

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

- 1-W<sub>1</sub>**      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
- 2-W<sub>2</sub>**      Determination of the frequency of a tuning fork by Melde's apparatus
- 3-H<sub>1</sub>**      Determination of the specific heat of a liquid by the method of cooling
- 4-H<sub>2</sub>**      Determination of the pressure-coefficient of air by a constant volume air thermometer
- 5-O<sub>3</sub>**      Determination of the refractive index of the material of a prism with the help of a spectrometer
- 6-O<sub>4</sub>**      Determination of the radius of curvature of a Plano-convex lens by the Newton's ring method
- 7-W<sub>3</sub>**      Determination of the spring constant and the effective mass of a loaded spring
- 8-H<sub>3</sub>**      Determination of thermal conductivity of a good conductor by Searle's apparatus
- 9-H<sub>4</sub>**      Determination of the thermal conductivity of a bad conductor by Lee's method
- 10-O<sub>5</sub>**      Determination of the specific rotation of sugar solution by a polarimeter
- 11-O<sub>6</sub>**      Study of the intensity distribution of Fraunhofer diffraction pattern due to a double slit
- 12-H<sub>5</sub>**      Calibration of a given thermocouple
- 13-H<sub>6</sub>**      Determination of the melting point of a solid using the calibration curve obtained in experiment H<sub>5</sub>