



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 Electricity and Safety and Measures

The bridge course on "Electricity and Safety Measures," conducted by Professor Anojkumar Yadav for the 5th semester of the TE program, encompassed a comprehensive range of topics essential for understanding and working with electricity. This 33-lecture program began with an introduction to electricity, covering the basics of electrical charges, current, voltage, resistance, and Ohm's Law. Students gained a fundamental understanding of electrical circuits, including series and parallel configurations, which are vital for designing and troubleshooting electrical systems. The course emphasized the importance of electrical safety, including the use of personal protective equipment (PPE) and precautions to mitigate electrical hazards in the workplace.

The program delved into the intricacies of electrical power systems, offering insights into power generation, transmission, and distribution. Students learned about various types of power plants and the basics of power distribution systems. In addition, the course explored the key components of distribution line equipment, such as poles, conductors, and insulators. Transforming maintenance practices were another significant aspect, as students gained knowledge about transformers, their operation, and maintenance practices, along with insights into substation equipment like circuit breakers and isolators.

Earthing, a critical aspect of electrical systems, was a subject of focus in the course. Students learned about the importance of proper earthing systems, different types of earthing electrodes and conductors, and safety procedures for earthing, including testing. Furthermore, the program emphasized the relevance of adhering to important electricity rules and regulations, safety standards, and codes. It provided guidance on accident prevention measures, conducting electrical safety audits and inspections, as well as reporting and investigating electrical incidents. An overview of disaster management and emergency response procedures in electrical incidents rounded off the curriculum, equipping students with the knowledge and skills necessary for a safe and productive career in the electrical field.

Prof. Anojkumar Yadav

Subject Incharge

Prof. Bhushan Save

H.O.D.