

**MUNICIPAL CORPORATION OF GREATER MUMBAI**

**MUNICIPAL ANALYST LABORATORY**

# **CUSTOMER GUIDE**

**Introduction: -**

\* Purpose of Customer Guide is to provide information about the Sample Analysis performed in laboratory.

\* As per capability and resources available in the laboratory, the test parameters for analysis and cost of analysis are clearly defined.

## AMENDMENT SHEET

Sr No	Page No.	Sample Type	Date of Amendment	Amendment	Reasons	Signature QM	Municipal Analyst
1	6-20	--	10.07.2020	Fees Structure	Per Annum Change as per MCGM Guidelines		
2	6-20	--	10.07.2020	Test methods specified w.r.t test	Pre-assessment Observation		
3	6-20	--	01.04.2021	Fees Structure	Per Annum change as per MCGM Guidelines		
4	6	Khoa/Mawa	01.04.2021	Test parameters added	FSSR, 2011 Standard		
5	5	--	01.08.2021	Terms & Conditions amended	Review of Terms & condition		
6	6-20	--	01.04.2022	Fees Structure	Per Annum change as per MCGM Guidelines		
7	6-20	--	01.04.2023	Fees Structure	Per Annum change as per MCGM Guidelines		

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## Terms and Conditions for Sample Analysis

- 1) Customer should submit the sample in clean/sterile\* container/bottle. In case of multiple samples, the information regarding samples should be clearly mentioned in the Customer Service Request Form. (\*sterile bottles available at sample reception counter)
- 2) Before submitting the sample for analysis, Customer should read the Customer Guide Available at Sample Reception Section and understand
  - a) The quantity of food sample required for analysis.
  - b) Testing charges applied by the laboratory.
  - c) Respective tests to be performed and the test methods.
- 3) After understanding the scope of tests done in laboratory, customer should fill & sign the Customer Service Request Form with Name, Address, Contact No., Quantity of sample, Specific requirements, information required by the laboratory.
- 4) If Customer wants the sample to be tested by method other than specified method, please ask for technical opinion.
- 5) In case, if laboratory does not have capability and resources for the specific test method requested by customer, Laboratory does not accept the sample.
- 6) Customer should submit appropriate quantity of the sample along with testing charges at the sample reception table. If Sample submitted is insufficient for analysis, only possible tests will be carried out.
- 7) Customer has to bring original money receipt to get the analysis report. The report will be issued on 14th working day from receipt of sample (Except the report of samples for Shelf-Life Estimation)
- 8) There is no provision for return of remnant sample after analysis. The remnant sample will be disposed after 20 working days from the date of receipt of sample. Perishable Sample will be disposed after its shelf life / expiration.
- 9) MAL assures the customer that the results obtained on testing the sample provided by the customer will not be disclosed to anybody else other than the customer or concerned regulatory authority without explicit permission from the customer. Legal action can be taken by customer if this requirement is not complied by MAL.
- 10) If Customer require statement of conformity to a specification or standard for the test, clearly mention in Customer Service Request Form.

**Decision Rule: While stating the conformity statement, the measurement uncertainty will not be considered. However, if requested, Measurement Uncertainty will be conveyed to the customer.**

## Dairy Products &amp; Analogues

Sr. No.	Food Products	Quantity required for analysis	Cost of analysis	Tests to be performed as per the standards prescribed in FSS Regulations Chapter 2	Test Method
1	Milk Curd Flavoured Milk	100-300ml 100-300g	Rs. 1200/-	Total Solids	FSSAI Manual of Methods of Analysis of Foods - (Milk & Milk Products)
				Fat in Milk	
				Milk Solid Not Fat	
				Qualitative test for Cane Sugar	
				Determination of Sugar (Flavoured Milk)	
				Qualitative test for Starch	
				Qualitative test for Urea	
				Qualitative test for Bicarbonate	
				Qualitative test for Preservative	
2	Cream, Malai, Chhena or Paneer	100-200g	Rs. 1200/-	Total Solid	FSSAI Manual of Methods of Analysis of Foods (Milk & Milk Products)
				Milk Fat /Total Fat	
				Milk Protein/Total Protein	
				Synthetic Food Colour	
Qualitative test for Starch					
3	Cheese & Cheese Products	100-200g	Rs. 1200/-	Moisture	FSSAI Manual of Methods of Analysis of Foods - (Milk & Milk Products)
				Milk Fat (on dry basis)	
4	Concentrated Milk/ Sweetened Condensed Milk/ Dairy based Desserts / Confections (Ice-cream, Frozen Desserts)	100-200g	Rs. 1200/-	Total Solid %	FSSAI Manual of Methods of Analysis of Foods - (Milk & Milk Products)
				Milk Fat /Total Fat %	
				Milk Protein/Total Protein	
				Milk solid not fat% (Sweetened condensed Milk)	
				Synthetic Food Colour (Qualitative Test)	
5	Khoa / Mawa	100-200g	Rs. 1200/-	Total Solids, Min. %	FSSAI Manual of Methods of Analysis of Foods - (Milk & Milk Products)
				Milk Fat, Min. %	
				Total Ash, Max. %	
				Titration acidity (as % lactic acid), Max %	
				Test for Starch (Qualitative Test)	
				Test for Sugar (Qualitative Test)	
				Reichert Meissl Value	
				Polenske Value	
				Butyrefractometer Reading	

