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NQTLD TESTIND SCOPE 2024-2025

SCOPE OF TESTING IN BIOTECHNOLOGY LABORATORY UNIT MICROBIOLOGY			
S/N	**Standard Operating Procedures (SOP)/reference or Standard Methods**	**Parameters**	**Matrix (product name)**
1	NQTLD/ MIC/ SOP-1 In accordance with ISO 6222	Total Viable Count	**Water**
2	NQTLD/ MIC/SOP-4 in accordance with ISO 9308-1	Total coliforms	
3	NQTLD/ MIC/ SOP-4 In accordance with ISO 9308-1	Escherichia coli	
4	NQTLD/ MIC/ SOP-9 In accordance with ISO 19250	Salmonella spp	
5	NQTLD/ MIC/ SOP-13 In accordance with ISO16266	Pseudomonas aeruginosa	
6	NQTLD/ MIC/ SOP-15 In accordance with ISO7899	Intestinal enterococci/ Enterococcus faecalis	
7	NQTLD/MIC.SOP-21, In accordance with ISO ISO 7937: 2004	Horizontal method for enumeration of Clostridium perfringens	
8	NQTLD/ MIC/ SOP-22 Inaccordance ISO14189	Clostridium perfringens	
9	NQTLD/ MIC/SOP-2 in accordance with ISO 4833-1	Total viable counts	**Food, feed and environmental samples**
10	NQTLD/ MIC/ SOP-SOP-3 in accordance with ISO 4832	Total coliforms	
11	NQTLD/ MIC/ SOP-8 in accordance with ISO 16649-1	Escherichia coli	
12	NQTLD/ MIC/ SOP-10 In accordance with ISO 6579	Salmonella spp	
13	NQTLD/ MIC/ SOP-12 In accordance with ISO 6888-1	Coagulase-positive staphylococci (Staphylococcus aureus and other species)	
14	NQTLD/ MIC/ SOP-14 in accordance with ISO 21528-2	Enterobacteriaceae	
15	NQTLD/ MIC/ SOP-17 In accordance with 21872-1	Vibrio parahaemolyticus	
16	NQTLD/ MIC/ SOP-17 In accordance with 21872-1	Vibrio cholerae	
17	In accordance with ISO 15213	Sulfite reducing anaerobes	
18	NQTLD/ MIC/ SOP-18 In accordance with ISO 21567	Shigella ssp	
19	NQTLD/ MIC/ SOP-19 In accordance with ISO 10272-1	Campylobacter spp	
20	NQTLD/ MIC/ SOP-20 Part1 In accordance ISO 11290-1	Listeria Monocytogenes (enumeration)	
21	NQTLD/ MIC/ SOP-20 part 2 in accordance ISO 11290-2	Listeria Monocytogenes (detection)	
22	NQTLD/ MIC/ SOP-21 in accordance ISO7939	Clostridium perfringens	
23	NQTLD/ MIC/ SOP-22 In accordance ISO14189	Clostridium perfringens	
24	NQTLD/ MIC/ SOP-5 in accordance with ISO 21527-1	Yeasts &Moulds	**Food, feed and environmental samples with Greater water activity than 0.95**

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25	NQTLD/ MIC/ SOP-6 In accordance with ISO 21527-2	Yeasts &Moulds	**Food, feed and environmental samples with water activity Less than0.95**
26	NQTLD/ MIC/ SOP-7In accordance with ISO 661	Yeasts &Moulds	**Milk and milk Products**
27	NQTLD/ MIC/ SOP-16 In accordance with ISO22717	Pseudomonas aeruginosa	**Cosmetic products**
28	NQTLD/MIC/SOP-28 in accordance with ISO 21149	Aerobic mesophilic bacteria	
29	NQTLD/MIC/SOP-27 in accordance with ISO 22718	Staphylococcus aureus	
30	NQTLD/MIC/SOP-26	Candida albicans	

SCOPE OF TESTING IN CHEMICAL LABORATORIES UNIT –FOODAGRICUTURE& MYCOTOXIN LABORATORIES

S/N	Standard Operating Procedures (SOP)/reference or Standard Methods	Parameters	Components/ If applicable	Matrix (product name)
1	NQTLD/FAL/SOP-7	Moisture content		**Tea and tea products**
2	NQTLD/FAL/SOP-7	Dry matter		
3	NQTLD/FAL/SOP-8	Total ash content		
4	NQTLD/FAL/SOP-10	Acid insoluble ash		
5	NQTLD/FAL/SOP-12	Water soluble ash		
6	NQTLD/FAL/SOP-13	Alkalinity of water soluble ash		
7	NQTLD/FAL/SOP-11	Water extract		
8	NQTLD/FAL/SOP-9	Crude fiber		
9	NQTLD/FAL/SOP-14	Moisture content		**Coffee and coffee products**
10	NQTLD/FAL/SOP-15	Total ash		
11	NQTLD/FAL/SOP-16	Acid insoluble ash		
12	NQTLD/FAL/SOP-18	Alkalinity of water soluble ash		
13	NQTLD/FAL/SOP-19	Petroleum ether extract		
14	NQTLD/FAL/SOP-33	Ochratoxin-A		
15	NQTLD/FAL/SOP-45	Caffeine		
16	NQTLD/FAL/SOP-17	Water soluble matter		
17	RS EAS 43	Moisture content		**Bread**
18	RS EAS 43	pH of aqueous extract		
19	RS EAS 43	Acid insoluble ash		
20	NQTLD/FAL/SOP-9	Crude fiber		
21	NQTLD/FAL/SOP-6	Fat content		
22	NQTLD/FAL/SOP-1	Aflatoxin (B1,B2, G1&G2)		
23	ISO 7301	Head rice		**Rice**
24	ISO 7301	Broken rice		
25	ISO 7301	Damaged rice		
26	ISO 7301	Chalky		
27	ISO 7301	Red or redstreaked		
28	ISO 7301	Organic matters		
29	ISO 7301	Inorganic matters		
30	ISO 7301	Paddy grain		
31	NQTLD/FAL/SOP-38	Moisture content		
32	ISO 7301	Live weevils		
33	ISO 7301	Filth		

