



Progressive Education Society's
Modern College of Engineering, Pune - 411005
Department of Electronics & Telecommunication

AY-2023-24 Semester - I

Microcontroller

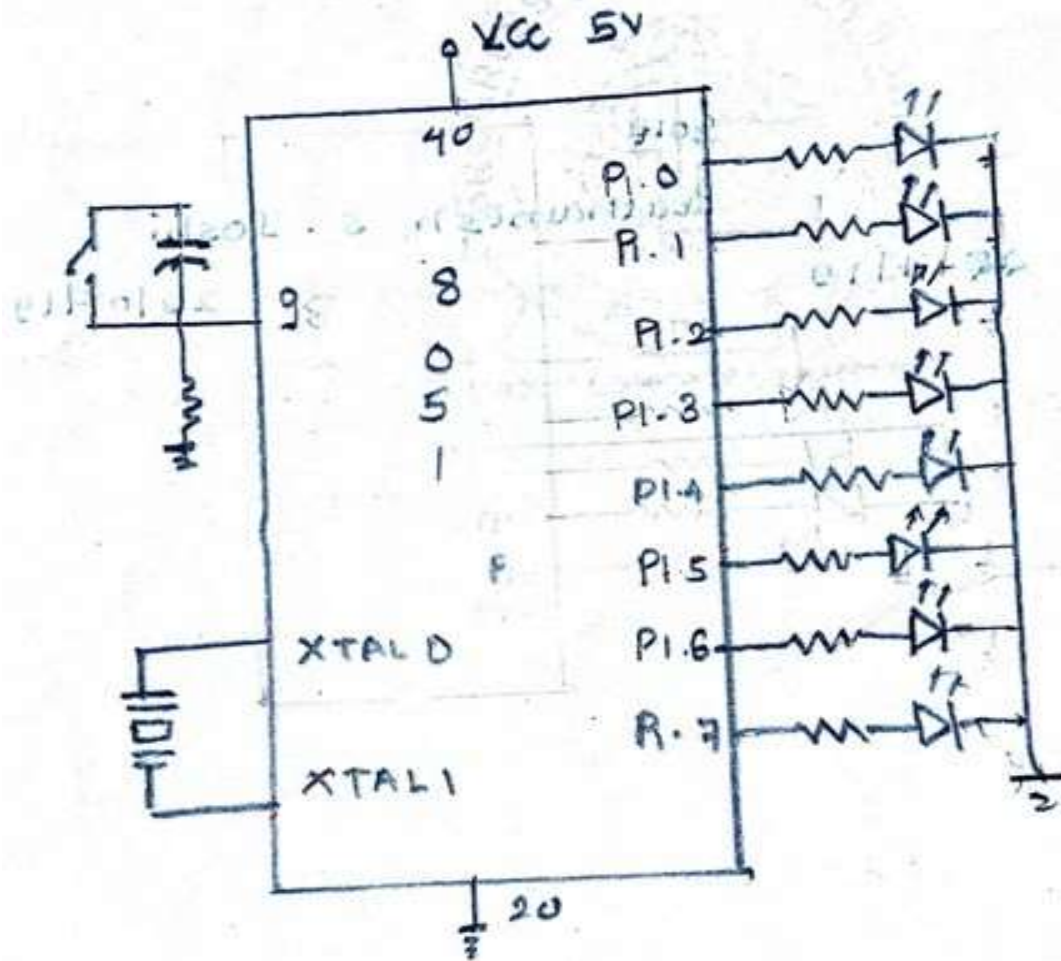
Course In-charges
Mrs. Rupali Chaudhari and Mrs. Supriya Bhosale

