Total	Marks: 25		 _
ROLL	NO.		

Lab-5 Arithmetic Instructions of PIC Microcontroller

Objective:

In this lab students will learn

- How to manipulate arithmetic instructions for different applications?
- How to perform the addition of packed BCD numbers?
- How the division of numbers is performed in PIC microcontroller?

Theory

Different types of arithmetic instructions available in PIC are given as:

Addition

- ADDLW
- ADDWF
- ADDWFC

Subtraction

- SUBLW
- SUBWF
- SUBWFB
- SUBFWB

Multiplication

MULLW

Lab Exercise

Find C, Z and DC flags for each of the following:

(a)

MOVLW 0xff
MOVWF MYREG
BSF STATUS,C
MOVLW 0
ADDWFC MYREG,F

(b)

[4]

	to Embedded Systems Lab	Total Marks: 25
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BCF		
MOVLW	0xFF	
MOVWF	MYREG	
MOVLW	0	
ADDWFC	MYREG, F	
		in memory locations starting at 50H. Write he result must be in BCD. Show the updat
rogram to		in memory locations starting at 50H. Write he result must be in BCD. Show the updat
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Introduction to Embedded Systems Lab GCU,LAHORE	Total Marks: 25 ROLL NO				
Assume that the file register location 0X20 has the value F3H. Write a program to convert into decimal. Save the digits in the location 0x40, 0x41, 0x42 where the least significant digits in 0x20. Show the updated memory locations on MPLAB software.					

Total Marks: 25 ROLL NO		
Show to to perform 77/3 on PIC microcontroller?		
	[3]	
	Total Marks: 25	