Laboratory	**Bangalore Test House, D-36 & D-98, 4th Main, KSSIDC Industrial Estate, Rajajinagar, Bangalore, Karnataka**		
Accreditation Standard	**ISO/IEC 17025: 2005**		
Discipline	**Chemical Testing**	**Issue Date**	**19.12.2014**
Certificate Number	**T-0222**	**Valid Until**	**18.12.2016**
Last Amended on	**-**	**Page**	**1 of 36**

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
AT LABORATORY				
I.	**FOOD AND AGRICULTURAL PRODUCTS**			
1.	**Coffee Powder/Soluble Coffee(Instant) Powder/Soluble Coffee-Chicory Powder**	Moisture	Annex B of IS 2791: 1992	(0.5 to 20) g per 100 g
		Total Ash (on dry basis)	Annex C of IS 2791: 1992	(0.2 to 15) g per 100 g
		Caffeine content (on dry basis)	Annex D of IS 2791: 1992	(0.5 to 5.0) g per 100 g
		Solubility in Boiling Water	Annex E of IS 2791-1992	Qualitative
		Solubility in Cold Water at 16 ± 2^0C	Annex E of IS 2791: 1992	Qualitative
2.	**Roasted Coffee-Chicory Powder/Roasted Coffee Powder**	Moisture	Annex E of IS 3077: 1992	(0.5 to 20) g per 100 g
		Total Ash	Annex F of IS 3077: 1992	(0.2 to 15) g per 100 g
		Acid Insoluble ash	Annex G of IS 3077: 1992	(0.01 to 2) g per 100 g
		Water Soluble Matter	Annex K of IS 3077: 1992	(0.5 to 80) g per 100 g
		Caffeine	Annex L of IS 3077: 1992	(0.5 to 5) g per 100 g
3.	**Tea Powder/Dust**	Moisture	IS 13853: 1994	(0.1 to 20) g per 100 g
		Total Ash	IS 13853: 1994	(0.01 to 20) g per 100 g
		Water Soluble Ash	IS 13855: 1993	(0.1 to 70) g per 100 g
		Ash Insoluble in dilute HCl	IS 13857: 1993	(0.05 to 2) g per 100 g
		Water Extract	IS 13862: 1999	(2 to 5) g per 100 g
		Alkalinity of Soluble Ash	IS 13856: 1993	(0.1 to 5) g per 100 g
		Crude Fibre	IS 10226 (Part I): 1982	(0.2 to 30) g per 100 g
4.	**Milk Powder/ Skimmed Milk Powder/Milk cereal weaning food/Processed cereal weaning foods/Milk cereal based comp-limentary food**	Total Solids	IS 1165: 2002	(90 to 99.5) g per100 g
		Fat	IS 11721: 2005	(0.2 to 35) g per100 g
		Total ash (on dry basis)	Appendix A of IS 1165: 2002	(0.1 to 1) g per100 g
		Titratable acidity as Lactic Acid	IS 1165: 2002	(0.2 to 2) g per100 g
		Moisture	IS 16072: 2012	(1 to 10) g per 100 g

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Total Carbohydrate	IS 1656: 2007 Annex C	(40 to 80) g per 100 g
		Ash insoluble in HCl	IS 14433 (Part 1): 1997	(0.03 to 2) g per 100 g
		Crude Fibre	IS 10226 (Part I): 1982	(0.1 to 10) g per 100 g
		Protein	IS 7219: 1973	(0.1 to 90) g per 100 g
5.	**Ice cream /Kulfi/Softies/ Lollies/Frozen Dessert**	Total Solids	Appendix B of IS 2802: 1964 (RA 1996)	(10 to 60)g per 100 g
		Fat	Appendix C of IS 2802: 1964 (RA 1996)	(0.1 to 30)g per 100 g
		Acidity As lactic acid	Appendix D of IS 2802: 1964 (RA 1996)	(0.03 to 1) g per 100 g
		Sucrose	Appendix E of IS 2802: 1964 (RA 1996)	(0.5 to 20) g per 100 g
		Protein	IS 7219: 1973	(1 to 50) g per 100 g
6.	**Sugar & Sugar Products**	Sucrose	IS 15279: 2003 Cl. 12	(10 to 100) g per 100g
		Colour (ICUMSA units)	IS 15279: 2003 Cl. 8	5 to 65
		Sulphated ash	IS 15279: 2003 Cl. 10	(0.1 to 2) g per100 g
		Crystal Size	Annex B of IS 5975: 2003	(90 to 99.9) g per100 g
		Sulphur dioxide	IS 15279: 2003 Cl. 13	(1 to 30) mg per kg
		Moisture	IS 15279: 2003 Cl. 4	(0.01 to 5) g per100 g
7.	**Confectioneries (Toffees, Hard boiled confectionaries)**	Ash Sulphated	IS 6287: 1985	(0.1 to 2) g per 100 g
		Acid insoluble ash	**IS 6287:** 1985	(0.005 to 2) g per 100 g
8.	**Biscuits/Cookies/ Crackers/Wafers/ snacks of similar category**	Moisture	Annex C of IS 1011: 2002	(0.1 to 10) g per 100 g
		Acid insoluble ash	Annex D of IS 1011: 2002	(0.01 to 0.5) g per 100 g
		Acidity of extracted fat As oleic acid	Annex E of IS 1011: 2002	(0.2 to 2) g per 100 g

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
9.	**Honey**	Specific gravity	Annex A of IS 4941: 1994	1.1 to 1.5
		Moisture	Annex B of IS 4941: 1994	(13 to 25) g per 100 g
		Total reducing sugar	Annex C of IS 4941: 1994	(25 to 85) g per100 g
		Ash	Annex D of IS 4941: 1994	(0.02 to 2) g per100 g
		Acidity	Annex E of IS 4941: 1994	(0.01 to 1) g per100 g
		Sucrose	Annex C of IS 4941: 1994	(0.3 to 30) g per100 g
		Fructose-Glucose Ratio	Annex A of IS 4941: 1994	0.5 to 1.5
		Hydroxyl methyl furfural	Appendix F of IS 4941: 1994	(10 to 400) mg/kg
10.	**Cereal & Cereal Products**	Moisture	Appendix A of IS 1009: 1979 (RA 2005)	(0.1 to 15) g per 100 g
		Total ash (on dry basis)	Appendix B of IS 1009: 1979 (RA 2005)	(0.1 to 2) g per 100 g
		Acid insoluble ash	Appendix C of IS 1009: 1979 (RA 2005)	(0.1 to 2) g per 100 g
		Gluten	Appendix D of IS 1009: 1979 (RA 2005)	(1 to 20) g per 100 g
		Alcoholic acidity as H_2SO_4	Appendix E of IS 1009: 1979 (RA 2005)	(0.01 to 2) g per 100 g
		Granularity	Appendix F of IS 1009: 1979 (RA 2005)	Qualitative
		Protein (on dry basis)	IS 7219: 1973	(1.0 to 20.0) g per 100 g
		Uric acid	IS 4333 (Part V): 1970	(1 to 40) mg per kg
11.	**Iodised Salt**	Water insoluble matter	Annex C of IS 7224: 2006	(0.05 to 5) g per 100 g
		Chloride content (as NaCl)	Annex D of IS 7224: 2006	(90 to 99.9) g per 100 g

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Matter soluble in water other than NaCl	Annex E of IS 7224: 2006	(0.1 to 5) g per 100 g
		Iodine content	Annex H of IS 7224: 2006	(10 to 100) mg per kg
12.	**Edible Common Salt**	Water insoluble matter	A-4 of IS 253: 1985	(0.01 to 5) g per100 g
		Matter soluble in Water other than Sodium Chloride	A-7 of IS 253: 1985	(0.01 to 5) g per100 g
		Chloride (as NaCl)	Appendix A-5 of IS 253: 1985	(90.0 to 99.9) g per 100 g
		Acid insoluble matter	Appendix A-6 of IS 253: 1985	(0.05 to 3) g per 100 g
		Calcium	Appendix A-8 of IS 253: 1985	(0.01 to 0.1) g per 100 g
		Magnesium	Appendix A-8 of IS 253: 1985	(0.01 to 0.1) g per 100 g
		Sulphate	Appendix A-9 of IS 253: 1985	(0.05 to 1) g per 100 g
		Alkalinity	Appendix A-10 of IS 253: 1985	(0.1 to 0.2) g per100 g
		Ferrocyanide	IS 253: 1985	Qualitative (Present / Absent)
		Moisture	Clause B – 5.1 of IS 253: 1985	(0.05 to 6.0) g per100 g
13.	**Milk & Milk Products (Butter, Milk sweets, etc.,) Cheese, Paneer**	Moisture	Cl. 4 of IS 3507: 1966	(1 to 30) g per 100g
		Fat	Cl. 4 of IS 3507: 1966	(1 to 90) g per 100g
		Moisture	Appendix A of IS 2785: 1979	(1 to 80) g per 100g
		Fat	Appendix B of IS 2785: 1979	(1 to 80) g per 100g
14.	**Spices & Condiments (Whole & Ground) (Chilli Powder / Dhaniya Powder / Jeera Powder / Pepper Powder /turmeric/Masala powder etc.)**	Moisture	Cl. 9 of IS 1797: 1985	(1 to 20) g per 100 g
		Total Ash (on dry basis)	Cl. 6 of IS 1797: 1985	(0.5 to 10) g per 100 g
		Acid insoluble ash	Cl. 8 of IS 1797: 1985	(0.1 to 1.0) g per 100 g
		Crude Fibre	Cl.13 of IS 1797: 1985	(0.5 to 30) g per 100 g
		Non-Volatile Ether Extract	Cl. 14 of IS 1797: 1985	(1 to 25) g per 100 g
		Volatile Oil	Cl. 15 of IS 1797: 1985	(0.25 to 25) g per 100 g
		Salt	Cl. 16 of IS 1797: 1985	(0.5 to 10) g per 100 g
		Insect Damage	Cl. 4.2 of IS 3576: 1994	(0.1 to 5) g per 100 g

