

**SANDIP UNIVERSITY**

School of Pharmaceutical Sciences

Mahiravani, Trimbak Road, Tal & Dist. Nashik-422213, Maharashtra State

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**SANDIP**  
UNIVERSITY

**Department/ School Name:** School of Pharmaceutical Sciences (SOPS)

**Academic Year:** 2023-2024

**Report on:** RO (Reverse Osmosis) Water Treatment Plant

**Event Title: Report on:** RO (Reverse Osmosis) Water Treatment Plant Visit

**Event Date:** 21<sup>th</sup> October 2023

**1. Event Conduction Duration:** 12:30 PM to 02:00 PM

**2. Event Venue:** RO Plant, Sandip University

**3. Name of Event Coordinator with contact details:**

1. Mrs. Darshana Shinde Assistant Professor

2. Ms. Bhagyashree Jadhav Assistant Professor

**6. Event Outline & Outcome of the event:**

**Outline of Program:** SOPS organized a Sewage Water Treatment Plant Visit at Sandip University, Nashik, on 21<sup>st</sup> Oct. 2023, for F.Y.D. Pharm students.

**Objective of Program:** Objective of this Reverse Osmosis Water Treatment Plant Visit was to give knowledge to students regarding how the Reverse Osmosis water treatment was given.

**Output of Program:**

Sandip School of Pharmaceutical Sciences has successfully conducted Sewage Water Treatment Plant Visit on 21/10/2023, where students get information Reverse Osmosis water treatment, also known as RO treatment, is the process Reverse osmosis (RO) is a water purification process that uses a partially permeable membrane to remove ions, molecules, and larger particles from drinking water. It is a widely used method to produce clean and purified water, and it has various applications, including in residential water treatment, industrial processes, and desalination of seawater.

The basic principle of reverse osmosis involves applying external pressure to force water through a semipermeable membrane. This membrane allows water molecules to pass through while blocking the passage of dissolved salts, minerals, contaminants, and other impurities. The result is that the water on the other side of the membrane is purified, with most of the impurities and contaminants being removed.

Key components of a reverse osmosis system typically include

**Pre-filtration:** The water is usually pre-filtered to remove larger particles and sediments that could clog or damage the RO membrane

**Reverse Osmosis Membrane:** This is the heart of the system. It consists of a thin, semipermeable membrane that allows water molecules to pass through while rejecting most other substances.

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Post-Filtration: After the water has passed through the RO membrane, it may go through a post-filter to remove any remaining impurities and to improve taste and quality.

Storage Tank: The purified water is typically stored in a tank for on-demand use.

## 7. RO Water Treatment Plant Visit photos which must include RO Plant

