



Vishnu Waman Thakur Charitable Trust's
VIVA Institute of Technology

Approved by AICTE, New Delhi, DTE, Government of Maharashtra
And Affiliated to University of Mumbai

Department of Electrical Engineering



Report on Illumination Engineering

The bridge course on "Illumination Engineering," conducted by Professor Sangita Kamble for the 8th semester of the BE program, encompassed a comprehensive range of topics essential for understanding and working with Illumination Engineering electricity. This 34-lecture program with allotted time table began with an introduction to Illumination Engineering basic electricity, various laws of illumination, lighting parameters, and light sources. Students gained a fundamental understanding of Illumination Engineering with electrical circuits, including series and parallel configurations, which are vital for designing and troubleshooting electrical lamp systems. The course emphasized the importance of identifying different Lighting Control schemes, including the use of their applications in Lighting for health and safety and solar-powered schemes.

construction and characteristics: Incandescent lamps, Discharge lamps, induction lamps, and LED lamps; LED Lighting Components and Subsystems, Incandescent lamps, Discharge lamp-1, Discharge lamp-2, Discharge lamp-3. Thermal Management and Lifetime Studies, Luminaire: optical control, Control gear. In addition, the course explored the key components of the distribution line equipment, such as Illumination system-1, Illumination system-2, design considerations, and calculation. Colour Glare. Applications: residential, educational institute, industries, sports centres, commercial premises: retail stores, offices. Constructing maintenance practices were another significant aspect, as students gained knowledge about Light, its operation, and maintenance practices, along with insights into system and its designing like Lamps, LED, and Glare.

This report provides a comprehensive overview of illumination engineering, covering its principles, applications, and emerging trends. It serves as a mandatory disclosure of the syllabus, offering students a foundational understanding of light and its engineering applications across various industries.

Prof. Sangita Kamble

Subject Incharge