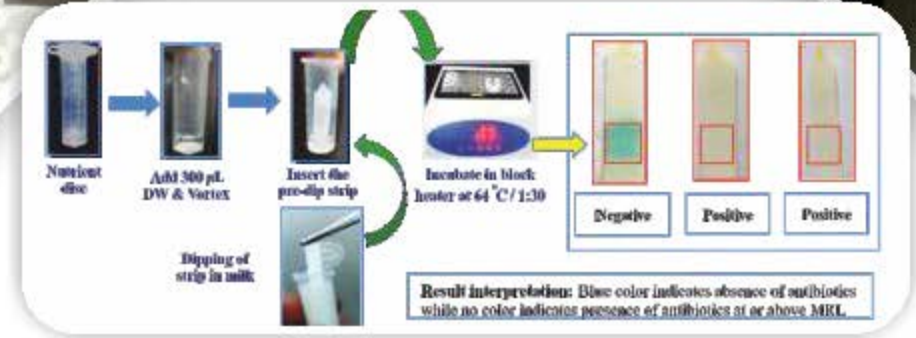
Approved List of Charges for Various Contract and Consultancy Services Offered by ICAR-NDRI through Consultancy Processing Cell

(w.e.f. 01/09/2021)



ICAR-National Dairy Research Institute

Karnal-132001, Haryana

2021-22

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ICAR-National Dairy Research Institute
Karnal- 132001 (Haryana) INDIA

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Preface

The Indian Council of Agricultural Research (ICAR) had formulated the Rule and Guidelines on Training, Consultancy ,Contract Research and Contract Services in ICAR System during the year 1997, with a view to develop a mechanism on partnership, resource generation and incentive and rewards within the system. ICAR-NDRI has also implemented these rules and guidelines for all its professional service functions. Contract services would mean services rendered to the external organizations/clients/customers or assistance of minor nature based on available knowledge, expertise, skills and facilities of the institute; these would involve service activities such as routine laboratory testing where the results are provided as such without further processing or interpreting the data; and would not require any technical advice. The main purpose of minor/ routine contract services is to showcase the strengths of our institutes for general public benefits; thereby providing support to the external agencies in mandated areas of the institute or its centre(s). In turn, there may be some income generation as well. Contract service may include various kinds of routine services like testing and analysis of samples of milk and milk products, packaging materials used for different food products and animal feeds; equipment usage charges; hiring charges for pilot scale trials in the Experimental Dairy; supply of cultures; supply of test kits; advisory charges; charges for preparation of techno-economic feasibility report. The approved rates of all these services which are fixed on the basis of the cost of inputs provided by the institute are compiled in the form of a booklet for the wide circulations. The rates for the entire contract services given in this booklet are effective from 01/09/2021.Institute can also take up the contract services other than the listed one in its mandated area and rates for such services would be fixed on the basis of ICAR guidelines.

Chairperson
Consultancy Processing Unit
ICAR-NDRI, Karnal

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1. Testing and Analysis of Samples of Milk and Milk Products, Packaging Materials Used for Different Food Products and Animal Feeds

