SUBJECT NO-PH29001, SUBJECT NAME- General Properties & Thermal Physics lab LTP- 0-0-6, CRD- 4

SYLLABUS :-

- 1. To determine the Stefans constant by using an incandescent lamp and photo voltaic cell.
- 2. To determine the thermal conductivity of the given disc of bad conductor of heat by Lees and Chorltons method.
- 3. To study the variation of thermo-e.m.f of a given thermocouple with its cold junction in ice and the other junction at room temperature and above and hence to determine the thermoelectric power.
- 4. To calibrate a Platinum resistance thermometer and then to determine the boiling point of a given liquid.
- 5. To determine the coefficient of viscosity of a given liquid (water) by its streamline flow through a capillary tube.
- 6. To determine the surface tension of water by Jaegers method at different temperatures.
- 7. To determine the coefficient of linear expansion of the Material of a rod by optical leaver arrangement.
- 8. To determine the thermal conductivity of the material of a good conductor using Searles apparatus.
- 9. To determine the band-gap of a given semiconductor using a junction diode.
- 10. To study the characteristic curves of a given Thyratron tube.
- 11. To determine the Youngs modulus of Elasticity of the material of a bar by the method of flexure.
- 12. Normal modes of a coupled planar pendulum.