## PHYSICS SESSIONAL Course No.: Phy 102 Department of MME (LEVEL-1, TERM-1)

1-W1	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-W3	Determination of the spring constant and the effective mass of a loaded spring
<b>3-E</b> <sub>3</sub>	Verification of Biot-Savart law and Tangent law
<b>4-E</b> 5	Determination of the temperature coefficient of the resistance of the material of a wire
<b>5-O</b> 3	Determination of the refractive index of the material of a prism with the help of a spectrometer
<b>6-O</b> 4	Determination of the radius of curvature of a Plano-convex lens by the Newton's ring method
<b>7-G</b> <sub>1</sub>	Determination of the surface tension of water by capillary tube method
8-G3	Determination of the rigidity modulus of the material of a wire by the static method
9-H5	Calibration of a given thermocouple
<b>10-H</b> <sub>6</sub>	Determination of the melting point of a solid using the calibration curve obtained in experiment $\mathrm{H}_5$
11-E <sub>6</sub>	Determination of dielectric constant of materials using a parallel plate capacitor
12-VL-M <sub>3</sub>	Determination of lattice constant of NaCl crystal using an X-ray diffraction simulator
13-05	Determination of the specific rotation of sugar solution by a polarimeter
14-W <sub>2</sub>	Determination of the frequency of a tuning fork by Melde's apparatus

Prepared by - Department of Physics, BUET Updated on UG semester January, 2023