ST. XAVIER'S COLLEGE, MAPUSA GOA

College with Potential for Excellence
Re-accredited by NAAC with A Grade
Awarded DBT STAR College Scheme

Nature of Event (Workshop, Guest Lecture, Add-on Course, Seminar, etc.)	Hands-on Session
Name of Department	Chemistry
Faculty In-Charge	Ms. Kathleen Pinto Dr. Andrew D'Souza Ms. Flavia Travasso
Stratum of Event (College, State, Regional, National)	College
Title of Event	Demonstration and Hands-on training on 'Soil and Water sampling techniques'
Date of Event	16th March 2024
Venue	Conference Hall, Post-Graduation Block, St Xavier's College Mapusa-Goa
Resource Person details	Mr. Satish Patil, Assistant Professor of Soil Science and Agricultural Chemistry at Goa College of Agriculture
Objective/ Scope of Event	Hands-on training session on 'Soil and Water Sampling Techniques' for the F.Y.BSc. SEC Chemistry Students who have opted for the paper CHC-141: Water and Soil Analysis.

Particulars of Event	Mr. Satish Patil passionately explained how soil and water sampling is a vital process used to gather representative soil and water samples from different locations to understand the composition, fertility and health of the soil and pH, conductivity of water. Mr. Satish Patil explored the most common tools for soil sampling and practically demonstrated soil sampling techniques on the college campus using shovel/hand trowel method and auger method. • Shovel or Hand Trowel Method: This technique is straightforward and requires minimal equipment. Using a shovel or a hand trowel, small pits or holes at various locations across the area of interest are dug. The soil samples are then collected from different depths within the pit and mixed together to form a composite sample. It's a quick method suitable for basic soil assessment. • Auger Method: Augers are handy tools that allow collection of deeper soil samples with ease. There are various types of augers, but they generally involve a rotating helical screw that drills into the soil. This technique is valuable for studying soil profiles and identifying soil layers at different depths. The students then moved to the chemistry laboratory for analysis of soil samples for their soil texture. Soil Texture indicates the relative content of particles of various sizes, such as sand, silt and clay in the soil. Soil texture influences the ease with which soil can be worked, the amount of water and air it holds, and the rate at which water can enter and move through soil. The students enthusiastically participated in the hands-on session while gaining knowledge connecting this new knowledge with knowledge and concepts that they already learnt in the classroom.
Outcome of Event	Students learnt the techniques of Soil and water sampling and got a Hands-on Demonstration
Feedback	Very well organized, full of knowledge.

Total No. of Participants	26 Participants

Photographs