Sl	SvCd	Test Package	Source & Purpose	Physical, Sensory & Chemical	Microbial	Sample	₹
1	FCT	Faecal Contamination Test	Deep borewell / municipal / treated / filtered / purified / bottled water; to rule-out faecal contamination of drinking water.		Detection of total coliforms & E. coli in 100ml by MF/ES.	250ml in CSBF / SBTD	600
2	CWF	Ceramic / Candle Water Filter tests	Ceramic & candle filter water; economical test package for drinking water.	Colour, Odour, pH, Turbidity, EC & Fluoride.	Detection of total coliforms & <i>E. coli</i> in 100ml by MF/ES.	500 ml in (CBWS) + 250 ml (CSBF / SBTD)	700
3	HWF	Household Water Filter - tests	Domestic Ultra ± UV filter water; economical test package to check potability.	Colour, Odour, pH Turbidity, EC; Hardness, Calcium, Magnesium, Nitrate, Fluoride & Boron.	Detection of total coliforms & <i>E. coli</i> in 100ml by MF/ES	1 Ltr (CBWS) + 250 ml (SBTD)	1,300
4	HRO	Household RO water purifier	Domestic RO purifier water; economical test package to check potability.	Colour, Odour, pH Turbidity, EC; Hardness, Calcium, Magnesium, Nitrate, Fluoride, Chloride, Boron, Sulfate & Sodium.	Detection of total coliforms & E. coli in 100ml by MF/ES	1 Ltr (CBWS) + 250 ml (SBTD)	1,700
5	BWP	Bottled Water Potability	Bottled / canned water; economical test package to check potability & assess product quality.	Colour, Odour, Turbidity, pH, & EC; Hardness, Calcium, Magnesium, Nitrate, Fluoride, Boron, Chloride, Sulfate, Iron, Manganese & Sodium.		1 Ltr (CBWS) + 250 ml (SBTD) Or Intact water can/bottle.	2000

Sl	SvCd	Test Package	Source & Purpose	Physical, Sensory & Chemical	Microbial	Sample	₹
6	ROP	RO product water Profile	RO Product water; cost- effective test package for various use cases.	Colour, Odour, Turbidity, pH, EC, Total Solids - Dried. Alkalinity, Hardness, Calcium, Magnesium, Nitrate, Fluoride, Boron, Chloride, Sulfate, Iron, Manganese & Sodium.	coliforms & E. coli	1 Ltr (CBWS) + 250 ml (SBTD)	2500
7	BPT	Basic Potability Tests	Municipal / deep borewell water; economical test package to check potability.	Colour, Odour, Turbidity, pH & EC, Total Dissolved Solids (TDS) range estimated from EC (TDSE); Hardness, Calcium, Magnesium, Nitrate, Chloride, Fluoride & Sulfate.	Detection of total coliforms & <i>E. coli</i> in 100ml by MF/ES	1 Ltr (CBWS) + 250 ml (SBTD)	1,400
8	CPT	City-water Potability Tests	Municipal water; cost- effective test package to check for potability, domestic use, & vulnerability assessment.	Colour, Odour, Turbidity, pH, EC & TDSG; Alkalinity, Hardness, Ca, Mg, NH3-N, Nitrite, Nitrate, Chloride, Fluoride, Sulfate & Boron.	Detection of total coliforms & E. coli in 100ml by MF/ES	1 Ltr (CBWS)+ 250 ml (SBTD)	2,100
9	GPT	Borewell water potability tests	Borewell water; cost- effective test package to check for potability, domestic use, & vulnerability assessment.	Colour, Odour, pH Turbidity, EC & TDSG. Alkalinity, Hardness, Ca, Mg; Ammonia- Nitrogen, Nitrite, Nitrate, Fluoride, Chloride, Sulfate, Boron, Iron & Manganese.	Detection of total coliforms & E. coli in 100ml by MF/ES	1 Ltr (CBWS)+ 250 ml (SBTD)	2400
10	GPA	Groundwater for Potability & Agrihorticulture.	Water from borewell in various locations; for Potability & Irrigation water for Agriculture / Horticulture.	Colour, Odour, Turbidity, pH, EC & TDSG. Alkalinity, Hardness, Ca, Mg, NH <sub>3</sub> -N, Nitrite, Nitrate, Fluoride, Boron, Chloride, Sulfate, Phosphate, Iron, Manganese, Sodium, Potassium, & <b>Irrigation Water Ratios</b> : SAR, Residual Sodium Carbonate (RSC) Activity, Mg/Ca Activity Ratio & Cl/SO4 Activity Ratio.	Detection of total coliforms & E. coli in 100ml by MF/ES.	2 x 1 Ltr (CBWS) + 250 ml (SBTD)	3200

Sl	SvCd	Test Package	Source & Purpose	Physical, Sensory & Chemical	Microbial	Sample	₹
11	ROF	RO plant Feed Water	Borewell- / Surface- / Brackish-water; for RO plant design, perf assessment & monitoring feedwater quality.	Colour, Odour, pH & Turbidity, EC & TDSG; Alkalinity, Hardness, Calcium, Magnesium, Fluoride, Chloride, Sulfate, Phosphate, Iron, Manganese, Silica, Oil & Grease.	MPN (Tot coliforms), Detection of FC & E. coli.	1.0L in CBWS + 250ml in CSBF / SBTD	2400
12	LABW	Water for Laboratory Use	Multi-stage purified water for various general laboratory use cases.	pH & EC; Total Solids, Dried (TSD), & Silica.	Standard Plate Count (SPC)	500 ml in CBWM + 250ml in CSBF / SBTD	750
13	SBP	Surface water Basic Profile tests.	Water from surface water bodies like river, reservoir, lake, tank; wetland; for various use cases.	Colour, Odour, Turbidity, pH, EC & TDSG, TSS, Hardness, Calcium, Magnesium, NH <sub>3</sub> -N, Nitrite, Nitrate, Fluoride, Boron, Chloride, Sulfate, Phosphate, Sodium, Potassium; Oil & Grease; SAR & BOD.	MPN (Total coliforms), Detection of FC & E. coli.	2x1 Ltr (CBWS) + 250 ml (CSB / SBTD)	3500
14	BGHW	Bathing Ghat Water	Water from bathing ghats in surface water bodies like river, lake, tank; for ritual / organised bathing, swimming, immersive water sports, etc.	Colour, Odour, Turbidity, pH, EC & BOD.	MPN (Total coliforms), & MPN (Faecal coliforms).	1.0L in CBWS + 250ml in CSBF / SBTD	1100
15	ULKE	Urban Lake Environment tests.	Water from urban water bodies & wetlands; for environmental monitoring.	Colour, Odour, Temperature, Turbidity, pH, EC; NH <sub>3</sub> -N, Nitrite, Nitrate, Total Oxidised Nitrogen [(NO <sub>2</sub> +NO <sub>3</sub> )-N], Phosphate, Dissolved Oxygen by Titration & BOD.	MPN (Total coliforms), & MPN (Faecal coliforms).	2 × 1.0L in CBWS + 250ml in CSBF / SBTD	2000

