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INDUSTRIES DEPARTMENT

NOTIFICATION

The 27th April 2010

No. 5923–VIII-SI-14/2010-I.—Consequent upon the increase in the cost of Raw Materials and other ancillary items required for testing of various products in the Testing Laboratories, the question of upward revision of the rates of testing fees now being charged for different type of tests conducted in the Testing Laboratories located at Cuttack, Rourkela, Berhampur, Angul, Balasore & Balangir under the Directorate of Export Promotion & Marketing, Orissa was under consideration of the Government for some time past. After careful consideration, Government have been pleased to revise the existing rates of testing fees as per schedule of Testing charge enclosed in ANNEXURE 'A' for different types of tests to be conducted in the aforesaid Laboratoties.

Government have also been pleased to allow 25% concession of the testing fees to Micro & Small enterprises of the State.

The revised rates shall remain in force until further orders from the date of issue of this Notification.

This supersedes Industries Department Notification No. 12797–VIII-SI-19/1998-I., dated 26/27-5-1998.

ORDER—Order that the Notification be published in the next issue of Extraordinary Gazette of Orissa and 20 copies thereof may please be supplied.

By order of the Governor

S. GARG

Commissioner-*cum*-Secretary to Government

SCHEDULE OF TESTING CHARGES FOR TESTING LABORATORIES OF
DIRECTORATE OF E.P. & M.

Sl. No.	Name of the Item/Tests	I. S. Specifications	Rate of testing fees (in Rs.) w.e.f.
(1)	(2)	(3)	(4)
(I) ELECTRICAL ITEMS			
1	PVC Insulated Cable	IS. 694	2000
2	PVC Heavy duty Cable for 2 core/3 or 4 core	IS. 1554 (Pt. I)	2000/8000
3	PVC Heavy duty Cable up to 6.6 KV.	IS. 1554 (Pt. II)	4200
4	A1 Alloy Stranded Conductor	IS. 398	1600
5	A1 Conductor, Galvanized Steel Reinforced	IS. 398	2000
6	Ballasts (Fluorescent Lamps)	IS. 1534	4000
7	Fluorescent Lamps 20/40/65/80W	IS. 2418 (Pt. I to IV)	10800
8	Street Light Fittings (Excluding Rain proof test, test for mechanical Strength & Photo-metric test)	IS. 2149	1600
9	Lead Acid Storage Battery for Automobiles	IS. 7372	12000
10	Switches for domestic & similar purpose	IS. 3854	2000
11	Holder for starters for tubular fluorescent lamp	IS. 3324	2000
12	Metal Clad Switch	IS. 13947	2000
13	Fuse unit	IS. 2086	2000
14	Rotary Switch	IS. 13947	2000
15	Plugs	IS. 1293	1000
16	Ceiling Roses	IS. 371	1000
17	Sockets	IS. 1293	1000
18	Starters for Fluorescent Lamp excluding impulse (up to 100 KVA)	IS. 2215	800
19	Electric Irons	IS. 366	5800
20	Electric Immersion, Water Heater (without tracking test)	IS. 4159	
	(a) 1 KW		4000
	(b) 1.5 KW		4000
	(c) 2 KW		4000

(1)	(2)	(3)	(4)
21	Electric Stoves	IS. 2994	
	(a) 1 KW		4000
	(b) 1.5 KW		4000
	(c) 2 KW		4000
22	Automatic Voltage Stabilizer	IS. 8448	6500
TESTS			
1	High Voltage Test of PVC Cable	IS. 694	600
2	High Voltage Test of Paper Insulated	IS. 10810 (Pt. 45)	600
3	Insulation Resistance test	IS. 10810 (Pt. 43)	1000
4	Millie volt drop test	IS. 10810	600
5	Resistivity	IS. 10810	600
6	Heating cycle test	IS. 10810 (Pt. 49)	600
7	Thickness of Insulation & Sheath up to 10 crores.	IS. 10810 (Pt. 6)	200
8	Verification of Dimensions	IS. 10810 (Pt. 36)	600
9	Conductor Resistance Test (High Voltage)	IS. 8130/IS. 10810	600
10	Electric Power Factor Test	IS. 10810 (Pt. 48)	600
11	AC High Voltage Test at Room Temp.	IS. 10810 (Pt. 45)	400
12	(Up to 3 core & 4 core)	IS. 10810 (Pt. 45)	400
13	AC High Voltage Test at Room Temp. (5 core)	IS. 10810 (Pt. 45)	600
14	AC High Voltage Test at Room Temp. (6 to 10 core)	IS. 10810 (Pt. 45)	600
15	Annealing Test 2 core	IS. 8130	200
16	Annealing Test 3 to 4 core	IS. 8130	400
17	Annealing Test 5 core	IS. 8130	600
18	Annealing Test 6 to 10 core	IS. 8130	600
19	Annealing Test (for each Addl. 5 core)	IS. 8130	200
20	Armour Resistance Test	IS. 8130	600
21	Bend Test	IS. 10810 (Pt. 50)	200
22	Break down voltage test	IS. 10810	800
23	Conductor Resistance 2 core	IS. 8130	400
24	Conductor Resistance 3 & 4 core	IS. 8130	600
25	Conductor Resistance 5 core	IS. 8130	800
26	Conductor Resistance 6 to 10 core	IS. 8130	800

(1)	(2)	(3)	(4)
27	Conductor Resistance (for each Addl. 5 core)	IS. 8130	200
28	Elongation Test	IS. 10810 (Relevant Part)	200
29	Flamability Test	IS. 10810	400
30	Heat shock Test	IS. 10810 (Pt. 53)	200
31	I.R. Test up to 3 core	IS. 10810 (Pt. 43)	400
32	I.R. Test 4 core	IS. 10810 (Pt. 43)	400
33	I.R. Test 5 core	IS. 10810 (Pt. 43)	600
34	I.R. Test 6 to 10 core	IS. 10810 (Pt. 43)	600
35	I.R. Test for each Addl. 5 core	IS. 10810 (Pt. 43)	200
36	Mandrel windig Test	IS. 10810 (Pt. 3)	200
37	Jerk Test	IS. 10810	200
38	Over all dimension	IS. 10810	200
39	Persulphate Test (per core)	IS. 10810	200
40	Resistivity Test	IS. 10810	600
41	Resistivity Test for Armour	IS. 10810	600
42	Shrinkage Test for sheath	IS. 10810	200
43	Tensile Strength & elongation	IS. 10810	200
44	Tensile Strength Aluminium per sample	IS. 10810	200
45	Thickness of Insulation for each Addl. 5 core	IS. 10810	200
46	AIR Delivery Ceiling Fan	IS. 374	3200
47	Breacking Capacity plugs	IS. 1293	200
48	Checking of dimensions plugs	IS. 1293	200
49	Clearance & creepage distance distribution Board	IS. 2675	200
50	Construction of plugs	IS. 1293	200
51	Contact Resistance & Temperature rise	IS. 1293	400
52	Creepage distance & clearance (Ceiling Fan)	IS. 374	400
53	Creepage distance & clearance Switch for domestic purpose.	IS. 3854	200
54	Creepage distance & clearance (Ballasts)	IS. 1534	200
55	Dimension M. V. Battery	IS. 7372	200
56	Dimensional Verification (Bayonet lamp Holder, starter for fluorescent lamp)	IS. 1258	

