to LED.	07 07
Q.4	(a) (b)	Explain Programing steps to transfer and receive data serially from AVR.	07 07
Q.5	(a)	Write a program to generate a delay of $1920\mu s$. (consider XTAL= 8 MHz, Timer 2).	07
	(b)	OR	07
Q.5	(a)	Write a program (in Assembly or C) that toggles pin PORTB.5 every 40 µs, while at the same time transferring data from PORTC to PORTD. Assume XTAL = 1Mhz and use Timer0 with Interrupt.	07
	(b)		07
