

**Ph DIGITAL METER**

*by :*

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## Summary

This project deals with the design construction and testing of a Ph digital meter. The design of the Ph meter incorporates the design of a circuit capable to receive and amplify small value of e.m.f. from a high impedance source and the design of a voltmeter. The first circuit was designed using OP-AMPS configurations and the voltmeter was designed using staircase ramp principle.

The characteristics and principle of operation of each component used in the design of the instrument were studied in order to achieve an efficient design.

The basic definition for ph value and the principle of operation the Ph sensor supposed to be used by the instrument were also studied. The importance of Ph value in chemistry was examined and the uses of ph measurements were also investigated.

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