

## Environmental Engineering Lab

Objective: Conduct Tests on water to Determine pH, Hardness, Chloride, Turbidity and other tests.



Sections Handled: II Year

Major Equipment Details:

S. No	Equipment Name	Qty
1.	pH Meter	1
2.	Turbidity Meter	1
3.	Conductivity Meter	1
4.	Muffle Furnace	1
5.	Dissolved Oxygen Meter	1
6.	COD Reflux Apparatus	1
7.	BOD Incubator	1
8.	U-V Spectrophotometer	1
9.	Laminar Flow Chamber	1
10.	Water Stoll	1
11.	Jar test apparatus	1
12.	Hot air Oven	1
13.	Chloroscope	1
14.	Desiccator	2

Faculty In charge with qualification : P.Nagabhushanam.M.E Environmental Engineering.

Lab Technician name with qualification: K. Vinay Kumar. B.Tech.

Experiments list as per curriculum:

- 1.Determination of pH and Electrical Conductivity 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.
5. Determination of Iron.
6. Determination of Dissolved Oxygen with D.O. Meter & Winkler's 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.
- 14.Design of Sedimentation Tank

Experiment list beyond the curriculum

1. Measurement of Salinity