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34	NQTLD/FAL/SOP-1	Aflatoxin (B1,B2,G1&G2)		
35	GEA Niro A9a	Fat content		**Milk powder**
36	NQTLD/FAL/SOP-5	Protein content		
37	GEA Niro A 1 b	Total solid		
38	GEA Niro A 25 a	Total ash		
39	GEA Niro A1b	Moisture content		
40	GEA Niro A3a	Insolubility index		
41	GEA Niro A19a	Titratable acidity		
42	AoAC_980	Aflatoxin M1		
43	NQTLD/FAL/SOP-24	Fat content		**Fresh milk**
44	NQTLD/FAL/SOP-24	Total solid		
45	NQTLD/FAL/SOP-24	Freezing point depression		
46	NQTLD/FAL/SOP-24	Lactose		
47	NQTLD/FAL/SOP-24	Protein content		
48	RS 38	pH		
49	NQTLD/FAL/SOP-24	Solid non fat		
50	NQTLD/FAL/SOP-24	Acidity		
51	ISO 26323	pH variation		
52	AOAC 952.21	Foreign matters		
53	AOAC 980.21	Aflatoxin M1		
54	AOAC 970.5	Titratable acidity		
55	NQTLD/FAL/SOP-38	Moisture content		**Maize grains**
56	ISO 605	Foreign matter		
57	ISO 605	Inorganic matter		
58	ISO 605	Broken grains		
59	ISO 605	Rotten and diseased grains		
60	ISO 605	Total defective grains		
61	ISO 605	Live weevils		
62	ISO 605	filth		
63	NQTLD/FAL/SOP-43	Aflatoxin (B1,B2,G1&G2)		
64	NQTLD/FAL/SOP-38	Moisture content		**Dry beans**
65	NQTLD/FAL/SOP-38	Moisture content		**Cassava flour and ground cassava**
66	NQTLD/FAL/SOP-39	Crude ash		
67	NQTLD/FAL/SOP-4	Acid insoluble ash		
68	NQTLD/FAL/SOP-42	Crude fibers		
69	AOAC 996.11	Starch		
70	NQTLD/FAL/SOP-1	Aflatoxin (B1,B2, G1&G2)		
71	NQTLD/ICH/SOP-30	Hydrogen cyanide(HCN)		
72	NQTLD/FAL/SOP-38	Moisture content		**Processed cereals(flour)**
73	NQTLD/FAL/SOP-8	Total ash		
74	NQTLD/FAL/SOP-4	Acid insoluble ash		
75	NQTLD/FAL/SOP-42	Fiber content		
76	NQTLD/FAL/SOP-41	Fat content		
77	NQTLD/FAL/SOP-40	protein		
78	RS 268:2007	Granularity		
79	AOAC 996.11	Starch		
80	AOAC 986.25	Total carbohydrates		
81	NQTLD/FAL/SOP-1	Aflatoxin (B1,B2, G1&G2)		
82	NQTLD/FAL/SOP-50	Moisture content		
83	NQTLD/FAL/SOP-39	Crude ash		

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84	NQTLD/FAL/SOP-4	Acid insolubleash		**Animal feeds**
85	NQTLD/FAL/SOP-53	Crude fiber		
86	NQTLD/FAL/SOP-51	Crude fat		
87	NQTLD/FAL/SOP-52	Crude protein		
88	ISO 12099	Total carbohydrates		
89	NQTLD/FAL/SOP-1	Aflatoxin (B1,B2,G1&G2)		
90	NQTLD/FAL/SOP-20	Moisture content		**Biscuits**
91	NQTLD/FAL/SOP-21	Acid insoluble ash		
92	NQTLD/FAL/SOP-38	Moisture content		**Macadamia kernels**
93	NQTLD/FAL/SOP-38	Total ash		
94	NQTLD/FAL/SOP-40	Oil content		
95	RS 170	Shrunken and shriveled kernels		
96	RS 170	Mouldy kernels		
97	RS 170	Rotten and insects damaged		
98	ISO 605	Live insects		
99	ISO 605	Foreign matters		
100	NQTLD/FAL/SOP-1	Aflatoxins B1,B2,G1 and G2		
101	NQTLD/FAL/SOP-38	Moisture content		**Groundnuts**
102	ISO 605	Damaged kernels		
103	ISO 605	Other defects		
104	EAS 46	Unshelled kernels		
105	EAS 46	Total defectives kernels		
106	EAS 46	Foreign matter		
107	ISO 659	Oil content		
108	NQTLD/FAL/SOP-1	Aflatoxins B1,B2,G1 and G2		
109	NQTLD/FAL/SOP-38	Moisture content		**Tofu**
110	ISO 659	Crude fat		
111	NQTLD/FAL/SOP-5	Crude protein		
112	NQTLD/FAL/SOP-28	Moisture		**Urea**
113	NQTLD/FAL/SOP-40	Nitrogen		
114	AOAC 955.03	Ash		
115	RS 71	pH		
116	NQTLD/FAL/SOP-28	Moisture		**NPK**
117	NQTLD/FAL/SOP-40	Nitrogen		
118	KS 157:1998	Phosphorus		
119	NQTLD/ICH/SOP-16	Potassium		
120	RS 71	pH		
121	NQTLD/FAL/SOP-50	Formaldehyde		**Fresh fish and beef**
122	NQTLD/FAL/SOP-28	Moisture		**Calcium ammonium**
123	NQTLD/FAL/SOP-40	Nitrogen		
124	NQTLD/FAL/SOP-28	Moisture		**Potassium**

