DETAILED ESTIMATE FOR S & P OF PROPOSED 2 No. LABORATORY AT S. N. BOSE NATIONAL CENTRE FOR BASIC SCIENCES AT SALTLAKE, KOLKATA.

SI. No.	Description	Unit	Qty.	Rate(Rs)	Amount(Rs)
1	Supplying fitting and fixing G.I. pipes TATA make with all necessary accessories, specials viz. socket, bend, tee, union, cross, elbow, nipple, long screw, reducing socket, reducing tees, short piece etc. fitted with holder bats clamps, i/c. cutting pipes, making threads, fitting fixing etc. complete in all respects i/c. cost of all necessary fittings as required, jointing materials and two coats of painting with approved paint in any position above ground. (Payment will be make on the centre line measurements of the total pipe line i/c. all specials. No separate payment will be made for accessories specials)				
	a) 15 mm. dia Medium Quality	metre	30.00		
	b) 25 mm. dia Medium Quality	metre	20.00		
	c) 32 mm. dia Medium Quality	metre	80.00		
	d) 40 mm. dia Medium Quality	metre	100.00		
	e) 50 mm. dia Medium Quality	metre	50.00		
2	Supplying, fixing, testing CPVC pipe for internal Cold and Hot water supply conforming STAM-D-2846 grade SDR 13.5 including all type of fittings jointing, cutting etc, complete as per drawing andv specifications. The installed pipes with fittings are to be clamped, hung or otherwise with proper pvc brackets, u- clamps, structural supports, Chasing in wall / R.C.C. is to be done as may required. Walls and floors may have to be cut to make apertures or holes as required. All chasing and cutting will have to be repaired with cement morter (1:4) or cement concrete (1:2:4) as the case may be pipe joints are to be made with adhesive solution fixed with plastic clamps as required / spec. of manufacturer etc. complete.				
	a) 20mm dia	metre	20.00		
	b) 15mm dia	metre	20.00		
3	Supplying fitting and fixing gunmetal wheel valve of approved brand and make tested to 21 kg. per sq. cm. a) 50mm dia b) 32 mm dia	each each	2 4		

SI. No.	Description	Unit	Qty.	Rate(Rs)	Amount(Rs)
	c) 20 mm dia	each	8		
	d) 15 mm dia	each	12		
4	Chromium plated Bibcock (angular shape withh wall flange) (equivalent to code no. 5037 & model - Florentine of Jaquar or similar brand). Wash basin white vitreous china of approved make (without fittings) supplied fitted & fixed in position on 75 mm. x 75 mm. X 75 mm wood blocks and C.I. brackets i/c. two coats of painting of C.I. brackets	each	10		
	a) 630 mm. x 450 mm. size	each	4		
6	Chromium plated Rose shower with revolving joint and 150 mm long shower arm (equivalent to code no 5489 & Model - Florentine of Jaquar or similar brand).	each	3		
7	Supplying, fitting and fixing approved brand P.V.C. Connector white flexible with both end coupling with heavy brass over C.P. nut 15 mm. dia				
	a) 600 mm. long	each	4		
8	Supplying, fitting and fixing approved brand P.V.C. waste pipe with coupling at one end fitted with brass CP nut 32 mm. dia				
	a) 750 mm. long	each	4		
9	Waste fittings supplied, fitted and fixed complete				
	a) C.P. over brass				
	í) 32 mm.	each	3		
	ii) 40 mm	each	3		
10	Supplying, fitting and fixing dome shaped C.P. waste grating for urinals				
	a) 50 mm. dia	each	4		
11	Cast iron soil pipe only conforming to I.S. 3989/1970 and I.S. 1729/1964 with bobbins, nails etc. i/c. making holes in the wall, floor etc. and cutting trenches etc. in any floor through masonary concrete if necessary and mending good damages with necessary jointing materials and painting two coats to the exposed surface with approved paint complete.				