1.1 Microbiological Analysis of Milk and Milk products (NABL Accredited BSL-3 Laboratory)

Sr. No.	Description of test (Testing Procedure)	Product description	Rate per sample excluding GST (Rs.)
1.	Total Viable Count (IS:5402:2012 (RA-2018))	Pasteurized milk/ boiled milk/ flavored milk, Pasteurized cream, Sweetened condensed milk, Pasteurized butter, Milk powder: SMP, PSMP, Dairy Whitener, cream powder, ice cream mix powder, lactose, whey based powder, butter milk powder, casein powder, Infant milk foods, Infant formulae, Infant milk substitute, Follow-up formula, Cereal based complementary foods, Ice-cream, frozen dessert, milk lolly, ice candy, Processed cheese/ cheese spread, Paneer/ Chhana/ Chhana based sweets and Khoa/ Khoa based sweets	750
2.	Yeast and Mould Count (IS:5403:1999 (RA-2018)	Sweetened condensed milk, Pasteurized butter, Milk powder: SMP, PSMP, Dairy Whitener, cream powder, ice cream mix powder, lactose, whey based powder, butter milk powder, casein powder, Infant milk foods, Infant formulae, Infant milk substitute, Follow-up formula, Cereal based complementary foods, All other cheeses categories including fresh cheese/ cheddar cheese/ cottage/ soft/ semi soft etc., Fermented milk products, Paneer/ Chhana/ Chhana based sweets, Khoa/ Khoa based sweets	750
3.	Total Coliforms Count (IS: 5401- Part 1:2012) (RA-2018)	Pasteurized milk/ boiled milk/ flavored milk, Pasteurized cream, Sweetened condensed milk, Pasteurized butter, Milk powder: SMP, PSMP, Dairy Whitener, cream powder, ice cream mix powder, lactose, whey based powder, butter milk powder, casein powder, Follow-up formula, Cereal based complementary foods, Ice-cream, frozen dessert, milk lolly, ice candy, Processed cheese/ cheese spread, All other cheeses categories including fresh cheese/ cheddar cheese/ cottage/ soft/semi soft etc., Fermented milk products, Paneer/ Chhana/ Chhana based sweets, Khoa/ Khoa based sweets	750
4.	Enterobacteriaceae (ISO: 21528-1 & 21528-2)	Infant Milk Food, Infant Formulae, Infant Milk Substitute	750

Sr. No.	Description of test (Testing Procedure)	Product description	Rate per sample excluding GST (Rs.)
5.	Staphylococcus aureus (Coagulase positive) (IS: 5887: Part-9 Sec 1:2002) (RA-2018)	Pasteurized butter, Sweetened condensed milk, Pasteurized butter, Milk powder: SMP, PSMP, Dairy Whitener, cream powder, ice cream mix powder, lactose, whey based powder, butter milk powder, casein powder, Infant milk foods, Infant formulae, Infant milk substitute, Follow-up formula, Cereal based complementary foods, Ice-cream, frozen dessert, milk lolly, ice candy, Processed cheese/ cheese spread, All other cheeses categories including fresh cheese/ cheddar cheese/ cottage/ soft/semi soft etc., Fermented milk products, Paneer/ Chhana/ Chhana based sweets, Khoa/ Khoa based sweets	750
6.	*E.coli* (IS:5887: Part 1: 1976) (RA-2018)	Pasteurized butter, Pasteurized butter, Infant milk substitute, Follow-up formula, Cereal based complementary foods, Ice-cream, frozen dessert, milk lolly, ice candy, All other cheeses categories including fresh cheese/ cheddar cheese/ cottage/ soft/semi soft etc., Fermented milk products, Paneer / Chhana/ Chhana based sweets, Khoa / Khoa based sweets	1500
7.	Salmonella/ Shigella (IS:5887: Part 3:1999) (RA-2018)	Pasteurized milk, boiled milk/ flavored milk, Pasteurized cream, Sweetened condensed milk, Pasteurized butter, Sweetened condensed milk, Pasteurized butter, Milk powder: SMP, PSMP, Dairy Whitener, cream powder, ice cream mix powder, lactose, whey based powder, butter milk powder, casein powder, Infant milk foods, Infant formulae, Infant milk substtute, Follow-up formula, Cereal based complementary foods, Ice-cream, frozen dessert, milk lolly, ice candy, Processed cheese/ cheese spread, All other cheeses categories including fresh cheese/ cheddar cheese/ cottage/ soft/semi soft etc., Fermented milk products, Paneer/ Chhana/ Chhana based sweets, Khoa/Khoa based sweets.	1500
8.	Sulphite Reducing Clostridia (SRC) (ISO:15213:2003) (RA-2005)	Milk powder: SMP, PSMP, Dairy Whitener, cream powder, ice cream mix powder, lactose, whey based powder, butter milk powder, casein powder, Infant milk foods, Infant formulae, Infant milk substitute, Follow-up formula, Cereal based complementary foods	1500

