**LIST of EXPERIMENTS: Science Lab I**

1. C1: Verification of the Beer-Lambert’s Law with a given solution and Determination of the unknown Concentration of the solution.
2. P1: Determination of the Young’s Modulus of the Material of a Beam by Method of Flexure.
3. C2: Determination of the Specific Rotation and Composition of a solution by a Polarimeter.
4. P2: Determination of the Magnetic Field of the Earth by Stewart and Gee's method.
5. C3: Determination of the Strength of an Unknown Acid Sample by Conductometric Titration of the Acid using the Cell Constant of the given Conductometric Cell and Compare with Indicator-Based Titration.
6. P3: Determination of the Number of Rulings per unit Length of a Diffraction Grating.
7. C4: Determination of the pka of a Weak Acid by pH-metric Titration method.
8. P4: Measure the Radius of Curvature of Plano-Convex Lens by Newton's Rings method.
9. C5: Kinetic Study of the Decomposition of H2O2 in the Presence of FeCl3 solution and the Effect of the Catalyst on the Rate Constant.
10. P5: Verification of Malus' Law of Polarization.