

Microprocessor Lab

Code : EI 492

Contacts : 3P

Credits : 2

1. a) Familiarization with 8085 trainer kit components.
b) Familiarization with 8085 simulator on PC.
2. a) Study of prewritten programs using basic instruction set (data transfer, Load/Store, Arithmetic, Logical) on the simulator.
b) Assignments based on above
3. PROGRAMMING USING KIT/SIMULATOR FOR
 - i) Table look up
 - ii) Copying a block of memory
 - iii) Shifting a block of memory
 - iv) Packing and unpacking of BCD numbers
 - v) Addition of BCD numbers
 - vi) Binary to ASCII conversion
 - vii) String Matching
 - viii) Multiplication using Booth's Algorithm
4. Program using subroutine calls and IN/OUT instructions using 8255 PPI on the trainer kit eg, subroutine for delay, reading switch state & glowing LEDs accordingly, finding out the frequency of a pulse train etc
5. Interfacing any 8-bit Latch (eg, 74LS373) with trainer kit as a peripheral mapped output port with absolute address decoding
6. INTERFACING WITH I/O MODULES:
 - a) ADC
 - b) Speed control of mini DC motor using DAC
 - c) Stepper motor
7. FAMILIARIZATION WITH EPROM PROGRAMMING AND ERASING