

PHYSICS SESSIONAL

Course No.: Phy 102

Department of ME, NAME & IPE (LEVEL-1, TERM-2)

- 1-W₂** Determination of the frequency of a tuning fork by Melde's apparatus
- 2-W₃** Determination of the spring constant and the effective mass of a loaded spring
- 3-E₃** Verification of Biot-Savart law and Tangent law
- 4-E₅** Determination of the temperature coefficient of the resistance of the material of a wire
- 5-O₃** Determination of the refractive index of the material of a prism with the help of a spectrometer
- 6-O₄** Determination of the radius of curvature of a Plano-convex lens by the Newton's ring method
- 7-M₁** Determination of the threshold frequency for the material of a photo-cathode and hence find the value of the Planck's constant
- 8-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
- 9-G₂** Determination of the moment of inertia of a fly-wheel about its axis of rotation
- 10-G₃** Determination of the rigidity modulus of the material of a wire by the static method
- 11-E₆** Determination of dielectric constant of materials using a parallel plate capacitor
- 12-O₅** Determination of the specific rotation of sugar solution by a polarimeter
- 13-VL-M₃** Determination of lattice constant of NaCl crystal using an X-ray diffraction simulator
- 14-H₅** Calibration of a given thermocouple
- 15-H₆** Determination of the melting point of a solid using the calibration curve obtained in experiment H₅