(1)	(2)	(3)	(4)
57	Dimensional Check, Ceiling Rose	IS. 371	200
58	Drop Test	IS. 2215	400
59	Earthings Connection, Ceiling Fan	IS. 374	400
60	Effectiveness of contacts plug	IS. 1293	400
61	Endurance Test, Switches for domestic purposes	IS. 3854	200
62	Endurance Test for starter for fluorescent lamp	IS. 2215	3600
63	Fan speed & input Ceiling Fan	IS. 374	600
64	Heating of current carrying parts Bayonet holder	IS. 1258	400
65	High rate discharge at low temperature vehicle battery	IS. 7372	1000
66	High voltage test, Ceiling Fan	IS. 374	400
67	High voltage test, starters for fluorescent lamp	IS. 2215	400
68	High voltage test, fuse unit	IS. 2086	400
69	Insulation Resistance under humidity	IS. 1534	400
70	Ignition Test, fuse unit	IS. 2215	400
71	Insulation Resistance & Electric strength, Plugs	IS. 1293	200
72	Insulation Resistance of Switches for domestic purpose.	IS. 3854	400
73	Insulation Resistance for domestic purpose, (Ceiling Fan).	IS. 374	200
74	Insulation Resistance, Fuse unit	IS. 2086	200
75	Interchangability (Plugs & Sockets)	IS. 1293	200
76	Leakage Current, Ceiling Fan	IS. 374	400
77	Life test for switches	IS. 3854	600
78	Life test for M. V. Battery	IS. 7372	1600
79	Making & visual Examination (Switches, fuse unit, Bayone & ceiling Rose, etc.)	IS. 3854, IS. 1258 IS. 371	200
80	Marking & Breaking capacity	..	400
81	Mechanical Endurance, Ceiling Fan	IS. 374	600
82	Mechanical strength, starter for fluorescent lamp	IS. 2215	400
83	Moisture Resistance, Ceiling Fan	IS. 374	600
84	Moisture Resistance IR & Electric strength (Bayone lamp holder)	IS. 1258	600
85	Over Voltage & Over current capacity	..	400

(1)	(2)	(3)	(4)
86	Over voltage & under voltage test	..	200
87	Protection against Electric shock, Switches, Plugs, etc.	IS. 3854	200
88	Protection against accidental contact & electric shock (Ballast).	IS. 1534	200
89	Protection against Electric shock (Ceiling Fan)	IS. 374	400
90	Resistance to ageing & moisture (Plug & ceiling rose).	IS. 1293	200
91	Resistance to over charge	IS. 371	1600
92	Resistance to corrosion ballast	IS. 1534	400
93	Resistance to heat Domestic Switches	IS. 3854	200
94	Resistance to heat (Bayone lamp holder, plugs & sockets & starters for fluorescent lamps).	IS. 1258, IS. 1293 IS. 2215	400
95	Resistance to humidity (Domestic Swithces)	IS. 3854	400
96	Resistance to rusting plugs	IS. 1293	200
97	Retention of charge M. V. Battery	IS. 7372	1200
98	Screws & connections (Plugs)	IS. 1293	200
99	Starting Ceiling Fan	IS. 374	400
100	Starting Test, Starters for fluorescent lamp	IS. 2215	1000
101	Storage test M. V. Battery	IS. 7372	1200
102	Temp. rise limit, Distribution Board	IS. 2675	600
103	Temp. rise test, plugs	IS. 1293	200
104	Temp. rise ceiling fan	IS. 374	1000
105	Temp. rise (Domestic switches, fuse unit)	IS. 3854	400
106	Test of Ballast losses	IS. 1534	600
107	Test for High Voltages, Ceiling Rose	IS. 371	200
108	Test for Insulation resistance (dry ceiling rose)	IS. 371	200
109	Test for Insulation of ballast heating	IS. 1534	1000
110	Test for mechanical Endurance (Fuse unit)	IS. 2086	400
111	Test for mechanical strength for independent ballast	IS. 1534	400
112	Test for mechanical strength (Fuse unit)	..	200
113	Test for mechanical strength (Ceiling rose)	IS. 371	200
114	Test for moisture resistance (Ceiling rose)	IS. 371	200

(1)	(2)	(3)	(4)
115	Test for moisture resistant (Ballast)	IS. 1534	1000
116	Resistance to heat (Ballast)	IS. 1534	400
117	Test for screws, current carrying parts, Ballast	IS. 1534	400
118	Test for terminals for external wiring Ballast	IS. 1534	400
119	Test for Thermal Endurance of winding (Ballast)	IS. 1534	6000
120	Test for water absorption (Ceiling rose)	IS. 371	200
121	Test for water absorption for domestic switches	IS. 3854	200
122	Testing of Earthing Ballast	IS. 1534	200
123	Test for limitation of Ballast heating	IS. 1534	1000
124	Torsion test, starter for fluorescent lamp	IS. 2215	400
125	Visual Examination, Ballasts for fluorescent lamp	IS. 1534	400
126	Visual Examination, starters for fluorescent lamps	IS. 2215	400
127	Withdrawal pull (kit kat fuse unit)	IS. 2086	200
128	Wrapping test for Aluminium per sample	IS. 398	200
129	Thickness of Insulation/Sheath	IS. 694	200
130	Voltage Test	IS. 5831	400
131	Dimensions	..	200

(II) NON-DESTRUCTIVE TESTING DIVISION

A. Radiographic Examination with X-Ray or Gama-Rays

Welded Joints Material thickness in mm.

Up to 32 200

Above 32 up to 50 400

Above 50 600

Castings & Forgings

Up to 100 200

Above 100 400

B. Ultrasonic Test

(a) Plate per Sq. Mtr. or a fraction thereof 200

(b) Welded joint per running Mtr. length or a fraction thereof 200

(c) Forging & Casting per cubic Mtr. or a fraction thereof 600

C. Magnetic & Fluorescent Crack Detection Tests

(a) Welded Joing per running Mtr. or a fraction thereof 200

(b) Castings & Forgings per 100 Sq. Cm. or a fraction thereof 200

(1)	(2)	(3)	(4)
D. Metallographic Examination			
(1)	Micro-etch test		200
(2)	Micro-examination of grain structure		200
(3)	Micro-etch test & Micro-examination		400
(4)	Depth of hardened case		400
(5)	Thickness of electric deposited coating (Microscopic method).		400
(6)	Estimation of grain size (without according heat-treatment)		600
(7)	Estimation of grain size (with heat treatment charges)		600
(8)	Micro-hardness test		600
(9)	Hardness test (Room temperatures impressions)		200
(10)	Spot test for determination of chromium coating thickness		200
(11)	Mercurous Nitrate test		600
(12)	Visual examination with photograph of sample		600

(III) CIVIL ENGINEERING DIVISION

CEMENT, AGGREGATE, CONCRETE, ROCK, Etc.

