



List of Experiments to be conducted

Sl. No.	Topics	Name of Experiment	CO	PO	PSO
1	8085 basic instruction set	Familiarization with 8085 Trainer kit. Study of prewritten programs on 8085 trainer kit or simulator using the basic Instruction set.	1,2,3	1,2,3,4 ,5,9,10 ,12	1,2
2	8085 basic instruction set	Assignment-1: XOR operation with & without XRA command Assignment-2: Find Sum & Carry for addition of Hexadecimal numbers. Assignment-3: Add two Hexadecimal numbers with & without DAD instruction.	2,3	2,3,4,5 ,9,10,1 2	1,2
3	Subtraction, Copying, Shifting	Assignment-4: Subtract two 8 bit numbers with & without SUB instruction. Assignment-5: Copy block of data to another block Assignment-6: Transfer the block of data to the said memory location.	2,3	1,2,3,4 ,5,9,10 ,12	1,2
4	Look up table, BCD numbers	Assignment-7: Look-up table Assignment-8: Pack two BCD numbers Assignment-9: Unpack two BCD numbers	2,3	1,2,3,4 ,5,9,10 ,12	1,2
5	Code conversion	Assignment-10: Add two BCD numbers Assignment-11.a: Convert Hexadecimal number to ASCII. Assignment-11.b: Convert ASCII to Hexadecimal number.	2,3	1,2,3,4 ,5,9,10 ,12	1,2
6	String comparison and multiplication	Assignment-12: Compare two strings Assignment-13: Multiplication of two unsigned 8-bit data.	2,3	1,2,3,4 ,5,9,10 ,12	1,2
7	8255 PPI	Program using IN/OUT instructions and 8255 PPI on the trainer kit e.g. subroutine for delay, Assignment-1: Glowing all the LEDs one by one with particular delay Assignment-2: Reading switches state and glowing LEDs accordingly. Assignment-3: Read the data and unpack it Assignment-4: Read data and display it	1,2,3, 4	1,2,3,4 ,5,9,10 ,12	1,2

		by swapping the nibbles.			
8	8051- microcontroller basic instruction set.	Familiarization with 8051 Trainer kit, study of sample programs on 8051 Microcontroller Kit using the basic instruction set. Assignment-1 a) Subtraction between two 8 bit numbers. b) Multiplication between two 8 bit numbers. c) Division between two 8 bit numbers. Assignment-2: ASCII number to its equivalent Hexadecimal number Assignment-3: Add two 16-bit numbers	1,2,3	1,2,3,4 ,5,9,10 ,12	1,2
9	DAC and ADC	Write program to interface of keyboard, DAC and ADC using the 8051 kit.	2,3,4	1,2,3,4 ,5,9,10 ,12	1,2
10	Serial communication	Serial communication between Assignment-1: PC and trainer Kit. Assignment-2: Between two trainer Kits	2,3,4	1,2,3,4 ,5,9,10 ,12	1,2
10	Additional Experiment	One Beyond syllabus experiment: i). Explore debugger using different commands.	1,2,3	1,2,3,4 ,5,9,10 ,12	1,2