

## Appendix –IV

# List of Laboratory Equipment

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|---|-------------|
| <b>a. List of Laboratory Chemicals for Mineral Water Test Lab</b> | Page no. ii |
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**a. List of Laboratory Chemicals**

S. No.	Name of Chemical	Packaging / Quantity
1	0.01N Sodium Thio Sulphate	3ampx1
2	0.02 N Sulphuric Acid	500mlx1
3	0.1N Hydrochloric Acid	500mlx1
4	1,10 Phenenthroline Monohydrate	5gmx1
5	1- Nephthal	100gmx1
6	Absolute Ethylene Glycol	500mlx1
7	Agar Powder Bacteriological	500gmx1
8	Aluminium Potassium Sulphate	500gmx1
9	Ammonium Acetate	500gmx1
10	Ammonium Chloride	500gmx1
11	Ammonium Dichromate	500gmx1
12	Ammonium Hydroxide	250gmx1
13	Ammonium Meta vanadate	100gmx1
14	Antibumping Granules	500gmx1
15	Antibumping Trichloride	250gmx1
16	Barium Chloride	500gmx1
17	Barium Hydroxide	500gmx1
18	Bird Parkar Agar	Min Pack
19	Boric Acid	500gmx1
20	Bromocressol Green	125mlx1
21	Buffer Tablets PH-4.0	10cap
22	Buffer Tablets PH-7.0	10cap
23	Buffer Tablets PH-9.2	10cap
24	Calcium Chloride	500gmx1
25	Calcium Hydroxide	500gmx1
26	Chloroform	500mlx1
27	Chlorohexanone	Min Pack
28	Chromotrophic Acid	Min Pack
29	Citric Acid	500gmx1
30	Cobaltus Chloride	100gmx1
31	Conc. Hydrochloric Acid	500mlx1
32	Conc. Nitric Acid	500mlx1
33	Conc. Sulphuric Acid	500mlx1
34	Creation Solution	Min Pack
35	Crystal Violet red bile Agar (VRBL)	100gmx1
36	D.R.C.M. Agar	100gmx1
37	Dextrose	500gmx1
38	Di ammonium Hydrogen Phosphate	500gmx1
39	Di-Isopropyl Ether	500mlx1
40	Dimethyl-P-Phenyle Diamine-oxalate	Min Pack
41	DL-Asparagine	25gmx1
42	Dodecylclenzine Sulphonic Acid	Min Pack
43	Double Distilled Water	Min Pack
44	EDTA Powder	25gmx1
45	Eosin Methyl Blue Lactose Agar Medium	100gmx1
46	Eriochrome Black T Indicator	25gmx1
47	Eriochrome Cyanine R Dye	Min Pack
48	Ethyl Acetate	500gmx1
49	Ethyl Alcohol	500mlx1
50	Fe (NH4)2(SO4) 6H2O	500gmx1
51	Ferric Chloride	500gmx1

