

**Department of Chemistry**  
**Mary Matha Arts & Science College Mananthavady**  
**Certificate Course**

## **WATER QUALITY ASSESSMENT SYLLABUS**

<b>Course Code</b>	<b>Theory</b>	<b>Practical</b>	<b>Time</b>
CCWQAMMCHE18	8 Hours	22 Hours	3.30 to 4.30

### **Programme Description**

Water analysis is a method of analysing water to estimate the purity of drinking water. Water Analysis is an extremely important aspect and the importance of determining the quality of the Water we use in our daily life can be well understood if we draw some focus of exactly how big and essential role Water plays in the day to day activities of a human life. Water is a vitally important component important to every aspect of our lives.

### **Learning Objectives**

At the end of the course the student will be able to:

- Develop awareness about quality criteria and standards for water, and their relation to publichealth and environment.
- Understand important parameters for measuring water quality.
- Know about the methods for the determination of water quality parameters.

### **Syllabus**

- I. **Fundamentals of environmental protection and pollution control (8 hours)**  
Segments of environment, Air, water and soil pollution, Water recourses, water pollution, Importantwater Quality parameters and methods for their determination - turbidity, color, taste, pH, acidity, alkalinity, chemical constituents, hardness, dissolved oxygen etc., water sampling, standard for drinkingwater as per BIS specifications, household water treatment and safe storage.
- II. **Practical - Laboratory tests for water quality monitoring (15 hours)**  
Determination of pH and conductivity, Test for acidity and alkalinity, Test for total hardness, Test forchloride, calcium, iron etc., calculation of magnesium content and total solids.
- III. **Project (7 hours)**  
Analysis of water samples collect from different areas.