

III Year - II Semester	L	T	P	C
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ENVIRONMENTAL ENGINEERING LAB

Course Learning Objectives:

The course will address the following:

- Estimation some important characteristics of water and wastewater in the laboratory
- It also gives the significance of the characteristics of the water and wastewater

Course Outcomes:

Upon the successful completion of this course, the students will be able to:

- Estimation some important characteristics of water and wastewater in the laboratory
- Draw some conclusion and decide whether the water is potable or not.
- Decide whether the water body is polluted or not with reference to the state parameters in the list of experiments
- Estimation of the strength of the sewage in terms of BOD and COD

SYLLABUS:

List of Experiments

1. Determination of pH and Electrical Conductivity (Salinity) of Water and Soil.
2. Determination and estimation of Total Hardness–Calcium & Magnesium.
3. Determination of Alkalinity/Acidity
4. Determination of Chlorides in water and soil
5. Determination and Estimation of total solids, organic solids and inorganic solids and settleable solids by Imhoff Cone.
6. Determination of Iron.
7. Determination of Dissolved Oxygen with D.O. Meter & Winklers Method and B.O.D.
8. Determination of N, P, K values in solid waste
9. Physical parameters – Temperature, Colour, Odour, Turbidity, Taste.
10. Determination of C.O.D.
11. Determination of Optimum coagulant dose.
12. Determination of Chlorine demand.
13. Presumptive Coliform test.