<b>S. No.</b>	<b>Name of Chemical</b>	<b>Packaging / Quantity</b>
52	Ferrous Ammonium Sulphate	500gmx1
53	Gelatine Powder	500gmx1
54	Glacial Acetic Acid	500mlx1
55	Glycerol	500mlx1
56	Gram Staining Kit	Min Pack
57	Granulated activated carbon	500gmx1
58	Hexamethylene Tetramine	Min Pack
59	Hexanon	Min Pack
60	Hydrazine Sulphate	Min Pack
61	Hydrogen Peroxide	500mlx1
62	Hydrogen Powder	Min Pack
63	Hydroxylamine	Min Pack
64	Hydroxylamine Hydrochloride	500mlx1
65	Immersion Oil	Min Pack
66	Iron (III) Citrate	Min Pack
67	Isopropyl Alcohol	Min Pack
68	L+/- Ascorbic Acid	250gmx1
69	Mac Conkey Agar	100gmx1
70	Mac Conkey Broth	100gmx1
71	Manganese Sulphate	500gmx1
72	Methanol	500mlx1
73	Methyl Orange Indicator	125mlx1
74	Methyl Red	125mlx1
75	Methylene Blue	125mlx1
76	Murexide Indicator	Min Pack
77	NED Dihydrochloride	Min Pack
78	Neocuprine	Min Pack
79	Nutrient Agar Medium	Min Pack
80	Nutrient Broth	Min Pack
81	Ortho-Tolidine	Min Pack
82	Parafine Wax	500gmx1
83	Pattan & Reader's Indicator	5gmx1
84	Peptone	500gmx1
85	Phenolphthalein Indicator	125mlx1
86	Phosphate Buffer solution	Min Pack
87	Phosphoric Acid	500mlx1
88	Plate Count Agar	100gmx1
89	Potassium chloride	500gmx1
90	Potassium Chloroplatinate	1gmx1
91	Potassium Chromate	500gmx1
92	Potassium Cyanide	
93	Potassium Di Chromate	500gmx1
94	Potassium Di-Hydrogen Phosphate	500gmx1
95	Potassium Iodide	250gmx1
96	Potassium Periodate	100gmx1
97	Potassium Permanganate	500gmx1
98	Potassium Nitrate	500gmx1
99	Potato Dextrose Agar	Min Pack
100	Pseudomonas Isolation Agar	100gmx1
101	Silver Nitrate	25gmx1
102	Sodium Acetate	500gmx1
103	Sodium Ascorbate	Min Pack

<b>S. No.</b>	<b>Name of Chemical</b>	<b>Packaging / Quantity</b>
104	Sodium Bi-Carbonate	500gmx1
105	Sodium Carbonate	500gmx1
106	Sodium Chloride	500gmx1
107	Sodium Hydrogen Carbonate	1kgx1
108	Sodium Hydroxide	500gmx1
109	Sodium Nitrate	500gmx1
110	Sodium Oxalate	500gmx1
111	Sodium Sulphate	500gmx1
112	Sodium Sulphite	500gmx1
113	Sodium Thiosulphate	500gmx1
114	Standard Iron Solution	Min Pack
115	Standard Sulphide Solution	Min Pack
116	Starch Indicator Paper	100lvs
117	Stock Calcium Solution	Min Pack
118	Sulphanilamide	500gmx1
119	Sulphur Di oxide solution	Min Pack
120	Tartaric Acid	500gmx1
121	Tetra Cycline Powder	Min Pack
122	Triethanolamine 10%	500mlx1
123	Turgitol Agar Medium	Min Pack
124	Universal Indicator	100mlx1
125	Urea	500gmx1
126	Violet Agar	Min Pack
127	Yeast extract-dextrose chloramphenical agar medium	Min Pack
128	Zinc Dust	500gmx1
129	Zinc Sulphate	500gmx1
130	Zincon Reagent	Min Pack

**b. List of Lab Instruments**

S. No.	Name of Instrument	Specification	Quantity
1	Digital T.D.S. meter	0-1000 ppt L. Count. 1ppm	One
2	Digital PH Meter	0-14 Ph l. Count. 0.01	One
3	Turbidity Meter	0-200 NTU L. Count. 0.1NTU	One
4	Hot Plate	Ambient-100°C	One
5	Analytical Balance	0-200 gm L. Count. 0.1mg	One
6	Oven 12"x12"x12" Alu Chamber	Ambient 100°C	One
7	Microscope	Lens -10 X,40X,100X	One
8	LPG cylinder & Burner*/Burner Only		One
9	Digital Spectrophotometer	340-960 nm L. Count. 1nm	One
10	Incubator 12"x12"x12" Alum Chamber	Ambient-100°C L. Count.0.5 °C	One
11	B.OD. Incubator S.S Chamber	60°C L. Count. 0.01°C	Two
12	Vacuum Pump		One
13	Water Bath	Ambient-100 °C L. Count. 0.5 °C	One
14	U.V. Chamber	360nm+/-20nm	One
15	Auto Clave Single Drum	30 Lbs/Inc2 L.C.1 Lbs/Inc2	One
16	Heating Mantle 500 ml	Ambient-100 °C	One
17	Magnetic Stirrer With Heater	Ambient-100 °C	One
18	Filtration Assembly	1 Ltr.	One
19	Gas Stripping Apparatus	1 Ltr.	One
20	Desiccator	6 inch Dia.	One
21	Refrigerator		X
22	Thermometer	0-100 °C L.C.-0.5°C	One
23	Colony Counter	Digital	One
24	Laminar Air Flow Unit		One
25	Fume - Hood	-	One