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125	NQTLD/ICH/SOP-16	Potassium		**chloride(MOP)**
126	RS 71	pH		
127	NQTLD/FAL/SOP-28	Moisture		**DAP/MAP**
128	NQTLD/FAL/SOP-40	Nitrogen		
129	AOAC 969.02	phosphorus		
130	RS 71	pH		
131	NQTLD/FAL/SOP-28	Moisture		**Compost/organic manure**
132	NQTLD/FAL/SOP-40	Nitrogen		
133	AOAC 969.02	Phosphorus		
134	NQTLD/ICH/SOP-16	Potassium		
135	RS 73:2013	Organic matters		
136	RS 73:2013	C/N ratio		
137	RS 71:2007	PH		
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S/N	**Standard Operating Procedures (SOP)/reference or Standard Methods**	**Parameters**	**Components/ If applicable**	**MATRIX (PRODUCT NAME)**
1	NQTLD/ICH/SOP-15	pH		**Physical and chemical parameters in water**
2	TDS/CONDUCTIVITY METER	Total Dissolved Solids TDS		
3	NQTLD/ICH/SOP-22	Total Hardness		
4	NQTLD/ICH/SOP-29	Turbidity		
5	EPA Methods 310.1	Alkalinity		
6	NQTLD/ICH/SOP-28	Electrical Conductivity		
7	NQTLD/ICH/SOP-14	Sulphate as SO42-		
8	ISO 7393	Free Chlorine		
9	NQTLD/ICH/SOP-8	Chloride Cl-		
10	NQTLD/ICH/SOP-13	Sodium as Na		**Water (analysis of heavy metals by AAS)**
11	NQTLD/ICH/SOP-13	Potassium as K		
12	NQTLD/ICH/SOP-13	Magnesium as Mg		
13	NQTLD/ICH/SOP-13	Manganese as Mn		
14	NQTLD/ICH/SOP-34	Zinc as Zn		
15	NQTLD/ICH/SOP-13	Iron as Fe		
16	NQTLD/ICH/SOP-13	Cadmium as Cd		
17	NQTLD/ICH/SOP-13	Chromium as Cr		
18	NQTLD/ICH/SOP-13	Tin as Sn		
19	NQTLD/ICH/SOP-13	Aluminium as Al		
20	NQTLD/ICH/SOP-13	Barium as Ba		
21	NQTLD/ICH/SOP-12	Sodium as Na		**Metals analysis in digestible samples by AAS**
22	NQTLD/ICH/SOP-12	Potassium as K		
23	NQTLD/ICH/SOP-12	Magnesium as Mg		
24	NQTLD/ICH/SOP-12	Manganese as Mn		
25	NQTLD/ICH/SOP-12	Zinc as Zn		
26	NQTLD/ICH/SOP-12	Iron as Fe		
27	NQTLD/ICH/SOP-12	Cadmium as Cd		
28	NQTLD/ICH/SOP-12	Chromium as Cr		
29	NQTLD/ICH/SOP-12	Tin as Sn		
30	NQTLD/ICH/SOP-12	Aluminium as Al		
31	NQTLD/ICH/SOP-12	Barium as Ba		
32	NQTLD/ICH/SOP-12	Copper as Cu		
33	NQTLD/ICH/SOP-12	Nickel as Ni		
34	NQTLD/ICH/SOP-12	Cobalt as Co		
35	ISO 172924:2016	Lead as Pb		
36	ISO 172924:2016	Arsenic as As		

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37	ISO 172924:2016	Mercury as Hg		**Analysis of heavy metals by ICP/MS**
38	ISO 172924:2016	Cadmium as Cd		
39	ISO 172924:2016	Tin as Sn		
40	ISO 172924:2016	Thallium as Tl		
41	ISO 172924:2016	Molybdenum as Mo		
42	ISO 172924:2016	Aluminium as Al		
43	ISO 172924:2016	Niobium as Nb		
44	ISO 172924:2016	Cesium as Cs		
45	ISO 172924:2016	Francium as Fr		
46	ISO 172924:2016	Strontium as Sr		
47	ISO 172924:2016	Barium as Ba		
48	ISO 172924:2016	Radium as Ra		
49	ISO 172924:2016	Scandium as Sc		
50	ISO 172924:2016	Ytrium as Y		
51	ISO 172924:2016	Aluminium as Al		
52	ISO 172924:2016	Rubidium as Rb		
53	ISO 172924:2016	Titanium as Ti		
54	ISO 172924:2016	Vanadium as V		
55	ISO 172924:2016	Chromium as Cr		
56	ISO 172924:2016	Gallium as Ga		
57	ISO 172924:2016	Germanium as Ge		
58	ISO 172924:2016	Arsenic as As		
59	ISO 172924:2016	Zirconium as Zr		
60	ISO 172924:2016	Thallium as Tl		
61	ISO 172924:2016	Mercury as Hg		
62	ISO 172924:2016	Niobium as Nb		
63	ISO 172924:2016	Molybdenum as Mo		
64	ISO 172924:2016	Ruthenium as Ru		
65	ISO 172924:2016	Rhodium as Rh		
66	ISO 172924:2016	Palladium as Pd		
67	ISO 172924:2016	Gold as Au		
68	ISO 172924:2016	Cadmium as Cd		
69	ISO 172924:2016	Tin as Sn		
70	ISO 172924:2016	Antimony as Sb		
71	ISO 172924:2016	Indium as In		
72	ISO 172924:2016	Platinum as Pt		
73	ISO 172924:2016	Hafnium as Hf		
74	ISO 172924:2016	Thorium as Th		
75	ISO 172924:2016	Bismuth as Bi		
76	ISO 172924:2016	Tellurium as Te		
77	ISO 172924:2016	Silicon as Si		
78	ISO 172924:2016	Selenium as Se		
79	NQTLD/ICH/SOP-12	Sodium as Na		**Digestible samples (Food ,beverage, cosmetics and environmental related matrices) analysis of heavy metals by ICP/MS**
80	NQTLD/ICH/SOP-12	Potassium as K		
81	NQTLD/ICH/SOP-12	Magnesium as Mg		
82	NQTLD/ICH/SOP-12	Manganese as Mn		
83	NQTLD/ICH/SOP-12	Zinc as Zn		
84	NQTLD/ICH/SOP-12	Iron as Fe		
85	NQTLD/ICH/SOP-12	Copper as Cu		
86	NQTLD/ICH/SOP-12	Lead as Pb		
87	NQTLD/ICH/SOP-12	Arsenic as As		
88	NQTLD/ICH/SOP-12	Mercury as Hg		
89	NQTLD/ICH/SOP-12	Cadmium as Cd		
90	NQTLD/ICH/SOP-12	Tin as Sn		
91	NQTLD/ICH/SOP-12	Thallium as Tl		
92	NQTLD/ICH/SOP-12	Molybdenum as Mo		
93	NQTLD/ICH/SOP-12	Aluminium as Al		
94	NQTLD/ICH/SOP-12	Niobium as Nb		
95	NQTLD/ICH/SOP-12	Cesium as Cs		
96	NQTLD/ICH/SOP-12	Francium as Fr		
97	NQTLD/ICH/SOP-12	Strontium as Sr		
98	NQTLD/ICH/SOP-12	Radium as Ra		