Sr. No.	Description of test (Testing Procedure)	Product description	Rate per sample excluding GST (Rs.)
9.	*Listeria monocytogenes* (IS:14988: Part-1:2001) (RA-2018)	Pasteurized milk/ boiled milk/ flavored milk, Pasteurized cream, Sweetened condensed milk, Pasteurized butter, Sweetened condensed milk, Pasteurized butter, Milk powder: SMP, PSMP, Dairy Whitener, cream powder, ice cream mix powder, lactose, whey based powder, butter milk powder, casein powder, Infant milk foods, Infant formulae, Infant milk substitute, Follow-up formula, Cereal based complementary foods, Ice-cream, frozen dessert, milk lolly, ice candy, Processed cheese/ cheese spread, All other cheeses categories including fresh cheese/ cheddar cheese/ cottage/ soft/semi soft etc., Fermented milk products Paneer/ Chhana/ Chhana based sweets, Khoa/ Khoa based sweets	1500
10.	*Bacillus cereus* (IS:5887: Part-6: 2012) (RA-2018)	Milk powder: SMP, PSMP, Dairy Whitener, cream powder, ice cream mix powder, lactose, whey based powder, butter milk powder, casein powder, Infant milk foods, Infant formulae, Infant milk substitute, Follow-up formula, Cereal based complementary foods	1500
11.	Commercial sterility test (IS:4238/IS: 4884) (RA-2019)	Sterilized milk/ UHT milk, Sterilized cream/ UHT cream	1500
12.	*Enterobacter sakazakii* (ISO/T:22964:2017) (RA-2017)	Infant Milk Food, Infant Formulae, Infant Milk Substitutes	1500
13.	*In-Vitro* anti-bacteria efficacy testing of disinfectants (IS:5253)	For checking antimicrobial potency of sanitizers used in dairy / food industry	750
14.	Charm ROSA test for antibiotics in milk (AOAC approved assay) (Charm ROSA)	Testing of raw, pasteurized milk and dried milks for following 6 groups of antimicrobial residues : β-Lactam, Tetracycline, Chloramphenicol, Streptomycin, Sulfa drugs, Aminoglycoside, Gentamycin / Neomycin	1000 per sample and for each antibiotic

Sr. No.	Description of test (Testing Procedure)	Product description	Rate per sample excluding GST (Rs.)
15.	DPA based test for antibiotic in milk	Testing of raw, pasteurized milk and dried milks for following 7 groups of antibiotics as broad spectrum detection (**LODs at FSSAI /Codex Limits**): β-Lactam, Tetracycline, Chloramphenicol, Streptomycin, Sulfa drugs, Macrolides, Aminoglycoside, Gentamycin / Neomycin.	200 per sample Per sample
16.	MBRT test (BIS method)	Raw/processed milk	250
17.	Somatic Cell count (Quantitative evaluation)	Raw/processed milk	500
18.	Somatic Cell count (Semi quantitative)	Raw/processed milk	200
19.	Paper strip based test for antibiotic in milk	Testing of raw, pasteurized milk and dried milks for following 7 groups of antibiotics as broad spectrum detection (**LODs at FSSAI /Codex Limits**): β-Lactam, Tetracycline, Chloramphenicol, Streptomycin, Sulfa drugs, Macrolides, Aminoglycoside, Gentamycin / Neomycin	300
20.	Paper strip based test for detection of Pesticide residues in different food matrices	Testing of raw, pasteurized milk and dried milks for following 7 groups of antibiotics as broad spectrum detection (**LODs at FSSAI /Codex Limits**): β-Lactam, Tetracycline, Chloramphenicol, Streptomycin, Sulfa drugs, Macrolides, Aminoglycoside, Gentamycin / Neomycin	300
21.	Paper strip based test for detection of Pesticide residues in different food matrices	Testing of different food matrices which includes milk, cereal based foods, fruit juices, soil, manure, feed, fodder , water etc., for all groups of pesticides at MRL limits set by codex/FSSAI)	500
22.	Identification of Bacteria	Gram negative , Gram positive and Yeast (Using BD system) 48 hrs.	1200 Per Micro-organism
23.	Antimicrobial susceptibility testing (AST) of bacteria	Gram negative & Gram positive (Using BD system) 72 h. (As per clinical & laboratory standard institute (CLSI) guidelines.	1200 Per Micro-organism