Sl	SvCd	Test Package	Source & Purpose	Physical, Sensory & Chemical	Microbial	Sample	₹
16	SWUC		River / reservoir water; for designated best use classification, source selection, monitoring etc.	Colour, Odour, Turbidity, pH, EC, Hardness, Calcium, Magnesium, Ammonia-N, Boron, Sodium & Potassium, Sodium Adsorption Ratio, Dissolved Oxygen by Titration & BOD.	MPN (Tot coliforms), Detection of FC & E. coli.	2x1 Ltr (CBWS) + 250 ml (CSB / SBTD)	2100
17	RAINH	Rain Harvest Analysis	Roof-top / surface-runoff rainwater harvest; for treatment planning & utilisation options.	Colour, Odour, Turbidity, pH, EC, TDSG, TSS; Iron, COD & BOD.	MPN (Tot coliforms), Detection of FC & E. coli. Standard Plate Count.	1.0L in CBWS + 250ml in CSBF / SBTD	1800
18	IRGW	Irrigation Water tests	Groundwater / Surface water; for agriculture, horticulture.	Appearance, Turbidity, pH, EC; Alkalinity, Hardness, Ca, Mg, Nitrate, Fluoride, Boron, Sodium, Potassium, Chloride, Sulfate, Phosphate; Sodium Adsorption Ratio (SAR), Residual Sodium Carbonate (RSC) Activity, Mg/Ca Activity Ratio & Cl/SO4 Activity Ratio (CSAR).	None	2 × 1.0L in CBWS	2100
19	HYPON	Water for Hydroponic Cultivation	Rain harvest / RO / Borewell water; for hydroponic cultivation.	Colour, Turbidity, pH, EC; Alkalinity, Hardness, Ca, Mg, NH <sub>3</sub> -N, Nitrite, Nitrate, Total Oxidised Nitrogen [(NO <sub>2</sub> +NO <sub>3</sub> )-N], Sodium, Potassium, Chloride, Sulfate, Phosphate, Boron; Iron & Manganese.	None	2 × 1.0L in CBWS	2300
20	LSFW	Livestock Feed Water	Borewell / tank / pond / canal water; for farm animals, dairy farm & livestock.	Colour, Odour, Turbidity, pH, EC, TDSG; Alkalinity, Hardness, Ca, Mg, NH <sub>3</sub> -N, Nitrite, Nitrate, Total Oxidised Nitrogen [(NO <sub>2</sub> +NO <sub>3</sub> )-N], Fluoride, Chloride, Sulfate.	MPN (Total coliforms), & MPN ( <i>E. coli</i> ).	1.0L in CBWS + 250ml in CSBF / SBTD	2200



S1	SvCd	Test Package	Source & Purpose	Physical, Sensory & Chemical	Microbial	Sample	₹
21	PLFW	Poultry Feed Water	Borewell / municipal water; for poultry feed water system.	Colour, Odour, Turbidity, pH, EC, TDSG; Alkalinity, Hardness, Ca, Mg, NH <sub>3</sub> -N, Nitrite, Nitrate, Total Oxidised Nitrogen [(NO <sub>2</sub> +NO <sub>3</sub> )-N], Fluoride, Boron, Chloride, Sulfate.	MPN (Total coliforms), MPN ( <i>E. coli</i> ) & Aerobic Microbial Count.	1.0L in CBWS + 250ml in CSBF / SBTD	2300
22	FISHP	Fish Pond Water	Pond / Tank / Lake water; for freshwater fishery.	Appearance, Odour, Turbidity, pH, EC, TSS; Alkalinity, Hardness, Ca, NH3-N, Nitrite, Nitrate, Chloride, Phosphate, COD & BOD.	None	1.0L in CBWS	₹2200
23	CMS	Coliforms in live Municipal Supply	Live municipal / metro water supply at consumerend; for voluntary monitoring, community & citizen surveillance of faecal contamination events.	None	Detection of total coliforms & E. coli in 100ml by MF/ES	250 ml SBTD	600
24	PCM	Physico-Chemical Monitoring of municipal supply.	Live municipal / metro water supply at consumer- end; for scoping & monitoring of municipal / metro water quality.	Colour, Odour, Turbidity, pH, EC & TDSG; Alkalinity, Hardness, NH <sub>3</sub> -N, Nitrite, Nitrate, Fluoride & Chloride.	None	1 Ltr (CBWS)	1300
25	BSV	Basic System Vulnerability paired sample tests.	Live municipal / metro supply at consumer-end & paired sample from concerned service reservoir; to study sanitary status of water distribution network.	Colour, Odour, pH, Turbidity & TDSG. Ammonia, Nitrites & Nitrates; Chlorides.	Detection of total coliforms & <i>E. coli</i> in 100ml by MF/ES	1 Ltr (CBWS) + 250ml (SBTD) for each sample - A & B	2,400