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Extraneous matter	Cl. 4 of IS 1797: 1985	(0.005 to 2) g per 100 g
		Test for presence of Chromate	Appendix A of IS 3576: 1994	Qualitative
		Starch	Cl. 9 of IS 4706 (Part II): 1978	(3 to 60) g per100 g
15.	**Ketchup / Sauce/Puree**	Total Soluble Solids	Appendix B of IS 3882: 1966	(10 to 50) g per 100 g
		Specific gravity	Cl. 9 of IS 2860-1964 (RA 1995)	0.8 to 1.8
		Acidity as citric acid	IS 2860: 1964 (RA 1995)	(0.5 to 2) g per 100 g
16.	**Processed Fruits and Vegetables**	pH value	IS 2860: 1964	1 to 8
		Sodium Chloride	IS 2860: 1964 (RA 1995)	(0.5 to 4) g per 100 g
		Calcium	IS 2860: 1964 (RA 1995)	(0.01 to 10) g per 100 g
		Acidity	IS 2860: 1964 (RA 1995)	(0.5 to 2) g per 100 g
17.	**Fishmeal /Animal Feed**	Moisture	IS 7874 (Part 1): 1975 (RA 1990)	(0.1 to 20) g per 100 g
		Crude Protein (on dry basis)	IS 7874 (Part 1): 1975 (RA 1990)	(0.3 to 60) g per 100 g
		Crude Fat (on dry basis)	IS 7874 (Part 1): 1975 (RA 1990)	(0.2 to 30) g per100 g
		Acid insoluble ash (on dry basis)	IS 7874 (Part 1): 1975 (RA 1990)	(0.01 to 1.0) g per100 g
		Chlorine as NaCl	IS 7874 (Part 2): 1975 (RA 1990)	(0.1 to 10) g per100 g
		Total Ash (on dry basis)	IS 7874 (Part 1): 1975 (RA 1990)	(0.1 to 30) g per100 g
		Sand Silica	IS 7874 (Part 1): 1975 (RA 1990)	(0.01 to 30) g per100 g
		Crude Fibre (on dry basis)	IS 7874 (Part 1): 1975 (RA 1990)	(0.2 to 30)g per100 g
		Nitrogen free extract (By calculation)	Feed evaluation & nutrition research techniques by Dr.Raman Malik Page 35/ BTH/WP/450 R1 20.08.2014	(0.5 to 70) g per100 g
		Urease activity	IS 4333 (Part 5): 1970	0.01 to 1.0

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
18.	**Alcoholic Drinks (Rum Gin/ Whiskies/ Brandies, etc.,)**	Total acids	IS 3752: 2005 Cl. 7	(2 to 2000) g per 100 L
		Volatile acids	IS 3752: 2005 Cl. 8	(2 to 200) g per 100 L
		Esters	IS 3752: 2005 Cl. 9	(5 to 250) g per 100 L
		Higher Alcohol	IS 3752: 2005 Cl. 10	(0.5 to 800) g per 100 L
		Aldehydes	IS 3752: 2005 Cl. 11	(1 to 60) g per 100 L
		Furfural	IS 3752: 2005 Cl. 12	(0.1 to 15) g per 100 L
		Ethyl alcohol Content	IS 3752: 2005 Cl. 4	(10 to 60) g per 100 L
		Methyl alcohol content	IS 3752: 2005 Cl. 16	(1 to 200) g per 100 L
		Residue on evaporation	IS 3752: 2005 Cl. 5	(0.1 to 10) g per 100 ml
		Copper	IS 3752: 2005 Cl. 15	(0.05 to 15) mg per L
19.	**Mineral Mixtures**	Moisture	Cl. 4 of IS 7874 (Part 1): 1975) (RA 1990)	(0.5 to 10) g per 100 g
		Calcium	IS 13574; 1992	(0.5 to 35 g per100 g
		Phosphorus	IS 7874 (Part II): 1975 Cl. 6	(0.1 to 20 g per100 g
		Acid insoluble ash	IS 7874 (Part I): 1975 (RA 1990) Cl. 10	(0.01 to 10.0 g per100 g
20.	**Edible Oils**	Saponification Value	IS 548 (Part I): 1964 (RA 2010) Cl. 15	10 to 250
		Acid Value & Free Fatty Acid	IS 548 (Part I): 1964 (RA 2010) Cl. 7	(0.1 to 10) mg KOH per g
		Unsaponifiable Matter	IS 548 (Part I): 1964 (RA 2010) Cl. 8	(0.1 to 10) g per 100g
		Iodine Value	IS 548 (Part I): 1964 (RA 2010) Cl. 14	5 to 250
21.	**Cereal, Pulses & Oil Seeds**	**PESTICIDE RESIDUES:**		
		p,p- DDT	Validated Procedure BTH/WP/3508 (Method A) Issue Nov 2014	(0.025 to 0.5) mg per kg
		o,p- DDT		(0.025 to 0.5) mg per kg
		o,p- DDE		(0.025 to 0.5) mg per kg
		p,p- DDE		(0.025 to 0.5) mg per kg
		o,p- DDD		(0.025 to 0.5) mg per kg

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Cereal, Pulses & Oil Seeds	p,p- DDD		(0.025 to 0.5) mg per kg
		Alpha HCH		(0.025 to 0.5) mg per kg
		Beta HCH		(0.025 to 0.5) mg per kg
		Gamma HCH		(0.025 to 0.5) mg per kg
		Delta HCH		(0.025 to 0.5) mg per kg
		Chlorpyrifos		(0.025 to 0.5) mg per kg
		Aldrin		(0.025 to 0.5) mg per kg
		Dieldrin		(0.025 to 0.5) mg per kg
		Cypermethrin	Validated Procedure BTH/WP/3508 (Method A) Issue Nov 2014	(0.025 to 0.5) mg per kg
		Deltamethrin		(0.025 to 0.5) mg per kg
		Fenvalerate		(0.025 to 0.5) mg per kg
22.	**Fruits & Vegetables**	**PESTICIDE RESIDUES:**		
		p,p- DDT	Validated Procedure BTH/WP/3508 (Method B) Issue Nov 2014	(0.025 to 0.5) mg per kg
		o,p- DDT		(0.025 to 0.5) mg per kg
		o,p- DDE		(0.025 to 0.5) mg per kg
		p,p- DDE		(0.025 to 0.5) mg per kg
		o,p- DDD		(0.025 to 0.5) mg per kg
		p,p- DDD		(0.025 to 0.5) mg per kg
		Alpha HCH		(0.025 to 0.5) mg per kg
		Beta HCH		(0.025 to 0.5) mg per kg
		Gamma HCH		(0.025 to 0.5) mg per kg
		Delta HCH		(0.025 to 0.5) mg per kg
		Chlorpyrifos		(0.025 to 0.5) mg per kg
		Aldrin		(0.025 to 0.5) mg per kg
		Dieldrin		(0.025 to 0.5) mg per kg
		Cypermethrin		(0.025 to 0.5) mg per kg
		Deltamethrin		(0.025 to 0.5) mg per kg
		Fenvalerate		(0.25 0.5) mg per kg