**c. List of Glassware**

S. No.	Particulars	Specification	Quantity
1	Burette	50ml	2
2	Burette	10ml	1
3	Burette	25ml	1
4	Micro Burette	5ml	1
5	Graduated pipette	2ml	2
6	Graduated pipette	1ml	1
7	Graduated pipette	10ml	2
8	Graduated pipette	5ml	1
9	One mark pipette	5ml	1
10	One mark pipette	10ml	1
11	One mark pipette	20ml	1
12	Conical Flask	100ml	4
13	Conical Flask	250ml	4
14	Conical Flask	500ml	1
15	Conical Flask	1000ml	1
16	Beaker	100ml	4
17	Beaker	250ml	4
18	Beaker	500ml	2
19	Beaker	50ml	6
20	Beaker	1000ml	1
21	Measuring Cylinder	10ml	2
22	Measuring Cylinder	25ml	1
23	Measuring Cylinder	50ml	2
24	Measuring Cylinder	100ml	2
25	Measuring Cylinder	250ml	1
26	Measuring Cylinder	500ml	1
27	Volumetric Flask	10ml	4
28	Volumetric Flask	25ml	2
29	Volumetric Flask	50ml	2
30	Volumetric Flask	100ml	2
31	Volumetric Flask	200ml	1
32	Volumetric Flask	250ml	2
33	Volumetric Flask	500ml	2
34	Volumetric Flask	1000ml	1
35	Separating Funnel With Stop Cock	1000ml	1
36	Separating Funnel With Stop Cock	250ml	2
37	Separating Funnel With Stop Cock	125ml	2
38	Petri Dish	4"	6
39	Petri Dish	55ml	15
40	Evaporating Dish	100ml	1
41	Nessler Tube	50ml	6
42	Nessler Tube	100ml	2
43	Vacuum Flask	1000ml	1
44	Round Bottom Flask	1000ml	1
45	Round Bottom Flask	500ml	1
46	Distillation Apparatus	500ml	1
47	Screw Cap Bottle	100ml	2
48	Screw Cap Bottle	250ml	2
49	Screw Cap Bottle	500ml	2
50	Durham's Tube		1 pkt
51	Test Tube	15ml	12 Nos.

<b>S. No.</b>	<b>Particulars</b>	<b>Specification</b>	<b>Quantity</b>
52	Whatman Filter Paper	40 No.	1
53	Whatman Filter Paper	42/41 No.	1
54	Wide Mouth Bottle	1000ml	2
55	P.P. Bottles	500ml	2
56	P.P. Bottles	250ml	2
57	P.P. Washing Bottle	500ml	2
58	Glass Rods		3
59	Funnels	3”Dia	2
60	Microscopic Cover Glass		1 Box
61	Micro Slide		1 Box
62	Forceps		2
63	Gooch crucible	G-5	1
64	Distillation Unit	1.5 ltr/hr.	1
65	Reagent Bottle (Colourless)	1000ml	2
66	Reagent Bottle (Amber Colour)	250ml	12
67	Reagent Bottle (Amber Colour)	500ml	6
68	Reagent Bottle (Amber Colour)	1000ml	1
69	Reagent Bottle (Colourless)	250ml	12
70	Reagent Bottle (Colourless)	500ml	6
71	Burette Stand		3
72	Pipette Stand		1
73	Test Tube Stand		1
74	Test Tube Holder		1
75	Micro filter membrane	0.45 micron	1 Pack
76	Micro filter membrane	0.8 micron	1 Pack
77	Micro filter membrane	0.22 micron	1 Pack