A. CEMENT

(a)	Ordinary Portland Cement, 33 grade full tests (fineness by Le Chatelier method).	IS. 269	2000
(b)	Ordinary Portland Pozzolana Cement full test (fineness by Specific surface & soundness by auto-clave method).	IS. 1489	2400
(c)	Portland Slag Cement full test (fineness by sieve & soundness by Le Chatelier method).	IS. 455	2000
(d)	43 Grade Ordinary Portland Cement full Test (fineness by specific surface & soundness by auto-clave).	IS. 8112	
(e)	Ordinary Portland Cement, 53 Grade	IS. 12269	2400
(f)	Full Chemical tests for hydraulic cement		1000
(g)	Full Physical tests for hydraulic cement		1400
(h)	Setting time for hydraulic cement		200
(i)	Fineness by Sieve method		200
(j)	Fineness by specific surface		200
(k)	Soundness by Le Chatelier		200

(1)	(2)	(3)	(4)
(l)	Soundness by Auto-clave method		400
(m)	Compressive strength (3/7/28 days)		600
(n)	Compressive strength (3 & 7 days)		400
B.	COARSE/FINE AGGREGATE	IS. 383	
(a)	Grading & fineness modules		200
(b)	One Sieving operation		200
(c)	Tests for deleterious materials		600
(d)	Soundness		800
(e)	Water absorption		200
(f)	Specific Gravity		200
(g)	Bulk density of coarse aggregates from natural sources.		200
(h)	Aggregate crushing strength		200
(i)	Aggregate Abrasion (Bevel Abrasion or Loss Angles Abrasion).		200
(j)	Adhesion of aggregates to tar		200
(k)	Aggregate impact test		200
(l)	Elongation Index		200
(m)	Flaking Index		200
(n)	Stripping test		400
C.	ROCK		
(a)	Porosity of natural building stone/rock	IS. 1124	200
(b)	Water absorption of natural building stone/rock	IS. 1124	200
(c)	Specific Gravity of natural building stone/rock	IS. 1124	200
(d)	Compressive strength of rock Cylinders/ Specimen (average of two tests).	IS. 1121 (Pt.-1)	200
(e)	Transverse strength of rock Specimen (average of two tests).	IS. 1121 (Pt-2)	200
(f)	Shear strength of rock specimen (average of two tests).	IS. 1121 (Pt-4)	200
(g)	Durability test		400
(h)	Flexual Strength	..	200
(i)	Ressistance to Wear	IS. 5482	800

(1)	(2)	(3)	(4)
D. CONCRETE, CELLULAR CONCRETE BLOCK, CONCRETE CUBE			
(1)	Compressive Strength of Concrete Cube (Average of three special)	IS. 516	200
(2)	Concrete Mix Design for each grade of concrete		8000
(3)	Compressive Strength of cellular concrete block		400
(4)	Compressive Strength of hollow concrete block		200
(5)	Deflection of ultimate load cellular concrete block	IS. 5482	600
(6)	Density (Hollow cellular block & concrete block)	IS. 5482	200
(7)	Dimension & visual Examination		200
(8)	Drying shrinkage, Hollow cellular block & concrete block).	IS. 5482	200
(9)	Flexual strength (Concrete)	IS. 5482	200
(10)	Gauging concrete cube (given mix & strength) one period.	IS. 5482	400
(11)	Moisture content (Hollow concrete block & cellular concrete block.)	IS. 5482	200
E. LIME STONE		IS. 1128	
(a)	Full chemical analysis		1400
(b)	Specific Gravity		200
(c)	Water absorption		200
(d)	Hardness in Moh's scale		200
F. BUILDING LIME		IS. 712	
(a)	Full physical tests		1200
(b)	Finess		200
(c)	Setting time		200
(d)	Workability		200
(e)	Soundness		200
(f)	Compressive strength		200
(g)	Transverse strength		200
(h)	Volume increase		200
(i)	Chemical analysis of Building lime		1000
G. CEMENT WATER PROOFING COMPOUND		IS. 2645	
(a)	Full tests (Physical test)		1600
(b)	Setting time		200

(1)	(2)	(3)	(4)
(c)	Compressive Strength		800
(d)	Percolation test		800
(e)	Chloride & Sulphate content		400
H.	CEMENT CONCRETE FLOORING TILES	IS. 1237	
(a)	Full tests		1600
(b)	Visual examination & Tolerance on Dimensions		200
(c)	Water absorption		200
(d)	Transverse strength		200
(e)	Resistance to abrasion		1000
I.	CLAY BUILDING BRICKS	IS. 1077	
(a)	Full tests of clay building Bricks including visual examination & checking of dimension.		1400
(b)	Water absorption (5 specimens average)		200
(c)	Crushing strength (5 specimens average)		200
(d)	Efflorescence (5 specimens average)		200
(e)	Density (per brick)		200
(f)	Transverse strength (single brick)		200
(g)	Transverse strength (average of not exceeding 5 bricks)		200
J.	TIMBER, PLYWOOD, FLUSH DOOR, PRELAMINATED BOARD		
1	Measurement of dimensions		200
2	Moisture content		200
3	Density/Specific gravity		200
4	Total Preservative		1000
5	Construction		200
6	Resistance to immersion in water		400
7	Glue adhesion test		200
8	Resistance to Slamming		200
9	Indentation test		200
10	Identification of glue		200
11	Loading test (Single corner, double corner, etc.)		200
12	Slamming Test		200
13	Density		200
14	Edge loading test		400

(1)	(2)	(3)	(4)
15	Flame retardant test		400
16	Glue Shear Strength (Dry state)		200
17	Glue Shear Strength (After mycological treatment)		400
18	Impact resistance test		200
19	Knife test (adhesion of ply) test	IS. 303	200
20	Local Planeness test for door	IS. 303	200
21	Long time loading test (Plywood)	IS. 1659	200
22	Micological test (with knife test only) (Block Board).	IS.	600
23	Panel shear strength (Plywood)	IS. 303	200
24	Resistance to buckling test for door	IS. 303	600
25	Resistance to dry heat (Plywood)	IS.	200
26	Resistance to miscose test for door	IS. 303	200
27	Resistance to water Plywood		200
28	Screw holding power test for door	IS.	200
29	Shock resistance test for door	IS. 303	400
30	Static bending test (Plywood)	IS.	200
31	Tensile strength (Plywood)	IS. 303	200
32	Test against rusting		200
33	Varying humidity test for door	IS. 303	400
K.	REFRACTORY & HEAT INSULATING MATERIALS	IS. 6, IS. 8	
(a)	Dimensions		400
(b)	Bulk density		200
(c)	Cold crushing strength (average of 5 tests)		200
(d)	Porosity (5 tests average)		200
(e)	Chemical analysis		1400
(f)	Estimation of Silica/Alumina in Firebricks–		
	Silica		400
	Alumina		400
	Silica & Alumina		800
L.	SANITARY APPLIANCES		
(a)	Wash basins	IS. 771	800
(b)	Urinals/Sinks	IS. 771	800
(c)	Flushing Cisterns	IS. 774	800

(1)	(2)	(3)	(4)
M.	STONEWARE PIPES	IS. 651	
(a)	Full Tests		1000
(b)	Dimensions		200
(c)	Hydraulic pressure test		200
(d)	Water absorption		200
(e)	Resistance to the action of any one acid		200
(f)	Resistance to the action of alkali salts		200
(g)	Crushing strength Test		200
N.	RE-INFORCED CEMENT CONCRETE PIPES	IS. 458	
(1)	Full Tests		1200
(2)	Dimensions		200
(3)	Hydrostatic test		400
(4)	Permeability Test		200
(5)	Strength Test (3-edge bearing test)		400
O.	CEMENT CONCRETE HOLLOW BLOCKS	IS. 2185 (PT-1)	
(a)	Full Tests		800
(b)	Dimensions		200
(c)	Crushing Strength		200
(d)	Drying shrinkage		200
(e)	Moisture movement		200
P.	QUICK LIME/HYDRATED LIME	IS. 1540	1000
(IV)	TEXTILES/RUBBER/PLASTIC DIVISION		
	ITEMS		
1	Cotton Duck, Grey	IS. 1422	1800
2	Cotton Duck, proofed	IS. 2422	2600
3	Tarpauline	IS. 2089	3000
4	Cotton Yarn Waste	IS. 5485	2600
5	Cotton Bandage	IS. 863	2600
6	Cotton gauze	IS. 758	2400
7	Woolen Jersey	IS. 2360	2600
8	Woolen Socks	IS. 2187	2400
9	Absorbent Cotton wool	IP.	1600
10	Cotton Thread	IS. 1720	1400

