

TENDERDOCUMENT

E-Tender NoticeNo: 01/2018-19/RGNUL

Dated: 04/04 /2018

Construction of 01 no Hostel block for Girls including internal & external Public Health & Electrical Services(under BabuJagjivan Ram ChhatrawasYojna) in RGNUL campus, Sidhuwal, Patiala.



VOLUME -2

(ConstructionandMaintenanceWing)
RajivGandhiNationalUniversityofLaw,Punjab,Patiala

ARCHITECT/CONSULTANTS:

M/s Kothari Associates Pvt. Ltd.

G-65,ConnaughtCircus,NewDelhi110001

01123325040,01123324598,Fax:01123712001

Shams

****CONTENTS****

59-8259-82

SECTION-I BILLOFQUANTITIES

SCHEDULEOFITEMSOF WORK,QUANTITIESTHEREOFANDRATE.
(THECONTRACTOR/BIDDERISTO QUOTEPERCENTAGEABOVEORBELOW
THENITAMOUNT)-----1 - 47

SECTION-II
FORMOFBID-----48--49

SECTION-I
BILLOFQUANTITIES

BILL OF QUANTITIES

Construction of 01 no Hostel block for Girls including internal & external Public Health & Electrical Services(under BabuJagjivan Ram ChhatrawasYojna) in RGNUL campus, Sidhuwal, Patiala .

S.No	Description of items	UNIT	Appx Quantities	Total Rate	Amount
1	Excavation in Soil (any type) using Hydraulic Excavator CK 90 and Tippers with Disposal up to 450 metres. Excavation for roadwork in soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and sides	cum	2489.25	47.34	117841.10
2	Carriage of excavated earth outside from foundation & subsequent with machinery	cum	2489.25	27.00	67209.75
3	Earth filling under floors with surplus ordinary soil or soil containing gravel or kankar upto 40% taking outside from the building plinth the premises in 15 cm layers including ramming, watering and consolidated lead upto 30 metres.	cum	2489.25	88.24	219651.42
4	Earth filling under floors with surplus ordinary soil or soil containing gravel or kankar upto 40% taking outside including ,unloading, carriage with average lead of 8 km the premises in 15 cm layers including ramming, watering and consolidated lead upto 1000 metres.	cum	450.00	275.00	123750.00
5	Rehandling of recently deposited earth received from foundation for reuse in filling by mean of machinery	cum	2489.25	32.40	80651.70
	Earth filling:				0.00
6	Earth filling under floors with surplus ordinary soil or soil containing gravel or kankar upto 40% excavated from foundation and taken only from outside the building plinth in 15 cm layers including ramming, watering and consolidating lead upto 30 metres	Cum	RO	41.51	0.00
7	Providing and applying Anti Termite Treatment using pre constructional chemical treatment measures as per IS - 6313 - 2001 (Part 2) & using Chemical containing chloropyrifos systemic insecticide diluted to manufacturer's specifications (i) In foundation pits, by treating the bottom & sides up to height of 300mm by uniformly spraying solution @ 5 Litre / SqMetre (ii) In the refill earth on both sides of all built up walls @ 7.5 Litre / Running Metre (width - 300 mm, depth - 450 mm) (iii) Before laying the floor, by uniformly sprinkling the top surface of the consolidated earth within the outer periMetre @ 5 Litre solution per SqMetre.	Sqm	750	119.03	89268.75
	CENTERING AND SHUTTERING				0.00
8	Centering and shuttering for flat surface such as suspended floors, Roofs, Landing, Chhajjas, Shelves etc				0.00
i	For Ground Floor	Sqm	2718.96	204.01	554700.47
ii	For First Floor	Sqm	595.16	2.70	1606.93
iii	For Second Floor	Sqm	595.16	5.40	3213.86
iv	For Third Floor	Sqm	630.84	8.10	5109.80
v	For Fourth Floor	Sqm	169.39	10.80	1829.41
9	Centering and shuttering for sides and soffits of beams, haunchings, girders, bressumers, lintels				0.00
i	For Ground Floor	Sqm	1928.2	188.73	363909.19
ii	For First Floor	Sqm	365.52	2.70	986.90