Sl	SvCd	Test Package	Source & Purpose	Physical, Sensory & Chemical	Microbial	Sample	₹
26	DRF	Dialysis-medical RO - Feed water	Designated source water for medical / dialysis RO system; to design dialysis/medical RO plant & for operational monitoring.	Colour, Odour, Turbidity, pH, EC & TDSG; Total Chlorine, Hardness, Calcium, Magnesium, Sodium, Potassium, Nitrate, Fluoride, Sulfate, Iron & Silica.	MPN (Total coliforms), Detcn. of FC, & E. coli	1.0L in CBWS + 250ml in CSBF / SBTD	2200
27	DLB	DiaLysis water Basics	Water from dialysis room supply line; for patient safety.	Colour, Odour, Turbidity, pH & EC; Total Chlorine, Hardness, Calcium, Magnesium, Nitrate, Fluoride, Sulfate, Sodium & Potassium.	Total Viable Count (TVC)	1.0L in CBWS + 250ml in CSBF / SBTD	1600
28	DLBET	Dialysis water - Bacterial Endotoxin Test	Water from dialysis machine supply line; to monitor endotoxin level for patient safety.	None	Bacterial Endotoxin (LAL) Assay @ 0.125 EU/ml	14 ml in NPT.	4000
29	PST	Swimming Poolside Tests	Swimming pool & makeup water; for bather safety & operational monitoring.	pH, Water Temperature & Clarity; Free, Combined & Total Chlorine, ORP & Pool Observation Report.	None	Core city; GHMC:	1500; 1800
30	PWC	Pool Water Chemistry	Swimming pool & makeup water; for bather safety & operational monitoring.	Colour, Odour, Turbidity; pH, EC & TDSG; Alkalinity, Hardness, Calcium Hardness, Chloride, Iron & Calcite (Langelier) Saturation Index at 25°C.	None	2x1L (ABWS)	1100
31	PWBM	Pool Water Bacteriological Monitoring	Swimming pool & makeup water; for bather safety & routine monitoring.	None	Standard Plate Count, MPN (Total coliforms), Detcn. of FC, & E. coli.	250ml in SBTP	₹1000

Sl	SvCd	Test Package	Source & Purpose	Physical, Sensory & Chemical	Microbial	Sample	₹
32	WBPJ	Water for Building & construction ProJects.		Colour, Odour, Turbidity, pH, EC, TDSG & TSS; Acidity, Alkalinity, Hardness, Calcium, Magnesium, Ammoniacal-Nitrogen, Nitrite, Nitrate, Chloride, Fluoride; Boron, Sulfate; Iron & Manganese.	in 100ml by MF/ES	1 Ltr (CBWS)+ 250 ml (SBTD)	2200
33	WBC	Water for Building, Construction		Colour, pH, EC, TDSG, TSS, Acidity, Alkalinity, Chloride, Sulphate, Iron & Manganese.	None	1L (CBWS)	1100
34	WSCT	Water Scaling & Corrosivity Tests	Groundwater, Drinking Water, Industrial Water; for assessment of scaling and corrosion potential.	Turbidity, pH, EC & TDSG, Hardness, Alkalinity, Calcium, Nitrate, Chlorides, & Sulfate. Computation of Calcite (Langelier) Saturation Index, Chloride-to-Sulfate Mass Ratio (CSMR) to assess potential to promote galvanic corrosion (PPGC) ∓ Larson-Skold Ratio (LSKI).	Standard Plate Count	1 Ltr (CBWS)+ 250 ml (SBTD)	1600
35	CTW	Cooling Tower Water tests.	Circulating & make-up water in cooling towers; for trouble free operation.	Colour, pH, EC, Turbidity, TDSG, Alkalinity; Hardness & Components, Ca, Mg; Chlorides, Sulfate, Iron, Manganese, Silica, Langelier Saturation Index (aka Calcite Saturation Index) & COD.	Standard Plate Count	2x1L (CBWS) + 250 ml (SBTD)	2100

Sl	SvCd	Test Package	Source & Purpose	Physical, Sensory & Chemical	Microbial	Sample	₹
36	SW11P	Surface Water CPCB 11- Parameter set.	River / reservoir / lake water; for <b>trend</b> monitoring; as per CPCB 2017 guidelines.	Colour, Odour, Temperature, pH, EC; Nitrite, Nitrate, (NO2 + NO3)-N, Dissolved Oxygen by Titration & BOD.	MPN (Total coliforms), & MPN (Faecal coliforms).	2 × 1.0L in CBWS + 250ml in CSBF / SBTD	1600
37	SW15P	Surface Water CPCB 15- Parameter set.	River / reservoir / lake water; for <b>trend</b> monitoring; as per CPCB 2007 guidelines.	Colour, Odour, Temperature, Turbidity, pH, EC; NH3-N, Nitrite, Nitrate, (NO2 + NO3)-N, Chloride, Phosphate, Dissolved Oxygen by Titration, COD & BOD.	MPN (Total coliforms), & MPN (Faecal coliforms).	2 × 1.0L in CBWS + 250ml in CSBF/SBT D	2400
38	SW25P	Surface Water CPCB 25- Parameter set.	River / reservoir water; for <b>baseline</b> , pre-monsoon trend monitoring & <b>trend</b> monitoring of <i>flux-points</i> with known exposure to inflow of massive pollutants, & <i>hotspots</i> where one or more parameters are beyond IS10500 permissible limits; as per CPCB 2017 guidelines.	Colour, Odour, Temperature, Turbidity, pH, EC & & TDSG, Alkalinity, Carbonate, Bicarbonate, Hardness, Ca, Mg, NH3-N, Nitrite, Nitrate, Total Oxidised Nitrogen [(NO2+NO3)-N], Chloride, Fluoride & Sulfate, Phosphate, Boron, Sodium, Potassium, Dissolved Oxygen by Titration, COD & BOD.	coliforms), & MPN (Faecal coliforms).	2 × 1.0L in CBWS + 250ml in CSBF / SBTD	₹3700
39	GW15P	Groundwater CPCB 20-Parameter		Colour, Odour, Temp., Turbidity, pH, EC & TDSG; Nitrite, Nitrate, (NO2 + NO3)-N, Phosphate, Chloride, Fluoride, Boron.	MPN (Total coliforms), & MPN (Faecal coliforms).	1.0L in CBWS + 250ml in CSBF / SBTD	2000