SI. No.	Description	Unit	Qty.	Rate(Rs)	Amount(Rs)
	a) With lead caulked joints		10.00		
	i) 150 mm. dia (internal)	metre	10.00		
	b) With lead caulked joints				
	i) 100 mm. dia (internal)	metre	100.00		
12	Cast iron single branch equal with door,				
12	conforming to I.S. 1729/1970 i/c. jointing and				
	painting two coats to the exposed surface				
	a) With lead caulked joints				
	i) 100 mm. dia	each	10		
13	H.C.I. bend with door conforming to I.S.S.				
	i/c. jointing complete a) With lead caulked joints				
	i) 100 mm. dia	each	10		
14	H.C.I. bend without door conforming to I.S.S.				
17	including jointing complete				
	a) With leadcaulked joints				
	i) 100 mm. dia	each	10		
15	Approved patent vent cowl H.C.I. conforming				
	to I.S.S.				
	a) 100 mm. dia	each	2		
16	Supplying fitting and fixing cast iron 'P' or 'S'				
	trap conforming to I.S. 3989/1970 and				
	1729/1964 i/c. lead caulked joints and				
	painting two coats to the exposed surface				
	a) 'P' Trap or 'S' Trap				
	i) 100 mm. dia	each	4		
17	E.P.W.C. in white glazed vitreous chinaware				
	of approved make supplied fitted and fixed				
	in position complete with necessary bolts,				
	nuts etc. a) With P trap or S trap	each	3		
		cuon	Ũ		
18	Anglo Indian in white glazed vitreous chinaware				
	of approved make supplied fitted and fixed in position complete with necessary bolts,				
	nuts etc.				
	a) With P trap or S trap	each	1		
19	Supplying, fitting, fixing C.P. brass Shower rose				
	healthfoset type of Jaguar or Rid lay or similar brand with15 mm dia 1200 mm long UPVC pipe				
	for use in W.C. all complete as per direction	each	4		
20	Flat back urinal (half stall urinal) in white vitreous chinaware of approved make supplied				
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SI. No.	Description	Unit	Qty.	Rate(Rs)	Amount(Rs)
	fitted and fixed in position with brass screw on 75 mm. x 75 mm. x 75 mm.Wooden blocks complete				
	a) 465 mm. x 355 mm. x 265 mm.	each	4		
21	Supplying, fitting and fixing porcelin partition wall of approved make of size 618 mm X 310 mm complete in all respect.	each	4		
22	Half round channel with or without outlet as required set in cement concrete (6:3:1) with jhama chips complete				
	a)White Vitreous chinaware-600mm X 100mm	Mtr.	20.00		
	i)Channel with or without outlet,stop end & L or T	Mtr	10.00		
23	Supplying,fitting & fixing Closet seat of appvd. Make with lid & C P hinges,rubber buffer & brass screws complete. E.W.C (Bestolite solid type - black)	each	4		
24	Squating plate with integral flushing in white vitrius chinaware of appvd make supplied ,fitted,fixed in cement concrete 1:3:6 with jhamachips complt450mmx350mm	each	2		
25	Supplying, fitting and fixing Chromium plated concealed stop cock (equivalent to code no 513(A) &513(B) & Model - TROPICAL/SUMTHING SPECIAL OF ESSCO OR similar brand)				
	a) 15 mm.	each	12		
26	Supplying, fitting and fixing bevelled edged mirror 5.5 mm. thick silver red as per I.S. 3438/1965 together with brass C.P. hinges				
	a) 600 mm. x 450 mm.	each	4		
27	Supplying fitting and fixing towel rail with two brackets				
	a) C.P. over brass i) 25 mm. dia and 600 mm. long	each	4		
28	Supplying, fitting & fixing liquid soap container				
	a) PVC or polythene make	each	4		
29	Supply , fitting & fixing yard gully with appvd H C I grating complete				