iii	For Second Floor	Sqm	365.52	5.40	1973.81
iv	For Third Floor	Sqm	395.28	8.10	3201.77
v	For Fourth Floor	Sqm	93.04	10.80	1004.83
10	Centering and shuttering for stair cases with sloping soffits including risers and stringers.	Sqm	136.79	227.46	31114.46
i	For First Floor	Sqm	37.29	2.70	100.68
ii	For Second Floor	Sqm	37.29	5.40	201.37
iii	For Third Floor	Sqm	24.92	8.10	201.85
11	Centering and shuttering for columns (square or rectangular or polygonal in plan)				0.00
i	For Ground Floor	Sqm	922.8	242.01	223330.98
ii	Extra For First Floor	Sqm	179.12	2.70	483.62
iii	For Second Floor	Sqm	179.12	5.40	967.25
iv	For Third Floor	Sqm	179.12	8.10	1450.87
v	For fourth Floor	Sqm	65.44	10.80	706.75
12	Centering and shuttering for columns (circular or curved in plan)				0.00
i	For Ground floor	Sqm		262.63	0.00
13	Centering and shuttering for corbels parapets fascias and other similar items including edges	Sqm		367.32	0.00
14	Shuttering for faces of concrete foundations and foundation beams (vertical or battering)	Sqm	346.25	158.31	54816.40
15	Extra when ever smooth surface is desired for concrete finish.				0.00
i	Slab	Sqm	2617.96	20.40	53402.46
ii	Beams	Sqm	1928.2	18.87	36390.92
iii	Stairs	Sqm	136.79	22.75	3111.63
iv	Columns	Sqm	922.8	23.13	21340.21
16	Centring and shuttering for arches of varandah, door and windows openings.	Sqm	11.67	211.60	2469.36
i	Extra for third floor	Sqm	11.67	8.10	94.53
	CONCRETE				0.00
17	Prov. & laying cement concrete with cement content as specified /cum.				0.00
a	M-10 grade concrete with cement content of 175 kg./cum, without batch mix plant./(1:4:8) 20mm size	Cum	101.29	3092.65	313254.77
b	Cement concrete 1:8:16 ratio with cement content 90kg / cum, without batch mix plant.	cum	101.03	2556.13	258246.17
18	Cement concrete 1:5:10 ratio with cement content 90kg / cum, without batch mix plant.	cum	RO	2983.60	0.00
i	Extra for mixture	Cum	RO	113.76	0.00
19	Reinforced cement concrete M-20 with cement @375/kg per cum hand mixed but excluding steel reinforcement centring and shuttering in foundation and plinth	cum	118.25	4592.81	543099.52
20	Reinforced Cement Concrete M-25 mechanically batch mixed using cement content 380 kg./cum. With batch type concrete mixer as per IS: 1791 and vibrated by needle vibrator but excluding steel reinforcement centring and shuttering in foundation and plinth	cum	325.75	4749.28	1547077.37
21	Reinforced Cement Concrete M-25 mechanically batch mixed using cement content 380 kg./cum. With batch type concrete mixer as per IS: 1791 and vibrated by needle vibrator but excluding steel reinforcement centring and shuttering in superstructure	cum	678.66	4954.58	3362475.26
22	Extra for R.C.C. work done in subsequent storey above the first storey up to height of 4 metres or part thereof up to the roof top level of that storey.				0.00
i	For first floor	cum	147.83	40.80	6031.46
ii	For second floor	cum	147.83	81.60	12062.93
iii	for Third floor	cum	149.3	122.40	18274.32
iv	for fourth floor	cum	39.86	163.20	6505.15
23	Damp proof course 7.5 cm thick of cement concrete 1: 2: 4 with two course of bitumen 20/30 penetration	Sqm	80.78	441.59	35671.64

