

WATER AND WASTE WATER ANALYSIS LABORATORY

Major Equipment Available in the Lab

Sl. No	Name of the Equipment's	Specification	Quantity
1	Digital flame photometer	NA, KFILT model-130	1
2	Digital spectrophotometer	340NM-960KNM	1
3	BOD incubator	LBI-150M	1
4	Digital jar test apparatus	1 litre capacity SS body	1
5	Turbidity meter micro controller	0-1000 NTU	1
6	Dissolved oxygen meter	0-20PPM	1
7	Systrom conductivity meter/TAS meter digital	MK509	13
8	autoclave	300x500cm, AV-102	1
9	Muffle furnace	10x10x23cm-9800	1

COURSES OFFERED

Sl. No	Odd Sem (Course code & Name)	Class	Even Sem (Course code & Name)	Class
1	CE3311 water and waste water analysis laboratory (R2021)	II Civil	-	-

CE3311 - WATER AND WASTE WATER ANALYSIS LABORATORY

OBJECTIVES:

- To impart knowledge to determine the characterization of water.
- To impart knowledge to determine the characterisation of municipal sewage.
- To impart knowledge to determine procedure for quantifying water and sewage.
- To impart knowledge to determine the quality parameters for water.
- To impart knowledge to determine the quality parameters for sewage.

OUTCOMES:

- Students are able to Calibrate and standardize the equipment.
- Students are able to collect proper sample for analysis.

- Students are able to know the sample preservation methods.
- Students are able to perform field-oriented testing of water, wastewater.
- Students are able to perform coliform analysis.

LIST OF EXPERIMENTS

ANALYSIS OF WATER SAMPLE

1. Sampling and Preservation Methods for Water and Wastewater (Demonstration Only)
2. Measurement of Electrical Conductivity and Turbidity
3. Determination of Fluoride in Water by Spectrophotometric Method /ISE
4. Determination of Iron in Water (Demo)
5. Determination of Sulphate in Water
6. Determination of Optimum Coagulant Dosage by Jar Test Apparatus
7. Determination of Available Chlorine in Bleaching Powder and Residual Chlorine in Water
Analysis of Wastewater Sample
8. Estimation of suspended, volatile and fixed solids
9. Determination of Sludge Volume Index in waste water
10. Determination of Dissolved Oxygen
11. Estimation of B.O.D.
12. Estimation of C.O.D.
13. Determination of TKN and Ammonia Nitrogen in wastewater
14. Determination of total and faecal coliform (Demonstration only)