



**Bharati Vidyapeeth (Deemed to be University)**

**College of Engineering, Pune.**

**Department of Civil Engineering**



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**Environmental Engineering Laboratory**

Sr. No	List of Experiments
<b>Water Supply Engineering</b>	
1.	Determination of pH and alkalinity of water samples.
2.	Determination of Total Hardness and its components of water samples.
3.	Determination of Chlorides of water samples.
4.	Determination of Turbidity and optimum dose of alum for raw water samples.
5.	Determination of optimum dose of chlorine and residual chlorine for water samples.
6.	Site visit – Water Treatment Plant.
7.	Computer applications - Water Treatment.
8.	Computer applications– Analysis of distribution networks.
9.	Draw Layout of water supply in residential buildings.
10.	Water audit of water supply of our institute.
<b>Wastewater Treatment and Management</b>	
1.	Determination of Solids –Total solids, suspended solids, volatile solids, settleable solids& non-settleable solids
2.	Determination of Dissolved oxygen
3.	Determination of Bio-Chemical Oxygen Demand
4.	Determination of Chemical Oxygen Demand
5.	Determination of Electrical Conductivity
6.	Determination of Phosphates by spectrophotometer
7.	Determination of Nitrates by spectrophotometer
8.	Visit to domestic / Industrial wastewater treatment plant & its detailed reports
9.	Application of Arc GIS in Environmental Engineering
10.	Selection of Site for sewage treatment plant by using Arc GIS
11.	Determination of Sludge Volume Index
12.	Design of ETP/STP using software

**Size = 2' X 3 '**

**Qty = 1**



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**List of Equipment**

<b>Sr. No.</b>	<b>Name of Equipment</b>
1.	Oven Tempo Make
2.	Muffle Furnace Tempo Make
3.	BOD Incubator
4.	Refrigerator
5.	Burette Stand With clamp head
6.	Electronic Colony Counter
7.	Photoelectric Colorimeter
8.	Gas stove
9.	Test tube stand
10.	Electronic Scale
11.	Digital Sound level Meter
12.	Digital Anemometer
13.	Sound Level Meter
14.	Digital Oxygen Meter
15.	Filtration assembly consists of filtration funnel
16.	Magnetic Stirrer with four stirring point
17.	Digital Spectrophotometer
18.	Conductivity Meter
19.	pH Meter
20.	Digital Conductivity meter
21.	Water steel
22.	Digital oxygen meter
23.	Portable dissolved oxygen meter
24.	Microprocessor based TDS meter
25.	Sound level meter
26.	Chloroscope
27.	Sound level meter
28.	Digital Nephelometer
29.	Conductivity meter
30.	pH meter
31.	PC Based UV visible Spectrophotometer
32.	Digital Nephelometer



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33.	PM 10 sampler APM 641
34.	Single Pan Balance Electronic
35.	COD Analysis System
36.	Single top Pan Balance
37.	BOD Incubator
38.	Jar Test Apparatus
39.	PM 2.5 Sampler Eco-tech Model
40.	Systronics Digital Visible Spectrophotometer
41.	CO2 Analyzer
42.	Digital Bomb Calorimeter

<p><b>Size = 2' X 3 '</b> <b>Qty = 1</b></p>
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