R. Sharma

	@ 1.65 kg / sqmlaid hot and sanded.				
24	20mm thick cement plaster damp proof course 1:3 with two coats of bitumen at 1.65 kg. perSqMetre. laid hot and sanded. (a) Vertical	Sqm	58.93	290.58	17123.70
b	horizontal	Sqm	RO	303.78	0.00
25	Plain cement concrete M-20 grade precast kerb 250mm high with bottom width 165mm and top width 115mm fixed in position on earth base including carriage to site of work complete as per technical clause 408 of MORT&H specifications	mt	150	337.07	50560.50
26	Providing and laying 60 mm thick factory made cement concrete rubber moulded smooth finish interlocking paver topping with white cement Make block of M-35 grade made by block making machine with strong vibratory compaction and of approved size and design / shape laid in Ordinary Grey colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc, all complete as per directions of Engineer-in-Charge.NTC BRAND	sqm	143.59	623.00	89456.57
	BRICK WORK				0.00
27	First class burnt brick work laid in cement sand mortar 1:6 in foundation and plinth	Cum	4.58	3855.19	17656.77
28	First class burnt brick work laid in cement sand mortar 1:6 in first storeyupto 4 Metres above plinth level.	Cum	349.99	4136.39	1447696.85
29	First class burnt brick work laid in cement sand mortar 1:5 in first storeyupto 4 Metres above plinth level.	Cum	14.85	4238.58	62942.97
30	Extra for additional storeyupto 4 Metres above the top of structural roof of lower storey,				0.00
a	Extra for additional storey of first floor.	Cum	66.57	84.48	5624.13
b	Extra for additional storey of second floor.	Cum	67.01	168.97	11322.60
c	Extra for additional storey of third floor.	Cum	65.66	253.45	16641.74
d	Extra for additional storey of fourth floor.	Cum	68.37	337.94	23104.79
e	Extra for additional storey of fifth floor.	Cum	5.32	422.42	2247.27
31	Extra for burnt brick work in square or rectangular pillars in building.	cum	0.83	251.27	208.55
32	115 mm thick brick wall with every fourth course reinforced with hoop iron laid in 1 :4 cement sand mortar in super structure.	Sqm	2440.42	589.84	1439462.33
33	Extra for additional storey upto 4 Metres above the top of structural roof of lower storey,				0.00
a	Extra for additional storey of first floor.	Sqm	60.58	6.08	368.02
b	Extra for additional storey of second floor.	Sqm	60.58	12.15	736.05
c	Extra for additional storey of third floor.	Sqm	60.29	18.23	1098.79
34	Dressed or moulded two brick cornice laid in cement sand mortar 1:4 including 12mm thick cement plaster 1:4 or pointing as required.	Rmt	174.21	206.70	36009.00
	ROOFING & WATER PROOFING				0.00
35	Terracing consisting of tiles 22.86 cm x 11.43 cm x 3.81 cm laid over 25mm mud plaster, 75 mm mud filling on another layer of 25 mm mud plaster including two coats of bitumen laid hot @ 1.65 Kg. per SqMetre on top of R.C.C slab including grouting with cement sand mortar 1:4 and top surface to be left clear after wire brushing etc.	Sqm	617.42	650.59	401684.49
36	Top khurra 0.6m x 0.6m for rain water pipe in 25mm thick cement concrete 1:2:4 over 50 mm thick cement concrete 1:8:16	Nos.	12	95.10	1141.19
37	Providing and laying pointing in cement mortar 1: 2 (1 cement : 2 fine sand) flush variety on brick tiles.	Sqm	603.86	46.35	27991.33
38	Bottom Khurra on ground 1.2m x 0.6 mtr Consisting of brick on edge laid in cement mortar 1:3 over 75 mm cement concrete 1:8:16 i/c 12.5mm thick cement plaster 1:3	Nos.	12	576.45	6917.40