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
23.	**Leafy Vegetables & Herbs**	**PESTICIDE RESIDUES:**		
		p,p- DDT	Validated Procedure BTH/WP/3508 (Method C) Issue Nov 2014	(0.025 to 0.5) mg per kg
		o,p- DDT		(0.025 to 0.5) mg per kg
		o,p- DDE		(0.025 to 0.5) mg per kg
		p,p- DDE		(0.025 to 0.5) mg per kg
		o,p- DDD		(0.025 to 0.5) mg per kg
		p,p- DDD	Validated Procedure BTH/WP/3508 (Method C) Issue Nov 2014	(0.025 to 0.5) mg per kg
		Alpha HCH		(0.025 to 0.5) mg per kg
		Beta HCH		(0.025 to 0.5) mg per kg
		Gamma HCH		(0.025 to 0.5) mg per kg
		Delta HCH		(0.025 to 0.5) mg per kg
		Chlorpyrifos		(0.025 to 0.5) mg per kg
		Aldrin		(0.025 to 0.5) mg per kg
		Dieldrin		(0.025 to 0.5) mg per kg
		Cypermethrin		(0.025 to 0.5) mg per kg
		Deltamethrin		(0.025 to 0.5) mg per kg
		Fenvalerate		(0.025 to 0.5) mg per kg
24.	**Spices**	**PESTICIDE RESIDUES:**		
		p,p- DDT	Validated Procedure BTH/WP/3508 (Method D) Issue Nov 2014	(0.05 to 0.5) mg per kg
		o,p- DDT		(0.05 to 0.5) mg per kg
		o,p- DDE		(0.05 to 0.5) mg per kg
		p,p- DDE		(0.025 to 0.5) mg per kg
		o,p- DDD		(0.05 to 0.5) mg per kg
		p,p- DDD		(0.05 to 0.5) mg per kg
		Alpha HCH		(0.05 to 0.5) mg per kg
		Beta HCH		(0.05 to 0.5) mg per kg
		Gamma HCH		(0.025 to 0.5) mg per kg
		Delta HCH		(0.1 to 0.5) mg per kg
		Chlorpyrifos		(0.025 to 0.5) mg per kg

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Spices	Aldrin	Validated Procedure BTH/WP/3508 (Method D) Issue Nov 2014	(0.025 to 0.5) mg per kg
		Dieldrin		(0.025 to 0.5) mg per kg
		Cypermethrin		(0.025 to 0.5) mg per kg
		Deltamethrin		(0.025 to 0.5) mg per kg
		Fenvalerate		(0.025 to 0.5) mg per kg
25.	**Tea, Coffee & Cocoa**	**PESTICIDE RESIDUES:**		
		p,p- DDT	Validated Procedure BTH/WP/3508 (Method E) Issue Nov 2014	(0.05 to 0.5) mg per kg
		o,p- DDT		(0.05 to 0.5) mg per kg
		o,p- DDE		(0.05 to 0.5) mg per kg
		p,p- DDE		(0.025 to 0.5) mg per kg
		o,p- DDD		(0.05 to 0.5) mg per kg
		p,p- DDD		(0.05 to 0.5) mg per kg
		Alpha HCH		(0.05 to 0.5) mg per kg
		Beta HCH		(0.05 to 0.5) mg per kg
		Gamma HCH		(0.025 to 0.5) mg per kg
		Delta HCH		(0.1 to 0.5) mg per kg
		Chlorpyrifos		(0.025 to 0.5) mg per kg
		Aldrin		(0.025 to 0.5) mg per kg
		Dieldrin		(0.025 to 0.5) mg per kg
		Cypermethrin		(0.025 to 0.5) mg per kg
		Deltamethrin		(0.025 to 0.5) mg per kg
		Fenvalerate		(0.025 to 0.5) mg per kg
II.	**WATER**			
1.	**Potable Water**	Colour	IS 3025 (Part 4): 1983 / APHA 2120-C, 22nd Edn., Cl. 2	(2 to 500) TCU
		Odour	IS 3025 (Part 5): 1983	Qualitative
		Turbidity	IS 3025 (Part 10): 1984	(0.01 to 1000) NTU

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Potable Water	pH value	Cl. 2 of IS 3025 (Part 11): 1983 (RA 2002)	1 to 13
		Conductivity	IS 3025 (Part 14): 1984 (RA 2002) & APHA 2510-B, 22nd Edn	(0.1 to 5000) μmhos/cm
		Total Dissolved Solids	IS 3025 (Part 16): 1984	(1 to 5000) mg/L
		Total Suspended Solids	IS 3025 (Part 17): 1984	(1 to 500) mg/L
		Volatile & Fixed Residue (Organic & Inorganic Solids)	IS 3025 (Part 18): 1984	(1 to 5000) mg/L
		Total Hardness	IS 3025 (Part 21): 1983 Cl. 5	(1 to 1000) mg/L
		Acidity	IS 3025 (Part 22): 1986 (RA 1998)	(2 to 500) mg/L
		Alkalinity	IS 3025 (P23): 1986 (RA 1998)	(2 to 3000) mg/L
		Sulphates	Cl. 4 of IS 3025 (Part 24): 1986 (RA 1998)	(2 to 1000) mg/L
		Sulphates	APHA 4110 B, 22nd Edition	(0.1 to 1000) mg/L
		Residual Free Chlorine	IS 3025 (Part 26): 1986 (RA 1998) Cl. 4	(0.05 to 50) mg/L
		Cyanide	Cl. 2.7 of IS 3025 (Part 27): 1986 (RA 1998) APHA 4500 CN—E, 22nd Edn.,	(0.01 to 100) mg/L
		Sulphides	Cl. 3 of IS 3025 (Part 29): 1986 (RA 1998)	(0.05 to 10) mg/L
		Chloride	Cl. 2 of IS 3025 (Part 32): 1988 (RA 1999)	(2 to 5000) mg/L
		Chloride	APHA 4110 B, 22nd Edition	(0.1 to 1000) mg/L

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Potable Water	Silica	IS 3025 (Part 35): 1988 (RA 1999) Cl. 3	(0.2 to 100) mg/L
		Arsenic	IS 3025 (Part 37): 1988 (RA 1992) Cl. 3	(0.01 to 1.0) mg/L
		Oil & Grease	IS 3025 (Part 39): 1991 (RA 2003) Cl. 5	(1 to 10) mg/L
		Total Organic Carbon	APHA 5310 C & Work Procedure BTH/WP/890	(0.05 to 500) mg/L
		Chloramines	IS 3025 (Part 26) 1986	(0.05 to 10) mg/L
		Barium	Annex F of IS 13428-1998 / IS 15302-2003	(0.002 to 10) mg/L
		Calcium	Cl. 5 & 6 of IS 3025 (Part 40): 1991 (RA 1998)	(1 to 1000) mg/L
		Cadmium	IS 3025 (Part 41):1992 (RA 1998) /APHA 3113 B 22nd Edn. Cl. 5& 6	(0.001 to 10) mg/L
		Biological Oxygen Demand	IS 3025 (Part 44): 1993 (RA 1999) Cl. 4	(1 to 100) mg/L
		Phenols	IS 3025 (Part 43):1992 (RA 1998) Cl. 6	(0.001 to 10) mg/L
		Magnesium	IS 3025 (Part 46): 1994 (RA 1999) Cl. 6	(1 to 1000) mg/L
		Lead	Cl. 7 & 8 of IS 3025 (Part 47): 1994 (RA1999)/ APHA 3113 B, 22nd Edn	(0.01 to 10) mg/L

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Potable Water	Mercury	IS 3025 (Part 48): 1994 (RA 1999)	(0.001 to 10) mg/L
		Zinc	IS 3025 (Part 49): 1994 (RA 1999) Cl. 4 & 6	(0.01 to 10) mg/L
		Nitrates	IS 3025 (Part 34):1988 (RA 1999) APHA-4500-NO3.B, 22nd Edn., Cl. 3.3 & 3.4	(0.1 to 500) mg/L
		Nitrates	APHA 4110 B, 22nd Edition	(0.1 to 100) mg/L
		Fluorides	Cl. 5 of IS 3025 (Part 60) 2010/ APHA 4500-F-C, 22nd Edn.,	(0.02 to 10) mg/L
		Fluorides	APHA 4110 B, 22nd Edition	(0.02 to 10) mg/L
		Iron	Cl. 6 & 7 of IS 3025 (Part 53): 2003	(0.01 to 100) mg/L
		Aluminium	Cl. 5 of IS 3025 (Part 55): 2003	(0.01 to 10) mg/L
		Manganese	Cl. 5 of IS 3025 (Part 59): 2006	(0.1 to 10) mg/L
		Selenium	APHA 3131 B 22nd Edn./ IS 15303	(0.01 to 1) mg/L
		Permanganate Value	IS 3025 (Part 63): 2007	(0 to 50) mg/L
		Anionic Detergents	Annex K of IS 13428: 1998	(0.2 to 10) mg/L
		Chemical Oxygen Demand	IS 3025 (Part 58) : 2006 & APHA 5220-B, 22nd Edn.,	(1 to 1000) mg/L
		Chromium	IS 3025 (Part 52): 2003/ Annex J of IS 13428: 1998 Cl. 6	(0.01 to 10) mg/L

