

**Faculty of Civil Engineering**  
**M.E. Environmental Engineering**  
**(R 2017) Semester – I**  
**EV5111 Environmental Chemistry Laboratory**  
**(Requirements for a batch of 25 students)**

<b>Sl. No.</b>	<b>Description of Equipment</b>	<b>Quantity required (R)</b>	<b>Quantity available (A)</b>	<b>Deficiency (R - A)</b>
1.	pH Meter	2		
2.	Burette (50 mL)	20		
3.	Burette (25 mL)	5		
4.	Pipette 1 mL	10		
5.	Pipette 2 mL	10		
6.	Pipette 10 mL	10		
7.	Measuring Cylinder 10 mL	5		
8.	Measuring Cylinder 25 mL	5		
9.	Measuring Cylinder 50 mL	5		
10.	Measuring Cylinder 100 mL	5		
11.	Measuring Cylinder 500 mL	2		
12.	Measuring Cylinder 1000 mL	2		
13.	Volumetric Flask 100 mL	5		
14.	Volumetric Flask 250 mL	5		
15.	Volumetric Flask 500 mL	5		

16.	Volumetric Flask 1000 mL	5		
17.	Conductivity Meter	1		
18.	Spectrophotometer (uv-vis)	1		
19.	Nephelometer	1		
20.	TKN Analyser	1		
21.	TKN Digestion Unit (6 heating unit)	2		
22.	COD Digestion Unit Setup (6 heating mantle)	2		
23.	Atomic Absorption spectrophotometer (AAS)	1		
24.	Flame photometer	1		
25.	Weighing balance (0.0001g)	1		
26.	Weighing balance (0.01g)	1		
27.	Refrigerator	1		
28.	Water bath	1		
29.	Heavy Metal Analyser	1		

**Faculty of Civil Engineering**  
**M.E. Environmental Engineering**  
**(R 2017) Semester – I**  
**EV5112 Environmental Microbiology Laboratory**  
**(Requirements for a batch of 25 students)**

<b>Sl. No.</b>	<b>Description of Equipment</b>	<b>Quantity required (R)</b>	<b>Quantity available (A)</b>	<b>Deficiency (R - A)</b>
1.	Conical Flasks (500 mL)	4		
2.	Autoclave (20 L) 121oC temperature Pressure : 15 lbs	1		
3.	Test tubes (20 mL)	120		
4.	Petri plates	120		
5.	Incubator (Bacteriological)	1		
6.	Hot air oven	1		
7.	Laminar Air Flow Chamber	1		
8.	Measuring Cylinder 25 mL	5		
9.	Measuring Cylinder 50 mL	5		
10.	Measuring Cylinder 500 mL	2		
11.	Measuring Cylinder 1000 mL	1		
12.	Colony counter	1		
13.	Electronic Balance (0.0001g)	1		
14.	Electronic Balance (0.001g)	1		
15.	Table Shaker	1		

16.	Spectrophotometer (uv-vis)	1		
17.	BOD Incubator	1		
18.	Bioreactor Batch type (for cultivation of micro organisms)	1		
19.	Test Tubes (20ml)	120		
20.	Conical Flask (250 ml)	50		
21.	Beaker (250ml, 500ml, 1000ml) each	5		
22.	Micro Pipette (250 $\mu$ L, 500 $\mu$ L, 1000 $\mu$ L) Each	1		
23.	Pipette Tips	4		
24.	Water bath	1		
25.	Membrane Filtration setup with vacuum pump	1		
26.	Deep Freezer	1		
27.	Refrigerator	1		
28.	Centrifuge	1		
29.	Compound Microscope	1		

**Faculty of Civil Engineering**  
**M.E. Environmental Engineering**  
**(R 2017) Semester – II**  
**EV5211 ENVIRONMENTAL PROCESSES MONITORING LABORATORY**  
**(Requirements for a batch of 25 students)**

<b>Sl. No.</b>	<b>Description of Equipment</b>	<b>Quantity required (R)</b>	<b>Quantity available (A)</b>	<b>Deficiency (R - A)</b>
1.	pH Meter	2		
2.	BOD Incubator	1		
3.	Visible spectrophotometer	1		
4.	Weighing Balance 0.0001g & 0.001g	1		
5.	Deep Freezer	1		
6.	COD Apparatus	2		
7.	Jar Test apparatus	2		
8.	Settling Column	1		
9.	TKN Unit(6 heating mantle)	2		
10.	High Volume Sampler	2		
11.	Silt Density Index unit	1		
12.	Noise Meter	1		
13.	Hot air Oven	1		
14.	Desiccators	3		
15.	Water Bath	1		

16.	Fefrigator	1		
17.	Photo catalytic Reactor	1		
18.	Inmhoff cone	6		
19.	Muffle Furnace	1		
20.	Activated Sludge Process Model Reactor	1		
21.	Anaerobic Digester Model Reactor	1		