39	Cement concrete 1:2:4 gola 10 cm x 10 cm quadrant along junction of roof with parapet wall finished smooth, where specially specified.	Metre	160.63	52.65	8457.79
40	Providing and laying four courses of water proofing treatment with bitumen felt over roofs consisting of first and third courses of blown type bitumen grade 85/25 applied hot @1.20kg per sqm. of area for each course, second course on roofing felt type 3 grade-I (Hessian base self finished bitumen felt) and fourth and final course of stone grit 6m.m. and down size or pea-sized grit spread at 0.006 cu.m. persqm. including preparation of surface complete.	Sqm	RO	332.36	0.00
i	Providing & laying water proofing treatment with ready mixed chemicals mixed in required proportions as specified in the literature supplied by the manufacturer with minimum thickness of 2mm. Of any approved manufacturer on concrete surface equivalent to FOSROC, Dr. FIXIT.	Sqm	160	550.00	88000.00
41	Providing and fixing 110 mm dia SWR U.P.V.C Rain water pipe (ring fitted type-A) as per IS:13592 including jointing during masonry complete as per specifications and to the entire satisfaction of Engineer-in charge. (If fixed on wall face clamp to be paid separately as per respective item)	R Metre	194	239.91	46543.03
42	Providing and fixing 110 mm dia SWR U.P.V.C bend for Rain water pipe as per IS:14735 including jointing complete as per specifications and to the entire satisfaction of Engineer- in- charge.	Each	12	140.15	1681.80
43	Providing and fixing 110 mm dia SWR U.P.V.C Coupling/Socket for Rain water pipe as per IS:14735 including jointing complete as per specifications and to the entire satisfaction of Engineer- in- charge.	Each	36	137.79	4960.35
a	Providing and fixing covering 200mm wide Aluminium Sheet 14 Gauge with gatties and screw on vertical expansion joints one side fixed and one side fixed with slotted holes to allow movement complete in all respect as per specifications and to the entire satisfaction of engineer- in- charge.	mtr	30	413.11	12393.30
	FLOORING AND DADOS				0.00
44	Providing and fixing of false ceiling at all heights of 600x600x15mm/600*1200*15mm ceiling tiles of type DUNE RH-99 laid in grid system. The frame work comprise of made of GI 120 GSM coating with minimum 0.3mm thickness main runner spaced at 1200mm centre to centre securely fixed to the structural soffit by approved hangers at 1200mm maximum centres. Hangersa (GI wire of 4mm dia) to be fixed by approved roof plug, level adjusters and screw etc. The last hanger at the end of each main runner should not be greater than 450mm from the adjacent wall. Flush fitting 1200mm long cross tees (with double stitching) to be interlocked between main runners at 600mm centres to form 1200x600mm modules. Cut across tees longer than 600mm to be supported independently. 600x600mm modules to be formed by fitting 600mm long flush fitting cross tees centrally between the 1200mm cross tees. Perimeter trim to be Armstrong wall angle secured to walls at 450mm maximum centres complete in all respects as per specifications.	SQM	200.52	1286.09	257886.77
45	Providing and Fixing of Copper Sheet 16 Gauge 350mm wide in "V" or "U" shape on expansion joint including covering with C.Concrete complete in all respect as per specifications and to the entire satisfaction of engineer- in- charge.	MT	4	3276.24	13104.96
46	Base course of floor consisting of 100mm thick cement concrete 1:8:16 and 100mm sand or stone	Sqm	143.36	365.13	52345.04

