



ST. XAVIER'S COLLEGE, MAPUSA GOA
Report of Activity conducted in the Academic Year
2026-27

Name of Activity	Field Trip to Goa University
Date/ Duration	24 August 2026/ 3 hrs.
Venue	Department of Zoology, Goa University
Name of organizing Department/Cell	Department of Microbiology
In collaboration with	
Name/s of Faculty Co ordinator	Dr. Sheryanne Velho-Pereira and Ms. Arina Frank
Stratum of Event	State
Name & details of Resource Person/s if any	Dr. Avelyno D'Costa, Assistant Professor, Department of Zoology.
Report	As part of the Virology course, a group of 58 students of T.Y.B.Sc. Microbiology visited Goa University on 24 August 2026 at 10:30 a.m. The field trip was organized to provide students with practical exposure to animal-based research, virological techniques, sophisticated instrumentation, and their applications in research and teaching. The students were accompanied by Ms. Arina Frank and Dr. Sheryanne Velho Pereira. At Goa University, the students were guided by Dr. Avelyno D'Costa, Assistant Professor, Department of Zoology, who introduced them to the various research facilities and explained their importance and applications. During the visit, the students were introduced to the Animal House Facility, a Government of India-registered facility. They were briefed on the importance of maintaining laboratory animals under controlled environmental conditions and adhering to prescribed guidelines for their care, housing, handling, and use in scientific research. The Animal House consisted of different sections, including the Aqua Room, Herp Room, Mammal Room, and Preparation Room. The functions of these sections and their role in housing and maintaining different groups of experimental animals were explained to the students. The students were also provided with information regarding the procurement and maintenance of laboratory mice used in research. They learned that certain specialized strains of mice are expensive and may involve substantial transportation costs. Newly acquired animals are maintained under quarantine for 15 days before being transferred to

	the main animal housing area. This quarantine period allows for health monitoring and helps prevent the introduction and spread of diseases within the facility. As part of the virology component of the visit, the students learned about White Spot Syndrome Virus (WSSV), an important viral pathogen affecting crustaceans, particularly shrimp. They were also introduced to the use of mice as animal models in virology and toxicology research, enabling them to appreciate the importance of animal models in studying disease processes, toxicity, immune responses, and the effects of potential therapeutic agents. The students were further taken to the Instrumentation Room, where they were introduced to several sophisticated instruments used in biological and biomedical research. These included fluorescence microscopes, Gas Chromatography–Mass Spectrometry (GC–MS), High-Performance Liquid Chromatography (HPLC), sonication equipment, a lyophilizer, and an ultracentrifuge. The basic principles, functioning, and applications of these instruments in research as well as teaching were explained to the students. Particular emphasis was placed on the ultracentrifuge and its importance in virology. Students learned that ultracentrifugation involves centrifugation at extremely high speeds and is widely used for the separation, concentration, and purification of viruses and viral particles from biological samples. It can also be used to separate cellular components and macromolecules based on differences in their size and density. Techniques such as density-gradient ultracentrifugation are particularly useful for obtaining purified viral preparations for further characterization and experimental studies. Thus, the students were able to relate the theoretical concepts learned in virology to their practical applications in virus isolation and purification. The visit to the instrumentation facility also helped students understand how advanced analytical instruments are employed for the identification, characterization, separation, preservation, and analysis of biological samples and research products. Overall, the field trip was an informative and enriching learning experience. It provided the students with valuable practical insight into the functioning of an animal research facility and exposed them to sophisticated instruments used in modern biological research. The visit strengthened their understanding of the applications of animal models, virological techniques, and analytical instrumentation in virology, toxicology, research, and teaching.
Brochure/Poster	NA
Photographs	https://xavierscollegegoa.ac.in/wp-content/uploads/2026/08/images-of-Field-Trip-to-Goa-University.pdf
List of participants with signatures	NA
Certificate	NA