PHS392

SECTION A

Aim: OSCILLOSCOPE II

Oscilloscope as a measurement instrument: For measuring the following (1) Voltage (2) Frequency

SECTION B

Experiment: 1

Aim: Comparison of E.M.F. by Potentiometer

Apparatus: Dry cell, Potentiometer, Key K, galvanometer G with protective resistance P and shorting key, Jockey J, accumulator C, standard cell, rheostat R.

Experiment: 2

Aim: Determination of the temperature coefficient of resistance of a given wire.

Apparatus: Wheatstone bridge accumulator, galvanometer (centre reading), beaker, Bunsen burner, a coil of insulated wire, thermometer, key, standard resistor, ice.

Experiment: 3

Aim: Determination of the resistivity of a wire using the meter bridge.

Apparatus: meter Bridge, jockey, galvanometer, galvanometer protector, battery, standard resistor and two (2) piece of wire of different diameter.

Experiment: 4

Aim: Measurement of an unknown resistance using the meter bridge.
**Apparatus:** Wheatstone bridge, dry cell, key, decade resistance box, unknown resistance and

**Experiment:** 5

Aim: Comparison of E.M.F’s using a potentiometer

**Apparatus:** Dry cell D, potentiometer, key K₁, galvanometer G with protective resistance P and shorting key K₂, jockey, J, accumulator C, standard cell, rheostat R.

**Experiment:** 6

Aim: Calibration of Ammeter by potentiometer.

**Apparatus:** Potentiometer, key K₁, two accumulators C₁, C₂, rheostat R, ammeter M (about 0 - 2A), standard resistance Q (1Ω). Galvanometer G and protective resistance P with shorting key K₂, jockey J, standard cell E₅.

**Experiment:** 6

Aim: Measurement of the internal resistance of a cell by potentiometer.

**Apparatus:** Dry cell D, resistance box R (about 0 – 50Ω), switch S, potentiometer, key K₁, galvanometer G and protective resistance P with shorting key K₂, jockey J, and accumulator C

**SECTION C**

Mini project