R. Sharma

	filling				
47	Screed of 50mm thick cement concrete 1:8:16 to be laid below the topping	Sqm	1644.72	138.22	227326.21
48	Conglomerate floor 50 mm thick cement concrete topping 1:2:4.	SqMetre	236.31	196.30	46387.65
49	Conglomerate floor 25mm thick cement concrete topping 1:2:4.	Sqm	RO	134.28	0.00
50	Conglomerate floor 35mm thick cement concrete topping 1:3:6	Sqm	RO	140.22	0.00
51	Extra labour for projected nosing of staircase of any shape and design	Metrer	330	9.23	3044.84
52	Coloured glazed tiles 20 cm x 20 cm and 5 mm thick in skirting and dado on 12 mm thick cement plaster 1:3 in base an joined with white cement slurry in joints including bevelled corners.	sqm	692.73	1100.54	762377.07
53	Pro & fixing Marble Stone flooring with 14 to 18 mm thick marble stone (sample of marble shall approved by Engineer in charge) over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with grey cement slurry including rubbing and polishing complete (Minimum width of Thappi should be 3' to 4')with:	mtr	200.52	131.91	26450.59
54	Baroda green marble flooring 15mm to 20mm thick over 12.5mm thick base of Cement mortar 1:3 laid and jointed with white cement slurry with pigment to match the shade of marble including rubbing & Polishing.	Sqm	850	2042.62	1736227.00
55	Kotah stone tile flooring 20mm to 30mm thick over 12.5 mm thick base of cement mortar 1:3 (1 cement; 3 sand) laid and jointed with neat cement slurry mixed with pigment to match the shade of stone including rubbing and polishing.				0.00
a	For Ground Floor	Sqm	180.47	1324.22	238981.98
56	Kota stone tiles 20 mm thick in skirting rises of steps dado walls and pillars laid in 12.5 mm thick cement mortar 1:3 and jointed with neat cement slurry mixed with pigment to match the shade of stone including rubbing and polishing				0.00
a	For Ground Floor	Sqm	31.11	1319.25	41041.95
57	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS : 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), including grouting the joints with white cement and matching pigments etc., complete.				
a	Size of Tile 60 x 60 cm (basic rate Rs. 880.00 per SqMetre)	Sqm	1445	1402.55	2026684.75
58	Grouting the joints of flooring tiles having joints of 3 mm width, using epoxy grout mix of 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg), including filling / grouting and finishing complete as per direction of Engineer-in-charge.				0.00
a	Size of Tile 60 x 60 cm.	Sqm	RO	187.95	0.00
59	White marble tiles with Light Green I Yellowish streaks arranged from Morwad of 18 mm to 20 thick in risers of skirting dado, pillars and wall lining including matching the 1:3 and jointed neat cement slurry including the cost of cramps labour for fixing cramps pins and dowels etc. including rubbing and polishing complete in all respect.	Sqm	275	2423.05	666338.20
i	Extra for First Floor.	Sqm	1680.2	2.70	4536.54
ii	Extra for Second Floor.	Sqm	1680.2	5.56	9341.91
iii	Extra for third Floor.	Sqm	1680.2	8.34	14012.87
60	Anti-skid floor tiles 10 mm thick in flooring matching	Sqm	162.72	972.88	158307.03

