

PM SHRI KV INS MANDOVI,GOA

WRITE UP ON FULLY EQUIPPED PHYSICS ,CHEMISTRY ,BIOLOGY AND SCIENCE LAB

A fully equipped science lab encompasses facilities tailored for biology, physics, and chemistry studies, each serving distinct educational purposes.

*Science Lab –

Science Lab is a well -equipped lab in which experiments and activities of Physics ,Chemistry and Biology lab for class 6-10th are conducted. Under PM Shri ,Lab is provided with Science kit (Physics Walla) for class 8. Chapter wise activities are being conducted from the kit and hence being utilized.

Biology Lab:

Our School has a well-equipped biology lab for conducting experiments and observations related to living organisms and biological processes. Key features include:

- ***Microscopes:*** High-powered compound microscopes for cellular and microbiological studies, equipped with digital imaging capabilities.
- ***Dissection Tools:*** Scalpels, forceps, and dissecting trays for anatomical studies and dissections.
- ***Safety Equipment:*** Gloves, goggles, and lab coats to ensure safety when handling biological specimens and chemicals.

Physics Lab:

Our Physics lab is designed for hands-on experimentation to explore fundamental principles of physics. It typically includes:

- ***Measurement Tools:*** Precision instruments like rulers, Vernier calipers, and micrometers for accurate measurements.
- ***Experimental Apparatus:*** Equipment such as pendulums, optics benches, and inclined planes for studying mechanics and optics.
- ***Electrical Components:*** Circuits, resistors, capacitors, and multimeters for electrical experiments and studies in electromagnetism, meter bridges ,potentiometer and sonometer etc.

Modern Science Lab equipments like Vande -graff generator , Bell -jar experiment ,Ring Launcher ,Laser Kit ,Mechnaics Kit by all Science teachers are being utilized as part of syllabus and beyond.

Chemistry Lab:

A chemistry lab facilitates experiments involving chemical reactions and properties of substances. Essential components include:

- ***Glassware and Equipment:*** Burettes, beakers, pipettes, and graduated cylinders for precise measurement and mixing of chemicals.
- ***Heating Devices:*** Bunsen burners, hot plates, for controlling temperature during reactions.
- ***Safety Gear:*** Safety goggles, aprons, and fire extinguishers to ensure safety when handling hazardous chemicals.

Common Features:

Workstations: Adequate bench space and seating for students to conduct experiments comfortably.

- ***Storage:*** Cabinets and shelves for storing equipment, chemicals, and specimens safely.

- ***Technology Integration:*** Computers with software for data analysis, interactive simulations, and presentations.

In conclusion, a fully equipped science lab for biology, physics, and chemistry is providing to students with the tools and environment provides hands-on learning and exploration in each respective field, fostering a deeper understanding of scientific principles through practical application.