S1	SvCd	Test Package	Source & Purpose	Physical, Sensory & Chemical	Microbial	Sample	₹
40	GW22P	Groundwater CPCB 22-Parameter set.	Borewell water profile; for source selection, project planning & monitoring.	Colour, Odour, Temp., Turbidity, pH, EC & TDSG; Nitrite, Nitrate, (NO2 + NO3)-N, Alkalinity, CO3-2, HCO3-1, Hardness, Calcium, Magnesium, Sodium, Potassium, Chloride, Sulfate, Phosphate, Fluoride & Boron.	MPN (Total coliforms), & MPN (Faecal coliforms).	1.0L in CBWS + 250ml in CSBF / SBTD	2900
41	RJM	Reject Water Minerals	RO Reject water for utilisation potential, RO perf assessment & disposal.	pH, EC & TDSG; Hardness, Calcium, Magnesium, Nitrate, Chloride, Sulfate, Phosphate, Iron, Manganese, Sodium & Boron.	Nil	1 L (CBWS)	1,700
42	SEPJ	Seepage Wastewater	Cellar/pit seepage, wastewater; for identifying probable source & exploring use cases.	Appearance, Odour, Turbidity, pH, EC, NH <sub>3</sub> -N, NO <sub>2</sub> , NO <sub>3</sub> , Chloride, Phosphate, Oil & grease.	MPN (Total coliforms), Detection of FC & E. coli.	1L (CBWS) + 250 ml (SBTD)	1500
43	EFTB	Effluent Tests - Basic	Industrial / trade effluents & wastewater; for treatment efficacy monitoring.	Appearance, Odour, pH, TSS, TDSG, Ammoniacal-Nitrogen, Fluoride, Iron, Manganese, BOD, Total Oil & Grease.	None	1L (CBWS)	2200
44		Post-harvest Prawn/shrimp Processing Effluent	Wastewater from prawn processing facilities; to explore alternate use cases & for environmental compliance.	Appearance, pH, TSS, TDSG), Total Solids (TSS + TDSG), Ammoniacal-Nitrogen by Titration, Total Kjeldahl Nitrogen, Phosphate, Oil & Grease, COD & BOD.	None	2x1L (CBWS)	2200

Sl	SvCd	Test Package	Source & Purpose	Physical, Sensory & Chemical	Microbial	Sample	₹
45	EDPS	Effluent Discharge to Public Sewers	& wastewater discharges to public sewers; for	Appearance, Odour, pH, EC, TSS, Ammoniacal-Nitrogen (NH3T), Fluoride, Iron, Manganese, Biochemical Oxygen Demand (BOD), Total Oil & Grease.	MPN (Total coliforms), & MPN (Faecal coliforms).	2x1L (CBWS)	2000
46	EDWB	Effluent Discharge to inland-surface Water Bodies		Appearance, Odour, pH, TSS, Ammoniacal-Nitrogen (NH3T), Nitrate-N, Total Kjeldahl Nitrogen (TKN), Fluoride, Phosphate, Sulphide, Iron, Manganese, Chemical Oxygen Demand (COD), & Biochemical Oxygen Demand (BOD).	None	2x1L in CBWS	3000
47	STPE	Sewage Treatment Plant Effluent	Treated effluent from sewage treatment plant; for treatment efficacy monitoring, compliance / surveillance.	Appearance, Odour, pH, EC, TSS, Ammoniacal-Nitrogen (NH3T), Nitrate- Nitrogen, Total Kjeldahl Nitrogen (TKN), Fluoride, Phosphate, Chemical Oxygen Demand (COD), Biochemical Oxygen Demand (BOD), Total Oil & Grease.	MPN (Total coliforms), & MPN (Faecal coliforms).	2 x 1L CBWS + 250 ml in SBTW	2800
48	CTEQ	Common Treated Effluent Quality	Wastewater outlets of common effluent treatment plants; for treatment efficacy monitoring, compliance / surveillance.	Appearance, Odour, pH, TSS, Total Solids-Dried (TSD), Ammoniacal-Nitrogen (NH3T), Nitrate-Nitrogen, Total Kjeldahl Nitrogen (TKN), Fluoride, Chloride, Sulfate, Phosphate, Sulphide, Iron, Manganese, Total Chlorine, Chemical Oxygen Demand (COD), Biochemical Oxygen Demand (BOD), Total Oil & Grease.	None	2L in (CBWS)	3500

#### Client-Defined Chemical Quality Test Packages:

The following physical and chemical quality test packages emerged out of client-preference over time, asking for only physical & chemical quality parameters included in various source-purpose packages, for various client-intended use case. Clients choosing these packages are expected to interpret the test results in accordance with requirements and specification of intended uses cases. However, the IHS Laboratory may provide some inputs for interpretation, wherever feasible.

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S1	SvCd	Test Package	Source; Purpose	•	Sample Vol. & Bottle	Service Charge
1	BMT	Basic Mineral Tests	Borewell, municipal supply, tanker water, surface water; to know physical & general chemical quality for client-intended use cases.	Colour, Odour, Turbidity, pH, EC & TDSG; Hardness, Calcium, Magnesium, Nitrate, Fluoride & Chloride.	1.0L in CBWS	₹1000
2	BQT	Basic chemical Quality Tests	Borewell, municipal supply, tanker water, surface water; to know physical & general chemical quality for client-intended use cases.	Colour, Odour, Turbidity, pH & EC; Hardness, Calcium, Magnesium, Nitrate, Fluoride, Chloride & Boron.	1.0L in CBWS	₹1100
3	CQT	City-water chemical Quality Tests	Municipal water; to know physical & general chemical quality for client-intended use cases.	Colour, Odour, pH, Turbidity, EC & TDSG. Alkalinity, Hardness, Ca, Mg, NH3-N, Nitrite, Nitrate, Chloride, Fluoride, Sulfate & Boron.	1.0L in CBWS	₹1800
4	GQT	Groundwater chemical Quality Tests	Domestic borewell water; to know physical & general chemical quality for client-intended use cases.	Colour, Odour, Turbidity, pH, EC & TDSG. Alkalinity, Hardness, Ca, Mg, NH3-N, Nitrite, Nitrate, Fluoride, Boron, Chloride, Sulfate, Iron Manganese.	1.0L in CBWS	₹2100
5	GQA	Groundwater chemical-Quality for Agrihorticulture.	Borewell water from various locations such as, farm houses, agriculture / horticulture farms, recreational parks, social forestry sites; for irrigation.	Colour, Odour, Turbidity, pH, EC & TDSG. Alkalinity, Hardness, Ca, Mg, NH3-N, Nitrite, Nitrate, Fluoride, Boron, Chloride, Sulfate, Phosphate, Iron, Manganese, Sodium, Potassium, & Computed Irrigation Water Ratios: SAR, Residual Sodium Carbonate (RSC) Activity, Mg/Ca Activity Ratio & Cl/SO4 Activity Ratio.	2 × 1.0L in CBWS	₹2900



<sup>&</sup>lt;sup>1</sup>Notes: Test-samples should be accompanied by a water sample collection record (WCR1) giving details regarding place and source of sample, etcetera; and a test requisition letter (TRL1). Both forms can be downloaded: https://www.ihs.org.in/lab/wqt/pdf/IHSLabWCR1.pdf and https://www.ihs.org.in/lab/wqt/pdf/IHSLabTRL1.pdf.