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99	NQTLD/ICH/SOP-12	Scandium as Sc		
100	NQTLD/ICH/SOP-12	Ytrium as Y		
101	NQTLD/ICH/SOP-12	Aluminium as Al		
102	NQTLD/ICH/SOP-12	Rubidium as Rb		
103	NQTLD/ICH/SOP-12	Titanium as Ti		
104	NQTLD/ICH/SOP-12	Vanadium as V		
105	NQTLD/ICH/SOP-12	Chromium as Cr		
106	NQTLD/ICH/SOP-12	Gallium as Ga		
107	NQTLD/ICH/SOP-12	Germanium as Ge		
108	NQTLD/ICH/SOP-12	Arsenic as As		
109	NQTLD/ICH/SOP-12	Zirconium as Zr		
110	NQTLD/ICH/SOP-12	Thallium as Tl		
111	NQTLD/ICH/SOP-12	Mercury as Hg		
112	NQTLD/ICH/SOP-12	Niobium as Nb		
113	NQTLD/ICH/SOP-12	Molybdenum as Mo		
114	ISO 1842-1991	pH		**Tomato paste**
115	AOAC 940.19	pH		**Juices (soft beverages)**
116	ISO 750	Acidity		
117	AOAC 940.27	Brix		
118	NQTLD/ICH/SOP-36	Moisture content		**Honey**
119	NQTLD/ICH/SOP-23	Total ash		
120	NQTLD/ICH/SOP-20	Acidity		
121	AOAC 945:27	pH		
122	NQTLD/ICH/SOP-38	Fiehe's test		
123	RS 164	Conductivity		
124	NQTLD/ICH/SOP-11	Relative density		
125	NQTLD/ICH/SOP-21	Polarization		**Sugar**
126	NQTLD/ICH/SOP-25	Moisture content		
127	KS 05-58:1998	Sulfur dioxide		
128	NQTLD/ICH/SOP-26	Conductivity ash		
129	KS 05-58:1998	Color		
130	KS 05-2029:1989	sulfates		**Salts**
131	NQTLD/ICH/SOP-37	Total chloride as NaCl		
132	NQTLD/ICH/SOP-17	Iodine		
133	KS 05-2029:1989	Moisture content		
134	ISO-2479-1972	Water insoluble matter		
135	NQTLD/ICH/SOP-18	Refractive index		**Cooking oil**
136	NQTLD/ICH/SOP-25	Moisture and volatile matter		
137	NQTLD/ICH/SOP-5	Peroxide value		
138	NQTLD/ICH/SOP-6	Saponification value		
139	NQTLD/ICH/SOP-7	Acid value		
140	KS 05-2029:1989	Relative density		
141	NQTLD/ICH/SOP-19	Iodine value		
142	NQTLD/ICH/SOP-3	Soap content		
143	NQTLD/ICH/SOP-31	Free fatty acid		

SCOPE OF TESTING IN CHEMICAL LABORATORIES UNIT- ORGANIC CHEMISTRY

S/N	Standard Operating Procedures (SOP)/reference or Standard Methods	Parameters	Components/If applicable	MATRIX (PRODUCT NAME)
1	NQTLD/OCH/SOP-20	Ethyl alcohol content		
2		Total acids		
3		Volatile acids		
4		Total Sulfur dioxide(T-SO2)		
5		pH		
6		Glucose fructose		
7		Malic acid		
8		Citric acid		
9		Tartaric acid		
10		Carbon dioxide(CO2)		
11		Density		