Practicals

8051 and PIC Microcontroller

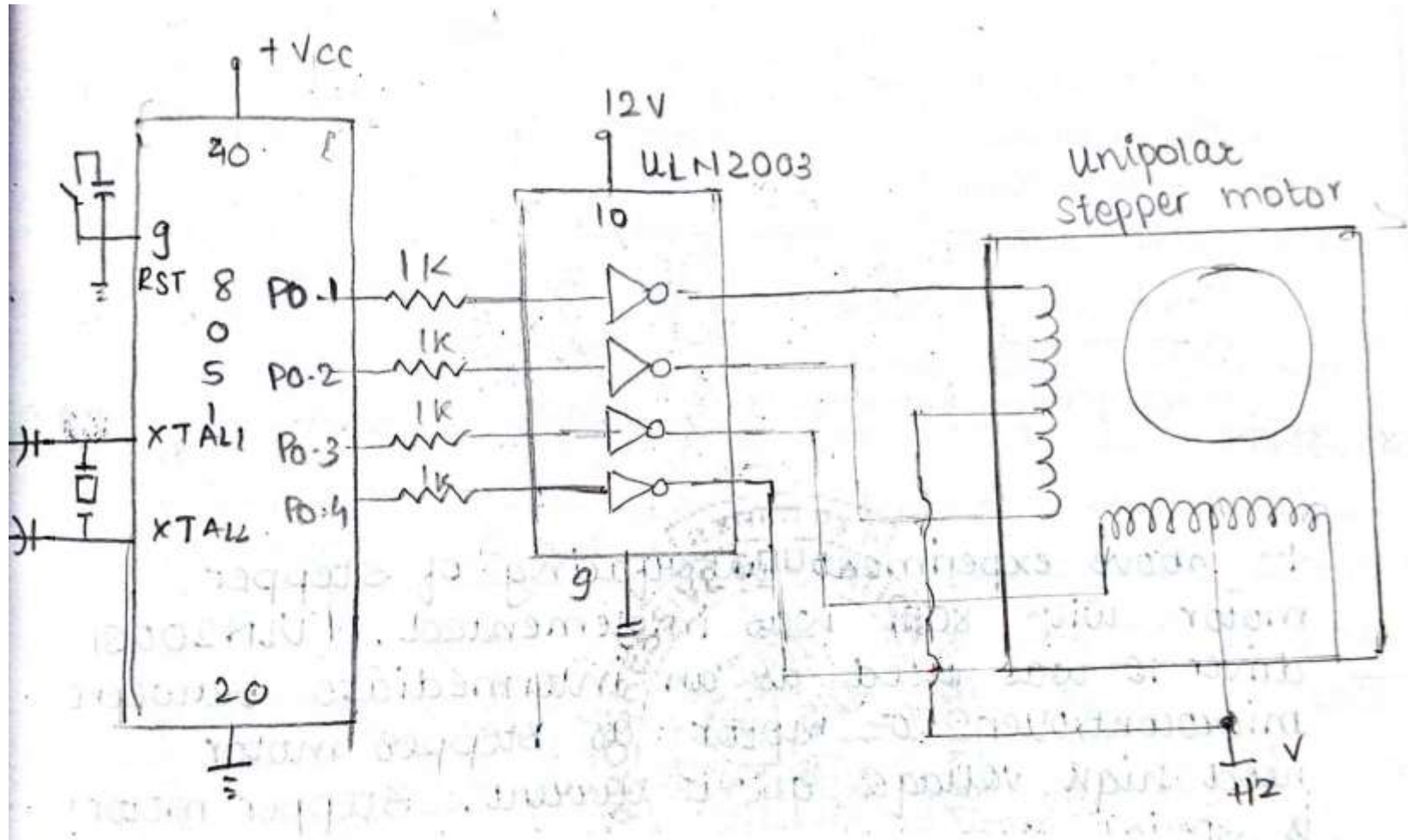
Experiment - 2

Parallel port interacting of LEDS—Different programs (flashing, Counter, BCD, HEX, Display of Characteristic)



