NABL ACCREDITATION SCOPE PARAMETERS OF WATER LABORATORY

S. No.	Products/ Material of test	Specific Tests Performed	Test Method / Standard against which tests are performed	Range of Testing/ Limit of Detection
1.	Surface Waters & ground Water	Conductivity	APHA 2510 – B, 2-54 to 2-55. 22nd Ed. 2012	1-30000 µmhos/cm
		Total Dissolved Solids	APHA 2540 C, 2-65, 22nd Ed. 2012	5 -18000 mg/L
		Chemical Oxygen Demand	APHA 5220 B, 5-17 to 5-18, 22nd Ed. 2012	5-200 mg/L
		Bio – chemical Oxygen Demand	APHA 5210 B, 5-5 to 5-10, 22nd Ed. 2012, 4500 OC, 4-139 to 4-140,22nd Ed.2012.(5 days at 20^0C). IS-3025 part 44:1993, BOD (3 Days at 25^0C).	1-100 mg/L
		Chloride	APHA 4500 – Cl B , 4-72 to 4-73, 22nd Ed.2012.	5 - 600 mg/l
		Phosphate – P	APHA 4500 – PD , 4-154 to 4-155,22nd Ed.2012.	0.05 -10 mg/l
		Total Hardness	APHA 2340 – C, 2-44 to 2-47, 22nd Ed.2012.	10 - 900 mg/l (As $CaCO_3$)
		Calcium	APHA 3500 – Ca B , 3-67 to 3-68. 22nd Ed.	2 - 200 mg/l
		Magnesium	APHA 3500 – Mg B , 3-84, 22nd Ed.2012.	2 -200 mg/l
		Fluoride	APHA 4500 – F D, 4-87 to 4-88, 22nd Ed. 2012. (SPADNS Method)	0.02 to 10 mg/L
		pH	APHA 4500 H^+ - B, 4-92 to 4-96, 22nd Ed. 2012	2 - 14
		NO_2-N	APHA 4500 - NO_2^-, B ,4-120 to 4-121, 22nd Ed. 2012	0.01- 2 mg/l
		NH_3-N	IS :3025(Part-34)-1988,(First reprint April-1992)	0.2-20 mg/l
S.No.	**Products/ Material of test**	**Specific Tests Performed**	**Test Method / Standard against which tests are performed**	**Range of Testing/ Limit of Detection**
2.	**Waste Water**	**Conductivity**	**APHA 2510 – B, 2-54 to 2-55. 22nd Ed. 2012**	**1-40,000 µmhos/cm**
		Suspended solids	**APHA 2540 D, 2-66 to 2-67, 22nd Ed. 2012**	**10 – 5,000 mg/l**
		Total Solids	**APHA 2540 B, 2-64, 22nd Ed. 2012**	**10 – 20,000 mg/l**
		Total Dissolved Solids	**APHA 2540 C, 2-65, 22nd Ed. 2012**	**10 -15,000 mg/l**
		Chemical Oxygen Demand	**APHA 5220 B, 5-17 to 5-18, 22nd Ed. 2012**	**10 – 90,000 mg/l**
		Bio – chemical Oxygen Demand	**APHA 5210 B, 5-5 to 5-10, 22nd Ed. 2012, 4500 OC, 4-139 to 4-140,22nd Ed.2012.(5 days at 20^0C). IS-3025 part 44:1993, BOD (3 Days at 25^0C).**	**5 – 60,000 mg/l**
		Oil & Grease	**APHA 5520 B, 5-40,22nd Ed.2012**	**5 -200 mg/l**
		Phosphate – P	**APHA 4500 – PD , 4-154 to 4-155,22nd Ed.2012.**	**0.05 – 10 mg/l**
		Chloride	**APHA 4500 – Cl B , 4-72 to 4-73, 22nd Ed.2012.**	**5 - 2000 mg/l**
		pH	**APHA 4500 H^+ - B, 4-92 to 4-96, 22nd Ed. 2012**	**2 - 14**

		NH_3-N	APHA 4500 NH_3 – B&C, 4-110 to 4-112, 22nd Ed. 2012	1-100 mg/l
		Cr^{+6}	APHA 3500 Cr– B,3-69 to 3-70, 22nd Ed. 2012	0.1- 10 mg/l
S.No.	Products/ Material of test	Specific Tests Performed	Test Method / Standard against which tests are performed	Range of Testing/ Limit of Detection
3.	Soil & Solid Waste	pH	IS: 2720 (Part 26) – 1987, reaff. 2007	2-14
		Conductivity	IS: 14767 - 2002.	1- 40,000 µmhos/cm
		Moisture	IS:2720 (Part II) – 1973 (Reaffirmed 2007	0.1-50 %
		Organic Matter	IS: 2720 (Part 22) – 1972,Reaff 2006	0.5 – 20 %
		Sodium Exchangeable)	SOP No. CB/CL/SOP/S-5 based on Soil Chemical Analysis by M.L. Jackson ,1967	10-1000 mg/kg
		Potassium(Exchangeable)	SOP No. CB/CL/SOP/S-6 based on Soil Chemical Analysis by M.L. Jackson ,1967	10-1000 mg/kg
		Calcium (Exchangeable)	SOP No CB/SOIL/SOP/07 based on Soil Chemical Analysis by M.L. Jackson ,1967	5 -10,000 mg/kg
		Magnesium (Exchangeable)	SOP No. CB/CL/SOP/S-8 based on Soil Chemical Analysis by M.L. Jackson ,1967 .	5 -5000 mg/kg
		Cation Exchange Capacity (CEC)	SOP No. CB/CL/SOP/S-9 by Calculation only	1-30
		Exchangeable SodiumPercent(ESP)	SOP No. CB/CL/SOP/S-10 by Calculation only	1 - 30 %