

**Dated:** 28<sup>th</sup> Nov. 2024

### **Visit to GL Bajaj ITM Electric sub-station**

The college electric substation is an integral part of the campus infrastructure, ensuring the receipt of electrical power from the grid and its distribution to various buildings and facilities within the premises. The visit was organized to provide students with an in-depth understanding of substation equipment, operational procedures, and safety measures. A faculty member and instructor facilitated the session, introducing students to the substation's components, purpose, and significance in the power distribution process.

Key points discussed and observations made during the visit include:

- **Identification and Explanation of Major Components:** Students were introduced to essential components such as transformers, circuit breakers, switches, and meters, along with their respective roles in the substation.
- **Functioning of Each Component:** Detailed discussions were held on how each component contributes to the power distribution process.
- **Safety Protocols and Measures:** Emphasis was placed on the importance of adhering to safety protocols and the measures implemented to ensure a safe working environment.
- **Demonstration of Safety Equipment:** Students observed the safety gear and equipment used by substation personnel to mitigate risks.
- **Visit to the Control Room:** The control room visit provided insights into the processes of monitoring and managing power flow within the substation.
- **Monitoring Devices and Systems:** An overview of control panels, monitoring devices, and the SCADA (Supervisory Control and Data Acquisition) system was provided.
- **Transformer Functions and Maintenance:** The role of transformers in the substation and their maintenance procedures were explained comprehensively.

This visit offered students a valuable opportunity to bridge theoretical knowledge with practical applications, fostering a deeper understanding of electrical power systems.

