



Sanjivani Prasthutan Mumbai Sansthan

S. P. I. T. POLYTECHNIC, KURUND

Nighoj Road, Post-Ralegan Thermal, Tal-Parner, Dist-Ahilyanagar, Pin-414306

Phone - (02488) 212631, 7743813109, 9420726405 Fax No.- (02488) 212632

Email-spitkurund@gmail.com, Web - www.spitpolyedu.org.in

(Approved by AICTE, New Delhi, Recognized by Govt. of Maharashtra & Affiliated to MSRTI, Mumbai.)

Established Year : 2009, Approval No : 2009/(304/09)T.E.



Founder President

Date -22/09/2025

MECHANICAL DEPARTMENT

Report: Practical Demonstration on Water pH and TDS Measurement and carrier guidance of Frist, second and last year students.

Conducted by: Alumni – Bhute Vinayak

Date: 20/09/2025

Location: S. P. I. T. Collage Seminar Hall

Objective:

The purpose of this session was to provide hands-on knowledge about measuring the pH and Total Dissolved Solids (TDS) in water, helping students understand water quality parameters and their environmental importance.

Overview of the Demonstration:

Alumnus Bhute Vinayak conducted an informative and interactive session on water quality testing using digital pH meters and TDS meters. The demonstration covered:

- Introduction to Water Quality:**

Brief explanation of why pH and TDS are critical parameters in determining the safety and usability of water for drinking, agriculture, and industrial purposes.



Mr. Bhute Vinayak Introduction to Water Quality.

Vision- To provide excellent knowledge and enrich the problem-solving skills of the students in the field of Mechanical Engineering with a focus to prepare the students for industry need, recognized as leader and a responsible citizen.

- **Measurement of pH:**

- The pH meter was calibrated using standard buffer solutions.
- Samples of tap water, bottled water, and rainwater were tested.
- Results showed variations in pH, ranging from slightly acidic to neutral.



Mr. Bhute Vinayak Measurement of pH

- **Measurement of TDS:**

- TDS meter was used to measure the concentration of dissolved solids in various water samples.
- Tap water showed higher TDS compared to bottled water, indicating the presence of minerals or impurities.



Mr. Bhute Vinayak Measurement of TDS.

Vision- To provide excellent knowledge and enrich the problem-solving skills of the students in the field of Mechanical Engineering with a focus to prepare the students for industry need, recognized as leader and a responsible citizen.

Key Learnings:

- **pH Scale:** Ranges from 0 to 14; 7 is neutral, below 7 is acidic, and above 7 is alkaline.
- **TDS Values:** Ideal drinking water has TDS below 500 ppm as per WHO standards.
- Importance of regular testing of water sources for health and safety.

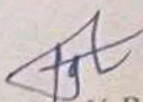
Conclusion:

The session successfully enhanced student understanding of basic water testing techniques. Bhute Vinayak's practical insights and clear explanation made the concept more approachable and relevant for real-world applications. Students actively participated and expressed increased interest in environmental and water quality studies.

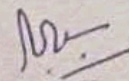
Vote of Thanks -



Prof. Mr. V.A. Mallav give a Vote of thanks


Prof. Dr. V. B. Jadhav
Head of Department




Prof. Dr. S. D. Kapse
Principal

Vision- To provide excellent knowledge and enrich the problem-solving skills of the students in the field of Mechanical Engineering with a focus to prepare the students for industry need, recognized as leader and a responsible citizen.