PHYSICS SESSIONAL

Course No.: Phy 102 Department of EEE (LEVEL-1, TERM-2)

$1-W_1$	Determination of line frequency by Lissajous figures using an oscilloscope and a function
	generator and verification of the calibration of time/div knob at a particular position for
	different frequencies
2-W ₃	Determination of the spring constant and the effective mass of a loaded spring
3-H ₂	Determination of the pressure coefficient of air by a constant volume air thermometer
4-H ₄	Determination of the thermal conductivity of a bad conductor by Lee's method
5-O ₃	Determination of the refractive index of the material of a prism with the help of a spectrometer
6-O ₄	Determination of the radius of curvature of a Plano-convex lens by the Newton's ring method
7-M ₁	Determination of the threshold frequency for the material of a photo-cathode and hence find the value of the Planck's constant
$8-M_2$	Determination of the linear absorption coefficient and mass absorption coefficient of Aluminum using a ¹³⁷ Cs radioactive source
9-E ₃	Verification of Biot-Savart law and Tangent law
10-E ₆	Determination of dielectric constant of materials using a parallel plate capacitor
11-H ₅	Calibration of a given thermocouple
12-H ₆	Determination of the melting point of a solid using the calibration curve obtained in experiment H ₅
13-O ₅	Determination of the specific rotation of sugar solution by a polarimeter
14-VL-M ₃	Determination of lattice constant of NaCl crystal using an X-ray diffraction simulator
15-H ₇	Determination of the mechanical equivalent of heat by the electrical method