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Potable Water	Boron	Cl. 6.0 of IS 3025 (Part 57): 2005/ Annex H of IS 13428-: 998, APHA 4500-B, 22nd Edn.,	(0.1 to 10) mg/L
		Temperature	IS 3025 (Part 9):1984	(1 to 100) ºC
		Total Solids	IS 3025 (Part 15): 1984 (RA 1998)	(1 to 5000) mg/L
		Sulphites	IS 3025 (Part 28): 1986 (RA 1998)	(2 to 10) mg/L
		Phosphorus	Cl. 4 of IS 3025 (Part 31):1988 (RA 1999)	(0.05 to 50) mg/L
		Total Nitrogen & Organic Nitrogen	Cl. 2,3,4 of IS 3025 (Part 34): 1988 (RA 1999), APHA 4500N 22nd Edition	(1 to 500) mg/L
		Sodium	Cl. 5 of IS 3025 (Part 45): 1993 (RA 1999)	(0.1 to 500) mg/L
		Potassium	Cl. 5 of IS 3025 (Part 45): 1993 (RA 1999)	(0.1 to 100) mg/L
		Nickel	Cl. 6 & 7 of IS 3025(Part 54)2003 Annex L of IS 13428: 1998	(0.01 to 10) mg/L
		Silver	Annex J of IS 13428-1998	(0.01 to 1) mg/L
		Molybdenum	IS 3025 (Part 2): 2004 APHA 3113 B 22nd Edn.,	(0.01 to 10) mg/L

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Potable Water	**PCB** (2-Chlorobiphenyl/ 2,3-Dichlorobiphenyl/ 2,2',3,3',4,4',6-Heptachlorobiphenyl/ 2,2',4,4',5,6'-Hexachlorobiphenyl/ 2,2',3,3',4,5',6,6'-Octachlorobiphenyl/ 2,2',3',4,6'-Penta chlorobiphenyl/ 2,2',4,4'-Tetrachlorobiphenyl/ 2,4,5-Trichlorobiphenyl)	Annex M of IS 13428: 1998	(10 to 10) µg/L
		PAH (Acenaphthene, Acenaphthylene, Anthracene, Benzo (A) Anthracene, Benzo (A) Pyrene, Benzo (B) Fluoranthene, Benzo (G,H,I) Perylene, Benzo (K) Fluoranthene, Chrysene, Dibenzo (A,H) Anthracene, Fluoranthene, Fluorene, Indeno (1,2,3-CD) Pyrene, Naphthalene, Phenanthrene, Pyrene	APHA 6440, 22nd Edn	(10 to 100) µg/L
			USEPA 8310	(0.1 to100) µg/L
		PESTICIDE RESIDUES		
		p,p- DDT	USEPA 508	(0.025 to 100) µg/L
		o,p- DDT	USEPA 508	(0.025 to 100) µg/L
		o,p- DDE	USEPA 508	(0.025 to 100) µg/L
		p,p- DDE	USEPA 508	(0.025 to 100) µg/L
		o,p- DDD	USEPA 508	(0.025 to 100) µg/L
		p,p- DDD	USEPA 508	(0.025 to 100) µg/L
		Alpha HCH	USEPA 508	(0.025 to 100) µg/L
		Beta HCH	USEPA 508	(0.025 to 100) µg/L

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Potable Water	Gamma HCH	USEPA 508	(0.025 to 100) µg/L
		Delta HCH	USEPA 508	(0.025 to 100) µg/L
		Alpha Endosulfan	USEPA 508	(0.025 to 100) µg/L
		Beta Endosulfan	USEPA 508	(0.025 to 100) µg/L
		Endosulfan sulphate	USEPA 508	(0.025 to 100) µg/L
		Monocrotophos	USEPA 8141 A	(0.05 to 100) µg/L
		Ethion	USEPA 8141 A / USEPA 1657A	(0.05 to 100) µg/L
		Chlorpyrifos	USEPA 525.2	(0.025 to 100) µg/L
		Phorate & its analogues – Phorate Sulphoxide & Phorate Sulphone	USEPA 8141A	(0.05 to 100) µg/L
		2,4 -D	USEPA 515.1	(0.05 to 100) µg/L
		Butachlor	USEPA 8141A / USEPA 525.2	(0.05 to 100) µg/L
		Isoproturon	USEPA 532	(0.05 to 100) µg/L
		Alachlor	USEPA 507 / USEPA 525.2	(0.05 to 100) µg/L
		Atrazine	USEPA 8141A/ USEPA 525.2	(0.05 to 100) µg/L
		Methyl parathion & its analogue-Methyl Paraoxon	USEPA 8141A	(0.05 to 100) µg/L
		Malathion & its analogue-Malaoxon	USEPA 8141A	(0.05 to 100) µg/L
		Aldrin	USEPA 525.2	(0.025 to 100) µg/L
		Dieldrin	USEPA 525.2	(0.025 to 100) µg/L
		Mineral Oil	APHA 5520 C	(0.05 to 1) mg/L
2.	**Waste Water / Effluent Water**	Colour, Hue	Cl. 2 of IS 3025 (Part 4): 1983 / APHA 2120-C, 22nd Edn.	(400 to 700) nm
		Turbidity	IS 3025 (Part 10): 1984	(0.01 to 5000) NTU
		pH value	Cl. 2 of IS 3025 (Part 11): 1983 (RA 2002)	1 to 13

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Waste Water / Effluent Water	Conductivity	Cl. 5 of IS 3025 (Part 14): 1984 & APHA 2510-B, 22nd Edn., (RA 2002)	0.1 µS/cm to 20 mS/cm
		Total Dissolved Solids	IS 3025 (Part 16): 1984	(1 to 5000) mg/L
		Total Suspended Solids	IS 3025 (Part 17): 1984	(1 to 5000) mg/L
		Volatile & Fixed Residue (Organic & Inorganic Solids)	IS 3025 (Part 18): 1984	(1 to 5000) mg/L
		Settleable matter	IS 3025 (Part 19): 1984 / APHA, 22nd Edn.,	(2 to 100) ml
		Total Hardness	Cl. 5 of IS 3025 (Part 21): 1983	(1 to 5000) mg/L
		Acidity	IS 3025 (Part 22): 1986 (RA 1998)	(2 to 5000) mg/L
		Alkalinity	IS 3025 (Part 23): 1986 (RA 1998)	(2 to 5000) mg/L
		Sulphates	Cl. 4 of IS 3025 (Part 24): 1986 (RA 1998)	(0.2 to 1000) mg/L
		Residual Free Chlorine	Cl. 4 of IS 3025 (Part 26): 1986 (RA 1998)	(0.05 to 50) mg/L
		Cyanide	Cl. 2.7 of IS 3025 (Part 27): 1986 (RA 1998) APHA 4500 CN^-E, 22nd Edn.,	(0.01 to 100) mg/L
		Sulphides	Cl.3 of IS 3025 (Part 29): 1986 (RA 1998)	(0.05 to 100) mg/L

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Waste Water / Effluent Water	Chloride	Cl. 2 of IS 3025 (Part 32): 1988 (RA 1999)	(2 to 5000) mg/L
		Ammoniacal Nitrogen	Cl 2.5 of IS 3025 (Part 34): 1988	(0.5 to 100) mg/L
		Silica	Cl.3 of IS 3025 (Part 35): 1988 (RA 1998)	(0.2 to 100) mg/L
		Arsenic	Cl. 3 of IS 3025 (Part 37): 1988 (RA 1998)	(0.01 to 100) mg/L
		Oil & Grease	Cl. 5 of IS 3025 (Part 39): 1991 (RA 2003)	(1 to 100) mg/L
		Calcium	Cl of 5 & 6 IS 3025 (Part 40): 1991 (RA 1998)	(1 to 1000) mg/L
		Cadmium	Cl. 5 of IS 3025 (Part 41): 1992 (RA 1998)	(0.002 to 10) mg/L
		Copper	IS 3025 (Part 42): 1992 (RA 1998)	(0.05 to 100) mg/L
		Biochemical Oxygen Demand	Cl. 4 of IS 3025 (Part 44): 1993 (RA 1999)	(1 to 5000) mg/L
		Phenols	Cl. 6 of IS 3025 Page 43-1992 (RA 1998)	(0.001 to 100) mg/L
		Magnesium	Cl. 6 of IS 3025 Page 43-1994 (RA 1999)	(1 to 1000) mg/L
		Lead	Cl. 7 of IS 3025 Page 47-1994 (RA 1999)/ APHA 3113 B, 22nd Edn	(0.01 to 10) mg/L