SI. No.	Description	Unit	Qty.	Rate(Rs)	Amount(Rs)
	225 mmx 150 mm with 230 mm gratiings	Each	4		
30	Supplying , fitting & fixing of Aluminium domical grating :125 mm	Each	4		
31	Supplying fitting & fixing pillar cockC.P15mm(Code no 5011 & Model - FLORENTINE of JAQUAR or equivalent)	each	4		
32	Supplying , fitting & fixing of 10 ltr PVC low down cistern conforming to IS spec with PVc fittings complete , C I brackets incl two coats of painting to bracket etc. make of Parryware (Slimline model).	Each	4		
33	Constructing gully pit of inside measurement 600mm x 600mm x up to 600mm (depth) with 250 mm thick 1st class brick work in cement mortar (1:4) on all sides, bottom of the pit consisting of 100mm thick cement concrete (1:3:6) with stone chips over a layer of jhama brick flat soling, 15mm thick cement plaster to inside walls and out side walls up tp G.L. 20mm thick (1:4) plaster to bottom of the pit, providing necessary invert with cement concrete (1:3:6) with stone chips as per direction, neat cement finishing to entire internal surfaces, top of the pit covered with 100mm thick R.C.C. slab (1:1.5:3) with stone chips and necessary reinforcements up to 1% and shuttering including 6mm thick cement plaster (1:4) in all external surfaces of the slab and 500mm x 450mm pre-cast R.C.C. horizontal grating with frame of approved make supplied, fitted and fixed in the slab with necessary fittings, necessary earth work in excavation in all sorts of soil, filling sides of the pit with earth and removing spoils after work complete in all respect with all costs of labour and materials.				
		each	20.00		
34	Constructing inspection pit inside measure- ment 600 mm. x 600 mm. x Upto 600 mm. (depth) with 250mm.thk. 1st. class brick work in cement mortar (4:1) on all sides, bottom of the pit consisting of 100 mm. thick cement concrete (6:3:1) with jhama khoa over a layer of jhama brick flat soling 20 mm. thick (4:1) cement plaster to bottom of the pit, providing necessary invert with cement concrete (4:2:1) with jhama chips as per direction, neat cement finishing to entire internal surfaces the top of the pit covered with 100 mm., thick R.C.C. slab (3:1.5:1) with stone chips and necessary reinforcement upto 1% and shuttering i/c. 6 mm. thick (4:1) cement plaster in all external surfaces of the slab and one 560 mm. dia R.C.C. manhole cover of approved make fitted and fixed in the slab with necessary fittings, necessary earthwork in excavation in all sorts of soils, filling the sides of the pit with earth and removing spoils after work complete in all respects. With Pakur Variety	each	10		

SI. No.	Description	Unit	Qty.	Rate(Rs)	Amount(Rs)
35	Supplying plastic water storage tank of approved quality with closed top with lid (Black) muitilayer. a) 2000 ltr capacity b) 5000 ltr capacity	Each Each	2 4		
36	Labour for hoisting plastic water storage tank above 1500 ltr upto 5000 ltr capacity Upto 4th storey from G L	Each	6		
37	Labour for punching hole in plastic water storage tank upto 50 mm dia	Each	24		
38	Supplying, fitting and fixing glass shelf with aluminium guard rails. a) Ordinary type with 5.5 mm sheet glass i) 450 mm X 125 mm	each	4		
39	Supplying, fitting and fixing porcelin toilet paper holder of approved make with wooden spindle as necessary. i) Roll type size 250 mm X 125 mm	each	4		
	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion.(i) Single socketed pipes. 110 mm diameter	mtr	80.00		
41	UPVC Fittings				
a)	110mm dia Tee junction	each	10		
b)	110mm dia Y junction	each	10		
c)	110mm dia shoe of down pipe	each	10		
42	Supplying, fitting, fixing C.I. grating (heavy type)				
	a) Upto 100 mm. square or 100 mm. dia	each	10		
	b)Above 100 mm. & upto 150 mm. sq.or round	each	5		
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