1.2 Chemical Analysis of Milk and Milk Products (NABL Accredited Laboratory)

Sr. No.	Description of test	Rate per sample Excluding GST (Rs.)
Milk		
1.	Detection of neutralizers	250
2.	Detection of starch	250
3.	Detection of cane sugar	250
4.	Detection of hydrogen peroxide	250
5.	Detection of formaldehyde	250
6.	Detection of urea	250
7.	Detection of detergent	250
8.	Detection of Maltodextrin	250
9.	Detection of nitrate	250
10.	Detection of Vegetable oil	300
11.	Detection of Common salt	250
12.	Detection of Sulfate	250
13.	Detection of Ammonium salt	250
14.	Detection of boric acid	250
15.	Detection of salicylic acid	250
16.	Titratable Acidity (as % lactic acid)	300
17.	Fat by Gerber method	300
18.	Fat by Reference method	500
19.	Solids-not-fat (SNF) by lactometer	300
20.	Solids-not-fat (SNF) by gravimetric method	750
21.	Total solids by gravimetric method	350
22.	Crude Protein by nitrogen estimation	700
23.	Non-Protein Nitrogen	800
24.	True Protein nitrogen	1000
25.	Urea estimation	600
26.	Lactose estimation	600
27.	Ash estimation	400
28.	Lactate estimation	2000

Sr. No.	Description of test	Rate per sample Excluding GST (Rs.)
Butter		
29.	Moisture	350
30.	Fat	500
31.	Salt (% as NaCl)	600
32.	Curd	1200
33.	BR reading at 40°C	250
34.	Detection of synthetic colour/dye	500
Ghee		
35.	Moisture content	350
36.	BR reading at 40°C	250
37.	Acidity as free fatty acids (% oleic acid)	300
38.	Reichert-Meissl value	600
39.	Polenske Value	500
40.	Reichert-Meissl value + Polenske Value	800
41.	Detection of Vanaspati (hydrogenated vegetable oil) in ghee (Baudouin test)	250
42.	Detection of vegetable oil in ghee using NDRI Developed method	300
43.	Peroxide value	500
44.	Iodine value	500
45.	Saponification Value	500
46.	Cholesterol	800
47.	Fatty acid composition	2000
48.	Trans fat	2000
49.	TBA Value	500
50.	β-sitosterol test by HPLC	2000
51.	Triglyceride analysis by GCMS	2500
52.	RP-TLC based test to detect vegetable oils/fats in ghee	1500
Whole Milk Powder / Skimmed Milk Powder		
53.	Moisture	400
54.	Titratable acidity in (% lactic acid)	300
55.	Fat by Gerber method (in WMP only)	400
56.	Fat by Reference method	550
57.	Total Ash, on dry basis	400
58.	Protein by nitrogen estimation	800
59.	Non-protein nitrogen	900

Sr. No.	Description of test	Rate per sample Excluding GST (Rs.)
60.	Casein Nitrogen	700
61.	Whey Protein	700
62.	Lactose	750
63.	Lactate	2000
64.	Insolubility index	400
65.	Dispersibility	450
66.	Sinkability	300
67.	Wettability,	300
68.	Particle Size	450
69.	Angle of Repose	300
70.	Scorched Particles	300
Dairy Whitener		
71.	Moisture	400
72.	Titratable acidity in (%lactic acid)	350
73.	Fat by Gerber method	400
74.	Fat by Reference method	500
75.	Total Ash, on dry basis	900
76.	Protein by nitrogen estimation	800
77.	Non-protein nitrogen	900
78.	Lactose	800
79.	Lactate	2000
80.	Insolubility index	400
81.	Sucrose	900
82.	Scorched Particles	300
Cheese		
83.	Moisture	400
84.	Salt (added sodium chloride)	600
85.	Fat (on dry basis)	900
Ice-Cream		
86.	Total Solids	400
87.	Overrun	400
88.	Fat	500
89.	Sucrose	1000
90.	Protein	800