(1)	(2)	(3)	(4)
11	Canvas Shoes	IS. 3735	5800
12	Canvas Boot	IS. 3736	5800

TESTS

1	Fineness		
	(a) By weight per unit length		400
	(b) By diameter		400
2	Diameter		400
3	Grading of Wool (by fibre diameter)		400
4	Identification of Fibre by Microscope & Chemical		400
5	Yield of Wool		200
6	Impurity content (by hand cleaning)		200
7	Moisture content		200
8	Absorption of cotton Wool		200
9	Composition of Fibre (by chemical)		200
10	Loss on ignition		200
11	Shot content		200
12	Ash content		200
13	No. of Neps		200
14	No. of Twist in Fibre		400
15	Fluorescence		200
16	Twist in Yarn (per Ply)		200
17	Balance of twist		200
18	Lea-breaking strength		200
19	Size of lead content		200
20	Scouring loss		200
21	pH value of aqueous extract		200
22	Weight length ratio		200
23	Alkali solubility		200
24	Dimension/Construction		200
25	Nature of Weave		200
26	Threads per unit length		200
27	Weight per unit area		200
28	Defects in fabric by visual examination		200

(1)	(2)	(3)	(4)
29	Pin holes in fabric of tape		200
30	Area of print in a printed fabric		200
31	Count of Yarn–		
	(a) Warp		200
	(b) Weft		200
32	Breaking strength (Normal or wet)–		
	(a) Warp way		200
	(b) Weft way		200
33	Elongation (Normal or wet)–		
	(a) Warp way		200
	(b) Weft way		200
34	Bursting strength (Normal or wet)		200
35	Tearing strength (Normal or wet)–		
	(a) Warp way		200
	(b) Weft way		200
36	Abrasion resistance (loss in weight and change in thickness)		200
37	Air Permeability		200
38	Sweat resistance		200
39	Absorbency/Absorption test		200
40	Stretch test or permanent set		200
41	Crimp of Yarn in fabrics		200
42	Resistance of flexing		200
43	Waterproofness test–		
	(a) Pressure head or bag test		200
	(b) Cone test		200
	(c) Spray test		200
	(d) Bundesmann water repellency test		200
44	Shrinkage in water/in solution–		
	(a) By immersion method		200
	(b) By wash wheel		200
	(c) Relaxation shrinkage of wool		200
45	Inflammability test		200

(1)	(2)	(3)	(4)
46	Heat ageing test (Change in breaking strength)–		
	(a) Warp way		200
	(b) Weft way		200
47	Water soluble impurities (PH)		200
48	Chemical Impurity–		
	(a) By indicator		200
	(b) By PH		200
49	Free acidity or alkalinity		200
50	Conductivity of aqueous extract		200
51	Reaction of aqueous extract		200
52	Ash content		200
53	Chloride content		200
54	Copper/Manganese/Zinc content		200
55	Sulphate content		200
56	Grease or Oil content		200
57	Weight of basic material of treated material		200
58	Adhesion between layers (Normal condition)–		
	(a) Warp way		200
	(b) Weft way		200
59	Adhesion between layers (after treatment)–		
	(a) Warp way		200
	(b) Weft way		200
60	Resistance to xylol–		
	(a) By visual examination		
	(b) By adhesion		200
61	Resistance to fumigants–		
	(a) By visual examination		200
	(b) By adhesion		200
62	Loss in weight or flexibility after heating (volatility test)		200
63	Breaking strength of basic material after deproofing–		
	(a) Warp way		200
	(b) Weft way		200

(1)	(2)	(3)	(4)
64	Crease retention/Crease resistance		200
65	Tear Strength after treatment–		
	(a) Warp way		200
	(b) Weft way		200
66	Glass content of glass fabric		200
67	Alkali content in glass fabric		200
68	Scouring efficiency of–		
	(a) Ether extractable matter		200
	(b) Alcohol extractable matter		200
	(c) Water extractable matter		200
69	Breaking strength of seam joint		200
70	Strength test of elastic bandage		200
71	Flexing test		200
72	Tenacity of yarn/thread		200
73	Proof load test on Ropes		200

(V) LEATHER AND LEATHER PRODUCTS

TESTS	IS. 5914 & IS. 582
1 Area of leather	200
2 Thickness of leather	200
3 Weight per unit area	200
4 Thickness of components in Shoe/Boot	200
5 Constructional details of Shoe/Boot	200
6 Shrinkage or shrinkage temperature	200
7 Tightness/pipiness of grain, Crackiness of grain	200
8 Tensile strength and/or elongation	200
9 Tearing strength	200
10 Water absorption	200
11 Apparent density	200
12 Filtration test	200
13 Sinking test	200
14 Wet exposure test	200
15 Impact strength of top cap of safety Boot	200

(1)	(2)	(3)	(4)
16	Moisture content		200
17	Total ash content		200
18	Soluble ash content		200
19	In-soluble ash content		200
20	Fats and oil content		200
21	Free oil & fat content		200
22	Glucose content		200
23	Epsom Salt content		200
24	Combined oil content		200
25	Chromium or chromic oxide content		200
26	Water soluble matter content		200
27	PH of water soluble matter		200
28	Acid value		200
29	Nitrogen		200
30	Degree of tannage		800
31	Differential number		200
32	Cupping test		200
33	Dimensions—		
	(a) Up to five		200
	(b) More than five		400
34	Hardness of foxing/toe cap/sole/heel		200
35	Hardness of foxing/toe cap/sole/heel after ageing		400
36	Impact strength of toe cap		400
37	Performance test		400
38	Pilling test		200
39	Flexing resistance		400
40	Pliability test		200
41	Free acidity or alkalinity		200
(VI) BITUMEN, ROOFING FELT AND OTHER BITUMINOUS MATERIAL			
ITEMS			
1	Bitumen	IS. 702	1200
2	Bitumen emulsion for roads	IS. 3117	1200

(1)	(2)	(3)	(4)
3	Bitumen emulsion	IS. 8887	1400
4	Coaltar pitch	IS. 216	1200
5	Paving Bitumen	IS. 73	1200
6	Road Tar	IS. 215	1200
7	Cutback Bitumen	IS. 217, IS 454	1200
8	Crude Coaltar for general purpose	IS. 212	1200

TESTS

1	Weight per unit area of finished material		200
2	Bitumen content		200
3	Weight of basic material		200
4	Filling material content		200
5	Softening point of bitumen		200
6	Penetration of recovered bitumen		200
7	Weathering test		200
8	Static water head test		200
9	Cone test		200
10	Spray test		200
11	Water Absorption		200
12	Compression test		200
13	Recovery test		200
14	Extrusion sticking test		200
15	Storage sticking test		200
16	Heat resistance test		200
17	Flexibility or pliability test–		
	(a) at ambient temperature		200
	(b) at higher temperature		200
	(c) at lower temperature (Up to 5°C) for 24 hours		400
18	Exudation/Sweat test		200
19	Bleeding		200
20	Breaking strength–		
	(a) Warp way		200
	(b) Weft way		200