Sr. No.	Food Products	Quantity required for analysis	Cost of analysis	Tests to be performed as per the standards prescribed in FSS Regulations Chapter 2	Test Method
6	Milk Powder	100-200g	Rs. 1200/-	Moisture	FSSAI Manual of Methods of Analysis of Foods - (Milk & Milk Products)
				Milk Fat	
				Milk Protein	
				Titration Acidity	
				Total Ash	
7	Shrikhand/ Chakka	100-200g	Rs. 1200/-	Total Solid	FSSAI Manual of Methods of Analysis of Foods (Milk & Milk Products)
				Milk Fat	
				Milk Protein	
				Titration Acidity	
				Total Ash	
				Sucrose (in Shrikhand)	
				Synthetic Food Colour	
8	Table Butter / White-Cooking Butter	200g	Rs. 1610/-	Moisture	FSSAI Manual of Methods of Analysis of Foods - (Milk & Milk Products)
				Milk Fat	
				Milk Solids not Fat	
				Common Salt	
9	Ghee	100-200g	Rs. 1610/-	Moisture	FSSAI Manual of Methods of Analysis of Foods - (Milk & Milk Products)
				Milk Fat	
				B. R Reading at 40°C	
				Reichert Meissl Value	
				Polensky Value	
				FFA as Oleic Acid	
				Boudouin Test	
				Iodine Value	
Saponification Value					
10	Milk Fat/ Butter Oil	100-200g	Rs. 1610/-	Moisture	FSSAI Manual of Methods of Analysis of Foods - (Milk & Milk Products)
				Milk Fat	
				B. R Reading at 40°C	
				Reichert Meissl Value	
				Polensky Value	
				FFA as Oleic Acid	
				Boudouin Test	
				Iodine Value	
Saponification Value					
11	Fermented Milk Products (Buttermilk/Chhaach)	100-200 ml	Rs. 1200/-	Milk Protein %	FSSAI Manual of Methods of Analysis of Foods - (Milk & Milk Products)
				Titration Acidity % (as Lactic Acid)	
12	Milk Protein Concentrate / Whey Protein Concentrate	100-200 g	Rs. 1200/-	Moisture %	FSSAI Manual of Methods of Analysis of Foods - (Milk & Milk Products)
				Milk Protein %	
				Total Ash %	
				Insolubility Index	
13	Cow or Buffalo Colostrum & Colostrum Products	100 – 200 g/ 100 - 200ml	Rs. 1200/-	Moisture %	FSSAI Manual of Methods of Analysis of Foods - (Milk & Milk Products)
				Protein	
				Fat	
				Total Ash (Colostrum Powder)	

**Fats, Oils and Emulsions**

Sr. No.	Food Products	Quantity required for analysis	Cost of analysis	Tests to be performed as per the standards prescribed in FSS Regulations Chapter 2	Test Method
1	Edible Oils and Edible Fats (Test are applicable as per FSSAI Standards)  Peanut Butter/ Shea Butter	150-250ml	Rs. 1610/-	Moisture (for Refined Oil) Butyro Refractometer Reading at 40 <sup>0</sup> C Refractive Index at 40 <sup>0</sup> C Saponifiable Value Iodine Value Unsaponifiable Matter Acid Value / Free fatty acids (as Oleic Acid) Boudouin Test Cloud Point Reichert Meissl Value Polenske Value Test for Rancidity Peroxide Value Test for Mineral Oil	FSSAI Manual of Methods of Analysis of Foods - (Oils And Fats)
2	Margarine and Fat Spread / Bakery and Industrial Margarine	100-200g	Rs. 1610/-	Fat Moisture Unsaponifiable Matter Free Fatty Acid /Acid Value Baudouin Test	FSSAI Manual of Methods of Analysis of Foods - (Oils And Fats)
3	Hydrogenated Vegetable Oils / Vanaspati	100-200g	Rs. 1610/-	Moisture Unsaponifiable Matter Free Fatty Acid	FSSAI Manual of Methods of Analysis of Foods - (Oils And Fats)