Sr. No.	Description of test	Rate per sample Excluding GST (Rs.)
Paneer, Channa, Khoa		
91.	Moisture	400
92.	Fat (on dry basis)	900
93.	Detection of starch	300
Evaporated/Condensed milk		
94.	Total Solids	400
95.	Fat	500
96.	Sucrose	1000
97.	Protein	800
98.	Lactose	800
Lassi/ Dahi/Yoghurt/ Flavoured Milk		
99.	Total Solids	400
100.	Fat	500
101.	Acidity (% lactic acid)	300
102.	Sucrose	900
103.	Detection of Maltodextrin	250
Other Tests		
104.	Lactose in low lactose milk product	2000
105.	Aflatoxin M1 in milk and milk products by lateral flow assay	1500
106.	IgG estimation in colostrum	3000
107.	IgA estimation in human milk	3000
108.	Any one mineral element in various matrices (Please enquire before sending sample)	800
109.	Calibration of Glass Pipette	1000
110.	Calibration of Glass Thermometer	1500
111.	Calibration of Butyrometer	1200
112.	Calibration of Lactometer	1500
113.	Fatty acid composition in extracted fat of dairy products	2500
114.	Fibre Estimation in dairy based foods	1500

1.3 Detection of various analytes in milk using LC-MS/MS

Sr. No.	Description	Rate per sample Excluding GST (Rs.)
1.	Melamine detection per sample	2000
2.	Melamine Quantification per sample	3000
3.	Ampicillin detection in milk	1500
4.	Ampicillin quantification in milk	2000
5.	Ciprofloxacin detection in milk	1500
6.	Ciprofloxacin quantification in milk	2000
7.	Enrofloxacin detection in milk	1500
8.	Enrofloxacin quantification in milk	2000
9.	Suphadimidine detection in milk	1500
10.	Suphadimidine quantification in milk	2000
11.	Protein Identification from In-gel digested samples (60 minute gradient in nanoElute) (Less complex sample / gel piece) rate per run.	8,000/- per run
12.	Protein Identification from In-gel digested samples (120 minute gradient in nanoElute) (Complex sample)	12,000/- per run
13.	Identification of differentially expressed proteins using Label Free Quantitation (LFQ) (3 runs per sample) (120 minute gradient per run)	35,000/- per sample
14.	Identification of differentially expressed proteins using iTRAQ/ TMT labeling (120 min gradient per run)	12,000/- per run

1.4 Analytical services charges for *In-vitro* screening of *Lactobacillus* isolates for probiotic attributes as per the CMR-DBT Guidelines

Sr. No.	Description of test	Product description (Single)	Rate per sample excluding GST (Rs.)
1.	Resistance to gastric acidity/ pH of 2.0	*Lactobacillus* isolate	1000
2.	Bile acid resistance	*Lactobacillus* isolate	1000
3.	Cell Surface hydrophobicity (with two hydrocarbons Hexadecane and Xylene/ Choloroform/ Diethyl ether)	*Lactobacillus* isolate	1000
4.	Auto-aggregation/Intra bacterial aggregation assay	*Lactobacillus* isolate	600
5.	Co-aggregation assay/Inter species aggregation assay with Gram-negative pathogens (E. coli and Salmonella Typhi)	Lactobacillus isolate	1000
6.	Antimicrobial activity against potentially pathogenic bacteria through agar well diffusion assay (E. coli, SalmonellaTyphi, B. Cereus and Staphylococcus aureus through acid production)	Lactobacillus isolate	2000
7.	Ability to reduce pathogen adhesion to surfaces (Mucin adhesion assay)	Lactobacillus isolate	1000

Sr. No.	Description of test	Product description (Single)	Rate per sample excluding GST (Rs.)
8.	In vitro safety screening of probiotic Lactobacillus. Test includesMucin degradation test; Biogenic amine formation test & Haemolytic test	Lactobacillus isolate	2000
9.	Antimicrobial resistance testing of probiotic *Lactobacillus* using Iso-sensitest media	*Lactobacillus* isolate	1500

