AHSANULLAH UNIVERSITY OF SCIENCE & TECHNOLOGY

DEPARTMENT OF **ELECTRICAL & ELECTRONIC ENGINEERING**

PROJECT REPORT

Name of the project: Water Level Detector and loss preventing system.

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Course: EEE 2211 (Measurement & Instrumentation)

Section: D (2nd Year 2nd Semester)

Group Members:

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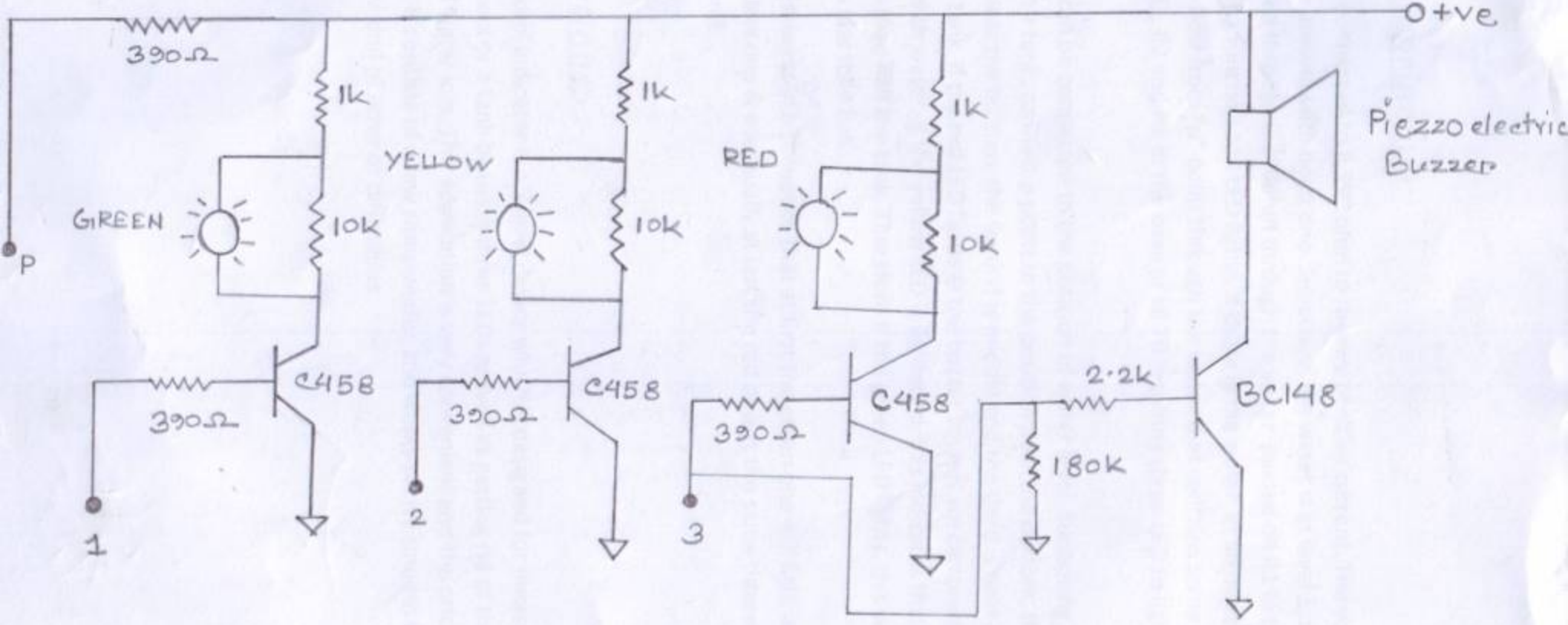
Apparatus & circuit diagram :—



Working principle:

"p" point is connected to R 390 ohm to receive positive current. The voltage at "p" point is present with point one. Supposing the water is at level 1, the current is transmitted through R 390ohm through the water passed on R1 to the base of TR1. Then TR1 function and LED lights. if there is the water at all three levels, the voltage will flow from "p" point through the water that contains some resistance, passed on R1, R2 and R3 to the base of all TR resulting three LED to light at the same time.

The device can be connected to the position of water level. Supposing to measure the water in a tank, connect p point to the position near the bottom, the first position is near the bottom, the second is middle and the third is near the upmost level of the tank. If the red LED lights & the buzzer sounds we can understand the tank is full with water. If the yellow LED is lightened, this indicates that there is water more than half the tank. Therefore if the green LED lights, this shows that the water is less than half.

That process works in a sequence that at first the green one will light and after that the yellow one & eventually at last the red one at the same time of the buzzing sound.

Applications:

Our water level indicator is a 3 level device which is designed for measuring the water in a pool or a tank by using three LEDs as well as getting rid of the unexpected water loss. This application is very convenient and the price is reasonable. It consists of a few components and works pretty smooth without showing any kind of error or difficulties.