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12		Folin C index		**Alcoholic beverages& carbonated soft drinks**
13		Fructose		
14		Free sulfur dioxide(F-SO2)		
15		Glycerol		
16		Reducing sugar		
17		pH for cloud beer		
18		Sorbic acid		
19	AOAC 932-12-1980	Total dissolved solids		
20	NQTLD/OCH/SOP-32	Aldehydes and acetaldehydes		
21		Esters as ethyl acetate		
22		Methanol		
23		1-Propanol		
24		2-Propanol or Isopropanol		
25		1-Butanol		
26		2-Butanol		
27		1-Pentanol or n-Pentanol or amyl alcohol		
28		Iso-amyl alcohol		
29	NQTLD/OCH/SOP-6	Total solids		
30	NQTLD/OCH/SOP -16	Thermal stability		**Skincare creams, lotions ,gel**
31	NQTLD/OCH/SOP -14	PH range		
32	NQTLD/OCH/SOP -15	Total fatty substances content		
33	NQTLD/OCH/SOP -13	hydroquinone		
34	NQTLD/OCH/SOP-18	Sulphate ash		**Pomades and solid brilliantine**
35	NQTLD/OCH/SOP -16	Thermal stability		**Hair cream**
36	NQTLD/OCH/SOP -34	pH range		
37	ASTM D86	Distillation		**Kerosene**
38	ASTM D445-09	Viscosity index		
39		Kinematic viscosity		
40	ASTM D1298	Specific gravity/ Relative density		
41	ASTM D86	Distillation		
42	ASTM D445-09	Viscosity index		
43		Kinematic viscosity		
44	ASTM D1298	Specific gravity/ Relative density		
45		API Gravity		
46	ASTM D86	Distillation		
47	Visual inspection	Colour		
48		Appearance		
49	ASTM D4052	Density		
50	Visual inspection	Appearance		**Jet A1**
51	ASTM D86	Distillation		
52	ASTM D4052	Density		
53	ASTM D93	Flash point		**Diesel or gasoil**
54	ASTM D86	Distillation		
55	ASTM D445-09	Kinematic viscosity		
56	Visual inspection	Appearance		
57	ASTM D4052	Density		
58	ASTM D93	Flash point		**Engine oil**
59	ASTM D86	Distillation		
60	ASTM D445-09	Kinematic viscosity		
61	Visual inspection	Appearance		
62	ASTM D4052	Density		
64	ASTM D86	Distillation		**Gasoline**
65	ASTM D4052	Density		
66	Visual inspection	Color		
67	NQTLD/OCH/SOP -21	Absorbency capacity		**Sanitary towels**
68	NQTLD/OCH/SOP -23	pH value		
69	NQTLD/OCH/SOP -22	Moisture content of filler material		
70	NQTLD/OCH/SOP -36	Water absorption		**Toilet paper**
71	NQTLD/OCH/SOP -35	pH value, hot extract		
72	NQTLD/OCH/SOP -37	Moisture content		
73	NQTLD/OCH/SOP -42	pH of 1% solution		

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74	NQTLD/OCH/SOP -38	Volatile matter		**Scouring powder**
75	NQTLD/OCH/SOP -08	Free alkali content		
76	NQTLD/OCH/SOP -10	Matter insoluble in water		
77	NQTLD/OCH/SOP -29	Matter insoluble in boiling water		**Skin powder**
78	NQTLD/OCH/SOP -31	Moisture and volatile matter		
79	NQTLD/OCH/SOP -30	pH of aqueous suspension		
80	NQTLD/OCH/SOP -12	Total fatty matter		**Laundry bar soap**
81	NQTLD/OCH/SOP -10	Matter insoluble in water		
82	NQTLD/OCH/SOP -11	Matter insoluble in ethanol		
83	NQTLD/OCH/SOP -38	Moisture and volatile matter content		
84	NQTLD/OCH/SOP -08	Total free alkali as NaOH		
85	NQTLD/OCH/SOP -07	Total alkali Content		
86	NQTLD/OCH/SOP -09	Free caustic alkali as NaOH		
87	NQTLD/OCH/SOP -33	Solubility in water		**Liquid detergent**
88	NQTLD/OCH/SOP -39	Rinsing properties		
89	NQTLD/OCH/SOP -24	pH at 27˚C at 1% solution		
90	NQTLD/OCH/SOP -10	Matter insoluble in water		
91	NQTLD/OCH/SOP -24	pH value range		
92	NQTLD/OCH/SOP -10	Total fatty matter		**Toilet soap**
93	NQTLD/OCH/SOP -24	Matter insoluble in ethanol		
94	NQTLD/OCH/SOP -12	Free caustic alkali as NaOH		
95	NQTLD/OCH/SOP -11	Matter insoluble in ethanol		**Liquid soap**
96	NQTLD/OCH/SOP -09	Free caustic alkali as K2O		
97	NQTLD/OCH/SOP -11	pH		
98	ISO 11024	Chromatographic profile		**Essential Oil**
99	Physical inspection	Appearance		
100	Physical inspection	Color		
101	Physical inspection	Odor		
102	ISO 279	Relative Density		
103	ISO 280	Refractive Index		
104	ISO 592	Optical Rotation		
105	ISO 875	Miscibility in ethanol		
106	ASTM D93	Flash point		
107	RS EAS 335:2013	Alcohol content		**Cologne**
108	RS EAS 335:2013	Stability of smell		
109	RS EAS 335:2013	pH		
110	RS 408:2019 ANNEX A	Alcohol content		**Perfume**
111	RS 408:2019 ANNEX B	Stability of smell		
112	RS 408:2019 ANNEX D	pH		
113	ASTM D2180 – 17	Available Oxygen		**Bleach**
114	EAS 295:2021 ANNEX	Available Chlorine		
115	EAS 295:2021 ANNEX	Sodium Hydroxide		
116	RS ISO 4316	pH		
117	RS EAS 956:2020	General leakage		
118	RS EAS 956:2020	Stability of smell		
119	RS EAS 956:2020	Non Volatile matter		
120	EAS 847-17	pH		
121	RS 283:2017 ANNEX C	Water content		**Glass Cleaner**
122	RS 283:2017 ANNEX D	Non-Volatile matter		
123	RS 283:2017 ANNEX G	Specific gravity		
124	RS 283:2017 ANNEX F	Flash point		
125	RS 283:2017 ANNEX E	pH		
126	RS ISO 3071	pH		**Wipes**
127	RS 439:2021 ANNEX C	Moisture content		
128	EAS 847-27	Total fatty matter		**Shampoo**
129	EAS 847-28	Free Caustic alkali		
130	EAS 847-3, ISO 673	Matter insoluble in ethanol		
131	EAS 847-17	pH		
132	RS ISO 3071	pH		**Diapers**
133	RS EAS 969:2020	Absorptive capacity		
134	RS EAS 461:2013	Aryl diamine		**Hair dye**
135	RS EAS 461:2013	pH		