R. Sharma

R Sharma

	with shade of wall tiles in 12.5mm thick cement plaster 1:3 in base and jointed with white cement slurry in joints including corners angles and beading. (Basic Rate Rs. 650 sqm)				
61	Black Granite stone tiles 15 mm to 18 mm thick in skirting, flooring, risers of steps, dado walls and pillars laid in 12.5mm thick cement mortar 1:3 (1 cement 3 coarse sand) and jointed with neat cement slurry mixed with pigment to match the shade of stone, including rubbing and polishing including labour for fixing dowel pins and cramps.				0.00
	All shades	Sqm	30.01	4423.38	132745.63
62	Coloured Granite stone tiles 15 mm to 18 mm thick in skirting, flooring, risers of steps, dado walls and pillars laid in 12.5mm thick cement mortar 1:3 (1 cement 3 coarse sand) and jointed with neat cement slurry mixed with pigment to match the shade of stone, including rubbing and polishing including labour for fixing dowel pins and cramps.				0.00
	All shades	Sqm	11.52	4858.49	55969.78
63	Extra for fixing marble/granite stone over and above corresponding basic item, in facia and drops of width upto 150mm with epoxy resin based adhesive including cleaning etc. complete.	R Metre	RO	247.40	0.00
64	Extra for marble / granite stone flooring in treads of steps and risers using single length upto 2.0 Metre.	Sqm	75.6	320.30	24214.68
65	Providing edge moulding to 18 mm thick marble stone counters, Vanities etc., including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge.				0.00
a	Marble work	Metre	RO	136.10	0.00
b	Granite Work	Metre	RO	230.55	0.00
66	Extra for providing opening of required size & shape for wash basins/kitchen sink in kitchen platform, vanity counters and similar location in marble/stone work including necessary holes for pillar taps etc. including rubbing and polishing of cut edges etc. complete.	Each	16	386.60	6185.60
67	Providing & fixing Morwar stone strips 12 to 15mm. thick in flooring of desired pattern as per design & drawing taken from marble slabs to match with subsequent marble joint with 20mm. thick cement mortar 1:3 ratio jointed with neat cement slurry including filling of matching shade colouring pigment with the basic marble in floors. (Joint to be matched with main floor joints)				0.00
a	Size from 40mm. To 75mm. Wide	Metre.	Ro	180.00	0.00
b	Size above 75 mm upto 150mm. Wide	Metre.	Ro	360.00	0.00
68	Cutting chases in brickwork to make skirting flush with plaster upto 100 mm height	Metre	RO	20.00	0.00
	PLASTERING, POINTING, WHITE WASHING AND DISTEMPERING				0.00
69	12.5 mm thick cement plaster 1:5	Sqm	4016.53	108.04	433959.40
70	20 mm thick cement plaster 1:5 in two coats work	Sqm	4016.53	146.65	589004.20
71	Extra for plastering exterior walls of height more than 10 m from ground level for every additional height of 3m or part thereof	Sqm	RO	19.73	0.00
72	Plastering on underside of ceiling with 10mm thick cement plaster 1:3	Sqm	5382.95	103.92	559398.96
73	Cement rendering on plaster 1mm thick	sqm	5383.95	39.53	212838.31
74	Extra for plaster in subsequent floor				0.00
a	first	Sqm	3354.00	1.62	5433.48
b	second	Sqm	3354.00	3.34	11202.36
c	third	Sqm	3354.00	5.00	16770.00
75	Preparation of plastered or concrete surface for painting (including sand papering the surface) using	Sqm	13416	49.48	663756.60

	ready mixed cement based wall putty by applying two coats to get required finish				
76	Applying priming coat with cement primer in all shades on newly plastered or concrete exterior surfaces.	Sqm	13416	20.81	279220.50
77	Distempering with acrylic washable oil bound distemper (of approved manufacture) two coats over one priming coat on new work	Sqm	9399	53.40	501932.23
78	Finishing walls with Premium Acrylic smooth exterior paint with silicon additives of required shade with two coats applied @ 1.43litre/10 sqm over and including base coat of water proofing Cement Paint applied @ 2.20 Kg/10 sqm	Sqm	4016.53	97.74	392575.64
79	Preparation of plywood surface for painting including sand papering the surface & applying filling with approved quality fillers consisting of white lead, linseed oil, Varnish, and Chalk Mitti including finishing the surface to required finish complete.	Sqm	1708.72	33.86	57861.53
	With special quality paint				0.00
80	Applying priming coat with metal primer on new steel or iron work including preparation of surface. With special quality paint	Sqm	1708.72	20.50	35028.76
81	Painting two coats excluding priming coat with synthetic enamel paint in all shades on wood work, metallic or plastered, concrete surface to give an even shade.	Sqm	998.17	58.10	57993.68
82	Painting two coats excluding priming coat with ready mixed paint for metallic surfaces in all shades on steel or iron work	sqm	120.66	51.75	6244.16
	WOOD WORK				0.00
83	Supply & Fixing of door frames (Chowkats) consisting of frame fabricated from sheet roll formed out of 1.20mm thick galvanized sheet as per IS :277 (base steel as per IS:513) with zinc of 120 gm./sqm. & powder coated with pure Polyester powder up to 50 microns (as per approved colour) , 3 nos. 100mm butt hinges 2mm. thick, 6 nos. 1.2mm. thick CRCA electroplated stiffeners,6 nos. M.S. hold fasts with split and tail welded to stiffner plate 200mm long , receiver for aldrop, M.S. tie rod 50mmx25mm to be fixed at bottom finished with powder coated total thickness of coating 0.60 mm of approved shade, fixed in position including including the cost of cement concrete 1:2:4 for lugs complete in all respects as per drawing, design , specifications & entire satisfaction of Engineer in charge.				0.00
	80mmx50mmx37mm single rebate	mtr	1745	1049.65	1831639.25
84	Supply & Fixing of door frames (Chowkats) consisting of frame fabricated from sheet roll formed out of 1.20mm thick galvanized sheet as per IS :277 (base steel as per IS:513) with zinc of 120 gm./sqm. & powder coated with pure Polyester powder up to 50 microns (as per approved colour) , 3 nos. 100mm butt hinges 2mm. thick, 6 nos. 1.2mm. thick CRCA electroplated stiffeners,6 nos. M.S. hold fasts with split and tail welded to stiffner plate 200mm long , receiver for aldrop, M.S. tie rod 50mmx25mm to be fixed at bottom finished with powder coated total thickness of coating 0.60 mm of approved shade, fixed in position including including the cost of cement concrete 1:2:4 for lugs complete in all respects as per drawing, design , specifications & entire satisfaction of Engineer in charge.				0.00
	125mmx60mmx37mm double rebate	mtr	1773	1364.78	2419754.94
85	Chowkat of Sal wood for doors and windows including iron hold fast, corner straps, cleats, stops for fixing shutters of approved make, bolts for hold	Cum	5	97574.00	487870.00