**Fruits & Vegetable Products**

<b>Sr. No.</b>	<b>Food Products</b>	<b>Quantity required for analysis</b>	<b>Cost of analysis</b>	<b>Tests to be performed as per the standards prescribed in FSS Regulations Chapter 2</b>	<b>Test Method</b>
1	Thermally processed / non-thermally processed Fruit & Vegetable Juices/ Fruit Nectars/ Pulps/ Purees / Squashes/ Crushes/ Fruit Syrups / Barley Water/ Synthetic Syrups/ Ready to serve Fruit Drinks/ Beverages/ Sharbat/ Murabba Jam/ Jelly Marmalades (Test are applicable as per FSSAI Standard)	50-100ml/ 50-100g	Rs. 1020/-	Total Soluble Solid Acidity Ash insoluble in dil. HCl  Synthetic Food Colour	FSSAI Manual of Methods of Analysis of Foods - (Fruit and Vegetable Products)
2.	Soup Powder/ Fruit Bar/ Toffee	50-100 g	Rs. 1020/-	Moisture Total Soluble Solid	FSSAI Manual of Methods of Analysis of Foods - (Fruit and Vegetable Products)
3.	Tomato Ketchup/ Sauce/ Puree/ Paste/ Tamarind Pulp/ Puree/ Soyabean Sauce	50-100 ml	Rs. 1020/-	Total Soluble Solid Acidity	FSSAI Manual of Methods of Analysis of Foods - (Fruit and Vegetable Products)

Sr. No.	Food Products	Quantity required for analysis	Cost of analysis	Tests to be performed as per the standards prescribed in FSS Regulations Chapter 2	Test Method
4.	Dehydrated Vegetables / Chutney/ Grated Desiccated Coconuts/ Date Paste (Test are applicable as per FSSAI Standard)	50-100g	Rs. 1020/-	Moisture	FSSAI Manual of Methods of Analysis of Foods - (Fruit and Vegetable Products)
				Total Ash	
				Ash insoluble in dil. HCl	
				pH	
5.	Pickles in Citrus Juice/ Brine/ Vinegar (Test are applicable as per FSSAI Standard)	100-200g	Rs. 1020/-	Sodium Chloride Content	FSSAI Manual of Methods of Analysis of Foods - (Fruit and Vegetable Products)
				Acidity	
6.	Vinegar	100-200ml	Rs. 1020/-	Acidity	FSSAI Manual of Methods of Analysis of Foods - (Fruit and Vegetable Products)
				Total Solids	
				Total Ash	
7.	Nuts & Raisin (All Dry Fruits)/ Cocoa Beans/ Betelnut (Test are applicable as per FSSAI Standards)	100-250g	Rs. 1020/-	Moisture	FSSAI Manual of Methods of Analysis of Foods - (Fruit and Vegetable Products)
				Damaged kernel/Damaged Unit	
				Unopened Shells	
				Empty Shell	
				Extraneous Matter	
				Rancidity	
				Acidity/ FFA as Oleic Acid	
				Acid insoluble Ash	
Peroxide Value					
8.	Seedless Tamarind/ Date Paste (Test are applicable as per FSSAI Standards)	100- 200 g	Rs. 1020/-	Moisture%	FSSAI Manual of Methods of Analysis of Foods - (Fruit and Vegetable Products)
				Organic Extraneous Matter	
				Total Ash	
				Acid insoluble Ash	
				Crude Fibre	
				Tamarind Seeds	
9	Coconut Milk/ Coconut Cream/ Coconut Milk Powder (Non-Dairy)	100-200 g/ 100-200 ml	Rs. 1020/-	Moisture%	FSSAI Manual of Methods of Analysis of Foods - (Fruit and Vegetable Products)
				Total Solids%	
				Solids-not-Fat %	
				Fat%	
				pH	
				FFA as lauric acid	
10	Fermented Soyabean Paste	20 - 50 g	Rs. 1020/-	Moisture%	FSSAI Manual of Methods of Analysis of Foods - (Fruit and Vegetable Products)
				Total Nitrogen %	