Experiment - 3

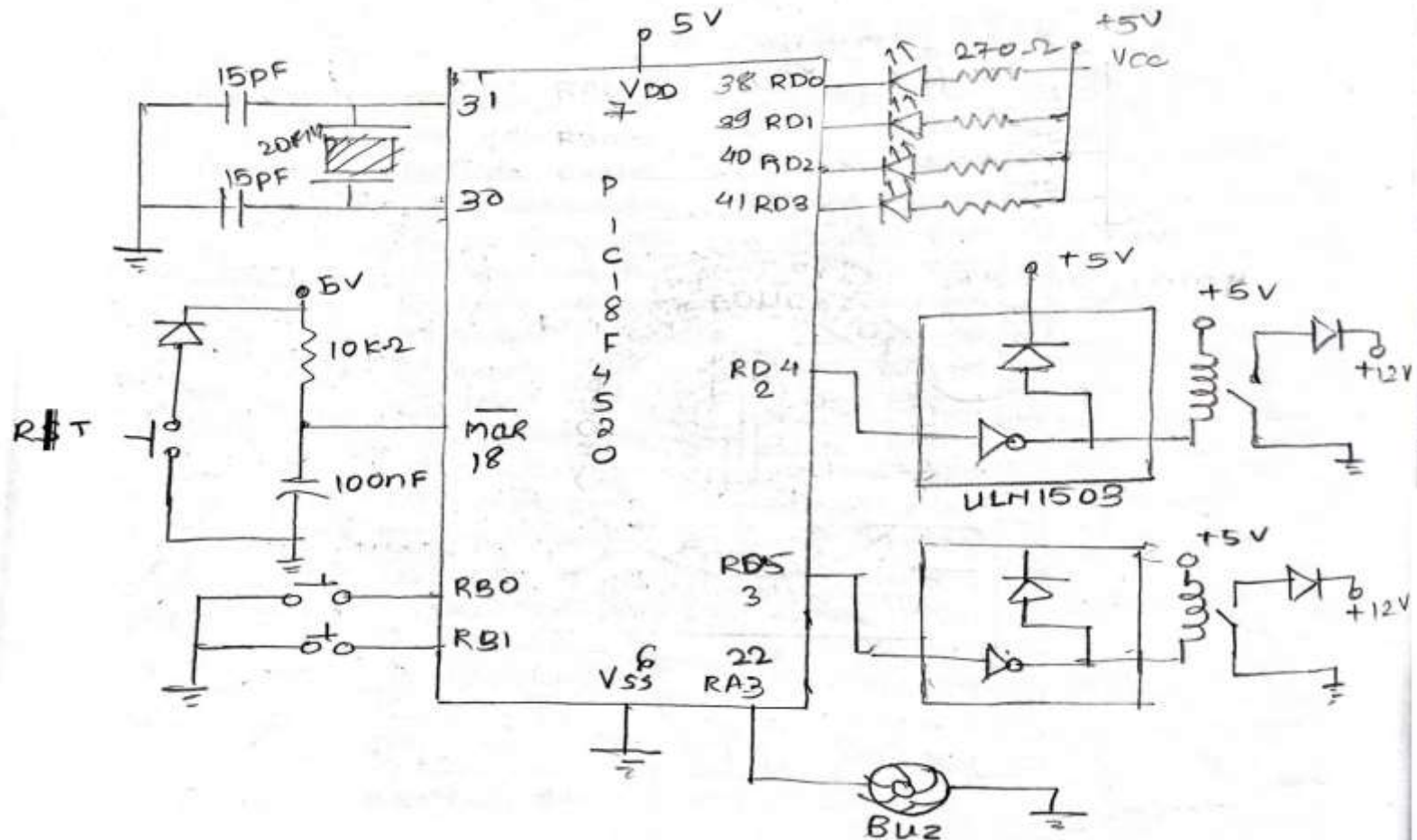
Interfacing of Stepper motor to 8051- software delay using Timer



