**Vidyavardhini’s College of Engineering & Technology, Vasai (W)**

**First Year Engineering**

**(Academic Year-2024-25)**

**Applied Physics (BSL 101)**

**Lab Objectives**

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| 1 | To develop scientific understanding of the physics concepts. |
| 2 | To develop the ability to explain the processes and applications related to science subjects. |
| 3 | To apply skills and knowledge in real life situations. |
| 4 | To improve the knowledge about the theory concepts of Physics learned in the class. |
| 5 | To improve the knowledge about the theory concepts of Physics learned in the class. |
| 6 | To develop understanding about inferring and predicting. |

**Lab Outcomes**

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| At the end of the laboratory course student will be able to: | | Action verb | Bloom’s Level |
| BSL101.1 | Determine the wavelength of a laser source using a plane diffraction grating. | Determine | Applying  Level 3 |
| BSL101.2 | Determine the numerical aperture of a given optical fiber cable. | Determine | Applying  Level 3 |
| BSL101.3 | Perform experiments based on interference in thin film and determine radius of curvature of lens / diameter of wire / thickness of paper. | Perform | Applying  Level 3 |
| BSL101.4 | Calculate the magnetic field of the coil by the variation with distance along the axis of a current carrying circular coil. | Calculate | Applying  Level 3 |
| BSL101.5 | Calculate basic parameters / constants using semiconductors. | Determine | Applying  Level 3 |
| BSL101.6 | Determine energy band gap / resistivity of a semiconductor. | Determine | Designing  Level 3 |