NQTLD TESTIND SCOPE 2024-2025

136	NQTLD/OCH/SOP- 25/EN 15662:2018	Pesticide residues	Dichlorvos, BHC-alpha (benzene hexachloride), Methacrifos, Sulfotep, BHC-gamma, Diazinon, Etrimfos, Fonofos, Propetamphos, BHC-beta, Chlorpyrifos-methyl, Dichlofenthion, Metalaxyl, Ronnel (Fenchlorphos), Pirimiphos-methyl, Chlorpyrifos, Heptachlor, Malathion, Aldrin, Bromophos, Chlorfenvinphos, Pirimiphos-ethyl,	**Fresh and dried Fruits & Vegetables and their products, Cereal grains and flour, honey as well as animal feed**

SCOPE OF TESTING IN MATERIAL TESTING LABORATORIES UNIT-BUILDING MATERIAL LABORATORY

S/N	Standard Operating Procedures (SOP)/reference or Standard Methods	Parameters	Components/ If applicable	MATRIX (PRODUCT NAME)
1	RS EAS 148-1	Initial setting time		**CEMENT**
2	RS EAS 148-1	Final setting time of cement		
3	RS EAS 148-1	Compressive strength of cement (including strength for 2days or 7days and 28 days strength)		
4	RS EAS 148-2	Lost on ignition		
5	RS EAS 148-1	Cement soundness		
6	RS EAS 11	Zinc coating mass and Base Metal thickness of roofing sheets		**ROOFING SHEETS**
7	RS EAS 11	Tensile strength of roofing sheets (3 pieces)		
8	RS EAS 468 RS EAS 410	Bending adhesion of roofing sheets (1piece)		
9	RS EAS 11 RS EAS 468 RS EAS 410	Marking of roofing of sheets		
10	RS EAS 11 RS EAS 468 RS EAS 410	Dimensional test of roofing sheets		
11	Product standard	Load test		**Assembly/ Component**
12	Product standard	Compression test		**Plastics pipes**
13	Product standard	Heat reversion		
14	RS 568	Water absorption of bricks and Blocks		**CEMENT BLOCKS /BRICKS**
15	RS 568	Compressive strength of Bricks and blocks (price for 10 specimens / batch)		
16	RS 568	Dimensional test of bricks/ blocks		
17	RS 415	Water absorption of Blocks (price for 10 specimens /batch)		**PAVING BLOCKS**
18	RS 415	Compressive strength of blocks (price for 10 specimens /batch)		
19	RS 415	Dimensional test of paving blocks		

NQTLD TESTIND SCOPE 2024-2025

20	RS 359	Water absorption of burnt bricks (price for 10 specimens/batch)		**BURNT BRICKS**
21	RS 359	Compressive strength of burnt bricks (price for 10specimens/batch)		
22	RS 359	Dimensional test of burnt bricks		
23	RS 358	Flexural strength of roofing Tiles (price for 10 specimens/batch)		**CRAY ROOFING TILES**
24	RS 358	Water absorption test of roofing tiles (price for 10 specimens/batch)		
25	RS 358	Dimensional test roofing tiles		
26	RS ISO1920-4	Compressive strength of hardened (concrete cubes or cylinders (price for 3 specimens)		**CONCRETE**
27	RS 211-1	Particle size distribution by sieve analysis		**SAND**
28	ISO 1167-1	Resistance to internal hydrostatic pressure (1 to 4hrs)		**Plastic pipes**
29	ISO 1167-1	Resistance to internal hydrostatic pressure (100hrs)		**Plastic pipes**
30	ISO 527-1, ISO 37	Tensile test		**Plastics and Composite Materials (BML)**

SCOPE OF TESTING IN MATERIAL TESTING LABORATORIES UNIT-NON DESTRUCTIVE MECHANICAL TESTING

S/N	Standard Operating Procedures (SOP)/reference or Standard Methods	Parameters	Components/if applicable	MATRIX (PRODUCT NAME)
1	RS ISO 6506-1	Brinell Hardness of metals		Metals (NDT)
2	NQTL/MTL/NDT/SOP-1	Chemical composition	(XRF test for up to 44 elements: (Na,Mg,Al,Si,P,S,Cl,K,Ca,Sc,Ti,V,Cr,Mn,Fe,Co,Ni,Cu,Zn,As,Se, Rb,Sr,Zr,,Nb,Mo,Ru,Pd,Ag,Cd,Sn,Sb,Te,Cs, Ba,Hf,Ta,W,Au, Hg,Pb,Bi, Th and U	**Metals (NDT)**
3	NQTL/MTL/NDT/SOP-1	Chemical composition	XRF test for up to 44 elements: (Na,Mg,Al,Si,P,S, Cl,K,Ca,Sc,Ti,V, Cr,Mn,Fe,Co,Ni,Cu,Zn,As,Se,Rb,Sr,Zr,,Nb,Mo, Ru,Pd,Ag,Cd,Sn,Sb,Te,Cs,Ba, Hf,Ta,W,Au,Hg, Pb,Bi, Th and U)	**SOILS ROCKS& LIQUID SAMPLES (NDT)**
4	NQTL/MTL/NDT/SOP-1	Elemental analysis/chemical composition		**School chalk(NDT)**
5	EAS 25	Moisture content of powder materials		
6	EAS 25	Product Dimensional test		
7	EAS 25	Product Marking inspection		
8	RS EAS 125	Burning quality		**Wax matches (NDT)**
9	RS EAS 125	Inspection of sticks		