**Cereal and Cereal Products**

Sr. No.	Food Products	Quantity required for analysis	Cost of analysis	Tests to be performed as per the standards prescribed in FSS Regulations Chapter 2	Test Method
1	Atta/ Maida/ Suji (Rawa)/ Besan/ Cornflour/ Macroni Products / Oat Products/ Flours (Test are applicable as per FSSAI Standards)	150-250g	Rs. 1020/-	Moisture	FSSAI Manual of Methods of Analysis of Foods - (Cereal and Cereal Products)
				Total Ash	
				Ash insoluble in dil. HCl	
				Gluten	
				Alcoholic Acidity	
				Total Protein (Protein rich Atta & Maida)	
Crude Fibre					
2	Food Grains (Test are applicable as per FSSAI Standards)	250-500g	Rs. 1020/-	Extraneous Matter/Foreign Matter	FSSAI Manual of Methods of Analysis of Foods - (Cereal and Cereal Products)
				Other Edible Grains	
				Damaged Grains	
				Weevilled Grains	
				Moisture	
3	Maize Starch/ Corn Flakes/ Custard Powder/ Pearl Barley / Barley Powder/ Malted Food / sago Flour (Test are applicable as per FSSAI Standards)	150- 250 g	Rs. 1020/-	Moisture	FSSAI Manual of Methods of Analysis of Foods - (Cereal and Cereal Products)
				Total Ash	
				Ash insoluble in dil. HCl	
				Gluten	
				Alcoholic Acidity	
				Starch Content	
				pH	
				Crude Fibre	
4	Soy Protein Products/ Whole Maize Flour/Maize Grits/ Textured Soy Protein	100-150 g	Rs. 1020/-	Moisture	FSSAI Manual of Methods of Analysis of Foods - (Cereal and Cereal Products)
				Total Ash	
				Total Protein	
				Crude Fat	
				Crude Fibre	
5	Bakery Products (Biscuits/ Bread) (Test are applicable as per FSSAI Standards)	200-250g	Rs. 800/-	Ash insoluble in dil. HCl	FSSAI Manual of Methods of Analysis of Foods - (Cereal and Cereal Products)
				Acidity of extracted Fat	
				Alcoholic Acidity	
				Synthetic Food Colour.	
				Rancidity of extracted fat	

**Meat and Meat Products**

<b>Sr. No.</b>	<b>Food Products</b>	<b>Quantity required for analysis</b>	<b>Cost of analysis</b>	<b>Tests to be performed as per the standards prescribed in FSS Regulations Chapter 2</b>	<b>Test Method</b>
1	Fresh or Chilled or Frozen Meat (Test are applicable as per FSSAI Standards)	150-200 g	Rs. 800/-	Moisture %	FSSAI Manual of Methods of Analysis of Foods - (Meat & Meat Products)
				Protein %	
				Fat %	
				Carbohydrates %	
				Ash %	
2	Fresh Eggs/ Frozen Eggs (Test are applicable as per FSSAI Standards)	4-6 pieces	Rs. 800/-	Moisture % / Min. solids matter content%	FSSAI Manual of Methods of Analysis of Foods - (Meat & Meat Products)
				Protein %	
				Fat %	
				Carbohydrates %	
				Ash %	
3	Pickled Eggs	50-100 g	Rs. 800/-	Acidity as Acetic Acid %	FSSAI Manual of Methods of Analysis of Foods - (Meat & Meat Products)
				Sodium Chloride %	
				pH	

**Sweets & Confectionery**

Sr. No.	Food Products	Quantity required for analysis	Cost of analysis	Tests to be performed as per the standards prescribed in FSS Regulations Chapter 2	Test Method
1	Sugar boiled confectionery / Milk Toffee/ Butter Toffee (Test are applicable as per FSSAI Standards)	100-200g	Rs. 1020/-	Ash insoluble in dil. HCl Sulphated Ash Total Fat Total Protein	FSSAI Manual of Methods of Analysis of Foods - (Sugar and Sugar Products and Confectionery Products)
2.	Chewing Gum/ Bubble Gum/Lozenges (Test are applicable as per FSSAI Standards)	100-200g	Rs. 1020/-	Moisture Ash insoluble in dil. HCl Sulphated Ash Reducing Sugar (as Dextrose) Sucrose	FSSAI Manual of Methods of Analysis of Foods - (Sugar and Sugar Products and Confectionery Products)
3.	Chocolate	100-200g	Rs. 1020/-	Insect & fungal infestation Total Fat Milk Fat Milk Solids Acid insoluble Ash	FSSAI Manual of Methods of Analysis of Foods - (Sugar and Sugar Products and Confectionery Products)
4.	Ice Lollies/ Edible Ice	100-200g	Rs. 1020/-	Sucrose Artificial Sweetener (Saccharin Sodium)	FSSAI Manual of Methods of Analysis of Foods - (Sugar and Sugar Products and Confectionery Products)
5.	Cocoa Powder	100-200g	Rs. 1020/-	Moisture Acid insoluble ash Alkalinity of total ash as K <sub>2</sub> O by weight Crude Fibre	FSSAI Manual of Methods of Analysis of Foods - (Sugar and Sugar Products and Confectionery Products)