(1)	(2)	(3)	(4)
21	Coal or Coke Ultimate & Proximate analysis & Calorific Value		1200
22	Ultimate Analysis & Calorific Value		1000
(VII) PAPER AND PAPER BOARDS AND STATIONERY MATERIALS			
1	Thickness		200
2	Substance of untreated material		200
3	Substance of basic material of treated material		200
4	Weight/substance of coating		200
5	Substance of basic material & weight of coating of coated material		200
6	Composition		400
7	Ash content		400
8	Water soluble matter		200
9	Iron content		200
10	Sulphate content/Chloride content		200
11	Copper content		400
12	Copper number		400
13	Acidity or water extract		200
14	pH. of water extract		200
15	Reducing matter content		400
16	Bitumen content		200
17	Softening point of bitumen		200
18	Water absorption		200
19	Cobb test		200
20	Oil absorption test		200
21	Printing penetration/Castor Oil test		200
22	Paraffin Wax content		200
23	Breaking strength (Normal or Wet)		
24	(a) Along		200
	(b) Across		200
25	Elongation–		
	(a) Along		200
	(b) Across		200
26	Burst strength		200

(1)	(2)	(3)	(4)
27	Burst factor		400
28	Tear strength (Normal or wet)–		
	(a) Along		200
	(b) Across		200
29	Tear strength after treatment–		
	(a) Along		200
	(b) Across		200
30	Tear Factor (Normal or wet)–		
	(a) Along		200
	(b) Across		200
31	Tear factor after treatment–		
	(a) Along		200
	(b) Across		200
32	Exudation/Sweat test		200
33	Bleeding test		200
34	Grease retentions test		200
35	Water vapour permeability		200
36	Degree of wet curl		200
37	Compressive/Crushing strength		200
38	Static bending/Flexural–		
	(a) Along		200
	(b) Across		200
39	Folding endurance–		
	(a) Along		200
	(b) Across		200
40	Porosity/Air permeability		200
41	Electrical tests–		
	(a) Conductivity of aqueous extract		400
	(b) Dielectric strength/break down/proof		400
	(c) Electric strength/break down/proof		400
	(d) Insulation resistance		400
	(e) Volume resistivity		400
	(f) Surface resistivity		400

(1)	(2)	(3)	(4)
42	Optical property–		
	(a) Opacity		200
	(b) Light transmission		200
	(c) Gloss		200
	(d) Reflectance		200
	(e) Brightness		200
	(f) Whiteness		200
43	Oil or grease resistance		200
44	Blocking resistance		200
45	Flexibility (by hand) in normal condition		200
46	Flexibility (by hand) after treatment		400
47	Stiffness in normal condition–		
	(a) Along		200
	(b) Across		200
48	Stiffness after treatment–		
	(a) Along		200
	(b) Across		200
49	Water resistance of gummed material		200
50	Adhesiveness of gummed material		200
51	Comformability of gummed material		200
52	Heat sealing property		200
53	Curling of carbon paper		200
54	Durability of pencil/pen carbon paper		200
55	Manifolding of carbon paper		200
56	Printing quality of sensitized paper		200
57	Inking & Erasing test of tracing material		200
(VIII) HEAVY MECHANICAL DIVISION			
1	Compression in Bridge Bearings/Blow 50 tons		600
	50 tons and above but below 100 tons		600
2	Load test on chain pully Blocks below 10 tons		400
	10 tons and above but below 20 tons		400
	20 tons and above but below 30 tons		600

(1)	(2)	(3)	(4)
3	Proof load test–		
	Up to 10 tons		200
	Above 10 tons below 30 tons		300
	Above 30 tons below 50 tons		400
	Above 50 tons below 75 tons		500
	Above 75 tons below 100 tons		600
4	Tensile destruction test–		
	Below 10 tons		200
	10 tons and above but below 30 tons		300
	Above 30 tons below 50 tons		400
	Above 50 tons below 75 tons		600
	Above 75 tons below 100 tons		600

(IX) LIGHT MECHANICAL DIVISION

TESTS

1	BEND TEST–		
	Cold Bend		200
	Extra charge for preparing a bend test piece		200
	Nicked Bend test		200
	Hot bend or temps. Bend		200
	Reverse Bend Test on Wire		200
2	Determination of Weight		200
3	Galvanizing test–		
	Mass of zinc coating-g/sq.m	IS. 2629, IS. 4826	200
	Uniformity of zinc coating	IS. 6745, IS. 4759	200
	Adhesion test	IS. 4736	200
4	Hardness Test by vickers/Brinell/Rockwell–		
	(a) Four impression on one piece		200
	(b) Preparation charges for hardness		200
5	Impact Tests on Notched Bars–		
	(a) Impact test on ready machined notched bars		200
	(b) Charge for preparing specimen bar with a single notch		200
	(c) Extra charge for each additional notch		200
	(d) Impact test including machining charge with three notches		800

(1)	(2)	(3)	(4)
6	Lapping/Wrapping/Coiling test on Wires		200
7	Measurement of Dimensions		200
8	Measurement of Surface finish per 2.5 cm. length		800
10	Pressure Test–		
	Proof pressure test on pipes		400
	Proof pressure test on valves (including Body & valve)		600
11	Shear tests–		
	(a) Specimen, machined ready for testing		400
	(b) Extra charge for preparing test specimen		200
12	(a) Specimen machined ready for tensile testing with Yield point		400
	(b) Stress strain graph in compression		400
	(c) Extra charge for preparing test piece		200
13	Tensile Test–		
	(a) Ready machined		200
	(b) Extra charge for machining each test		200
	(c) Charge for determining limit of proportionality		400
	(d) Wire & rods up to & including 3/8" diameter		200
	(e) Above 3/8" dia tested without machining		200
14	Tensile Test–		
	(a) Specimen machined ready for test including determination of modulus of rigidity.		400
	(b) Specimen machined ready for test excluding determination of modulus of elasticity.		200
	(c) Extra charge for preparing each test specimen		200
15	Transverse test–		
	(a) Cast Iron bar including measurement of deflection		400
	(b) Machining charges for the above		200
16	Tube Test–		
	(a) Bulging or drifting test		200
	(b) Flattening test		200
	(c) Crushing test		200
	(d) Test for weld		200
	(e) Bending test on steel tubes		200

(1)	(2)	(3)	(4)
17	Breaking load Test		200
18	Compression Test		200
19	Deflection Test		200
20	Erichsen Cupping Test		200
21	Ductility Test		200
22	Shear Test		200
23	Mass per meter run		200
24	Mass per square meter		200
25	Coating test on CI pipes/Sluice Valves		200
26	Drop Test		200
27	Measurement of Dimensions		200
28	Mechanical Failing Load Test		500
29	Mechanical test on clamp		200
30	Slip strength test for clamps/ACSR Conductors		200
31	Tensile test on wires/rods/grey iron casting		200
32	Torsion Test		200
33	Transverse test on CI pipes		200
34	Visual examination		200
35	Workmanship & Finish		200
36	Wrapping test on wires		200
37	Construction/Fabrication		200
38	Capacity Test		200
39	Head soundness test on bolts		200
40	Hydrostatic Test		300
41	Leakage Test		200
42	Performance Test		200
43	Proof load test on full size bolts		200
44	Surface finish		200
45	Tensile test on full size bolts/screws/studs		200
46	Lay ratio		200
47	Printed Sheet (Performance Test)		1000
(X)	ITEMS (Physical tests)		
1	Bolts & Nuts excluding chemical	IS. 1367	800
2	Bib Tape & Stop Tape	IS. 778, IS. 781	800