1.5 Other Miscellaneous Tests

Sr. No.	Parameter	Rate per sample excluding GST (Rs.)
1.	Penetration value (Cheese) – Hardness using texture analyzer	1500 Per sample
2.	Penetration value (Butter) – Hardness using texture analyzer	1500 Per sample
3.	Oxidative stability of milk fat by Rancimat (Qnty. Reqd. 100 ml)	12000
4.	Analysis of salivary fern pattern for estrus identification	100 per sample
5.	PCR based identification of *Lactobacillus* isolates at genus level	1500 Single isolate
6.	PCR based testing of milk samples	1000 per sample

1.6 Sensory Evaluation of Products

Sr. No.	Parameter	Qnty. Required	Rate per sample excluding GST (Rs.)
1.	Milk	500 ml or g	3500
2.	Cream	500 ml or g	3500
3.	Butter	500 g	3500
4.	Paneer	500 g	3500
5.	Cheeses	500 g	3500
6.	Ghee	500 ml	4000
7.	Ice cream	500 ml for bulk packaging or 10 cups of 50 or 100 ml packaging	3500
8.	Sweetened Condensed milk or Evaporated milk	500 g	3500
9.	SMP, WMP, Malted Milk Powder or Dairy Whitener	1 kg	3500
10.	*Dahi* or *Lassi*	500 g or ml for bulk packaging or 10 cups of 50 or 100 g or ml packaging	3500
11.	Khoa	500 g	3500
12.	*Gulab Jamun*, *Rasogolla* or any other milk based sweet	500 g	3500

1.7 Analysis charges for testing of food packaging materials

Sr. No.	Parameter	Quantity of Sample Required	Rate per sample excluding GST (Rs.)
Paper & Paperboard Materials **(as per IS: 1060 (Part-1,2 & 3) (1966)**			
1.	Substance / Grammage / GSM		600
2.	Thickness		600
3.	Bulk		600
4.	Moisture content		600
5.	pH Value		600
6.	Ash		1000
7.	Bursting strength		1000
8.	Tensile strength	1 meter	2000
9.	Tearing resistance		1000
10.	Sizing		1000
11.	Water penetration (Cobb Test)		600
12.	Water absorbency		600
13.	Water penetration		600
14.	Water vapour permeability test	1 meter	3500
15.	Oil absorbency		1000
16.	Bending Test		1000
17.	Estimation of lead and lead compounds		2000
18.	Estimation of chlorides (Water soluble)		1500
19.	Estimation of water soluble sulphates		1500
20.	Estimation of fatty and / or Rosin acid extractable by ether		1500
21.	Estimation of ether soluble matter		1500
22.	Estimation of benzene soluble matter		1500
23.	Alkalinity		1000
Polyethylene pouches for packaging liquid milk **(as per IS 11805: 1989)**			
24.	Thickness	1 meter	600
25.	Width	1 meter	200
26.	Tensile strength	1 meter	2000
27.	Elongation at break	1 meter	500
28.	Dart impact resistance	1 meter	2000
29.	Leak test	5 meters	1000
30.	Drop test	10 meters	1000
31.	Test for ink adhesion of milk pouches	1 meter	750

Sr. No.	Parameter	Quantity of Sample Required	Rate per sample excluding GST (Rs.)
HDPE Crates for milk pouches **(as per IS: 11584, 1986)**			
32.	Determination of resistance to stress	3 crates	1500
33.	Determination of resistance to applied load	12 crates	2500
Overall Migration or Global Migration of constituents of plastic films **(as per IS: 9845, 1998)**			
34.	Overall Migration or Global Migration into food stimulants	1-2 meters	2500
Test for Plastic Containers **(as per IS 2798: 1998)**			
35.	Diameter	3 pieces	600
36.	Neck height	3 pieces	600
37.	Neck and thread diameters	3 pieces	600
38.	Wall thickness	3 pieces	600
39.	Fill point	3 pieces	600
40.	Determination of Brimful capacity	3 pieces	600
41.	Leakage test	3 pieces	600
42.	Vibration leakage	3 pieces	1500
43.	Air pressure leakage	3 pieces	1500
44.	Test for verticality	3 pieces	1000
45.	Drop impact test	8 pieces	1500
46.	Stack load test	6 pieces	1500
47.	Handle pull test	3 pieces	1000
48.	Test for ink adhesion of printed containers	3 pieces	750
49.	Determination of Overall or Global migration (as per Is: 9845, 1998)	20 pieces	2500
50.	Environmental stress-crack resistance of blow-moulded containers (as per IS: 8747, 1989)	6 pieces	2500
Glass containers			
51.	Thermal shock test (as per IS 11930:1986)	15-20 containers	2500
52.	Glass milk bottles-thermal shock test (as per IS 1392:1999)	15-20 containers	2500
53.	Glass jars for pickles- thermal shock test (as per IS 11985:1987)	15-20 containers	2500
54.	Glass bottles for tomato ketchup-thermal shock test (as per IS 9780: 1981)	15-20 containers	2500
55.	Glass bottles for jams, jellies and marmalades-thermal shock test (as per IS 9781: 1981)	15-20 containers	2500
56.	Glass bottles for free flowing liquids- thermal shock test (IS 11984: 1986)	15-20 containers	2500
57.	Glass jars for honey – thermal shock test (IS 11369: 1985)	15-20 containers	2500

