

[GPERI Mehsana Visit]

ONE DAY WORKSHOP ON USE OF ADVANCE SURVAYING INSTRUMENT "TOTAL STATION"

- ➤ We, the student of government polytechnic Ahmedabad of civil department, visited the institute of Gujarat Power Engineering and Research Institute located in Mehsana on march 18, 2023.
- ➤ The purpose of our visit was to gain detailed knowledge about the advanced technology of total station that has emerged in the field of civil engineering.



➤ Faculty of structural engineering at GPERI guided and assisted us to an on-site hands-on experience of using the equipment.



(Total Station)

- ➤ The total station we worked at was of "TRIMBLE COMPANY" and it is really very advanced. We worked on total station very easily compared to "THEODOLITE" and "DUMPY LEVEL".
- ➤ It is an electronic transit theodolite integrated with electronic distance measurement (EDM) to measure both horizontal and vertical angles and slope distance from the instrument to a particular point.
- ➤ This instrument collects data in an on-board computer and performs triangulation/trigonometric calculations.

➤ The instrument could convert the collected data into 19 different civil engineering formats which makes it very easy for the data to put to use.



- ➤ We measured distances between various points along with horizontal and vertical angles between the points that we marked in the garden area of the GPERI institute.
- ➤ Due to time restraint, we couldn't conduct a whole survey but overall, we gained immense knowledge of the working mechanism of the total station given by the faculty in the theoretical lectures.



THANK YOU VERY MUCH GPERI FOR GIVING US AN OPPORTUNITY TO LEARN SOMETHING NEW.