6	SQT	Surface-water	Water from surface water bodies like river,	Colour, Odour, Turbidity, pH, EC & TDSG, TSS,	2 X 1.0L in	₹3000
		basic profile	reservoir, lake, tank; wetland; general	Hardness, Ca, Mg, NH3-N, Nitrite, Nitrate, Fluoride,	CBWS	
		chemical-Quality	chemical quality; for various use cases.	Boron, Chloride, Sulfate, Phosphate, Sodium,		
		Tests		Potassium; Oil & Grease, BOD; SAR.		
7	SOD	Surface water	Water from surface water bodies like river,	Dissolved Oxygen (DO), Chemical Oxygen Demand	300ml in	₹1000
		Oxygen Demand	reservoir, lake, tank; wetland; oxygen	(COD) & Biochemical Oxygen Demand (BOD).	BODB + 1.0L	
			demand tests for various use cases.		in CBWS	

# Chemical Lab: Single Or Limited Parameter Water Quality Tests

Sl	SvCd	Test Service	Parameter(s)	Sample	₹
1	APP	Appearance	Apparent colour of unfiltered sample.	0.5L in CBWM	₹40
2	ATC	Appearance & True Colour	Appearance of unfiltered sample & True colour of filtered sample in PCU.	0.5L in CBWM	₹100
3	ODR	Odour	Smell, observed by lab personnel.	0.5L in CBWM	₹50
4	NTU	Turbidity	Turbidity	0.5L in CBWM	₹100
5	PHV	pH	pH Value	0.5L in CBWM	₹60
6	ECS	Eelectrical Conductivity	Electrical Conductivity (Salinity) aka Specific Conductance as μS/cm.	0.5L in CBWM	₹60
7	ECH	EC & pH	Electrical Conductivity (Salinity) & pH Value	0.5L in CBWM	₹100
8	TDSE	TDS range Estimate	Electrical conductivity (EC) & EC-based estimate of TDS-range.	0.5L in CBWM	₹75
9	TDSG	TDS Quantitative, mg/L	Quantitative measurement of total dissolved solids (TDS) by gravimetry as mg/L.	0.5L in CBWM	₹200
10	TSS	TSS mg/L	Total Suspended Solids as mg/L.	0.5L in CBWM	₹200
11	TSC	Total Solids - Calculated from components.	(TSS + TDSG) mg/L.	0.5L in CBWM	₹400
12	TSD	Total Solids - Dried	Total solids from water dried at 104±1°C.	0.5L in CBWM	₹350
13	FRCV	Free Residual Chlorine by Visual comparison.	Free residual chlorine using DPD reagent & visual comparision with reference DPD colour chart (FRCV).	Onsite charge+	₹40
14	FACL	Free Available Chlorine by Colorimeter	Free residual chlorine by chlorine colorimeter and instrument grade DPD.	Onsite charge+	₹250
15	TCL	Total Chlorine by Colorimeter	Total chlorine by chlorine colorimeter and instrument grade DPD tablet.	Onsite charge+	₹250
16	CLM	Chloramines (Combined Chlorine)	Total & free chlorine & chloramines (combined chlorine) using chlorine colorimeter & instrument grade DPD tablets.	Onsite charge+	₹500



## Chemical Lab: Single Or Limited Parameter Water Quality Tests

Sl	SvCd	Test Service	Parameter(s)	Sample	₹
17	ACD	Acidity	Acidity	0.5L in CBWM	₹250
18	PALK	P Alkalinity as CaCO3 as mg/L	Phenolphthalein Alkalinity as CaCO3 component of water with pH ≥8.3.	0.5L in CBWM	₹50
19	MALK	M -Alkalinity as CaCO3 as mg/L. Since water	Methyl orange alkalinity (MAlk) as CaCO3. When PAlk=0, MAlk equals Total Alkalinity.	0.5L in CBWM	₹200
20	ALK	Alkalinity by type, as CaCO3 mg/L	L P Alkalinity (PAlk), M -Alkalinity, & Total Alkalinity (TAlk) as CaCO3. A single figure reported as Alkalinity means, PAlk=0 and Alkalinity = MAlk = TAlk.		₹250
21	CAlk	Carbonate Alkalinity as CaCO3 mg/L.	Calculated from PAlk & TAlk. Buffers pH level in water, prevents corrosion and precipitates toxic metals from water.	Topup ALK	₹50
22	CO3Ion	Carbonate Ion as CO3-2 meq/L	Carbonate Ion (CO3-2) calculated from CAlk, as meq/L, mmol/L Or mg/L.	Topup ALK	₹100
23	HCO3Alk	Bicarbonate Alkalinity as CaCO3 mg/L.	Calculated from PAlk & TAlk. Helps neutralize acids and maintain stable pH. Dominant buffering agent in most freshwaters.	Topup ALK	₹50
24	HCO3Ion	Bicarbonate Ion (HCO3-1).	Bicarbonate Ion (HCO3-1) calculated from HCO3Alk, as meq/L, mmol/L Or mg/L.	Topup ALK	₹100
25	OHAlk	Hydroxide Alkalinity as CaCO3 mg/L	Calculated from PAlk & TAlk. Indicates, the water may have caustic alkalis such as NaOH & KOH and/or other hydroxides such as LiOH, CsOH.	Topup ALK	₹50
26	TWH	Total Hardness as CaCO3	Total water hardness as CaCO3.	0.5L in CBWM	₹250
27	СОЗН	Carbonate Hardness as CaCO3 mg/L (aka Temporary Hardness)	e Hardness as CaCO3 Carbonate hardness is mostly due bicarbonate salts like Ca(HCO3)2 & Mg(HCO3)2. Known as		₹50
28	NCH	Non-carbonate Hardness as CaCO3 mg/L (aka Permanent Hardness).	Noncarbonated hardness is mostly due to salts like CaCl2, MgCl2, CaSO4 & MgSO4. Known as permanent hardness because these salts cannot be removed by boiling of water or adding lime to water. It is the total hardness in excess of the alkalinity.	Topup ALK & TWH	₹50
29	САН	Calcium Hardness as CaCO3	Calcium Hardness as CaCO3. Calcium hardness is related to both temporary {Ca(HCO3)2] and permanent [CaCl2 / CaSO4] hardness of water.	0.5L in CBWM	₹250
30	CLC	Calcium as Ca2+ mg/L.	Calcium as Ca2+ mg/L.	0.5L in CBWM	₹250
31	MGC	Magnesium Calculation	Calculation of Mg as Mg2+ from Hardness & Calcium.	Topup TWH & CAH / CLC	₹100
32	MGM	Magnesium as Mg2+	Magnesium as Mg2+ (Standalone parameter).	0.5L in CBWM	₹600
33	THM	TWH as CaCO3, Ca2+ & Mg2+	Total water hardness, Calcium as Ca2+ & Magnesium as Mg2+.	0.5L in CBWM	₹600