(1)	(2)	(3)	(4)
3	Brass Rod	IS. 319	1200
4	Brass Sheet, strip etc.	IS. 410	1000
5	Conductor A.C.S.R. Full test without chemical	IS. 398	800
6	Fittings for A.C.S.R. Conductor	IS. 2486	1200
7	G. I. Fittings	IS. 1239 (Pt-2)	800
8	Gray Iron Castings	IS. 210	600
9	Gun-metal Gate, Globe & check Valve	IS. 778	1200
10	G. I. Stay Stand	IS. 2141	800
11	High Tensile Wire for Pre-stressed Concrete	IS. 1785	800
12	H. D. Wire	IS. 432, (Pt-2)	1200
13	Mild Steel for Concrete Reinforcement	IS. 432. (Pt-1)	600
14	Paper Pins	IS. 5653	400
15	Rivets	IS. 1929	400
16	Sluice Valve	IS. 14846	2000
17	Structural Steel (Sd. Qual) (Physical)	IS. 2062	800
18	Structural Steel (Ord. Qual) (Physical)	IS. 1977	600
19	Swing Check type reflux valve	IS. 5312, (Pt-1)	1000
20	Steel Wire Chain Link Fence	IS. 2721	600
21	Steel Plates	IS. 3431	1200
22	Steel Window	IS. 1038	5600
23	Tests on welded joints Tensile and Bend Test	IS. 814	400
24	Tubes for structural purposes	IS. 1161	1600
25	Wire Barbed (Physical)	IS. 278	800
26	M. S. Tube	IS. 1239 (Pt-1)	1600
27	High Streangth Deformed Steel Bar	IS. 1786	1200
28	Gl. Stay strand	IS. 2141	1400
29	Cl. Spun pipe	IS. 1536	1000
30	Cl. Fittings for pressure pipes	IS. 1538	1200
31	Cl. Socket Spigot & Socket Soil Pipe	IS. 1729	800
32	Cl. Double Flange Pipe	IS. 7181	1000
33	MS Wire	IS. 280	1000
(XI) ITEMS-PHYSICAL & CEMICAL TESTS			
1	MS Angle, MS Flat, MS Channel, MS Round, Square Bar.	IS. 2062	3000
2	Steel Shelving Cabinet	IS. 3312	8000

(1)	(2)	(3)	(4)
3	Metal Table (office type)	IS. 3498	5400
4	Composite Office Table	IS. 8126	7000
5	Metal Chair (office purpose)	IS. 3499 (Pt-1)	6000
6	MS Square Tube	IS. 7138	1400
7	Screw	IS. 6760	1800
8	Metal Rolling Shutter	IS. 6248	19600
9	Collapsible Gate	IS. 10521	13000
10	Metal Shelving Rack	IS. 1883	10600
11	MS Sheet (Hot Rolled)	IS. 1079	2400
12	MS Sheet (Colled Rolled)	IS. 513	2600
13	MS Pipe	IS. 1161	2800
14	GI Pipe	IS. 1239 (Pt-1)	2800
15	GI Fittings	IS. 1239 (Pt-2)	2200
16	Black Hexagonal Bolts	IS. 1363, (P-1)	2800
17	Black Hexagonal Nuts	IS. 1363, (P-3)	2000
18	Deformed Steel Bar	IS. 1786	2400
19	Steel Window	IS. 1038	5600
20	GI Barbed Wire	IS. 278	3600
21	GI Stay strand	IS. 2141	2800
22	HD Wire	IS. 432, Pt-2	2000
23	Medium Tensile Steel Bar	IS. 432, P-1	3000
24	Hospital Bedstead	IS. 5029	15600
25	GP Sheet	IS. 277	2600
26	Paper Pin	IS. 5653	600
27	MS Wire/GI Wire	IS. 280	2600
28	Indeted Wire	IS. 6003	2000
(XII) OIL & ORGANIC CHEMICAL			
1	Transformer Oil (Insulating Oil) for Chemical Test only.	IS. 335	1000
2	Transformer Oil (Insulating Oil) (Full test)	IS. 335	1600
3	Grease		800
4	Oil of Lemon grass	IS. 327	800

(1)	(2)	(3)	(4)
5	Oil of Eucalyptus	IS. 328	800
6	Oil of Sandal wood	IS. 329	800
7	Paraffin Wax	IS. 4654	1000
8	Palmarosa Oil & Ginger Grass	IS. 526	800
9	Coconut Oil–		
	(a) Without tests for adulterants	IS. 542	800
	(b) With test for adulterants	IS. 542	1000
10	Cotton seed oil–		
	(a) Without tests for adulterants	IS. 543	800
	(b) With test for adulterants	IS. 543	1000
11	Groundnut Oil–		
	(a) Without tests for adulterants	IS. 544	800
	(b) With test for adulterants	IS. 544	1000
12	Mahua (Murash) Oil–		
	(a) Excluding tests for adulterants	IS. 545	800
	(b) Including tests for adulterants	IS. 545	1000
13	Oil for turpentine	IS. 533	800
14	Mustard Oil–		
	(a) Excluding tests for adulterants	IS. 546	800
	(b) Including tests for adulterants	IS. 546	1000
15	Sesama Oil–		
	(a) Excluding tests for adulterants	IS. 547	800
	(b) Including tests for adulterants	IS. 547	1000
16	Pine Oil	IS. 5757	1200
17	Syn. Detergent for Industrial purpose	IS. 4956	1200
18	Syn. Detergent for household use	IS. 4955	1200
19	Laundry Soap	IS. 285	800
20	Duplicating Ink	IS. 1222/1333	1000
21	Correcting fluid	IS. 4175	1000
22	Ink Stamp Pad	IS. 393	800
23	In Fountain Pen	IS. 1221	800
24	Sampoo (Synthetic Detergent)	IS. 7814	1000

(1)	(2)	(3)	(4)
25	Transformer Oil–	IS. 335	1600
	(a) Dielectric strength only	IS. 335	400
	(b) Specific resistance only	IS. 335	400
26	Creasote Oil Type I & II	IS. 218	1000
(XIII) PAPER & STATIONERY ITEMS			
	ITEMS		
1	Account/Ledger Paper	IS. 1848	2000
2	Azurelaid Paper	IS. 1848	1400
3	Bond Paper	IS. 1848	1800
4	Creamwove Paper	IS. 1848	1200
5	Duplicating Paper	IS. 1848	1600
6	Manifold Paper/White	IS. 1848	1400/1600
7	Maplitho Paper	IS. 1848	2000
8	Printing Colour	IS. 1848	1200
9	Printing Offset	IS. 1848	1600
10	Printing colour (Same as Sl. 8)	IS. 1848	1200
11	Printing White	IS. 1848	1600
12	Printing White Super Calendered	IS. 1848	1600
13	Printing Semibleached	IS. 1848	1600
14	Typewriting	IS. 1848	1200
15	Unbleached	IS. 1848	1200
16	Coated paper (Art/Chrom)	IS. 4658	1600
17	Coated Board	IS. 4658	2200
18	Newsprint Paper	IS. 11688	2000
19	Kraft Paper	IS. 1397	2000
20	Cover Paper	IS. 6956	2600/2800
21	Computer Paper	IS. 12766	2600
22	Plain Copier Paper	IS. 14490	3000
23	Pulp Board General	IS. 4664	1400
24	Stencil Paper	IS. 5086	2000
25	Carbon Paper-Hand writing	IS. 3450	1400
26	Carbon Paper for typewriters	IS. 1551	1400

(1)	(2)	(3)	(4)
	TESTS		
1	pH.		200
2	Ash content		200
3	Substance		200
4	Thickness		200
5	Cobb Test		200
6	Burst Strength		200
7	Water absorption test		200
8	Water resistance property		200
9	Water Soluble Sulphate		400
10	Water Soluble Chloride		400
11	Moisture		200
12	Stiffness		200
13	Smoothness		200
14	Wax pick strength		400
15	Size		200
16	Mass of coating		200
17	Bulk		200
18	Accelerated ageing test		200
19	Optical property–		
	(a) Opacity		200
	(b) Gloss		200
	(c) Reflectance		200
	(d) Brightness		200
	(e) Whiteness		200
20	Breaking Length/Tensile–		
	(a) MD		200
	(b) CD		200
21	Elongation–		
	(a) MD		200
	(b) CD		200
22	Tear strength–		
	(a) MD		200
	(b) CD		200