Experiment - 4

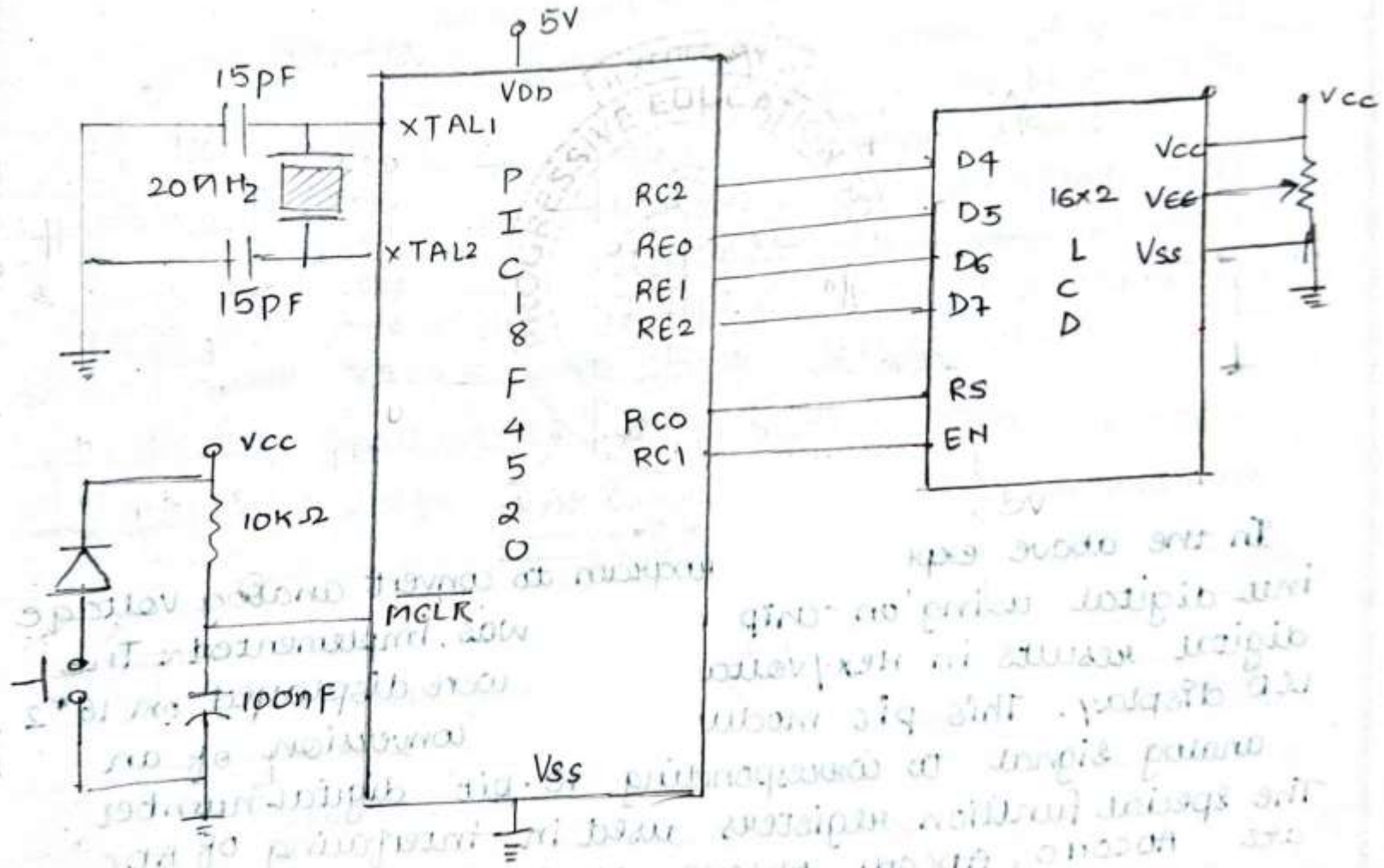
WAP for interfacing button, LED, relay and buzzer as follows -

On pressing button1 relay and buzzer is turned ON and LED's start chasing from left to right;
When button 2 is pressed relay and buzzer is turned OFF and LED's start chasing from left to right