# Chemical Lab: Single Or Limited Parameter Water Quality Tests

S1	SvCd	Test Service	Parameter(s)	Sample	₹
34	THC	TWH & Components.	Total Hardness, Carbonate Hardness aka Temporary Hardness (CO3H) & Noncarbonate Hardness aka Permanent Hardness (NCH).	0.5L in CBWM	₹600
35	НСС	Hardness Components - Calculation	Calculation of Carbonate (Temporary) Hardness (CO3H) & Noncarbonate (Permanent) Hardness (NCH) Components from Total Hardness & Alkalinity.	Topup TWH & ALK	₹100
36	NH3T	Ammonia by Titration	Ammoniacal Nitrogen NH3-N by Titrimetric method.	0.5L in CBWM	₹500
37	NH3P	Ammonia by Phenate method	Ammoniacal Nitrogen NH3-N by Phenate method.	0.5L in CBWM	₹400
38	TKN	Total Kjeldahl Nitrogen	Total Kjeldahl Nitrogen	1L in CBWS	₹850
39	NO2	Nitrite mg/L	Nitrite as NO2 mg/L.	0.5L in CBWM	₹300
40	NO3	Nitrate mg/L	Nitrate as NO3 mg/L.	0.5L in CBWM	₹300
41	TON	Total Oxidised Nitrogen (NO2+NO3)-N.	Calculation of TON as (NO2 + NO3)-N, mg/L from test results for Nitrite as NO2 Nitrate as NO3 mg/L.	0.5L in CBWM	₹100
42	ANN	NH3, NO2 & NO3	Ammoniacal-N by Phenate method, Nitrite as NO2 and Nitrate as NO3.	0.5L in CBWM	₹1000
	TNN	Total Nitrogen	$TNN = [TKN + (NO2 + NO3)-N mg/L] = [TKN + (NO2 \times 0.30446) + (NO3 \times 0.2259)] mg/L.$	2 × 1L in CBWS	₹1450
43	CLD	Chloride	Chloride - Argentometric Method.	0.5L in CBWM	₹250
44	FLDQ	Fluoride - Quantitative	Quantitative spectrophotometry for Fluorides.	0.5L in CBWM	₹350
45	IRN	Iron	Quantitative spectrophotometry for Iron (Fe).	0.5L in CBWM	₹300
46	MNG	Manganese	Quantitative spectrophotometry for Manganese (Mn).	0.5L in CBWM	₹300
47	IMN	Iron & Manganese	Quantitative spectrophotometry for Iron & Manganese.	0.5L in CBWM	₹500
48	BRN	Boron	Boron in water.	0.5L in CBWM	₹300
49	PO4	Phosphate	Phosphate.	0.5L in CBWM	₹400
50	SO4	Sulfate	Sulfate.	0.5L in CBWM	₹300
51	S2D	Sulfide	Sulfide as Hydrogen Sulfide (H2S).	0.5L in CBWM	₹500
52	SIW	Silica in Water	Silica in Water.	0.5L in CBWM	₹400
53	NAT	Sodium	Sodium (Na).	0.5L in CBWM	₹300
54	KAL	Potassium	Potassium (K).	0.5L in CBWM	₹300
55	NAK	Sodium & Potassium	Sodium & Potassium.	0.5L in CBWM	₹500



### Chemical Lab: Single Or Limited Parameter Water Quality Tests

Sl	SvCd	Test Service	Parameter(s)	Sample	₹
56	CSI	Calcite (CaCO3) Saturation Index aka Langelier Saturation Index (LSI).	Computation of CSI / LSI = (pH - pHs), using test results for pH, Ca, Alkalinity & TDSG to compute pHs at water temperature = 25°C (default) or as per client's choice from available temperature options: 0°C + 5°C increments till 90°C.	Topup PHV, Ca, Alk & TDSG.	₹300
57	LSKI	Larson-Skold Index aka Larson Ratio, meq.	Computation of LSKI using test results for Chloride, Sulfate, Alkalinity; to characterise corrosion potential.	Topup CLD, SO4 & ALk	₹300
58	CSMR	Chloride to Sulfate Mass Ratio (CSMR), mg.	Computation of Cl/SO4 Mass Ratio (CSMR) using test results for Chloride & Sulfate; to assess in conjuction with test result for Alkalinity, the potential to promote galvanic corrosion (PPGC).	Topup CLD, SO4 & ALK	₹100
59	SAR	Sodium Adsorption Ratio	Computation of Sodium Adsorption Ratio, meq, from test results for Na+, Ca2+ and Mg2+; to assess the sodium hazard of irrigation water.	0.5L in CBWM	₹300
60	RSC	Residual Sodium Carbonate, meq/L.	Computation of RSC, meq/L, to assess alkalinity hazard of irrigation water.	Topup ALK & CLC & MGM	₹200
61	CaMgR	Calcium Magnesium (Ca/Mg) activity Ratio, meq.	Computation of CaMgR; to assess magnesium problem in irrigation water.	Topup CLC & MGM	₹100
62	CSAR	Chloride-to-Sulfate Activity Ratio, meq.	Computation of CSAR; to assess salinity characteristics of irrigation water.	Topup CLD & SO4	₹100
63	DOT	Dissolved O2 by Titration	Dissolved oxygen by titration (Winkler) method.	300ml in BODB	₹250
64	COD	COD	Chemical Oxygen Demand.	1L in CBWS	₹600
65	BOD	BOD	Biochemical Oxygen Demand.	1L in CBWS	₹900
66	TOG	Total Oil & Grease	Total Oil & Grease.	0.5L in CBWM	₹400
67	SWTMP	Surface Water Temperature	Onsite measurement of temperature in surface water bodies such as lakes & reservoirs.	Onsite charge+	₹150
68	BWELT	Borewell Water Temperature	Onsite measurement of borewell water temperature.	Onsite charge+	₹100
69	POOLT	Pool Temperature	Onsite measurement of swimming pool water temperature.	Onsite charge+	₹100
70	SBTLT	Sample Bottle Temperature	External temperature of water sample bottle at the time of receipt in laboratory.	Recvd Sample Bottle	₹50