(1)	(2)	(3)	(4)
23	xxxxxxxxxxx		
	(a) MD		200
	(b) CD		200
24	Porosity/Air Permeability		200
25	Durability of Pencil/Pen carbon paper		200
26	Manifolding of Carbon Paper		200
(XIV) ADHESIVE, GLUE, SHELLAC, Etc.			
1	Viscosity		200
2	Refractive index		200
3	Nature of adhesive (Identification)	IS. 848	600
4	Gelly strength		200
5	Moisture content		200
6	Gum Rosin–General requirement	IS. 553	1000
7	Shellac–		
	(a) Essential requirements only	IS. 16	600
	(b) Optional requirements only	IS. 16	600
8	Bleached lac–		
	(a) Essential requirements only	IS. 17	600
	(b) For optional requirements only	IS. 17	600
9	Sealing Wax	IS. 868	1400
10	xxxxxxxxxxx	IS. 852	600
(XV) CHEMICAL DIVISION			
ITEMS			
1	Aluminium Paste for paints	IS. 289	1200
2	Varnish Medium for Aluminium paints	IS. 642	1200
3	Putty for use on wooden frames	IS. 419	1200
4	Paste Filler for colour coats	IS. 110	1200
5	Distemper, Dry colour as required	IS. 447	1600
6	Distemper, Oil Emulsion Colour as required	IS. 428	1400
7	Paint Remover	IS. 430, IS. 431	600
8	Anti fouling Paint for Ship's bottom & Hulls	IS. 1419	1200
9	Zinc Chrome Priming	IS. 104	1200

(1)	(2)	(3)	(4)
10	Priming for Enamels	IS. 2074	1200
11	Red Oxide Zinc Chrome Paint	IS. 2074	1400
12	Paint Red Oxide Brushing Finishing colour as required.	IS. 123	1400
13	White Paint	IS. 127	1200
14	Black Paint	IS. 128	1400
15	Red Oxide Zinc Chrome Paint	IS. 2075	1200
16	Ready Mixed Paint Brushing	IS. 146	1200
17	Bituminous Black Paint	IS. 158	1200
18	Acid Resisting Paint Brushing	IS. 159	1400
19	Road Marking paint to No. 356 Golden Yellow & White & Black.	IS. 164	1400
20	Aluminium Paint in Dual Containers	IS. 2339	1400
21	Paints Tinted to various colours	IS. 168	1400
22	Paints Tinted to various colours quick drying lead free	IS. 169	1400
23	Enamel Brushing Spraying Interior Undercoating	IS. 133	1200
24	Stoving Enamel Brushing Finishing	IS. 150	1400
25	Stoving Enamel Spraying Finishing	IS. 341	1400
26	Black Japan Type (a)	IS. 341	1200
27	French Polish	IS. 348	600
28	xxxxxx Enamel Finishing / Undercoating	IS. 2932	
	(b) Physico chemical test		1600
	(c) Undercoating		1400
29	Exterior Enamel Finishing / Undercoating Finishing	IS. 2933	
	(a) Physico chemical test		1600
	(b) Undercoating		1400
30	Black Japan type-B Exterior	IS. 1257	1400
31	Cement Paint	IS. 5410	
	Physico-chemical (Excluding OP requirements)		1400
32	Plastic Emulsion Paint	IS. 5411 (Pt.1)	1400
33	Plastic Emulsion Paint	IS. 5411 (P. 2)	1400
34	R/M Paint Wood Primer Pink	IS. 3536	1200
35	R/M Paint Finishing Interior	IS. 3537	1400

(1)	(2)	(3)	(4)
	TESTS		
1	Colour	IS. 101 (Pt. 4/Sec-2)	200
2	Colour Index	IS. 101 (Pt. 4/Sec-2)	200
3	Composition/Analysis to Synthetic Enamel	IS. 101 (Pt. 9/Sec-2)	600
4	Consistency/Relative Consistency	IS. 101 (Pt. 9/Sec-2)	200
5	Dry film thickness	IS. 101 (Pt. 3/Sec-2)	200
6	Drying time (Hardening & Recoating properties)	IS. 101 (Pt. 3/Sec-1)	200
7	Drying time, surface dry	IS. 101 (Pt. 3/Sec-1)	200
8	Finish	IS. 101 (Pt. 3/Sec-4)	200
9	Flash point	IS. 101 (Pt. 1/Sec-6)	200
10	Flexibility & Adhesion	IS. 101 (Pt. 5/Sec-2)	200
11	Freedom from organic binder	IS. 5410	200
12	Freedom from yellowing	IS. 133	200
13	Hard dry	IS. 101 (Pt. 3/Sec-1)	200
14	Impact resistance	IS. 101 (Pt. 5/Sec-3)	200
15	Lead free material	IS. 101 (Pt. 8/Sec-5)	200
16	Mass in Kg. 10 litre	IS. 101 (Pt. 1/Sec-7)	200
17	Stability/Keeping quality	IS. 101 (Pt. 6/Sec-2)	200
18	Moisture content	IS. 101 (Pt. 2/Sec-1)	200
19	Stripping Test	IS. 101 (Pt. 5/Sec-1)	200
20	Tack free Test	IS. 101 (Pt. 5/Sec-4)	200
21	Temp. Stability	IS. 5411 (Pt. 1)	200
22	Thinning	IS. 5411 (Pt. 1)	200
23	Viscosity	IS. 110 (101-64)	200
24	Water content	IS. 101 (Pt. 2/Sec-1)	200
25	Volatile Matter	IS. 101 (Pt. 2/Sec-2)	200
26	Water Repellency	IS. 5410	200
27	Wet Opacity	IS. 101-64	200
28	Volume solid per cent	IS. 2074	400
29	Total Zinc Content	IS. 2074	200
30	Total Iron as to oxide	IS. 2074	200
31	Odour	IS. 428	200

(1)	(2)	(3)	(4)
32	Opacity	IS. 101 (Pt. 4/Sec-1)	200
33	pH of the extract	IS. 101-64	400
34	Phthalic anhydride content	IS. 101 (Pt. 6/Sec-4)	200
35	Pigment content	IS. 101 (Pt. 8/Sec-2)	200
36	Pot life of mixed paint	IS. 5410	200
37	Preparation of sample for testing	IS. 5410	200
38	Pressure test	IS. 101-64 (Pt. 5/Sec-1)	200
39	Protection against corrosion	IS. 101 (Pt. 6/Sec-1)	400
40	Recoating properties	IS. 428	200
41	Relative density/specific gravity	IS. 101 (Pt. 1/Sec-5)	200
42	Residue on evaporation	IS. 1872	200
43	Residue on sieve	IS. 101 (Pt. 8/Sec-1)	200
44	Resistance to acid	IS. 158	200
45	Resistance to acid & acid fumes	IS. 9862	400
46	Resistance to alkali	IS. 428	200
47	Resistance to bleeding	IS. 101 (Pt. 7/Sec-4)	200
48	Resistance to Dry rubbing	IS. 428	200
49	Resistance to Chloride/Chlorine	IS. 9862	200
50	Resistance to heat	IS. 101 (Pt. 7/Sec-3)	200
51	Resistance to Kerosine		200
52	Resistance to Lubricating Oil	IS. 101 (Pt. 7/Sec-2)	200
53	Resistance to natural/artificial sea water	IS. 2074	400
54	Resistance to Petro/Hydro carbon solvent	IS. 101 (Pt. 7/Sec-2)	200
55	Resistance to Salt spray	IS. 101 (Pt. 6/Sec-1)	400
56	Resistance to water	IS. 101 (Pt. 7/Sec-1)	200
57	Resistance to wear	IS. 164	400
58	Resistance to wet abrasion	IS. 5411 (Pt. 1)	200
59	Scratch hardness test	IS. 101 (Pt. 5/Sec-1)	200
60	Spreading rate	IS. 101-64	200
METAL SECTION, NON-FERROUS METALS. (CHEM.)			
1	Complete analysis. Non Ferrous Materials		1600
2	Brass & Bronzes, Gun Metal, Cupro-Manganese, Cupro-Nickel, Silicon Bronze, Aluminium Bronze, Monel Metal, Bell-metal, etc.		
	Per set of 5 elements		1600
	Individual elements		400

