

REVISED TESTING AND CONSULTANCY CHARGES OF KNHPI

S.N.	PARTICULARS	Charges Rs./-
	TESTING AND CONSULTANCY CHARGES	
	ANALYSIS OF RAW MATERIAL	
1	Hot water solubility	500
2	N/ 10 NaOH solubility	500
3	Alcohol – Benzene solubility	500
4	Holocellulose (chloride)	1800
5	Total lignin	1800
6	Pentosan	1800
7	Ash	500
8	Silica	1800
	<u>PULPING & BLEACHING</u>	
9	Raw material evaluation – pulping, bleaching & pulp evaluation (optimization of cooking & strength properties)	50,000
10	- Pulping under one set of conditions	10,000
	- Bleaching under one set of conditions	10,000
	- Pulping chemical optimization	12,500
	- Bleaching chemical optimization	12,500
	- Pulp evaluation	10,000
	ANALYSIS OF PULP	
11	N/10 NaOH solubility	500
12	Alpha cellulose	1800
13	Klason lignin	1800
14	Pentosan	1800
15	Ash	500
16	Silica	1800
17	Copper Number	500
18	CED Viscosity	900
19	Kappa No.	900
20	Soda Loss	900
	<u>PULP EVALUATION</u>	
21	Beating & Sheet formation (Valley Beater)	10000
22	Bauer McNett Fibre Classification	3000
23	Evaluation of sizing chemicals	3000
24	Filler & Fines retention	5400
25	Freeness (CSF)	800
26	Shieve analysis of high yield pulp	3000

	PAPER TESTING	
27	Abrasion resistance (Taber)	1300
28	Air resistance (Gurley)	500
29	Ash content	500
30	Bulk	500
31	Bursting strength	500
32	Cobb sizing test	500
33	Grammage	500
34	Folding Endurance	500
35	In plane tear test	900
36	Klemm absorbency	500
37	Moisture	500
38	Paper dimensional stability	2700
39	pH(Hot extract)	500
40	Porosity (Bendsten)	500
41	Stiffness	500
42	Tearing strength	500
43	Tensile strength	500
44	Thickness	500
45	Water absorption (Blotter)	500
46	Ageing Test	3000
47	Wet strength testing	500
48	Spectrum 190-400 nm	1300
49	Spectrum 400-850 nm	1300
	OPTICAL PROPERTIES	
50	Brightness	500
51	Opacity	500
52	Transparency	500
53	Whiteness	500
54	Yellowness	500
55	CIE Color coordinates	900
	CHEMICAL ANALYSIS OF PAPER	
56	Rosin	1800
57	Wax	900
58	Starch	900
59	Casein	900
60	Water soluble sulphates	900
61	Titanium pigments	900
62	Amount of coating	900
63	Water soluble chlorides	900
64	pH (Hot water extract)	500
65	Ash content	500

	MICROSCOPIC ANALYSIS	
66	Mechanical pulp content in paper	3000
67	Fibre analysis (quantitative)	5000
68	Fibre analysis (qualtitative)	1500
	NON-FIBROUS MATERIAL TESTING	
69	Alum	1800
70	Soda ash	500
71	Rosin	1800
72	Starch	500
73	Titanium	1000
74	Talcum powder	600
75	Available lime index	500
	BLACK LIQUOR ANALYSIS	
76	pH at 30 ⁰ C	500
77	Total solids	500
78	Specific gravity at 30 ⁰ C	500
79	Suspended solids	900
80	Conductivity	500
81	Residual active alkali	900
82	Total alkali	900
83	Organically bound sodium	600
84	Silica content (SiO ₂)	1400
85	Sulphated ash	1400
86	Sulphated (SO ₄)	600
87	Chlorides	600
88	Sulphur	600
89	Lignin content UV	900
90	Reducing sugars	1800
	WATER ANALYSIS	
91	pH	450
92	Dissolved solids	900
93	color	900
94	Silica as SiO ₂	1100
95	Acidity	500
96	Oil & Grease	500
97	ALKALINITY - Phenolphethalein alkalinity as CaCO ₃ Methyl orange alkalinity as CaCO ₃	500
98	TOTAL HARDNESS Temporary as CaCO ₃ Permanent as CaCO ₃	900 900
99	Sulphates	900

100	Chlorides	500
101	Iron	500
	EFFLUENT ANALYSIS	
102	COD	1600
103	BOD	3000
104	Alkalinity as CaCO ₃	1000
105	Color intensity Co-Pt	600
106	CONSULTANCY CHARGES FOR PILOT PLANT TRIALS For a minimum of 500 kgs of R.M./Pulp, trials including processing at Digestor,potcher,beater,CMV/Autovat hydrapulper,press,Tawasuki,calender.	1,00,000