Note: Reports will be delivered by email or WhatsApp. Printed copies can be collected from the IHS Laboratory - Front Office. For delivery by courier service, please pay courier charges in addition to test service charge.

## Microbiology Lab (BioLab): Single Or Limited Parameter Water Quality Tests

Sl	SvCd	Test Service	Parameter(s) / Test Method	Sample Vol. & Bottle	Service Charge
1	SPC	Standard Plate Count	Nutrient Agar & 24h incubation at 37°C (IS 1622 - 1981, RA 2019, cl 3.2).	250ml in CSB / SBT	₹350
2	AMC	Aerobic Microbial Count	Plate Count Agar (PCA) & 24h incubation at 37°C (IS 5402 - 2012 RA 2018 / ISO 4833 - 2003 rw IS 14543 - 2024).	250ml in CSB / SBT	₹350
3	HPC	Heterotrophic Plate Count	Plate Count Agar (PCA) & 72h incubation at 30°C (IS 5402 - 2012 RA 2018 / ISO 4833 - 2003).	250ml in CSB / SBT	₹500
4	CPC	Cold Plate Count	Plate Count Agar (PCA) & 72h incubation at 21±1°C (IS 5402 - 2012 RA 2018 / ISO 2003 rw IS 14543 - 2024).	250ml in CSB / SBT	₹550
5	TVC	Total Viable Count	Tryptic Soy Agar (TSA) & 48h incubation at 36±1°C (IS 17646 Part(3) - 2021 / ISO 23500-3, 2019).	250ml in CSB / SBT	₹450
6	EC100	Detcn. of TC & E. coli in 100 ml by MF/ES.	Detection of Total coliforms & E. coli in 100 ml sample; by membrane filtration (IS 15185, 2016 RA 2021 / ISO 9308-1, 2014) OR Enzyme substrate method (APHA Standard Methods 24th Ed. 9223 B. Enzyme Substrate Test, 4.a Presence-absence procedure). Chosen method will be specified in report.	250ml in CSB / SBT	₹600
7	EC100ES	Detcn. of TC & E. coli in 100 ml by ESA.	Enzyme substrate autoanalysis (ESA) for detection of total coliforms (TC) & E. coli (APHA Standard Methods 24th Ed. 9223 B. Enzyme Substrate Test, 4.a Presence-absence procedure).	250ml in CSB / SBT	₹600
8	EPNEC	EPN of TC & E. coli.	Multi-tube enzyme substrate based probable number of of total coliforms (TC) & E. coli (APHA Standard Methods 24th Ed. 9223 B. Enzyme Substrate Test, 4.b Multiple-tube procedure).	250ml in CSB / SBT	₹700
9	MPNTC	MPN (Total coliforms)	Most probable number (Total coliforms) by multi-tube dilution & fermentation method (IS 1622 - 1981, RA2019, cl 3.3.1).	250ml in CSB / SBT	₹500
10	FCDMT	FC detcn. by multi-tube ferment.	Detection of Faecal (Thermotolerant) coliforms by multi-tube dilution & fermentation (IS 1622 - 1981, RA2019, cl 3.3.1.2b(i) & 3.3.3).	250ml in CSB / SBT	₹600
11	ECDMT	E. coli detcn. by multi-tube ferment.	Detection of E. coli by multi-tube dilution & fermentation (IS 1622 - 1981,RA2019, cl 3.3.4).	250ml in CSB / SBT	₹700
12	BCT	Basic Coliform Tests	MPN (Total coliforms), Detection of Faecal coliforms (FCDMT) & E. coli (ECDMT) by multitube dilution & fermentation.	250ml in CSB / SBT	₹700
13	MPNFC	MPN (Faecal coliforms) by multitube ferment.	Most Probable Number of Faecal (Thermotolerant) by multi-tube dilution & fermentation (IS 1622 - 1981,RA2019, cl 3.3.3.2).	250ml in CSB / SBT	₹900
14	MPNEC	MPN (E. coli) by multi-tube ferment.	Most Probable Number of (E. coli) by multi-tube dilution & fermentation (IS 1622 - 1981, RA 2019, cl 3.3.4).	250ml in CSB / SBT	₹900



15		1	1 / 2	250ml in CSB / SBT	₹600
16	YMDMF	Yeast & Mould detcn. by membrane filtration.	Detection of Yeast & Mould by membrane filtration (IS 5403, 1999 RA 2018 / ISO 7954).	250ml in CSB / SBT	₹700
17	SLDMF	Salmonella detcn. by membrane filtration.	Detection of Salmonella by membrane filtration (IS 15187, 2016 RA 2021 / ISO 19250, 2010).	250ml in CSB / SBT	₹1,000
18	PADMF	P. aeruginosa detcn. by membrane filtration.	Detection of Pseudomonas aeruginosa by membrane filtration (IS 13428, 2024).	250ml in CSB / SBT	₹900
19	SADMF	S. aureus detection by membrane filtration.	Detection of Staphylococcus aureus by membrane filtration (IS 5887 (Part 2), 1976 RA 2022).	250ml in CSB / SBT	₹800

#### Water Sample-Collection Bottles (Prepared Bottles for Collection of Water Samples)

Sample collection bottles can be picked up from the IHS Laboratory Front-Office during and outside office hours. A few of the regularly needed sample collection bottles such as CBWS to collect sample for chemical analysis and SBT to collect samples for bacteriological analysis are kept at the IHS Lab Front-Office and the Security Guards are trained to deliver these to needy clients visiting outside office hours. Please pay the refundable bottle deposit money to the Security Guard, and leave your name & contact number for adjustment of bottle deposit.