(1)	(2)	(3)	(4)
3	Type Metal, Solder, White Metal, Babbit Metal, etc.		
	Per set of 5 elements		1600
	Individual Elements		400
4	Tin and Lead per set of 5 elements		1600
	Individual Elements		400
5	German Silver, Complete Analysis		1600
	Individual Elements		400
6	Aluminium & Aluminium Alloys, Complete Analysis		1600
	Individual Element except Aluminium		400
7	Copper, Arsenical Copper, Phosphor Copper, Copper Alloys–		
	Complete Analysis (Excluding Silver)		1600
	Complete Analysis (with silver)		1800
	Copper, Arsenic, Lead & Bismuth		1600
	Copper, Phosphorus & Iron		1600
	Copper		600
	Silver		600
	Cadmium		400
	Individual Element excepting Copper & Silver		400
8	Lead, Lead Alloys, Antimonial lead, etc.		1600
	Complete Analysis		1600
9	Tin Metal. Complete Analysis		1600
	Individual Element Except Tin		400
10	Antimony Metal Complete Analysis		1600
	Individual Element excepting Antimony		400
11	Zinc Metal, Zinc Alloys, Diecasting alloys–		
	Complete Analysis		1600
	Individual Element excepting Zinc		400
12	Magnesium Metal, Complete Analysis		1600
	Individual Element excepting Magnesium		400
13	Nickel Metal, Complete Analysis		1600
	Individual Element		400
14	Manganese Metal, Complete Analysis		1600
	Individual Element except Manganese		400
	Vanadium in Mercury		400
	Mercury Content		600
15	Silver Solders, Complete Analysis		1800
	Silver only		600
	Individual Element except Silver		400

(1)	(2)	(3)	(4)
	FERROUS METAL AND ALLOYS (CHEMICAL)		
16	Carbon Steel Complete Analysis		1600
	Carbon, Silicon, Manganese, Sulphur, Phosphorus each		400
17	Alloy Steel Complete Analysis per set of 5 elements		1800
	Individual Element		400
18	Cast Iron, Pig Iron, Total Carbon, Graphitic Carbon, Combined Carbon, Silicon, Manganese, Sulphur & Phosphorus		1600
	Other Alloying Element like Nickel, Chromium Molybdenum each.		400
19	Ferro-silicon, Complete Analysis		1600
	Silicon only		400
20	Ferro-Molybdenum Complete Analysis		1600
	Carbon, Silicon, Manganese, Molybdenum each.		400
21	Ferro-Tungsten Complete Analysis		1600
	Tungsten only		400
22	Ferro-Vanadium Complete Analysis		1600
	Vanadium only		400
23	Ferro-Chrome Complete Analysis		1600
	Chromium only		400
24	Ferro-Manganese, Pig-Iron Complete Analysis		1600
	Managnese only		400
25	Ferro-Phosphorous Complete Analysis		1600
	Phosphorous only		400
26	Galvanisation Test (uniformity & Mass of Zinc Coating)		400
27	Thickness of silver Plating		600
28	Efficiency of tinning Copper sulphate test		200
29	Porosity Test		200
30	Salt-spray test for corrosion		400
31	Mercurous Nitrate Test on Brass or Bronze		400
32	Specific Gravity		200
	ORES AND MINERALS (CHEMICAL)		
1	Iron ore, Manganese ore, Copper ore, Buxite etc., complete analysis		1600
	Individual other element		400

(1)	(2)	(3)	(4)
2	Limestone, Dolomite, Gypsum Selenite, etc. complete analysis		1400
	Insoluble Residue, Lime & Mangnesia		800
DISINFECTANT FLUID			
1	Disinfectant Fluid (Phenyle)	IS. 1061	1000
REFRACTORY AND AGGREGATE (CHEMICAL)			
1	Refractory Material		
	General Chemical analysis		1400
2	Sand General Chemical Analysis		1400
3	Sand (Coarse & Fine aggregated) for determination of suitability for use in cement concrete.	IS. 383	1600 1200
OTHER CHEMICAL TESTS			
1	Test for Resistance to Acid–		
	(i) For Acid Resistant Bricks	IS. 4860	200
	(ii) For Asbestos-Cement Sheets Building pipes, etc.	IS. 459	200
	(iii) Asbestors Cement Building Pipes & fittings	IS. 1626	200
	(iv) Ceramic Unglezed Vitreous Acid–Resistant Tiles	IS. 4457	200
2	Test for soundness		
	For coarse & fine aggregates/Sand/Gravel/Stone	IS. 383	
	Aggregate for concrete (with Sodium Sulphate & Magnesium sulphate solution.	IS. 2386 (Pt. 2)	200
3	Determination of Deleterious materials of coarse and fine aggregates.	IS. 383	
	(i) Coal & lignite, (ii) Clay lumps,	IS. 2386 (Pt. 2)	800
	(iii) Material finer than 75-IS. Sieve, (iv) Soft fagments, (V. Shale)		
4	Determination of Fine Dust, fine silt & clay of masonry mortars.	IS. 2386 (Pt. 2)	800
5	Determination of Organic Impurities of Coarse and fine Aggregates for concrete/Masonry Mortars.	IS. 383 IS. 2116	200
6	Estimation of Alkalies (Na ₂ O, K ₂ O) Water soluble compounds/materials.		200
7	Apparent porosity of refractory material		200
8	Breaking load of clay proofing tiles	IS. 458	400
9	Crazing test of sanitary appliances		400

(1)	(2)	(3)	(4)
10	Penetration test of Bitumen	IS. 1322	200
11	Squareness of tiles	IS. 1464	200
12	Straightness of tiles	IS. 1464	200
13	Wrapage (Tiles)		200
14	Water absorption (Tiles)		200
15	Wet transverse strength of tiles		400
16	Tercaze tile	IS. 1237	1600
17	Paneled door with hard board panel	IS. 1003	2400
18	Exterior Grade M.D.F. Board	IS. 12406	3400
19	Interior Grade M.D.F. Board	IS. 12406	2400
20	Sanitary appliances	IS. 2556	1000
21	Acid resistance bricks	IS. 4860	1200
22	Alumino Ferric	IS. 299	2000
23	Aluminium Sulphate (Non ferric Alum)	IS. 260	2000
24	Bleaching Powder	IS. 1065	1200
25	Cotton Tag	IS. 8499	1000
26	Paper Adhesive	IS. 2257	2200
27	Bentonite	IS. 6186	2000
28	Fly Ash (Chemical)	IS. 3812	2200
29	Water for Concrete Mixture	IS. 456	2000
30	Water for Storage Battery	IS. 1069	1800
31	Distilled Water	IS. 1070	1200