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SCOPE OF TESTING IN MATERIAL TESTING LABORATORIES UNIT-ELECTRICAL & ELECTRONICS LABORATORY				
S/N	**Standard Operating Procedures (SOP)/reference or Standard Methods**	**Parameters**	**Components/ If applicable**	**MATRIX (PRODUCT NAME)**
1	RS IEC 60227-1	Marking inspection		**ELECTRICAL CABLES (EEL)**
2	NQTL/MTL/NDT/SOP-1	Chemical composition of cable conductor material		
3	RS IEC 60227-2	Resistance of electrical cables rolls.		
4	Product Standard	Secondary batteries: Discharge Performance Test, for power storage batteries: Capacity range greater than 100Ah		**ELECTRICAL BATTERIES (EEL)**
5	Product Standard	Secondary batteries: Charge and Discharge Performance Test, for car starter batteries and power storage batteries: Capacity range [50Ah- 100Ah]		
6	Product Standard	Secondary batteries: Charge and Discharge Performance Test, for phone batteries computers batteries, portable medical devices batteries, CAR Capacity range : [10Ah - 50Ah[		
7	Product Standard	Secondary batteries: Charge and Discharge Performance Test for rechargeable -phones batteries, cylindrical batteries for small apparatus. Capacity range : below 10Ah		
8	Product Standard	Discharge _Only Performance Test for primary batteries		
9	Product Standard	Battery Voltage “as received”, primary and secondary batteries		
10	Product Standard	Batteries marking inspection		
11	Product Standard	Solar panel performance test at Standard Test Conditions STC (Pmpp at STC, Voc at STC , Vmpp at STC, Isc at STC, Impp at STC)		**Solar Panel (EEL)**
12	Product Standard	Field Service Test by Day: Maximum Power Test at STC and Insulation resistance of PV solar system installation tested on filed		
13	Product Standard	Energy performance in house hold electric bulbs (Luminous Flux, lm Light efficiency, lm/w Energy Efficiency or Color Rendering Index (CRI), Power Factor (PF), b1Correlated Color Temperature (CCT) in Kelvin (°K), Light Distribution or Beam angle)		**ELECTRIC LAMPS**
14	Product Standard	Marking and labeling Inspection		

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SCOPE OF TESTING IN MATERIAL TESTING LABORATORIES UNIT-DESTRUCTIVE MECHANICAL TESTING				
S/N	**Standard Operating Procedures (SOP)/reference or Standard Methods**	**Parameters**	**Components /If applicable**	**MATRIX (PRODUCT NAME)**
1	RS ISO 6892-1	**Tensile strength/Yield strength/elongation**	bar diameter 6mm	**Steel bars for reinforcing of concrete (DMT)**
2	RS ISO 6892-1		bar diameter 8mm	
3	RS ISO 6892-1		bar diameter 10mm	
4	RS ISO 6892-1		bar diameter 12mm	
5	RS ISO 6892-1		bar diameter 14mm	
6	RS ISO 6892-1		bar diameter 16mm	
7	RS ISO 6892-1		bar diameter 20mm	
8	RS ISO 6892-1		bar diameter 25mm	
9	RS ISO 6892-1		bar diameter 32mm	
10	ISO 15630-1	**Three points Bend test ofsteel bars for reinforcing of concrete**	bar diameter 6mm,8mm,10mm,12mm	
11	ISO 15630-1		bar diameter 14mm and 16mm	
12	ISO 15630-2		bar diameter 20mm and 25mm	
13	ISO 15630-1		bar diameter 32mm and above	
14	RS ISO 6935-1&2	**Dimensional test**		**steel bars**
15	RS ISO 6892-1	Tensile strength(Min 3 strip pieces)		**Structural steels-Hollow sections (DMT)**
16	ISO 4019	Dimensional test		
17	product related	Tensile properties (3 pieces)		**Steel plates and sheets**
18	product related	Dimensional test		
19	RS 128	Resistance to deformation		**polyethylene water tanks (BML)**
20	RS 128	Tensile properties (6 pieces)		
21	RS 128	Dimensional test		

SCOPE OF TESTING IN MATERIAL TESTING LABORATORIES UNIT-POLYMER, LEATHER & TESTING LABORATORY				
S/N	**Standard Operating Procedures (SOP)/reference or Standard Methods**	**Parameters**	**Components/ If applicable**	**MATRIX (PRODUCT NAME)**
1	RS ISO 4074	Freedom from holes of condoms		**CONDOMS (PTL)**
2	RS ISO 4074	Condom strength Bursting volume and Bursting pressure of condoms		
3	RS ISO 4074	Pack seal integrity of condoms		
4	RS ISO 4074	Condoms dimensions (width and length)		
5	RS ISO 4074	Design and inspection of labeling requirements		