Sr. No.	Parameter	Quantity of Sample Required	Rate per sample excluding GST (Rs.)
Aluminum foil			
58.	Thickness	30 cm long	600
Metal Containers			
59.	Air pressure test		1500
60.	Drop test		1500
61.	Handle pull test		1500

1.8 Analysis charges for Feed & Fodder samples

Sr. No.	Parameter	Qnty. Required	Rate per sample excluding GST (Rs.)
1.	Proximate analysis of feeds/fodders	250 g	5000
2.	Analysis of Vitamin 'A' in feeds/fodders	100 g	4000
3.	Acid detergent fibre in feeds/fodders	100 g	1000
4.	Lignin in feeds/fodders	100 g	1000
5.	Neutral detergent fibre in feeds	100 g	1000
6.	Nitrogen in molasses	100 g	1000
7.	Moisture in molasses	100 g	1000
8.	Urea in feed sample	100 g	1000
9.	Major mineral elements in feed-calcium, magnesium phosphorus etc. (rate per elements)	100 g	1000
10.	Trace minor elements in feed-copper, iron, manganese, zinc etc. (rate per element)	100 g	1000
11.	Analysis of amino acids in feed	50-100 g	7500
12.	Analysis of aflatoxins (total) in feed/milk	100 g/ml	5000
13.	Effective RDO/UDP in feeds	200 g	2000
14.	Vitamin E in feeds	100 g	4000
15.	Mimosine in feeds (HPLC)	100 g	3000
16.	Glucosinolates in feeds (HPLC)	100 g	3000
17.	Tannins (Calorimetric)	100 g	1500
18.	Formulation of concentrate mix (per formula)		7500
19.	Formulation of concentrate mix based on RDP/UDP (per formula)		12000
20	Formulation of mineral mixture		25000
21.	Urea, Ammonia treatment to crop residues		10000
22.	Milk replacer formulation for young calves		12000
23.	Process of small silage making		12000

2. Equipment Usage Charges

Sr. No.	Name of equipment	Rate per sample excluding GST (Rs.)
1.	Particle Size Analyzer (size only)	400
2.	Particle Size Analyzer (size & zeta potential)	600
3.	FTIR	1000
4.	GC-MS	2000
5.	Atomic absorption spectrophotometer – flame mode	2000
6.	Atomic absorption spectrophotometer –graphite mode	3000
7.	Digital refractometer	500
8.	HPLC	2000
9.	Texture analyzer	1500/sample/test
10.	Viscometer	500/run
11.	Rheometer	1500/sample/test
12.	Colour measuring system	500/sample
13.	Water activity meter	500/sample
14.	Fluorescent Spectro-photometer	500/ Scan, 50/ for spot reading
15.	Real Time PCR Analysis	1500/ per Run
16.	Simple PCR Analysis	500/ per Run
17.	Blood Biochem. Analyser (Comprehensive)	2500/ sample
18.	SEM analysis (including drying, coating, visualization and image recording) Only fixed and dehydrated samples will be accepted	2500/sample