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Waste Water / Effluent Water	Mercury	Cl. 5 of IS 3025 Page 48-1994 (RA 1999)	(0.001 to 10) mg/L
		Zinc	Cl. 4 & 6 of IS 3025 Page 49-1994 (RA 1999)	(0.01 to 10) mg/L
		Nitrates	Cl. 3.4 & 3.5 of IS 3025 Page 34-1988 (RA 1999) APHA 4500NO_3B 22nd Edition	(0.01 to 100) mg/L
		Fluorides	Cl. 5 of IS 3025 (Part 60) 2010/ APHA 4500-F.C, 22nd Edn.,	(0.02 to 10) mg/L
		Iron	Cl. 6 & 7 of IS 3025 (Part 53): 2003	(0.01 to 100) mg/L
		Aluminium	Cl. 5 of IS 3025 (Part 55): 2003	(0.01 to 10) mg/L
		Manganese	Cl. 5 of IS 3025 (Part 59): 2006	(0.1 to 10) mg/L
		Selenium	APHA 3113 B 22nd Edn./ IS 3025(P56): 2003	(0.01 to 1) mg/L
		Permanganate Value	Cl. 5 of IS 3025 (Part 63) : 2008	(0 to 10) mg/L
		Anionic Detergents	Annex K of IS 13428; 1998	(0.2 to 10) mg/L
		Chemical Oxygen Demand	Cl. 8 of IS 3025 (Part 58) 2006 & APHA 5220-B, 22nd Edn.,	(1 to 2000) mg/L
		Chromium	Cl. 6 of IS 3025(Part 52): 2003/ Annex J of IS 13428: 1998	(0.01 to 100) mg/L
		Boron	IS 3025 (Part 57):2005/ Annex H of IS 13428: 1998, APHA 4500-B, 22nd Edn.,	(0.1 to 10) mg/L

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Waste Water / Effluent Water	Sodium Absorption Ratio	IS 11077-1984	1 to 90
		Residual Sodium Carbonate	BTH/WP/857; R2 21.01.2014	By Calculation
		Free Ammonia	IS 2488 (Part IV): 1974	0.05 mg/L
		Temperature	IS 3025 (Part 9): 1984	(1 to 100) ° C
		Total Solids	IS 3025 (Part 15): 1984 (RA 1998)	(1 to 5000) mg/L
		Sulphites	IS 3025 (Part 28): 1986 (RA 1998)	(2 to 10) mg/L
		Phosphorus	Cl. 4 of IS 3025 (Part 31): 1988 (RA 1999)	(0.05 to 10) mg/L
		Total Nitrogen & Organic Nitrogen	Cl. 2,3,4 of IS 3025 (Part 34): 1988 (RA 1999)	(1 to 500) mg/L
		Dissolved Oxygen	IS 3025 (Part 38): 1989	(1 to 10) mg/L
		Sodium	Cl. 5 of IS 3025 (Part 45): 1993 (RA 1999)	(0.1 to 500) mg/L
		Potassium	Cl. 5 of IS 3025 (Part 45): 1993 (RA 1999)	(0.1 to 100) mg/L
		Nickel	Cl. 6 of IS 3025 (Part 54): 2003 / Annex L of IS 13428-1998	(0.01 to 10) mg/L
		Silver	Annex J of IS 13428; 1998	(0.01 to 1) mg/L
		% Sodium	IS 2488 (Part V): 1976	By Calculation
		Sludge Volume Index	APHA 2710-D, 22nd Edn.,	By Calculation

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Waste Water / Effluent Water	**PESTICIDE RESIDUES:**		
		p,p- DDT	USEPA 508	(0.025 to 100) µg/L
		o,p- DDT	USEPA 508	(0.025 to 100) µg/L
		o,p- DDE	USEPA 508	(0.025 to 100) µg/L
		p,p- DDE	USEPA 508	(0.025 to 100) µg/L
		o,p- DDD	USEPA 508	(0.025 to 100) µg/L
		p,p- DDD	USEPA 508	(0.025 to 100) µg/L
		Alpha HCH	USEPA 508	(0.025 to 100) µg/L
		Beta HCH	USEPA 508	(0.025 to 100) µg/L
		Gamma HCH	USEPA 508	(0.025 to 100) µg/L
		Delta HCH	USEPA 508	(0.025 to 100) µg/L
		Alpha Endosulfan	USEPA 508	(0.025 to 100) µg/L
		Beta Endosulfan	USEPA 508	(0.025 to 100) µg/L
		Endosulfan sulphate	USEPA 508	(0.025 to 100) µg/L
		Monocrotophos	USEPA 8141 A	(0.05 to 100) µg/L
		Ethion	USEPA 8141 A / USEPA 1657A	(0.05 to 100) µg/L
		Chlorpyrifos	USEPA 525.2	(0.025 to 100) µg/L
		Phorate & its analogues – Phorate Sulphoxide & Phorate Sulphone	USEPA 8141A	(0.05 to 100) µg/L
		2,4 -D	USEPA 515.1	(0.05 to 100) µg/L
		Butachlor	USEPA 8141A / USEPA 525.2	(0.05 to 100) µg/L
		Isoproturon	USEPA 532	(0.05 to 100) µg/L
		Alachlor	USEPA 507 / USEPA 525.2	(0.05 to 100) µg/L
		Atrazine	USEPA 8141A/ USEPA 525.2	(0.05 to 100) µg/L
		Methyl parathion & its analogue-Methyl Paraoxon	USEPA 8141A	(0.05 to 100) µg/L
		Malathion & its analogue-Malaoxon	USEPA 8141A	(0.05 to 100) µg/L
		Aldrin	USEPA 525.2	(0.025 to 100) µg/L
		Dieldrin	USEPA 525.2	(0.025 to 100) µg/L

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Waste Water / Effluent Water	**PCB** 2-Chlorobiphenyl/ 2,3-Dichlorobiphenyl/ 2,2',3,3',4,4',6-Heptachlorobiphenyl/ 2,2',4,4',5,6'-Hexachlorobiphenyl/ 2,2',3,3',4,5',6,6'-Octachlorobiphenyl/ 2,2',3',4,6'-Penta chlorobiphenyl/ 2,2',4,4'-Tetrachlorobiphenyl/ 2,4,5-Trichlorobiphenyl)	Annex M of IS 13428-1998	(10 to 100) µg/L
		PAH (Acenaphthene, Acenaphthylene, Anthracene, Benzo (A) Anthracene, Benzo (A) Pyrene, Benzo (B) Fluoranthene, Benzo (G,H,I) Perylene, Benzo (K) Fluoranthene, Chrysene, Dibenzo (A,H) Anthracene, Fluoranthene, Fluorene, Indeno (1,2,3-CD) Pyrene, Naphthalene, Phenanthrene, Pyrene	APHA 6440 , 22nd Edn.,	(10 to 100) µg/L
			USEPA 8310	(0.1 to 100) µg/L
3.	**DM Water/Purified Water/Reagent Grade Water**	Phosphates	Cl. 4 of IS 3025 (Part 31): 1988	(0.05 to 10) mg/L
		Total Hardness	Cl. 5 of IS 3025 (Part 21): 1983	(1 to 10) mg/L
		pH	Cl. 2 of IS 3025 (Part 11): 1983	1 to 13
		Iron, Copper	32 of IS 3025-1964	(0.05 to 10) mg/L
		Silica	Cl. 3 of IS 3025 (Part 35): 1988	(0.2 to 10) mg/L
		Conductivity	Cl. 5 of IS 3025 (Part 14): 1984 (RA 2002) & APHA 2510-B, 22nd Edn.	(0.1 to 200) µS/cm

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Permanganate Value	Cl. 5 of IS 3025- (Part 63) 2007	(0 to 5) mg/L
		Total Organic carbon	USP Page 257/ IP 2010 Pg	(50 to 1000) mcg/L
4.	**Drinking Water/ Packaged Drinking Water**	Colour	Cl. 2 of IS 3025 (Part 4): 1983	(2 to 100) TCU
		Odour	IS 3025 (Part 5): 1983	Qualitative
		Turbidity	IS 3025 (Part 10): 1984	(0.01 to 10) NTU
		Total Dissolved Solids	IS 3025 (Part 16): 1984	(1 to 1000) mg/L
		pH	Cl. 2 of IS 3025(Part 11): 1983	3 to 12
		Barium	Annex F of IS 13428-1998 / IS 15302: 2003	(0.1 to 10) mg/L
		Copper	IS 3025 (Part 42): 1992	(0.02 to 10) mg/L
		Iron	Cl. 6 & 7 of IS 3025 (Part 53): 2003 / IS 15303-2003	(0.01 to 5) mg/L
		Manganese	Cl. 5 of IS 3025(Part 59) 2006 /APHA 3500-Mn B, 22nd dn.,	(0.03 to 10) mg/L
		Nitrates	Cl. 3.5 & 3.4 of IS 3025 (Part 34): 1988, APHA 4500-NO_3.B, 22nd Edn., AOAC, 18th Edn.,	(0.1 to 100) mg/L
		Nitrites	Cl. 4 of IS 3025 (Part 34): 1988	(0.01 to 10) mg/L
		Fluorides	Cl. 5 of IS 3025(Part 60) 2010 / APHA 4500-F.C, 22nd Edn.,	(0.02 to 10) mg/L
		Zinc	Cl. 4 & 6 of IS 3025 (Part 49): 1994	(0.005 to 10) mg/L