**Sweetening Agents including Honey**

Sr. No.	Food Products	Quantity required for analysis	Cost of analysis	Tests to be performed as per the standards prescribed in FSS Regulations Chapter 2	Test Method
1	Sugar/ Bura Sugar/ Cube Sugar/ Kandsari Sugar/ Misri Sugar/ Icing Sugar (Tests are applicable as per FSSAI Standards)	50-100g	Rs. 1020/-	Moisture Sucrose Total Ash Ash insoluble in dil. HCl Sulphated Ash	DGHS Manual of Methods of Analysis of Foods - (Beverages, Sugar and Sugar Products and Confectionery Products)
2	Honey	100-200g	Rs. 1020/-	Moisture Total reducing Sugar Sucrose Fructose- Glucose Ratio Total Ash Acidity Fiche's Test	DGHS Manual of Methods of Analysis of Foods - (Beverages, Sugar and Sugar Products and Confectionery Products)
3	Bees Wax	100-200 g	Rs. 1020/-	Solubility Acid Value Peroxide Value Saponification Value Ash Total volatile Matter	DGHS Manual of Methods of Analysis of Foods - (Beverages, Sugar and Sugar Products and Confectionery Products)
4	Jaggery/ Gur	200-250g	Rs. 1020/-	Total Sugar as Inverted Sugar Sucrose Extraneous Matter Total Ash Ash insoluble in dil HCl Added Colouring Matter	DGHS Manual of Methods of Analysis of Foods (Beverages, Sugar and Sugar Products and Confectionery Products)

**Salt, Spices, Condiments and Related Products**

Sr. No.	Food Products	Quantity required for analysis	Cost of analysis	Tests to be performed as per the standards prescribed in FSS Regulations Chapter 2	Test Method
1	Spices (whole) (Tests are applicable as per FSSAI Standards)	200-250g	Rs.1200/-	Extraneous Matter	FSSAI Manual of Methods of Analysis of Foods - (Spices and Condiments)
				Moisture	
				Total Ash	
				Ash insoluble in dil. HCl	
				Volatile Oil Content	
	Saffron (Kesar)	15-20g	Rs.1200/-	Cold Water-Soluble Extract	
				Other Edible Seeds	
				Test for Lead Chromate	
				Added colouring matter	
				Total Nitrogen Content (for Saffron)	
2	Powdered Spices/ Chili Powder/ Turmeric Powder/ Asafoetida (Hing)/ Mixed Masala Powder/ Dried Oregano Powder/ Seasoning  (Tests are applicable as per FSSAI Standards)	200-250g	Rs.1200/-	Moisture	FSSAI Manual of Methods of Analysis of Foods - (Spices and Condiments)
				Total Ash	
				Ash insoluble in dil. HCl	
				Volatile Oil Content	
				Non-Volatile ether extract	
				Crude Fibre	
				Cold Water-Soluble Extract	
				Water Soluble Ash	
				Alcoholic Extract	
				Starch (in Asafoetida & Turmeric Powder)	
				Test for Lead Chromate	
				Total Nitrogen Content (for Saffron)	
				Acidity	
Synthetic Food Colour					
3	Edible Common Salt	100-200g	Rs.1200/-	Moisture	IS: 253-1985 (Reaffirmed 2009)
				Sodium Chloride content	
				Matter insoluble in water	
				Matter soluble in water other than NaCl	