R. Sharma

	fasts, screws for fixing hinges etc. complete fixed in position as directed by Engineer-in-charge.				
86	Providing and fixing Ivory Coast wood beading to door windows chowkats with iron screws fixed in position complete as per design and shape required				0.00
i	50 mm x 12 mm	Mtr	1390	79.31	110240.90
87	Providing & fixing glazed shutters for doors, windows & clerestory windows without glass including black enamelled ISI marked M.S butt hinges with necessary screws complete in all respects.				0.00
i	35mm th. Ivory Coast wood without glass.	Sqm	405	1851.97	750047.85
88	Providing and fixing 35mm thick wire gauze shutters using galvanised M.S wire gauze of average width of aperture 1.4mm with wire of dia 0.63 mm for doors, windows and clerestory windows including ISI marked bright finished or / and black enamelled M.S butt hinges with necessary screws				0.00
i	35mm th. Ivory Coast wood.	Sqm	455	2064.72	939447.60
89	Cost of Aluminum fittings ISI marked complete for doors, windows, such as tower bolts, handles and screws etc. for these fittings (excluding sliding bolts).				0.00
a	For shutter area up to 0.50 sqm	sqm	234	180.75	42294.45
b	For shutter area above 0.50 sqm	sqm	79.4	144.04	11436.58
90	Providing & fixing Hydraulic door closer to wire gauge shutters of usperior quality.				0.00
i	I.S.I Designation No. III (size of door up to 1000 m.)	each	85	1131.32	96162.54
91	Hot finished welded type tubes Steel work in built up tubular (round, square or rectangular hollow tubesetc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete.	kg	2685	93.50	251047.50
92	Providing & fixing glazing in door, window, ventilator shutters etc. complete as per architectural drawings and the directions of Engineer in charge. (Cost of gasket / beading shall be paid as per respective item).				0.00
i	Glass panes 4mm thick above 0.40 sqm area.	sqm	175	637.10	111492.50
93	Providing and fixing ISI marked oxidised sliding bolt 250 x16 mm with nuts & bolts complete.	each	163	111.88	18237.01
94	Wrought iron and mild steel ladders, framed grills, grating etc, with ends of bars riveted or welded or forged framed window guards, barred iron doors stair case, iron railing including cost of bolts and nuts or screws or welding rod, complete fixed in position	Qtl	10	7540.48	75404.84
95	Cold twisted deformed (Ribbed/ Tor Steel Bar)Bars Fe 500 grade as per IS 1786-1985, for R.C.C works, where not including in the complete rate of RCC including bending and placing in position complete	Qtl	1085	5053.41	5482946.49
96	Providing and fixing stair case railing made out of M.S. square bars 25mm x 25mm as vertical part 0.70 m high fixed with M.S. base plate of 40mm x40mm x 6mm and flat iron 40mm x 6mm as hand rail complete in all respect.	Qtl	7.5	7540.48	56553.60
a	Providing and fixing bolts in steps	each	150	50.00	7500.00
97	Factory manufactured solid flush door fixed in position including cost of teak wood chowkats iron hold fast, corner straps iron hinges cleats and stops etc. (excluding the cost of any fittings other than specified above but including labour for fixing the same in position.)				0.00
a	35 mm thick	Sqm	475	2930.42	1391951.40
b	25 mm thick CB	Sqm	460	2469.46	1135949.76
98	Providing & supplying aluminium extruded tubular & other aluminium sections as per the architectural drawings and approved shop drawings , the aluminium quality as per grade 6063 T5 or T6 as per	sqm	56.76	6647.10	377289.40

