



Indian Standard IS 3686:1966 - Student-Type Microscope Specification

When selecting a **microscope for educational purposes**, it is essential to ensure it meets standards for **quality, durability, and performance** to support effective scientific learning. This **Indian Standard** provides comprehensive specifications for **student-type microscopes** used in schools, colleges, and laboratories.

This standard specifies the **technical requirements** that student microscopes must fulfill, including clarity of lenses, stability, and ease of use, to provide **reliable magnification** and **clear imaging** for young learners. By setting guidelines for **optical quality, structural stability, and durability**, this standard ensures that student microscopes are **suitable for repeated and extensive use** in educational settings. This focus on **robustness** and **ease of operation** is crucial in creating a tool that can withstand frequent handling while maintaining consistent performance.

The performance of these microscopes is evaluated through **tests for magnification accuracy, stability, and ease of adjustments**, ensuring that students can use them with minimal difficulty. This includes **rigorous quality checks** on focusing mechanisms, lens clarity, and construction to ensure that microscopes meet educational needs. The standard also outlines **packing and marking requirements** to ensure that each microscope model is properly identified and safely transported, reducing risks during transit and making them easier to handle in institutional settings.

In addition to **fostering safety and quality**, the standard encourages the development of **reliable educational tools** that enhance the scientific learning experience. For institutions and educators, it offers **assurance of consistent, high-quality equipment** that meets BIS standards, ultimately creating a **better hands-on learning environment** for students in India.