**Beverages**

Sr. No.	Food Products	Quantity required for analysis	Cost of analysis	Tests to be performed as per the standards prescribed in FSS Regulations Chapter 2	Test Method
1	Tea / Green Tea (Tests are applicable as per FSSAI Standards)	100-200g	Rs.1020/-	Total Ash	IS13854:1994 Reaffirmed 2014
				Water soluble ash	IS13855:1993 Reaffirmed 2014
				Alkalinity of water-soluble ash	IS13856:1993 Reaffirmed 2014
				Acid insoluble ash	IS13857:1993 Reaffirmed 2014
				Water Extract	IS13862:1999 Reaffirmed 2014
				Crude Fibre	IS16041:2012 Reaffirmed 2014
				Added Colouring matter	And FSSAI Manual of Methods of Analysis of Foods – Beverages: Tea, Coffee, Chicory
2	Coffee/ Chicory / Coffee –Chicory Mixture	100-200g	Rs. 1020/-	Total Ash	FSSAI Manual of Methods of Analysis of Foods – Beverages: Tea, Coffee, Chicory
				Water soluble ash	
				Alkalinity of water-soluble ash	
				Acid insoluble ash	
				Water Extract	
				Crude Fibre	
				Added Colouring matter	
				Solubility in Boiling Water	
				Solubility in Cold Water	
				Moisture %	
3	Carbonated Beverages (Cold Drinks: Pepsi, Cocacola, Thumps up etc.) (For Chemical Analysis)  (For Bacteriological Analysis)	100-200ml	Rs. 1020/-	<b>Chemical Analysis</b>	DGHS Manual of Methods of Analysis of Foods -- (Food Additives)
				Synthetic Food Colour	
				Artificial Sweetners (Saccharin Sodium)	
				<b>Bacteriological Analysis</b>	
		200-300ml	Rs. 1053/-	Total Plate Count	BIS Methods
				Coliform Count	
				Yeast & Mould Count	
4	Alcoholic Beverages (Whisky/Toddy/Wine/Beer)	1lit.	Rs.1200/-	Alcohol Content	FSSAI Manual of Methods of Analysis of Foods – Alcoholic Beverages
				Residue on evaporation	
				Total Acidity (as Tartaric Acid)	
				Volatile Acids (as Acetic Acid)	
				Reducing sugar	
				Total Sugar	

Sr. No.	Food Products	Quantity required for analysis	Cost of analysis	Tests to be performed	Test Method
5	Mineral Water / Packaged Drinking Water	2-3 lit.	Rs. 1610/-	<b>Chemical Analysis</b>	FSSAI Manual of Methods of Analysis of Foods -- (Water)
				Odour	
				Physical Appearance	
				Turbidity	
				Total Dissolved Solid	
				pH	
				Iron	
				Nitrate	
				Nitrite	
				Fluoride	
				Chloride	
				Sulphate	
				Alkalinity	
		Calcium			
		Residual Free Chlorine			
		2-3 lit	Rs. 5958/-	<b>Bacteriological Analysis</b>	
				Packaged Drinking Water	IS 14543: 2024
				Packaged Natural Mineral water	IS 13428: 2024
				Coliform count	IS 15185:2016
				<i>E.coli</i>	IS 15185:2016
Yeast & Mould	IS 16069 (P-1) 2008 RA 2022				
Aerobic Plate Count (P-1)	IS 5402: 2021				
<i>Salmonella Sp.</i>	IS 15187:2016 RA 2021				
<i>Vibrio cholerae &amp; Vibria Parahaemolyticus</i>	IS 5887 (Part 5): 1976 RA 2018				
<i>Pseudomonas aeruginosg</i>	IS 13428:2024 Annex-1				
<i>Faecal Streptococci</i>	IS 15186:2002 RA 2018				
<i>Staphylococcus aureus</i>	IS 5887 Part 2: 1976 RA 2020				
<i>Shigella</i>	IS 5887 (Part 7): 1999 RA 2022				
Sulphite reducing Anaerobe	IS 13428: 2024 Annex C				

**Other Food Products & Ingredients & Proprietary Food**

Sr. No.	Food Products	Quantity required for analysis	Cost of analysis	Tests to be performed as per the standards prescribed in FSS Regulations Chapter 2	Test Method
1	Pan Masala	25-50g	Rs.1020/-	Insect & fungal infestation Test for carbonate	As per prohibition order/ FSSA Notification by commissioner of food safety, FDA, Govt. of Maharashtra
2	Silver Leaf	2-3 Leaf's	Rs. 800/-	Physical Testing	Physical Testing
2	Proprietary Food / Food for Quality Check (Prepared Food/ Cake/ Mithai etc.)	75-100g	Rs.800/-	Artificial Sweeteners (Saccharin Sodium) Synthetic Food Colour Rancidity of extracted fat	Methods for tests are referred from FSSAI Manual of Methods of Analysis of Foods -- (Food Additives)

