#### Bharatiya Vidya Bhavan's



### SARDAR PATEL COLLEGE OF ENGINEERING

Andheri (W) Mumbai – 400058 (Government Aided Autonomous Institute) Affiliated to University of Mumbai



### **REPORT OF**

## Two Days Workshop on

# MAPPING DESIGN AND ANALYSIS OF URBAN WATER DISTRIBUTION SYSTEM

7 and 8 October 2023

VENUE – 106, SPCE

TIME - 9:00 AM - 5:00 PM

**ORGANIZED BY** 

### **CIVIL ENGINEERING ASSOCIATION**



### **ABOUT THE EVENT**

A two-day workshop on Mapping Design and Analysis of Urban Water Distribution System was conducted at 106 SPCE on the 7th and 8th of October. The workshop aimed to provide participants with in-depth knowledge about urban water distribution system design and analysis using modern software tools.

### Day 1: 7th October - QGIS Software

On the first day, Mr. Ashish Nair, an expert in the field, covered various aspects of urban water distribution systems. The highlight of the day was the introduction to QGIS software, a powerful and open-source Geographic Information System. Participants learned to create and analyze geographic data, which is essential for designing efficient water distribution systems.



Key Topics Covered on Day 1:

1. Introduction to Urban Water Distribution Systems

2. Importance of Mapping and GIS in Water Management

3. Overview of QGIS Software

4. Creating and Editing Geographic Data

5. Spatial Analysis for Water Distribution

Day 2: 8th October - EPANET JalTantra Software

The second day of the workshop delved into more advanced aspects of water distribution system design. Participants were introduced to EPANET JalTantra software, a widely used tool for hydraulic modeling of water distribution networks. They learned how to analyze the performance, simulate scenarios, and optimize water distribution systems.

Key Topics Covered on Day 2:

1. Introduction to Hydraulic Modeling

2. Understanding EPANET JalTantra Software

3. Network Building and Data Input

4. Hydraulic Analysis and Simulations

5. Optimization Techniques

The two-day workshop on Mapping Design and Analysis of Urban Water Distribution System, conducted by Mr. Ashish Nair, provided a comprehensive understanding of the essential tools and techniques used in the field. Participants gained hands-on experience with QGIS and EPANET JalTantra software, enabling them to apply this knowledge to real-world projects in urban water management.



The workshop was a valuable opportunity for individuals interested in urban water distribution systems, offering them the skills and insights needed to contribute to more efficient and sustainable water supply networks.