

Experiment List of Laboratory Experiments

Expt. No.	Name of the experiment
W₁	Determination of line frequency by Lissajous figures using an oscilloscope and a function generator and verification of the calibration of the calibration of time/div knob at a particular position for different frequencies
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
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
G₅	Determination of the moment of inertia of a point mass and verification of the conservation of angular momentum
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	Calibration of a given thermocouple
H₆	Determination of the melting point of a solid using the calibration curve obtained in experiment H ₅
H₇	Determination of the mechanical equivalent of heat by the electrical method

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
O₆	Study of the intensity distribution of Fraunhofer diffraction pattern due to a double slit
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 ^{137}Cs radioactive source and verification of the inverse square law of gamma radiation
VL-M₃	Determination of lattice constant of NaCl crystal using an X-ray diffraction simulator
M₄	Verification of Heisenberg's uncertainty principle using single slit diffraction pattern
E₂	Determination of the resistance of a galvanometer by half deflection method
E₃	Verification of Biot-Savart law and Tangent law
E₅	Determination of the temperature coefficient of the resistance of the material of a wire
E₆	Determination of dielectric constant of materials using a parallel plate capacitor