If you call us in advance, a separate package of sample collection bottles will be kept with the Security Guard on duty for you to collect outside office hrs.

Sl	SBCd	Bottle Name	Details	Volume	₹
1	CSBF	Clean Sterile Bottle for Freshwater	Clean sterile rigid polypropylene bottle without any additive for Freshwater / purified water known to be free of chlorine.	250ml	₹50
2	SBTD	Sterile Bottle with Thiosulfate for Drinking / Fresh water.	Sterile rigid polypropylene bottle with sodium thiosulfate to neutralise upto 5ppm chlorine, for microbial analysis of chlorinated drinking water. Can also be used for unchlorinated fresh water.	250ml	₹50
3	SBTP	Sterile Bottle with Thiosulfate for swimming Pool water.	Sterile polypropylene bottle with sodium thiosulfate to neutralise upto 10ppm chlorine, for microbial analysis of swimming pool water.	250ml	₹50
4	SBTW	Sterile Bottle with Thiosulfate for Wastewater.	Sterile polypropylene bottle with sodium thiosulfate to neutralise upto 15ppm chlorine, for microbial analysis of wastewater.	250ml	₹50
5	NPT	Non Pyrogenic Tube	Non-pyrogenic glass tube to collect water sample for bacterial endotoxin test (BET) i.e. LAL assay.	14ml	₹10
6	CBWS	Clear Bottle for Water sample - standard volume, 1000ml (1L)	Clean and dry clear polypropylene bottle to collect water sample for physical and chemical analysis, 1 Litre.	1.0L	₹100
7	CBWM	Clear Bottle for Water sample - Medium volume, 500 ml	Clean and dry clear polypropylene bottle to collect water sample for physical and chemical analysis, 0.5 Litre.	0.5L	₹100
8	ABWS	Amber Bottle for Water sample - standard volume, 1L	Amber colour, clean & dry polypropylene bottle to collect water sample for chemical analysis, 1000 ml (1L).	1.0L	₹150
9	S2DB	100ml Bottle with Sulfide Fixing Reagents.	100-ml graduated screw cap reagent bottle containing 0.20 ml 2M zinc acetate & 0.15 ml 6N NaOH.	100ml	₹400
10	ES2DB	100ml Bottle with Extra Sulfide Fixing Reagents.	100-ml graduated screw cap reagent bottle containing 0.40 ml 2M zinc acetate & 0.15 ml 6N NaOH for collection of high-sulfide water sample.	100ml	₹400
11	DOSK	BOD Bottle + DO Fixing Reagents.	Stoppered glass bottle and fixing reagents to collect water sample for testing of dissolved oxygen in laboratory. See DO Sample Collection Guide.*	300ml	₹500

Notes: ! Bottle deposit (BD) will be adjusted towards test service charges. In case of shortfall in return of reusable ice packs, fixing reagent kits, etc provided with the sample collection bottle, there would be prorata reduction in adjustment of bottle deposit. No separate charge for bottles, if concerned test charges are paid in advance while collecting the bottle. However, additional charges will be collected, in case of shortfall in return of reusable ice packs, fixing reagent kits, etc.

<sup>\*</sup> The same bottle is used in laboratory for BOD testing, hence the name. However, we are using this airtight bottle to prevent exchange of atmospheric oxygen with the sample, during transport to laboratory. Bottle with fixed sample and unused fixing reagents must be returned to laboratory for adjustment of bottle deposit. In case of shortfall, prorata reduction in adjustment of bottle deposit.



## Onsite Sample Collection Service:

We provide onsite sample collection service in Greater Hyderabad Municipal Corporation (GHMC) area. A trained Water Quality Investigator (WQI) or a Water Safety Surveyor (WSS) will visit your place, collect sample and gather relevant information about the source, intermediate storage if any, and your concerns.

Please note that test reports will be delivered by email or WhatsApp. Hence, please ensure to write your email address and/or WhatsApp number, legibly on the Test Requisition letter. You may also visit the IHS Laboratory and collect printed reports from the Front Office. If you would like to receive the report by any courier service, please pay additional cost of courier charges.

Sl	SvCd	Collection Service Name	Details	1st Sample		2 <sup>nd</sup> & 3 <sup>rd</sup>
						Samples
1	CSC	Core city Sample Collection	Collection of drinking water / borewell water / swimming pool	₹300	₹100	₹100
			samples Within Hyderabad District Limits.			
2	GSC	Greater Hyderabad Sample Collection	Collection of drinking water / borewell / swimming pool water	₹500	₹100	₹100
			samples outside Hyderabad District but within GHMC Limits.			
3	DLSC	DiaLysis water Sample Collection	Collection of dialysis water samples.	CC: ₹500;	₹200	₹200
				GH: ₹700		
4	DOSC	DO - water sample Collection	Collection & fixing of dissolved oxygen samples.	CC: ₹400	₹200	₹200
				GH: ₹600		
5	S2DC	Sulfide - water sample Collection	Collection & fixing of sulfide in water samples.	CC: ₹400	₹200	₹200
				GH: ₹600		
6	OSC	Other Area Sample Collection	Outside GHMC limits	Special Esti	mate	

For 4 or more samples from the same site, each block of up to 3 samples is treated as separate for computation of sample collection charge. Swimming pool samples for PWC and PWB ordered along with Poolside test (PST) are treated as 2<sup>nd</sup> and 3<sup>rd</sup> sample.

Note: Reports will be delivered by email or WhatsApp. Printed copies can be collected from the IHS Laboratory - Front Office. For delivery by courier service, please pay courier charges in addition to test service charge.

Date: 01-03-2025

Director