**Food for Nutritional Analysis**

Sr. No.	Food Products	Quantity required for analysis	Cost of analysis	Tests to be performed	Test Methods
1	Food for Nutritional Analysis	100-150g	Rs.1780/-	Moisture %	Halogen Moisture Balance
				Total Ash %	Gravimetric Method
				Total Fat %	Rose Gottlieb Method / Soxhlet Method
				Protein %	Kjeldahl Method
				Carbohydrates %	By difference
				Sucrose %	Lane Eynon Method
				Calorific Value	By Calculation

**Bacteriological Analysis for Food**

Sr. No.	Sample	Quantity required for analysis	Cost of analysis	Tests to be performed	Test Methods		
1	Food	100g/ 100ml	Rs. 386 for each test	Aerobic Microbial Count	IS 5402 (Part 1): 2021 - Pour Plate Method IS 5402 (Part-2): 2024 - Surface Plate Technique		
				Yeast & Mold Count & Detection	IS 5403:1999 RA 2018 IS 16069 (Part 1): 2013 IS 16069 (Part-2): 2013		
				Coliform Count	IS 5401 (Part-1):2012 RA 2022		
				<i>E.coli</i> Count	IS 5887 (Part-1) :1976 RA 2022		
				25g/25ml for each test	Rs. 800/- for each test	<i>Salmonella Spp.</i> detection	IS 5887(Part-3) Sec-1: 2020
			<i>Shigella</i> detection			IS 5887(Part-7) 1999 RA 2022	
			<i>Vibrio cholerae</i> detection			IS 5887(Part-5): 1976 RA 2018	
			<i>Vibrio cholerae</i> (For Fish Products)			(O1 & O139) - USFDA BAM Online, May 2004	
			<i>Vibrio parahaemolyticus</i> detection			IS 5887 (P-5) 1976 RA 2018	
			<i>Staphylococcus aureus</i> coagulase +ve count & detection			IS 5887 (P-2) 1976 (RA 2022)	
			<i>Enterobacteriaceae</i> count/ detection			IS 17112 P-1 & P-2: 2019	
			<i>Listeria Monocytogenes</i> detection			IS 4988 (P-1): 2020	
			Sulphite reducing bacteria detection			ISO 15213: 2003	
			Enterobacter Sakazaki			IS 18357: 2023	

**Bacteriological Analysis for Water**

Sr. No.	Type of water	Quantity required for analysis	Cost of analysis	Tests to be performed as per IS Specifications	Test Methods
1	Drinking Water for Bacteriological Analysis (Standards prescribed in IS:10500 of 2012)	100ml	Rs.800/-	Coliform Count	IS 15185: 2016
				<i>E.coli</i>	IS 15185: 2016
2	Swimming Pool Water for Bacteriological Analysis (Standards prescribed in IS:3328: 1993 RA 2019)	100ml	Rs.760/-	Standard Plate Count	IS 3328: 2003 (Annex-A)
				Coliform Count	IS 15185: 2016

**Chemical Analysis of Water**

Sr. No.	Type of water	Quantity required for analysis	Cost of analysis	Tests to be performed as per the standards prescribed in IS Specifications	Test Methods
1	Drinking Water <b>(Standards prescribed in IS:10500 of 2012)</b>	1 - 2 lit.	Rs.1610/-	Odour	IS 3025Part 05:1983 Reaffirmed 2002
				Physical Apperance	Visual Examination
				Total Dissolved Solid	TDS Electrode
				Turbidity	IS 3025 Part 10:2023
				pH	IS 3025 Part 11:1983 Reaffirmed 2006
				Nitrate	IS 3025 Part 34: 1988
				Total Alkalinity as CaCO <sub>3</sub>	IS 3025 Part 23:1986 Reaffirmed 2003
				Total Hardness as CaCO <sub>3</sub>	IS 3025 Part 21:1983 Reaffirmed 2009
				Chloride	ASTM Methods D4646-87
				Residual Free Chlorine	By Chlorinometer
				Sulphate	APHA
				Iron	ASTM E 1615-05
				Fluoride	IS 3025 Part 60:2008
				Calcium	AASTM D-511
Ammonia	IS 3025 Part 34:1988				
2	Construction Water <b>(Standards prescribed in IS:456 of 2000)</b>	2 – 5 lit.	Rs.1420/-	pH	IS 3025 Part 11:1983 Reaffirmed 2006
				NaOH required to neutralize 100ml water	IS 3025 Part 22:1986 Reaffirmed 2003
				H2SO4 required to neutralize 100ml water	IS 3025 Part 23:1986 Reaffirmed 2003
				Inorganic Solids	IS 3025 Part 18:1984 Reaffirmed 2002
				Organic Solid	IS 3025 Part 18:1984 Reaffirmed 2002
				Sulphate (as SO <sub>4</sub> )	IS 3025 Part 24:1986 Reaffirmed 2009
				Chloride (as Cl)	IS 3025 Part 32:1988 Reaffirmed 2007
Suspended Matter	IS 3025 Part 17:1984 Reaffirmed 2012				