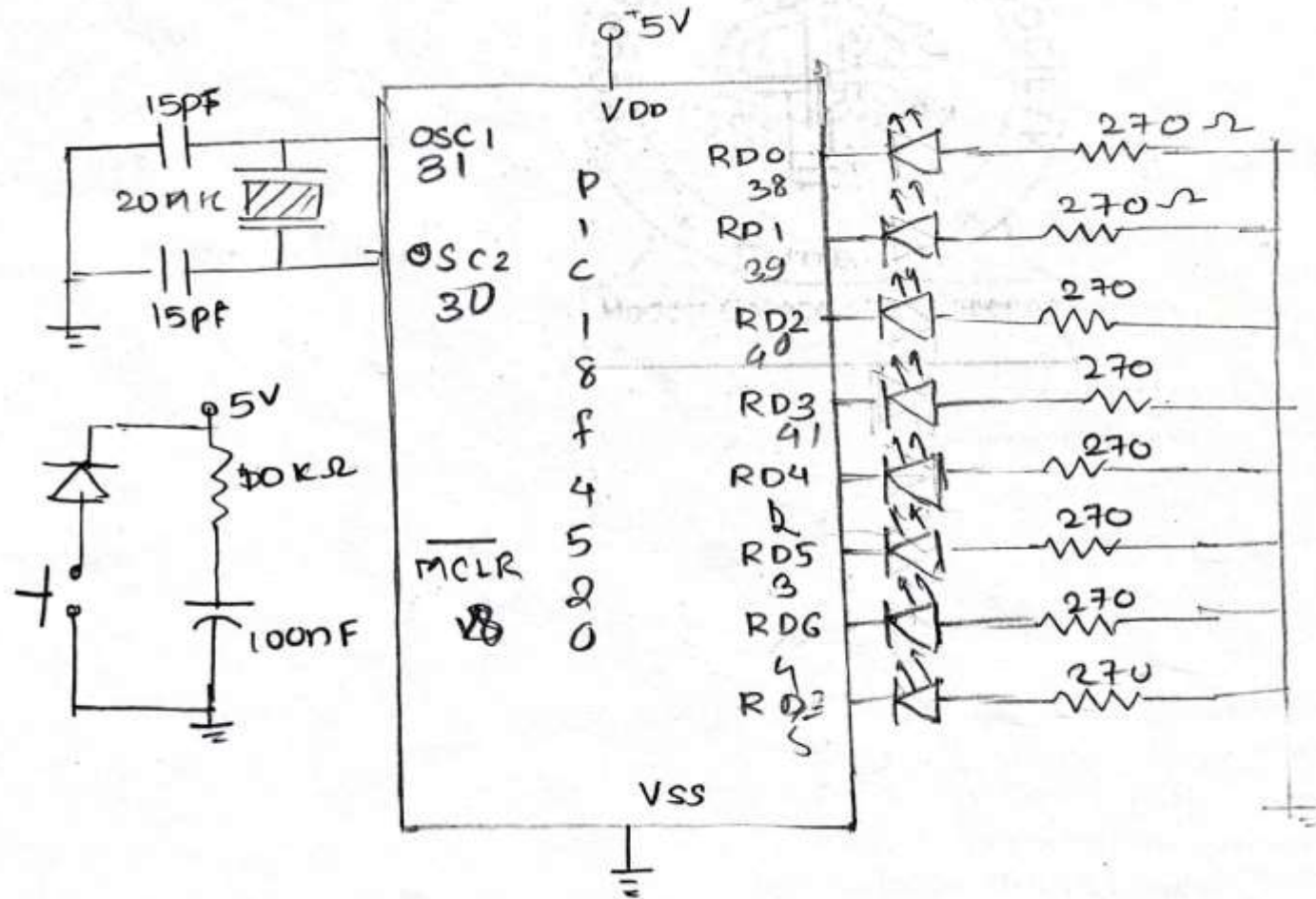
Experiment - 5

Interfacing of LCD to PIC 18FXXXX



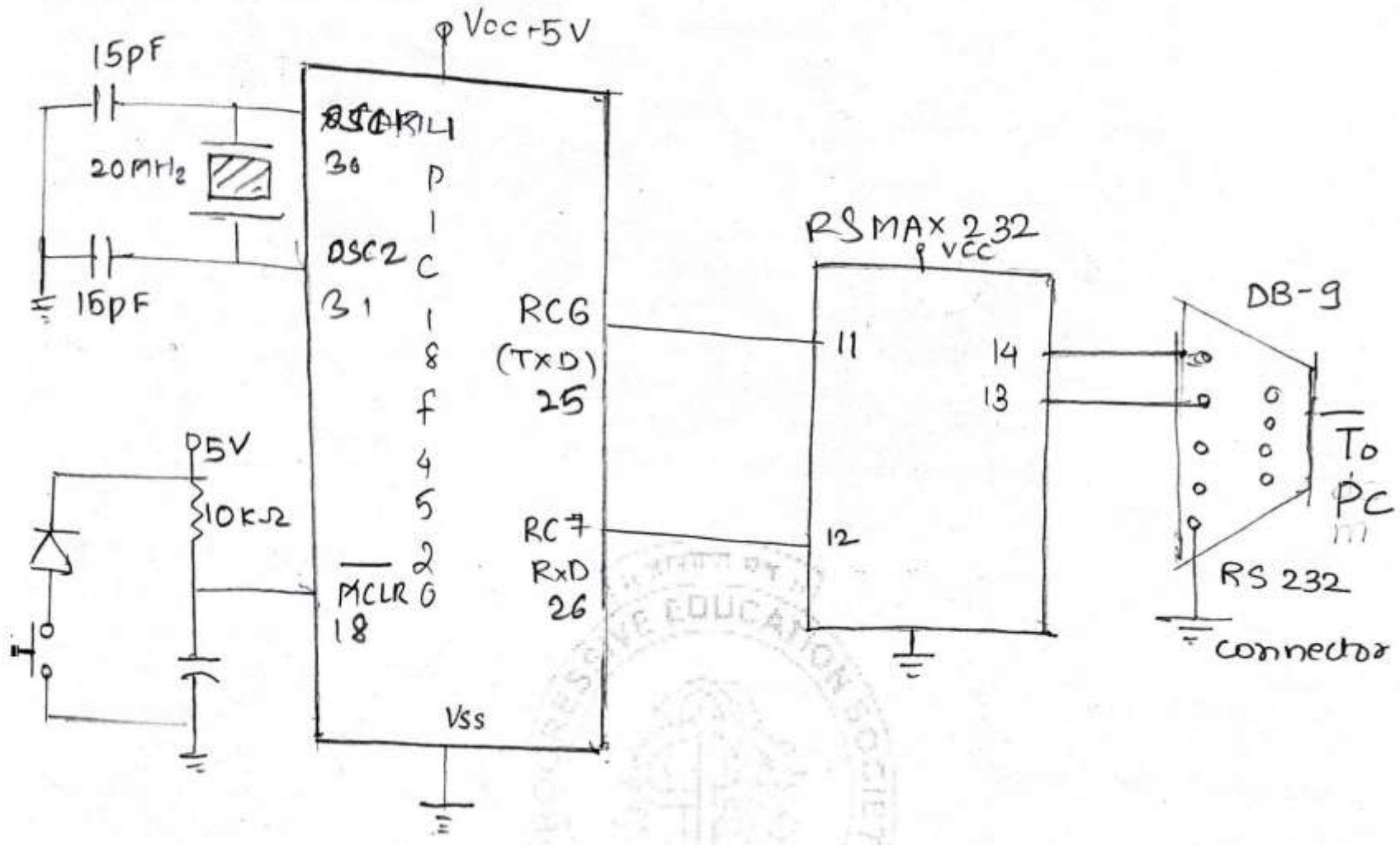
Experiment - 6

Generate square wave using timer with interrupt



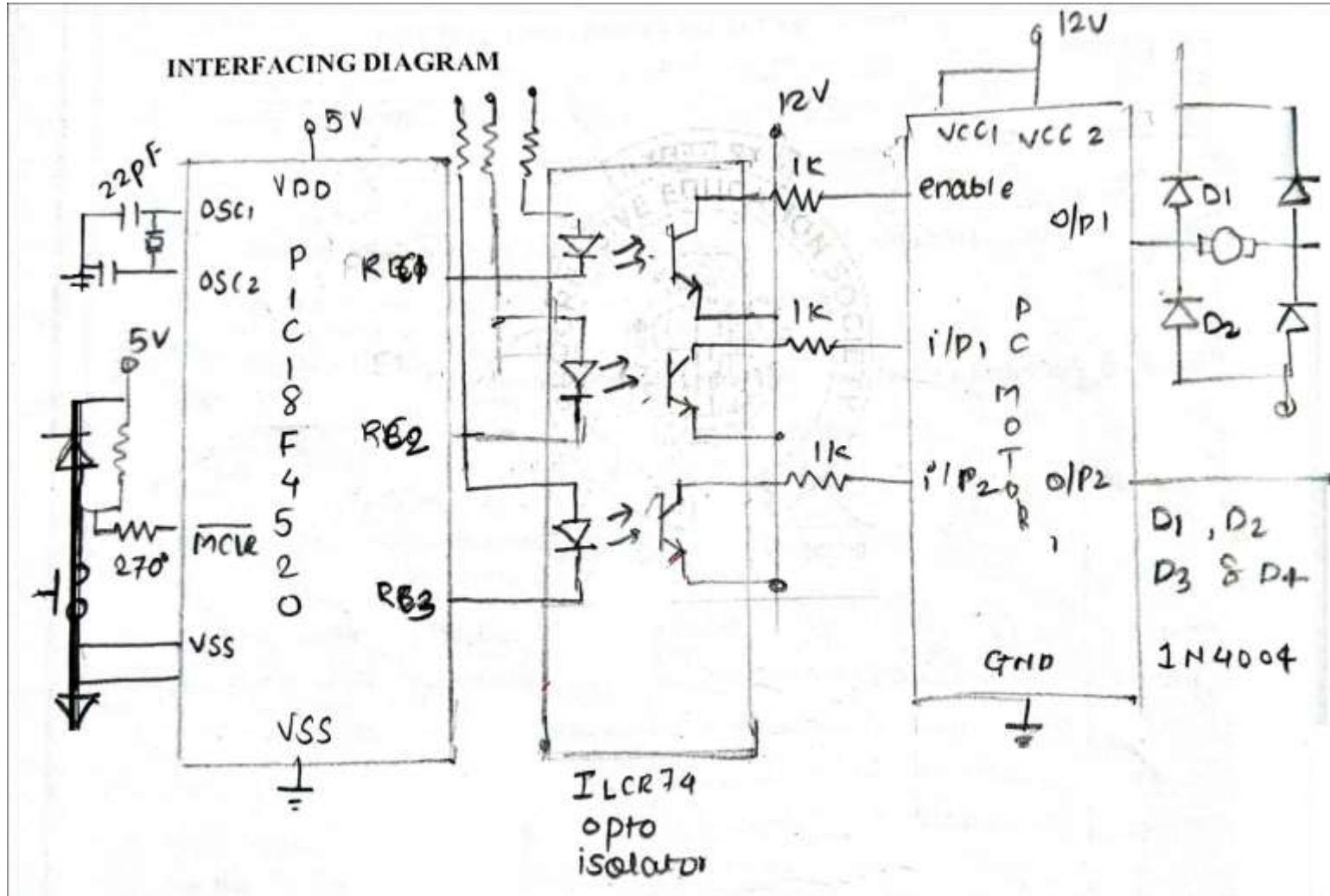
Experiment - 7

Interfacing serial port with PC both side communication



Experiment - 8

Generation of PWM signal for DC Motor control



Experiment - 9

Interfacing of 8051 Microcontroller with various display devices (Virtual Lab)

<http://vlabs.iitb.ac.in/vlabs-dev/labs/8051-Microcontroller-Lab/labs/exp1/index.php>

1. Interface an 8051 microcontroller with a display device and can perform the desired task.
2. Program a 8051 microcontroller using assembly language.

Experiment - 10

Interfacing of 8051 Microcontroller with DC motor. (Virtual Lab)

<http://vlabs.iitb.ac.in/vlabs-dev/labs/8051-Microcontroller-Lab/labs/exp3/index.php>

1. Interface a 8051 microcontroller with a DC motor.
2. Program a 8051 microcontroller using assembly language.