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Drinking Water/ Packaged Drinking Water	Silver	Annex Jof IS 13428-1998	(0.01 to 1) mg/L
		Aluminium	Cl. 5 of IS 3025 (Part 55): 2003/ APHA 3500-Al.D, 22nd Edn., / IS 15302-2003	(0.01 to 10) mg/L
		Chloride	Cl. 2 of IS 3025 (Part 32): 1988	(2 to 200) mg/L
		Selenium	IS 3025 (Part 56): 2003 / IS 15303: 2003	(0.01 to 1) mg/L
		Sulphates	Cl. 4 of IS 3025 (Part 24): 1986	(0.2 to 200) mg/L
		Alkalinity	IS 3025 (Part 23):1986 (RA 1998)	(2 to 500) mg/L
		Calcium	Cl. 5 & 6 of IS 3025 (Part 40): 1991	(1 to 100) mg/L
		Magnesium	Cl. 6 of IS 3025 (Part 46): 1994	(1 to 100) mg/L
		Sodium	Cl. 5 of IS 3025 (Part 45): 1993	(0.1 to 200) mg/L
		1Residual Free Chlorine	Cl. 4 of IS 3025 (Part 26): 1986 (RA 1998)	(0.05 to 10) mg/L
		Phenolic Compounds as Phenol	Cl 6.0 of IS 3025 (Part 43): 1992	(0.001 to 1) mg/L
		Mineral Oil	Cl 6.0 of IS 3025 (Part 39): 1991 (RA 2003)	(0.05 to 1) mg/L
		Anionic surface active agents	Annex K of IS 13428: 1998	(0.2 to 10) mg/L
		Sulphides as H_2S	Cl. 3 of IS 3025 (Part 29): 1986	(0.05 to 10) mg/L
		Antimony	Annex G of IS 13428 –1998 / IS 15303: 2003	(0.005 to 1) mg/L

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Drinking Water/ Packaged Drinking Water	Borates	Annex H of IS 13428-1998/ APHA 4500-B.B, 22nd Edn.,/ IS 3025: 2005 (Part 57)	(0.1 to 5) mg/L
		Mercury	Cl. 5 of IS 3025 (Part 48): 1994	(0.001 to 0.1) mg/L
		Cadmium	Cl. 5 of IS 3025 (Part 41): 1992	(0.002 to 1) mg/L
		Arsenic	Cl. 3 of IS 3025 (Part 37): 1988	(0.01 to 10) mg/L
		Cyanide	Cl. 2.7.2 of IS 3025 (Part 27): 1986 APHA 4500 CN^-E 22nd Edn.,	(0.01 to 1) mg/L
		Lead	Cl. 7 of IS 3025 (Part 47): 1994	(0.01 to 1) mg/L
		Chromium	Annex J of IS 13428-1998 / APHA 3500-Cr.B, 22nd Edn.,	(0.01 to 1) mg/L
		Nickel	Annex L of IS 13428-1998 / APHA 3500-Ni.B, 22nd Edn.,	(0.01 to 1) mg/L
		PCB (2-Chlorobiphenyl/ 2,3-Dichlorobiphenyl/ 2,2',3,3',4,4',6-Heptachlorobiphenyl/ 2,2',4,4',5,6'-Hexachlorobiphenyl/ 2,2',3,3',4,5',6,6'-Octachlorobiphenyl/ 2,2',3',4,6'-Penta chlorobiphenyl/ 2,2',4,4'-Tetrachlorobiphenyl/ 2,4,5-Trichlorobiphenyl)	Annex M of IS13428: 1998	(10 to100) µg/L

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Drinking Water/ Packaged Drinking Water	**PAH** (Acenaphthene, Acenaphthylene, Anthracene, Benzo (A) Anthracene, Benzo (A) Pyrene, Benzo (B) Fluoranthene, Benzo (G,H,I) Perylene, Benzo (K) Fluoranthene, Chrysene, Dibenzo (A,H) Anthracene, Fluoranthene, Fluorene, Indeno (1,2,3-CD) Pyrene, Naphthalene, Phenanthrene, Pyrene	APHA 6440, 22nd Edn	(10 to 100) µg/L
		PESTICIDE RESIDUES		
		p,p- DDT	USEPA 508	(0.025 to 100) µg/L
		o,p- DDT	USEPA 508	(0.025 to 100) µg/L
		o,p- DDE	USEPA 508	(0.025 to 100) µg/L
		p,p- DDE	USEPA 508	(0.025 to 100) µg/L
		o,p- DDD	USEPA 508	(0.025 to 100) µg/L
		p,p- DDD	USEPA 508	(0.025 to 100) µg/L
		Alpha HCH	USEPA 508	(0.025 to 100) µg/L
		Beta HCH	USEPA 508	(0.025 to 100) µg/L
		Gamma HCH	USEPA 508	(0.025 to 100) µg/L
		Delta HCH	USEPA 508	(0.025 to 100) µg/L
		Alpha Endosulfan	USEPA 508	(0.025 to 100) µg/L
		Beta Endosulfan	USEPA 508	(0.025 to 100) µg/L
		Endosulfan sulphate	USEPA 508	(0.025 to 100) µg/L
		Monocrotophos	USEPA 8141 A	(0.05 to 100) µg/L
		Ethion	USEPA 8141 A / USEPA 1657A	(0.05 to 100) µg/L
		Chlorpyrifos	USEPA 525.2	(0.025 to 100) µg/L

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Drinking Water/ Packaged Drinking Water	Phorate & its analogues – Phorate Sulphoxide & Phorate Sulphone	USEPA 8141A	(0.05 to 100) µg/L
		2,4 -D	USEPA 515.1	(0.05 to 100) µg/L
		Butachlor	USEPA 8141A / USEPA 525.2	(0.05 to 100) µg/L
		Isoproturon	USEPA 532	(0.05 to 100) µg/L
		Alachlor	USEPA 507 / USEPA 525.2	(0.05 to 100) µg/L
		Atrazine	USEPA 8141A/ USEPA 525.2	(0.05 to 100) µg/L
		Methyl parathion & its analogue-Methyl Paraoxon	USEPA 8141A	(0.05 to 100) µg/L
		2Malathion & its analogue-Malaoxon	USEPA 8141A	(0.05 to 100) µg/L
		Aldrin	USEPA 525.2	(0.025 to 100) µg/L
		2Dieldrin	USEPA 525.2	(0.025 to 100) µg/L
III.	**AIR, GASES & ATMOSPHERE**			
1.	**Stack Monitoring**	Velocity	IS11255 (Part 3): 1985	(3 to 50) m/s
		Particulate Matter	IS 11255 (Part 1): 1985 (RA 1995)	1 mg/m^3
		Sulphur dioxide	IS 11255 (Part 2): 1985 (RA 1995)	0.1 mg/m^3
		Oxides of Nitrogen	IS 11255 (Part 7): 2005	(0.1 to 100) mg/m^3
2.	**Ambient Air**	Suspended Particulate Matter	IS 5182 (Part 4): 1999	(5 to 1000) µg/m^3
		Sulphur dioxide	IS 5182 (Part 2): 2001	(4 to 100) µg/m^3
		Oxides of Nitrogen	IS 5182 (Part 6): 2006	(4 to 100) µg/m^3
		Particulate Matter PM_{10}	IS 5182 (Part 23): 2006	(5 to 100) µg/m^3

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Ambient Air	Particulate Matter $PM_{2.5}$	BTH/WP/897 R0 01.08.2014/ CPCB Manual, May 2011	(5 to 100) µg/m^3
		Ozone	CPCB Manual, May 2011, Pg 31/ BTH/WP/895 R0 01.08.2014	(50 to 500) µg/m^3
		Lead	CPCB Manual, May 2011, Pg 47/ BTH/WP/4542 R1 01.08.2014	(0.004 to 100) µg/m^3
		Nickel	CPCB Manual, May 2011, Pg 47/ BTH/WP/4542 R1 01.08.2014	(4 to 1000) ng/m^3
		Arsenic	CPCB Manual, May 2011, Pg 47/ BTH/WP/4542 R1 01.08.2014	(4 to 1000) ng/m^3
		Ammonia	CPCB Manual, May 2011, Pg 35/ BTH/WP/842, R1 01.02.2013	(20 to 5000) µg/m^3
		Carbon monoxide	CO Equipment Manual/ BTH/WP/896 R0 01.08.2014	(1 to 100 µg/m^3
		Benzene	CPCB Manual, May 2011, Pg 3 / BTH/WP/3511 R1 28.09.2013	(5 to 100) ng/m^3
		Benzopyrene	CPCB Manual, May 2011, Pg 39/ BTH/WP/3520 R0 25.09.2013	(1 to 100) ng/m^3

