

Event Report

Extension Activity: Hands-on Training Workshop: Tablet Punching, Dissolution Testing, and UV-Visible Spectroscopy.

Date: 26 February 2026

Time: 1:30-3:30 pm

Venue: Pharmaceutics PG Lab and Machine Room, Maratha Mandal's College of Pharmacy.

Objectives

The primary goal of this workshop was to bridge the gap between theoretical knowledge and practical application for entry-level pharmacy students. Specific objectives included:

- To familiarize students with the fundamental hardware used in solid dosage form manufacturing.
- To explain the mechanical and scientific principles behind drug release and analysis.
- To provide a foundational understanding of Good Laboratory Practices (GLP) and equipment handling.

Event Summary

The Pharmaceutics Department organized a comprehensive technical session designed to introduce 1st-year Diploma students to core industrial equipment. The event was conducted to provide a foundational understanding of the process from tablet manufacturing to analysis. Students were shown how solid unit dosage forms are prepared, how they dissolve within the body, and how the amount of drug released is measured. These core concepts were thoroughly explained to the first-year diploma students

Session I: Solid Dosage Manufacturing & Testing

Dr. Kartik Bhairu Khot led the session in the Machine Room. He provided a live demonstration of the Tablet Punching Machine, explaining the cycle of die filling, compression, and ejection. Following this, he demonstrated the Dissolution Apparatus, emphasizing how this equipment simulates the human digestive system to test how a drug releases and dissolves in the body.

Session II: Pharmaceutical Analysis

In the Pharmaceutics PG Lab, Mrs. Ankita Kanshinde conducted a session on the UV-Visible Spectrophotometer. She demonstrated the working principle, focusing on how light absorption is used to determine the concentration and purity of a medicinal substance.

Outcomes

The workshop concluded with an interactive Q&A session. The key outcomes were:

- **Technical Proficiency:** Students gained a clear understanding of the "how and why" behind tablet manufacturing and drug analysis.
- **Practical Insight:** Participants were able to identify the key components of the machinery, moving beyond textbook diagrams to real-world application.
- **Foundational Knowledge:** Students recognized the critical importance of these instruments in ensuring the quality and efficacy of pharmaceutical products.