



Introduction

Water is the universal solvent. It is essential for the growth and development of all forms of life. It regulates physical, chemical and biological process in the living organisms. The main source of water for is through precipitation. Water can be used for direct and indirect purposes. Direct purposes include bathing, drinking, and cooking. The bulk of the world's water use is for agriculture, industry, and electricity. The most common water uses include:

- Drinking and Household Needs
- Recreation
- Industry and Commerce
- Agriculture
- Thermoelectricity/Energy

Objectives of the courses

- To determine the quality of the water
- To reduce the environmental impacts due to water amendments.
- To understand the effects of water quality parameters and to learn the laboratory techniques.

Course Outcomes

After successful completion of the course the student will be able to

- Know that Water quality testing is an important part of environmental monitoring.
- To know that if quality of water is poor, it affects not only aquatic life but the surrounding parts of ecosystem.
- Measure physical properties of water quality include temperature and turbidity, Chemical properties involve parameters such as P^H , E.C, TDS, CO_3^{2-} , HCO_3^- , Cl^- , Ca^{2+} , Mg^{2+} . The above parameters are studied in the water bodies of Narayanapuram surroundings.
- Increase the knowledge and understand the specific issues of a water body.

Report on Certificate Course in Water Analysis

2021-22

The Department of Chemistry of SAS GDC , Narayanapuram conducted a certificate course in Water analysis from 06.12.2021 to 10.01.2022 with 30 Hrs duration. Smt.G.Hephzibah acted as the instructor for the course and 15 Students of III B.Sc (MPC&BZC) enrolled for the course.

The course commenced on the AN of 06.12.2021. A total number of 30 instruction hours (Both Theory and practicals) were conducted to enhance the knowledge levels of the student on Water analysis. As a part of this course, students were given hands on training at Dept. of Chemistry. The students observed different analytical techniques used in Water analysis for three days. Water testing is a low-cost practice to learn about the quality of water to support the life on earth.

At the end of the course a test was conducted for 50 marks with 40% of marks (20 Marks) as eligibility criterion for the completion of the course. On the last day of the course certificates were issued to the students who had successfully completed the course.