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
IV.	**DRUGS & PHARMACEUTICALS**			
1.	**Synthetic Drugs**			
	General tests for Tablets	Description	I.P. 2014, Vol 1 Pg 14	Qualitative
		Water Content	I.P. 2014, Vol 1,Pg 113 (2.3.43)	(0.1 to 30) g per 100g
	General tests for Capsules	Loss On drying	I.P. 2014, Vol 1,Pg 162 (2.4.19)	Qualitative
		Identification by colour test, UV & IR	I.P. 2014, Vol 1 Pg 14	10 mg to 5g 1 second to 3 hours
	General tests for Powder	Uniformity of weight of tablets	I.P. 2014, vol 2 Pg 959	Qualitative
		Disintegration Test	I.P. 2014, Vol 1, Pg 251 (2.5.1)	(0.001 to 3) A
		Uniformity of dispersion	I.P. 2014, Vol 2, Pg 960	(30 to 300) ^{o} C
	General tests for Liquids	Light Absorption	I.P. 2014, Vol 1 Pg 139 (2.4.7)	
		Melting point	I.P. 2014, Vol 1Pg 164(2.4.21)	
		Description	I.P. 2014, Vol 1 Pg 14	As per specification
		Water Content	I.P. 2014, Vol 1,Pg 113 (2.3.43)	(0.1 to 30) g per 100g
		Loss On drying	I.P. 2014, Vol 1,Pg 162 (2.4.19)	Qualitative
		Identification by colour test, UV & IR	I.P. 2014, Vol 1 Pg 14	(Present / Absent) Qualitative
		Uniformity of weight of capsules	I.P. 2014, Vol 2 Pg 929	(Present / Absent)
		Disintegration Test		0.1g to 2g
		Light Absorption	I.P. 2014, Vol 1, Pg 251 (2.5.1)	1 sec to 3hrs
		Melting point	I.P. 2014, Vol 1 Pg 139 (2.4.7)	(0.001 to 3)A
			I.P. 2014, Vol 1Pg 164(2.4.21)	30 ^{o} C to 300 ^{o} C
	General tests for Liquids	Description	I.P. 2014, Vol 1 Pg 14	As per specification
		Water Content	I.P. 2014, Vol 1,Pg 113 (2.3.43)	(0.1 to 30) g per100g
		Loss On drying	I.P. 2014, Vol 1,Pg 162 (2.4.19)	
		Uniformity of weight of Oral Powders	I.P. 2014, Vol 1 Pg 256 (2.5.6)	(0.1 to 50) g
		Light Absorption	I.P. 2014, Vol 1 Pg 139 (2.4.7)	(0.001A to 3) A
		Melting point	I.P. 2014, Vol 1Pg 164(2.4.21)	(30 to 300) ^{o} C
		Optical rotation/Specific Optical Rotation	I.P. 2014, Vol 1, Pg 167,(2.4.22)	1^{o} / 1^{o} to 360^{o}

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Description	I.P. 2014, Vol 1 Pg 14	As per specification
		Water Content	I.P. 2014, Vol 1,Pg 113 (2.3.43)	(0.1 to 30) g per 100g
		Density	I.P. 2014, Vol 1, Pg 204 (2.4.29)	(0.1 to 2) g
		pH	I.P. 2014, Vol 1 Pg 169(2.4.24)	1 to 14
		Uniformity of volume	I.P. 2014, Vol 1,Pg 258 (2.5.6)	(1 to 500) ml
		Refractive index	I.P. 2014, Vol 1, Pg 203, (2.4.27)	1.327 to 1.58
		Optical rotation/Specific Optical Rotation	I.P. 2014, Vol 1, Pg 167,(2.4.22)	1^o to 360^o
		Acid value	I.P. 2014, Vol 1,Pg 100 (2.3.22)	1 to 5
		Light Absorption	I.P. 2014, Vol 1 Pg 139 (2.4.7)	(0.001 to 3)A
	Albendazole tablets	Identification	I.P. 2014, Vol 2 Pg 1006 (TLC)	Qualitative (Present / Absent)
		Assay	I.P. 2014, Vol 2 Pg 1006 (UV)	(100 to 500) mg
	Alprazolam Tablets	Identification B	I.P. 2014, Vol 2 Pg 1017 (HPLC)	Qualitative (Present / Absent)
		Assay	I.P. 2014, Vol 2 Pg 1018 (HPLC)	(0.1 to 5) mg
	Amoxycillin Dispersible Tablet	Assay	I.P. 2014, Vol 2 Pg 1056 (HPLC)	(100 to 500) mg
	Amoxycillin Capsules	Identification B	I.P. 2014, Vol 2 Pg 1055 (HPLC)	Qualitative (Present / Absent)
		Dissolution	I.P. 2014, Vol 2 Pg 1055 (UV)	(80 to 120) %
		Assay	I.P. 2014, Vol 2 Pg 1056 (HPLC)	(100 to 750) mg
	Amoxycillin oral suspension	Identification	I.P. 2014, Vol 2 Pg 1057(HPLC)	Qualitative (Present / Absent)
		Assay	I.P. 2014, Vol 2 Pg 1057 (HPLC)	(100 to 500) mg

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Ampicillin Capsules	Identification B	I.P. 2014, Vol 2 Pg 1063 (HPLC)	Qualitative (Present / Absent)
		Assay	I.P. 2014, Vol 2 Pg 1064 (HPLC)	(100 to 750) mg
		Dissolution	I.P. 2014, Vol 2 Pg 1063 (UV)	(80 to 120) %
	Aspirin Tablets	Salicylic Acid	I.P. 2014, Vol 2 Pg 1093	Qualitative (Present / Absent)
		Assay	I.P. 2014, Vol 2 Pg 1093 titration)	(25 to 750) mg
		Dissolution	I.P. 2014, Vol 2 Pg 1092 (UV)	(80 to 120) %
	Benzyle Benzoate application	Assay	I.P. 2014, Vol 2 Pg 1161 titration)	(15 to 35) g per 100g
	Bromhexine Tablets	Related Substances	I.P. 2014, Vol 2 Pg 1203 (HPLC)	Qualitative (Present / Absent)
		Assay	I.P. 2014, Vol 2 Pg 1204 (UV)	(2 to 10) mg
	Castor Oil	Acid Value	I.P. 2014, Vol 1 Pg 3201 (2.3.23 titration)	1 to 5
	Cefadroxil Oral Suspension	Assay	I.P. 2014, Vol 2 Pg 1295 (HPLC)	(100 to 500) mg
	Cefadroxil Tablets	Identification	I.P. 2014, Vol 2 Pg 1295 (TLC)	Qualitative (Present / Absent)
		Water	I.P. 2014, Vol 2 Pg 1296	(0.1 to 20) g
		Dissolution	I.P. 2014, Vol 2 Pg 1296 (UV)	(80 to 120) %
		Assay	I.P. 2014, Vol 2 Pg 1296 (HPLC)	(100 to 1500) mg

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Chlorpheniramine Maleate Tablets	Identification	I.P. 2014, Vol 2 Pg 1376(TLC)	Qualitative (Present / Absent)
		Uniformity of content	I.P. 2014, Vol 2 Pg 1377 (UV)	(1 to 10) mg
		Assay	I.P. 2014, Vol 2 Pg 1377 (UV)	(1to 10) mg
		Related substance	I.P. 2014, Vol 2 Pg 1377 (TLC)	Qualitative (Present / Absent)
	Ciprofloxacin Hydrochloride Tablets	Identification by A & B	I.P. 2014, Vol 2 Pg 1403 (HPLC & TLC)	Qualitative (Present / Absent)
		Dissolution	I.P. 2014, Vol 2 Pg 1403 (UV)	80 to 120 %
		Assay	I.P. 2014, Vol 2 Pg 1404 (HPLC)	(100 to 1000) mg
	Clove bud Oil	Optical rotation	I.P. 2014, Vol 1 Pg 3201 (2.4.22)	$(-)5^{o}$ to 360^{o}
		Refractive Index	I.P. 2014, Vol 1 Pg 3201 (2.4.77)	1.327 to 1.58
	Diclofenac Gastro Resistant Tablets	Identification	I.P. 2014, Vol 2 Pg 1552 By TLC	Qualitative Present / Absent
		Assay	I.P. 2014, Vol 2 Pg 1553 by HPLC	(10 to 75) mg
	Hydrogen Peroxide 20 volume	Acidity	I.P. 2014, Vol 2 Pg 1912	Qualitative (Present / Absent)
		Organic stabilizers	I.P. 2014, Vol 2 Pg 1912	(0.1 to 20) mg
		Nonvolatile matter	I.P. 2014, Vol 2 Pg 1912	(0.1 to 50) mg
		Assay	I.P. 2014, Vol 2 Pg 1912	(1 to 10) g per 100ml