Sr. No.	Type of water	Quantity required for analysis	Cost of analysis	Tests to be performed as per the standards prescribed in IS Specifications	Test Methods
3	Swimming Pool Water <b>(Standards prescribed in IS:3328: 1993 RA 2019)</b>	1 - 1.5 lit.	Rs.1200/-	Odour	IS 3025Part 05:1983 Reaffirmed 2002
				Turbidity	IS 3025Part 10:1984 Reaffirmed 2006
				pH	IS 3025 Part 11:1983 Reaffirmed 2006
				Total Dissolved Solid	TDS Electrode
				Chloride	IS 3025 Part 32:1988 Reaffirmed 2007
				Total Alkalinity	IS 3025Part 23:1986 Reaffirmed 2003
				Total Residual Chlorine	By Chlorinometer
				Oxygen absorption	Tidy's Method

**Non-Food Articles**

Sr. No.	Sample	Quantity required for analysis	Cost of analysis	Tests to be performed as per IS methods	Test Methods
1	Soap <b>(Standards prescribed in IS 286: 1978 Reaffirmed 2008)</b>	250g	Rs.1200/-	Total Fatty Matter	IS 286: 1978 Reaffirmed 2008
2	Bleach Solution (Sodium Hypochlorite) <b>(Standards prescribed in IS 11673: 1992)</b>	150-250g/ 150-250ml	Rs.1200/-	Relative Density Available chlorine Free alkali Free sodium carbonate	IS 11673: 1992
3	Synthetic Detergent <b>(Standards prescribed in IS 4956: 2002)</b>	150-250g	Rs.1200/-	Active ingredient Moisture and volatile matter pH Matter insoluble in water	IS 4956: 2002
4	Cleaning Powder <b>(Standards prescribed in IS 6047: 2009)</b>	150-250g	Rs.1200/-	Active alkalinity Lather	IS 6047: 2009
5	Cigarette <b>(Standards prescribed in IS 1577:2008)</b>	25-50g	Rs.1200/-	Loss on Heating Total Ash Ash insoluble in dil. HCl	IS 5643: 1999 Reaffirmed 2005
6	Gutkha/ Scented Tobacco/ Scented Supari/ Mukhwas <b>(fssai Notification)</b>	20-50g	Rs.1200/-	Insect & Fungal Infestation Test for Carbonate	Visual Examination & Qualitative Test

**Samples for Shelf Life**

Sr. No.	Sample	Quantity required for analysis	Cost of analysis	Tests to be performed as per IS methods	Test Methods
1	<b>Shelf Life (Accelerated Shelf Life) – For Samples with minimum 2% fat</b>	100-150 g	Rs. 5500/-	Shelf Life	By Oxitest Instrument
2	<b>Shelf Life up to 30 days</b>	150-250g/ 150-250ml	Rs.2500/-	Appearance/ Visual Examination Rancidity of extracted fat (If applicable) Acidity (If applicable)	FSSAI Manual of Methods

**Analysis by Instrumental Method**

Sr. No.	Sample	Quantity required for analysis	Cost of analysis	Tests to be performed as per IS methods	Test Methods
1	Nutritional Analysis of Mid-Day Meal	100-150 g	Rs. 500/-	Protein % Calorific Value	By NIR Instrument
2	Fatty Acid Profile	100 g	Rs.2000/-	Quantitative Analysis	Gas Chromatography
3	Pesticide Residue	100 g	Rs.2000/-	Quantitative Analysis	Gas Chromatography
4	Food Additives	100 g	Rs. 2000/-	Quantitative Analysis	HPLC

Charges for Extra Copy/ Urgent Report	Rs. 386/-
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