

# CHHOTUBHAI GOPALBHAI PATEL INSTITUTE OF TECHNOLOGY

## Department of Electrical Engineering

### A REPORT

### ON

### A one-day Practical Workshop on “High Voltage Electrical Compliance and Safety Measures”

<b>Title of the Expert Talk</b>	High Voltage Electrical Compliance and Safety Measures
<b>Organizing Department</b>	Department of Electrical Engineering
<b>Coordinators</b>	Mr. Ranjit Rajak
<b>Target Audience</b>	Diploma Electrical Engineering (Girls Polytechnic)
<b>Total Number of Participants</b>	09
<b>Date of Programme</b>	9 <sup>th</sup> February, 2024
<b>Expert</b>	Mr. Snehal S Patel Department of Electrical Engineering, CGPIT, Uka Tarasadia University, Bardoli.

### Schedule of Expert Talk

Expert talk on “, **High Voltage Electrical Compliance and Safety Measures**” is schedule on 9<sup>th</sup> February, 2024, at C-009 from 9:00 A.M. to 3:00 P.M.

### Details of the Expert talk:

In this session, Mr. Snehal S Patel has been discussed regarding what is importance of High Voltage in Electrical engineering. He has covered the following topics:

- 1. Layout of High Voltage Lab:** Understand the arrangement of equipment and safety measures.
- 2. Earth Resistance Measurement:** Measure the earth resistance of the high voltage lab and high-tension supply pole.
- 3. Breakdown of Air:** Study air breakdown using a 80 kV AC- DC test set with different electrode configurations (sphere-sphere gap, sphere-plane gap, and point-plane gap).
- 4. Testing of Liquid:** Determines the breakdown voltage of the liquid.
- 5. Testing of Solid:** Dielectric strength refers to the maximum electric field a material can withstand without breaking down.
- 6. Measurement of Breakdown Compliance in Electrical Equipment**
- 7. Impulse Generator (0-150 kV)**

## Glimpse of the Expert Talk:

### During the talk



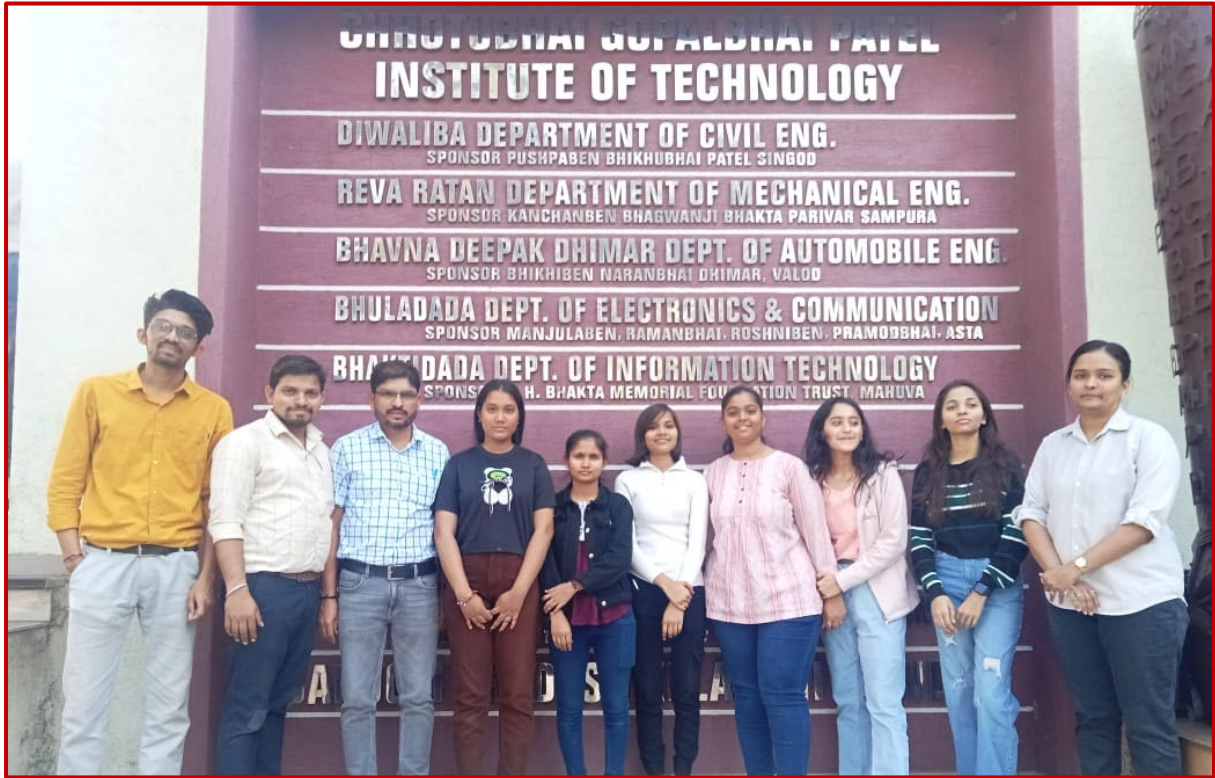
### Explanation of HV Experimental Set UP:





The session was concluded with a validatory function including students counselling for admission in D to D followed by the Group Photographs:





Group Photo at Chhotubhai Gopalbhai Patel Institute of technology