

SYLLABUS :-

1. (a) Fabry-Perot interferometer with sodium light source. (b) Fabry-Perot interferometer with laser light. 2. (a) Michelsons interferometer with sodium light source. (b) Michelsons interferometer with laser light. 3. Laser diffraction. 4. Polarization of laser light (elliptically, circularly and plane polarised). 5. Magnetostriction in a metallic rod using Michelson interferometry. 6. Study of Biot-Savarts law. 7. Study of a Helmholtz coil. 8. Collision simulator. 9. Space-time simulation. 10. B-H loop tracer to study ferromagnetism in different materials. 11. (a) Hall effect study of a p-type semiconductor. (b) Hall effect study of a n-type semiconductor with a PC interfacing. 12. Dielectric constant, ferroelectric Curie temperature (T_c) study of BaTiO₃ perovskite oxide. 13. Photoconductivity study of a semiconducting film. 14. Study of solar cell characteristics.