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Hydrogen Peroxide 100 volume	Acidity	I.P. 2014, Vol 2 Pg 1912	Qualitative (Present / Absent)
		Organic stabilizers	I.P. 2014, Vol 2 Pg 1912	(0.1 to 20) mg
		Nonvolatile matter	I.P. 2014, Vol 2 Pg 1912	(0.1 to 50) mg
		Assay	I.P. 2014, Vol 2 Pg 1912	(10 to 100) g per 100ml
	Ibuprofen tablets	Related substances	I.P. 2014, Vol 2 Pg 1945 (TLC)	Qualitative (Present / Absent)
		Dissolution	I.P. 2014, Vol 2 Pg 1945 (UV)	(70 to 120) %
		Assay	I.P. 2014, Vol 2 Pg 1945 (Titration)	(100 to 750) mg
	Light liquid paraffin	Light absorption	I.P. 2014, Vol 3 Pg 2436 & Vol 1 Pg 137 (2.4.7)	(0.001 to 3) A
	Mebendazole Tablets	Identification	I.P. 2014, Vol 2 Pg 2154 (HPLC)	Qualitative (Present / Absent)
	Mebendazole Tablets	Related substances	I.P. 2014, Vol 2 Pg 2155 (HPLC)	Qualitative (Present / Absent)
		Assay	I.P. 2014, Vol 2 Pg 2155 (UV)	(50 to 200) mg
	Metranidazole Tablets	Related substances	I.P. 2014, Vol 2 Pg 2220 (HPLC)	Qualitative (Present / Absent)
		Assay	I.P. 2014, Vol 2 Pg 2220 (Titration)	(100 to 500) mg
		Dissolution	I.P. 2014, Vol 2 Pg 2219 (UV)	(80 to 120) %

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	ORS Powder	Uniformity of Weight	I.P. 2014, Vol 3 Pg 2382	Qualitative
		Total Chloride	I.P. 2014, Vol 3 Pg 2382 (titration)	(1 to 5) g
		Total sodium	I.P. 2014, Vol 3 Pg 2382 (flame photometry)	(1 to 3) g
		Assay for Citrate	I.P. 2014, Vol 3 Pg 2382 (titration)	(0.5 to 3) g
		Assay for dextrose	I.P. 2014, Vol 3 Pg 2382 (optical rotation)	(1 to 50) g
		Total potassium	I.P. 2014, Vol 3 Pg 2382 (flame photometry)	(0.5 to 1) g
	Paracetamol tablets	Related substance	I.P. 2014, Vol 3 Pg 2434(HPLC)	Qualitative (Present / Absent)
		Assay	I.P. 2014, Vol 3 Pg 2434 (UV)	(100 to 850) mg
		Dissolution	I.P. 2014, Vol 3 Pg 2434 (UV)	(80 to 120) %
	Povidone Iodine solution	Assay	I.P. 2014, Vol 3 Pg 2530 (titration)	(0.25 to 2.0) g per 100ml
	Paracetamol Syrup	Identification	I.P. 2014, Vol 3 Pg 2433 (TLC)	Qualitative (Present / Absent)
	Povidone Iodine solution	4 aminophenol	I.P. 2014, Vol 3 Pg 2433 (HPLC)	Qualitative (Present / Absent)
	Paracetamol Syrup	Assay	I.P. 2014, Vol 3 Pg 2433 (HPLC)	(100 to 500) mg
	Zinc Oxide Cream	Assay	I.P. 2014, Vol 3 Pg 3011 by titration	(20 to 50) g per 100g
	Folic acid tablets	Identification	I.P. 2014, Vol 2 Pg 1822 (TLC)	Qualitative (Present / Absent)

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Hydrolysis products	I.P. 2014, Vol 2 Pg 1823 (HPLC)	Qualitative (Present / Absent)
		Uniformity of content	I.P. 2014, Vol 2 Pg 1823 (HPLC)	(0.05 to 10) mg
		Assay	I.P. 2014, Vol 2 Pg 1823 (HPLC)	(0.05 to 10) mg
	Salbutamol Tablets	Related substances	I.P. 2014, Vol 3 Pg 2704	Qualitative (Present / Absent)
		Uniformity of content	I.P. 2014, Vol 3 Pg 2704 (HPLC)	(1 to 10) mg
		Assay	I.P. 2014, Vol 3 Pg 2704 (HPLC)	(1 to 10) mg
2.	**Natural Drugs**			
	Ayurvedic and Herbal Products (Asava, Arishta, churna, thaila, ghrutha, single plant material, etc.,)	Cadmium	Ayurvedic Pharmacopoeia of India - Part I, Volume 7, Page No. 181	(0.1 to 5) mg/ kg
		Arsenic	Ayurvedic Pharmacopoeia of India - Part II, Page No. 182	(0.01 to 5) mg per kg
		Lead	Ayurvedic Pharmacopoeia of India - Part I, Volume 7, Page No. 181	(1.0 to 10) mg per kg
		Mercury	Ayurvedic Pharmacopoeia of India - Part I, Volume 7, Page No. 181	(0.01 to 5.0) mg per kg
		Ash	Ayurvedic Pharmacopoeia of India - Part I, Page No. 190	(1 to 25) g per 100g
	Ayurvedic and Herbal Products (Asava, Arishta, churna, thaila, ghrutha, single plant material, etc.,)	Acid Insoluble Ash	Ayurvedic Pharmacopoeia of India - Part I, Page No. 190	(0.1 to 20) g per 100g
		Water soluble Extract	Ayurvedic Pharmacopoeia of India - Part I, Page No. 191	(3 to 60) g per 100g

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Alcohol soluble Extract	Ayurvedic Pharmacopoeia of India - Part I, Page No. 191	(30 to 80) g per 100g
		Volatile oil	Ayurvedic Pharmacopoeia of India - Part I, Page No. 191	(0.1 to 25) g per 100g
		Fixed Oil	Ayurvedic Pharmacopoeia of India - Part I, Page No. 191	(1 to 15) g per 100g
		Loss on Drying (for dried drugs only)	Ayurvedic Pharmacopoeia of India - Part I, Page No. 191	(0.1 to 15) g per 100g
V.	**PESTICIDES**			
1.	**Deltamethrin WP**	Deltamethrin content	Annex B of IS 12005-1987	(0.0025 to 2.8)g per 100 g
		Suspensibility	IS 6940: 1982 (RA 2002)	(0.025 to 75) g per 100 g
		Acidity/ Alkalinity	IS 6940: 1982 (RA 2002)	(0.002 to 0.5) g per 100 g
		Wettability in seconds	IS 6940: 1982 (RA 2002)	(10-150) seconds
2.	**Dichlorvos EC**	Cold Test	IS 6940: 1982 (RA 2002)	Qualitative (Present/Absent)
		Flash Point	IS 6940: 1982 (RA 2002)	(55 to 75)°C
		Emulsion Stability	IS 6940: 1982 (RA 2002)	(0.1 to 2) ml
		Heat Stability	IS 6940: 1982 (RA 2002)	Qualitative (Present/Absent)
		Dichlorvos content	IS 5277: 1978	(0.4 to 79.8) g per 100 g
		Acidity	IS 6940; 1982 (RA 2002)	(0.001 to 1) g per 100 g

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
VI.	**AGRI-CULTURAL SOIL**	**Toxic Elements:**		
		Cadmium	USEPA 7131A	(0.1 & 500) g per kg
		Arsenic	USEPA 7060A	(0.01 & 500) g per kg
		Lead	USEPA 7421	(1 & 500) g per kg
		Mercury	USEPA 7471A	(0.01 & 500) g per kg
AT SITE				
3.	**Ambient Noise Monitoring**	Noise monitoring	IS 9876: 1981	(30 to 130) dB(A)

-X-X-X-X-X-X-X-X-X-X-X-X-X-X-X-

NOTE: The Laboratory has demonstrated competence for the stated scope for **WATER**. This however **does not fully cover** the specification requirements of **BIS for the Packaged Drinking Water as per IS 14543 and the Packaged Natural Mineral Water IS 13428.**