

## 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  $K_1$ , galvanometer G with protective resistance P and shorting key  $K_2$ , jockey, J, accumulator C, standard cell, rheostat R.

**Experiment: 6**

Aim: Calibration of Ammeter by potentiometer.

**Apparatus:** Potentiometer, key  $K_1$ , two accumulators  $C_1, C_2$ , rheostat R, ammeter M (about 0 - 2A), standard resistance Q ( $1\Omega$ ). Galvanometer G and protective resistance P with shorting key  $K_2$ , jockey J, standard cell  $E_s$ .

**Experiment:6**

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

**Apparatus:** Dry cell D, resistance box R (about 0 –  $50\Omega$ ), switch S, potentiometer, key  $K_1$ , galvanometer G and protective resistance P with shorting key  $K_2$ , jockey J, and accumulator C

## SECTION C

Mini project