GUJARAT TECHNOLOGICAL UNIVERSITY

M. E. - SEMESTER – I • EXAMINATION – SUMMER • 2013

Subject code: 710302N Date: 04-06 Subject Name: Advance Microcontroller			2013	
_		.30 am – 01.00 pm Total Marks: 70		
Instr	ruct	ions:		
	2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.		
Q.1	(a)	Explain flag register of 18F452 microcontroller along with function of each flag.	07	
	(b)	Explain any three with example.	07	
Q.2	(a) (b)	Draw schematic diagram interfacing LM35 with PIC18XXX. Explain necessary scaling (calibration) process if required. Write an assembly language program which reads temperature and displays at port D.	07 07	
	(b)	OR Draw schematic diagram interfacing ADC0800 with PIC18XXX. Write an assembly program to generate triangle wave.	07	
Q.3	(a)		07	
	(b)	*	07	
Q.3	(a)	OR Explain instruction with example 1)SWAPF 2) BTFSS 3) SUBLW	07	
Q.4	(b) (a) (b)	Draw and explain function of PORTA. List the addressing mode of PIC 18F452 and explain any two in detail.	07 07 07	
Q.4	(a) (b)	OR List and explain buses of PIC 18F452 microcontroller	07 07	
Q.5	(a) (b)	sixth read in WREG. Explain features of Harvard architecture. List their merits and demerits.	07 07	
Q.5	(a) (b)	Differentiate between Van ó Neumann and Harvard Architecture.	07 07	
