

SHAHAJIRAO PATIL VIKAS PRATISHTHAN

S. B. PATIL COLLEGE OF ENGINEERING, INDAPUR, DIST: PUNE

ACA – R-49

Rev: 00

Date: 01.07.2014

Academic Year: 2024-25

Semester: II

Ref: SPVP/SBPCOE/MECH/2024-25/F12/06 Date:20/01/2025

To.

The Principal

SBPCOE,

Indapur.

Ujani Dam Visit - Mechanical Engineering Department

Introduction

The Department of Mechanical Engineering organized an industrial visit to Ujani Dam to provide students with practical insights into large-scale hydraulic structures, power generation, and water management systems. The visit aimed to enhance students' understanding of dam construction, hydroelectric power generation, and irrigation systems, aligning with their academic curriculum.

Date of Visit: 17 th Jan 2025

Venue: Ujani Dam, Maharashtra

Organized By: Department of Mechanical Engineering

Faculty Coordinators: Prof J.B.Mule, Prof V S Dhotre, Prof K H Kuber

Number of Students:43

Objective of the Visit

The primary objectives of the visit were:

To understand the structural design and working of Ujani Dam.

To study hydroelectric power generation and water distribution.

To gain knowledge of irrigation systems and their impact on agriculture.

To observe turbine operation and mechanical components involved in water flow control.

Technical Aspects

Overview of Ujani Dam

Ujani Dam is a gravity and earthen dam constructed on the Bhima River in Maharashtra. It plays a crucial role in water supply, irrigation, flood control, and hydroelectric power generation.

Type: Gravity & Earthen Dam

Height: 56.4 meters



SHAHAJIRAO PATIL VIKAS PRATISHTHAN

S. B. PATIL COLLEGE OF ENGINEERING, INDAPUR, DIST: PUNE

Length: 2,534 meters

Reservoir Capacity: 1,517 million cubic meters

Purpose: Irrigation, Power Generation, Drinking Water Supply

Hydroelectric Power Generation

The dam is equipped with hydroelectric turbines that utilize water flow to generate electricity. The students observed:

The functioning of turbines and generators.

The mechanism of sluice gates in regulating water flow.

The maintenance and safety measures in a hydroelectric plant

.







SHAHAJIRAO PATIL VIKAS PRATISHTHAN

S. B. PATIL COLLEGE OF ENGINEERING, INDAPUR, DIST: PUNE

Conclusion

The industrial visit to Ujani Dam was highly informative and beneficial for students. It helped bridge the gap between theoretical learning and practical applications in mechanical engineering. The interaction with engineers and technical staff enriched students' knowledge and understanding of hydropower generation, dam engineering, and irrigation technology.

The Department of Mechanical Engineering expresses gratitude to the Ujani Dam authorities for their guidance and hospitality

Thanking you

Report Prepared By: Prof R.A.Deshmukh

Prof J.B.Mule Dr. M.D.Jagtap Prof V.S.Nalawade Dr. S.T. Shirkande Visit Co ordinator H.O.D Dean Academics Principal