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6	RS ISO 4074	Thickness of condoms and Quantity of lubricantin condom container		
7	EAS 378-1	Tensile properties		**MATRESS (PTL)**
8	EAS 378-1	Tear resistance		
9	EAS 378-1	Density		
10	EAS 378-1	Dimensions		
11	EAS 378-1	Compression set (3 pieces)		
12	EAS 378-1	Marking inspection		
13	ISO 3376	Tensile strength of leather materials and Percentage extension ofleather materials		**LEATHER MATERIALS(PTL)**
14	NQTLD/MTLU/PTL/SO P-6	Resistance to tearing loadof leather materials		
		Thickness of leather materials		
15	ISO 5402	Flex resistance of leather materials		
16	ISO 2420	Apparent density		
17	RS EAS 355	Tensile strength		**TOILET PAPER(PTL)**
18	RS EAS 355	Tissue paper substance/grammage		
19	RS EAS 355	Dimensional test		
20	RS EAS 355	Design and inspection of labeling requirements		
21	ISO 287	Moisture content		
22	ISO 2758	Bursting strength		**base paper for waxed bread wrap (PTL)**
23	ISO 1924	Tearing strength		
24	ISO 536	Substance/grammage		
25	ISO 12625-4	Tensile strength		**paper serviettes (napkins) (PTL)**
26	ISO 287	Moisture content		
27	ISO 22198	Dimensional test		
28	ISO 536	Grammage		
29	RS EAS 861	Design and inspection of labeling requirements		
30	ISO 12625-6	Grammage		**Facial tissue paper (PTL)**
31	ISO 22198	Dimensional test		
32	RS EAS 862	Design and inspection of labeling requirements		
33	ISO 12625-4	Tensile strength		
34	ISO 536	Grammage		**Office papers(PTL)**
35	ISO 287	Moisture content		
36	ISO 1974	Elmendorf Tear index		
37	ISO 535	Water absorptiveness		
38	ISO 536	Grammage		**Photocopy paper (PTL)**
39	ISO 287	Moisture content		
40	ISO 534	Thickness		
41	ISO 1974	Elmendorf Tear index		
42	ISO 536	Grammage		**Cement bags paper (PTL)**
43	ISO 287	Moisture content		
44	ISO 1924-2	Tensile strength		
45	ISO 5636	Porosity or Air permeability		
46	ISO 1974	Elmendorf Tear resistance		
47	ISO 535	Water absorptiveness		
48	NQTL/MTL/NDT/SOP-	Heavy metal content		**Waxed paper for bread wrap (PTL)**
49	ISO 536	Grammage		
50	ISO 536	Grammage		**Sack Kraft paper (PTL)**
51	ISO 287	Moisture content		
52	ISO 1924-3	Tensile strength		
53	ISO 535	Water absorptiveness		

NQTLD TESTIND SCOPE 2024-2025

54	ISO 1924-3	Tear index		
55	ISO 1924-3	Tensile index		
56	ISO 2758	Bursting strength		
57	ISO 536	Grammage		**Paper bags (PTL)**
58	ISO 2758	Bursting strength		
59	ISO 1974	Elmendorf Tearing resistance		
60	ISO 535	Water absorptiveness		
61	ISO 536	Grammage		**Wrapping paper (PTL)**
62	ISO 2758	Bursting strength		
63	ISO 1974	Tearing resistance		
64	ISO 13934-1	Tensile strength		**TEXTILE (PTL)**
65	ISO 9073-4	Tear strength		
66	ISO 3801	Specific weight (mass per unit area)		
67	ISO 22198	Dimensional test		
68	ISO7784-1&2	Resistance to abrasion		
69	ISO 811	Resistance to water penetration		
70	ISO105-C06	Color Fastness to weathering		
71	ISO 105-C06	Color Fastness to washing		
72	ISO 105-X12	Color Fastness to Rubbing		
73	Equipment method	Color measurement		
74	Equipment method	Color Fastness to light		
75	ISO 1833	Fiber composition		
76	ISO 5077	Dimensions change after washing		
77	ISO 16809	Dry film thickness test		**Paints and Coatings (PTL)**
78	ISO7784-1&2	Resistance to Abrasion		
79	ISO 2813	Gloss value		
80	ISO 2813	Loss of Gloss to weathering		
81	ISO 2811-4	Density or Specific Gravity		
82	ISO 9117-3	Drying Time of paint		
83		Hardness test		
84	RS EAS 851 2016	pH		
85	ISO1524	Fineness of paint granules		
86	ISO 3251	Non Volatile matter		
87	EAS 148-2	Loss on Ignition		**Cement (PTL)**
88	EAS 148-2	Chloride content		
89	EAS 148-2	Sulphate content		
90	ISO 14855-2	Biodegradability		**Plastics and alternative Products to plastics (PTL)**
91	ISO 1133-1	Melt Flow rate		
92	ASTM D3826:2018	Degradation End Point Test		
93	ISO 1833	Insoluble polymeric residues		
94	ISO 2758	Bursting strength		
95	ISO 5636	Porosity or Air Permeability		
96	ISO 536	Grammage		
97	ISO 22198	Dimensions		
98	Product standard	Migration		
99	MTL/NDT/SOP-1	Heavy Metals		
100	ISO 1924-2	Tear factor		**Notebook books (PTL)**
101	ISO 22198	Dimension Test		
102	ISO 536	Grammage/substance		
103	ISO 535	Water Absorptiveness		
104	RS ISO 4074	Design and Inspection of labeling or Packaging Requirements		

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105	ISO 811	Resistance to water penetration		**Water Resistants materials(Tarpulins,Tents,water bladders,etc) (PTL)**
106	ISO 13934-1	Tensile Strength		
107	ISO 9073-4	Tear Strength		
108	ISO 3801	Specific weight (Mass per unit area)		
109	ISO 7784-1,2	Resistance to Abrasion		**Materials resistance to abrasion Textile and polymers materials (PTL)**
SCOPE OF TESTING IN MATERIAL TESTING LABORATORIES UNIT- COOKING STOVES TESTING LABORATORY				
S/N	**Standard Operating Procedures (SOP)/reference or Standard Methods**	**Parameters**	**Components /If applicable**	**MATRIX (PRODUCT NAME)**
1	ISO 19867-1	Thermal efficiency and Emission (CO, CO2 and PM2.5)		**Cook Stoves**
2	ISO 19867-1	Safety and durability		
3	ISO 19867-1	Dimensions		
4	ISO 19867-1	Marking inspection		
5	Product standard	Moisture content		**Solid fuel**
6	Product standard	Fuel ash content		
7	Product standard	Calorific value		

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