SEMESTER-IV
OPTICS

BLOCK-I: INTERFERENCE

UNIT-1: Huygen's Principle and Young's Experiment of Light
UNIT-2: Applications of Interference

BLOCK-II DIFFRACTION

UNIT-3: Fresnel and Fraunhofer Diffraction
UNIT-4: Fresnel Diffraction at a Straight Edge
UNIT-5: Diffraction Grating
UNIT-6: Resolving Power and Dispersion of A GRATING

BLOCK-III: POLARIZATION

UNIT-7: Plane Polarisation, Polaroid, Polarization by Reflection
UNIT-8: Production and Analysis of Different Types of Polarized Light
UNIT-9: Rotary Polarization

BLOCK-IV: LASERS AND HOLOGRAPHY

UNIT-10: Lasers
UNIT-11: Holography
UNIT-12: Introduction to Fibre Optics

SEMESTER –IV
LAB – 4: OPTICS

1. Thickness of a wire using wedge method.
2. Determination of wavelength of light using Biprism.
3. Determination of Radius of curvature of a given convex lens by forming Newton's ring.
4. Resolving power of grating.
5. Study of optical rotation-Polari meter.
6. Dispersive power of a prism.
7. Determination of wavelength of light using diffraction grating minimum deviation method.
8. Wavelength of light using diffraction grating –normal incidence method.
9. Resolving power of a Telescope.
10. Refractive index of a liquid and glass (Boys Method)
11. Pulfrichrefractometer – determination of refractive index of liquid.
12. Wavelength of Laser Light using Diffraction Grating