3. Hiring Charges for Pilot Scale Trials in Expl. Dairy, ICAR-NDRI, Karnal

Sr. No.	Equipment	Rate excluding GST (Rs.)
1.	Cream separator/Clarifier	1,800/h
2.	Multi purpose processing vats (900liters capacity)	8,000/shift
3.	Butter making equipment	8,000/shift
4.	Ice cream making equipment	9,000/shift
5.	Homogenizer	4,000/shift
6.	Cheese vat (100lit. capacity)	4,000/shift
7.	Cheese vat (4000 lit. capacity)	6,000/shift
8.	Batch evaporator	15,000/shift
9.	Triple effect evaporator	15,000/shift

Sr. No.	Equipment	Rate excluding GST (Rs.)
10.	Spray dryer (small)	20,000/shift
11.	Spray dryer (Big)	25,000/shift
12.	Roller dryer	15,000/shift
13.	Scraped Surface Heat Exchanger	5,000/shift
14.	Ultrafiltration plant 0.6 m^2, 50 KDa MWCO	15,000/ shift
15.	Ultrafiltration plant small, 0.160 m^2, 50 KDa MWCO	10,000/shift
16.	MF plant, 1.4 µm, 30 kg feed	10,000/shift
17.	RO plant, 100 kg feed	15,000/ shift
18.	Ghee kettle and Ghee clarifier for Ghee making	4,000/ per batch

*Note: These charges include services of operator, but exclude labour charges which are situation specific and should be organized by the user.

4. Supply of Cultures

Sr. No.	Parameter	Rate per sample excluding GST (Rs.)
1.	Charges for freeze dried culture	1500

5. Supply of Test Kits

1.	Supply of Antibiotic test kits DPA based kit (3h Test kit) (Developed at NDRI)	Testing of raw, pasteurized milk and dried milks for following 7 groups of antibiotics as broad spectrum detection (**LODs at FSSAI /Codex Limits**): β-Lactam, Tetracycline, Chloramphenicol, Streptomycin, Sulfa drugs, Macrolides, Aminoglycoside, Gentamycin / Neomycin	7500 (for 100 tests upto 500 tests) and Rs 5000 for 100 tests single order above 500 tests
2.	Supply of Antibiotic test kits Paper strip based kit –(75 min) (Developed at NDRI)	Paper based test kits for testing of raw, pasteurized milk and dried milks for following 7 groups of antimicrobial residues as broad spectrum detection (presence/absence at MRL limits): β-Lactam, Tetracycline, Chloramphenicol, Streptomycin, Sulfa drugs, Macrolides, Aminoglycoside, Gentamycin / Neomycin	10,000 (for 100 tests upto 500 tests) and Rs 7500 for 100 tests single order above 500 tests
3.	Supply of Paper based strip Pesticide kit	For testing of different food matrices for all groups of pesticides at MRL limits set by codex/ FSSAI) (2 h test) (Developed at NDRI)	15,000 (for 100 tests upto 500 tests) and Rs 12000 for 100 tests single order above 500 tests
4.	Supply of Paper strip based mastitis kit	For testing of milk for detection of clinical and sub clinical mastitis in milk (30 min test) (Developed at NDRI)	Rs 3500 (for 100 tests upto 500 tests) and Rs 2500 for 100 tests single order above 500 tests

6. Advisory Charges

Sr. No.	Parameter	Rate excluding GST (Rs.)
1.	Charges for advice on setting up quality control Lab. for dairy products/ animal feed	The charges will be fixed on the basis of mandays and quantum of work
2.	Charges for setting up Molecular Biology/ Genetic Engineering Lab.	
3.	Charges for setting up a Dairy products Lab.	
4.	Critical control point identification for HACCP	
5.	Biofilm status of dairy processing units	
6.	Any other advisory services: Preliminary discussions, advisory tasks in preparation of project, technical advices etc	

7. Charges for Preparation of Techno-Economic Feasibility Report

Sr. No.	Report	Rate excluding GST (Rs.)
1.	Preparation of feasibility report for setting up dairy farm	1% of project cost if the project cost is < 1crore and 2% of project cost if the project cost is > 1crore
2.	Preparation of feasibility report for setting up dairy plant	

GIR HERD
AT ICAR-NDRI

ICAR-NDRI
MAIN BUILDING

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