

List of Active Experiments

- W₂** Determination of the frequency of a tuning fork by Melde's apparatus.
- W₃** Determination of the spring constant and the effective mass of a loaded spring.
- W₄** Determination of the acceleration due to gravity 'g' by means of a compound pendulum.
- G₁** Determination of the surface tension of water by capillary tube method.
- G₂** Determination of the moment of inertia of a fly-wheel about its axis of rotation.
- G₃** Determination of the rigidity modulus of the material of a wire by the static method.
- G₄** Determination of the Young's modulus of the material of a wire by Searle's apparatus.
- H₁** Determination of the specific heat of a liquid by the method of cooling.
- H₂** Determination of the pressure-coefficient of air by a constant volume air thermometer.
- H₃** Determination of thermal conductivity of a good conductor by Searle's apparatus.
- H₄** Determination of the thermal conductivity of a bad conductor by Lee's method.
- H₅** To plot the thermo-electromotive force vs. temperature (Calibration) curve for a given thermocouple.
- H₆** Determination of the melting point of a solid using the calibration curve obtained in experiment H₅.
- H₇** Determination of the mechanical equivalent of heat by the electrical method.
- O₁** Determination of the focal length of (i) a convex lens by the displacement method and (ii) a concave lens by the auxiliary lens method.
- O₂** Determination of the refractive index of a liquid by plane mirror and pin method using a convex lens.
- O₃** Determination of the refractive index of the material of a prism with the help of a spectrometer.
- O₄** Determination of the radius of curvature of a Plano-convex lens by the Newton's ring method.
- O₅** Determination of the specific rotation of sugar solution by a polarimeter.
- M₁** Determination of the threshold frequency for the material of a photo-cathode and hence find the value of the Planck's constant.
- M₂** Determination of the linear absorption coefficient and mass absorption coefficient of Aluminum using a ¹³⁷Cs radioactive source and verification of the inverse square law of gamma radiation.
- E₁** Determination of unknown resistances and verification of the laws of resistances by P.O. (Post Office) Box.
- E₂** Determination of the resistance of a galvanometer by half deflection method.
- E₃** To verify Biot-Savart law and Tangent law.
- E₅** Determination of the temperature coefficient of the resistance of the material of a wire.