R. Sharma

R. Sharma

<p>BS 1474,including super durable powder coating of 60-80 microns conforming to AAMA 2604 of required colour and shade as approved by the Engineer-in-Charge.(The item includes cost of material such as cleats, sleeves, screws etc. necessary for fabrication of extruded aluminium frame work. Nothing extra shall be paid on this account). Designing, fabricating, testing, protection, installing and fixing in position semi (grid) unitized system of structural glazing (with open joints) for linear as well as curvilinear portions of the building for all heights and all levels, including:</p> <p>a) Structural analysis & design and preparation of shop drawings for the specified design loads conforming to IS 875 part III (the system must passed the proof test at 1.5 times design wind pressure without any failure), including functional design of the aluminum sections for fixing glazing panels of various thicknesses, aluminium cleats, sleeves and splice plates etc. gaskets, screws, toggles, nuts, bolts, clamps etc., structural and weather silicone sealants, flashings, fire stop (barrier)-cum-smoke seals, microwave cured EPDM gaskets for water tightness, pressure equalisation& drainage and protection against fire hazard including:b) Fabricating and supplying serrated M.S. hot dip galvanised / Aluminium alloy of 6005 T5 brackets of required sizes, sections and profiles etc. to accommodate 3 Dimentional movement for achieving perfect verticality and fixing structural glazing system rigidly to the RCC/ masonry/structural steel framework of building structure using stainless steel anchor fasteners/ bolts, nylon seperator to prevent bimetallic contacts with nuts and washers etc. of stainless steel grade 316, of the required capacity and in required numbers.</p> <p>c) Providing and filling, two part pump filled, structural silicone sealant and one part weather silicone sealant compatible with the structural silicone sealant of required bite size in a clean and controlled factory/ work shop environment , including double sided spacer tape, setting blocks and backer rod, all of approved grade, brand and manufacture,as per the approved sealant design, within and all around the perimeter for holding glass.</p> <p>d) Providing and fixing in position flashings of solid aluminium sheet 1 mm thick and of sizes, shapes and profiles, as required as per the site conditions, to seal the gap between the building structure and all its interfaces with curtain glazing to make it watertight.</p> <p>e) Making provision for drainage of moisture/ water that enters the curtain glazing system to make it watertight, by incorporating principles of pressure equalization, providing suitable gutter profiles at bottom (if required), making necessary holes of required sizes and of required numbers etc. complete. This item includes cost of all inputs of designing, labour for fabricating and installation of aluminium grid, installation of glazed units, T&P, scaffolding and other incidental charges including wastages etc., enabling temporary structures and services, cranes or cradles etc. as described above and as specified.The item includes the cost of getting all the structural and functional design including shop drawings checked by a structural designer, dully approved by Engineer-in-charge. The item also includes the cost of all mock ups at site,</p>				
--	--	--	--	--

R. Sharma

	<p>cost of all samples of the individual components for testing in an approved laboratory, field tests on the assembled working structural glazing as specified, cleaning and protection till the handing over of the building for occupation. The item also includes the cost of all mock ups at site, cost of all samples of the individual components for testing in an approved laboratory, field tests on the assembled working structural glazing as specified, cleaning and protection till the handing over of the building for occupation. In the end, the Contractor shall provide a water tight structural glazing having all the performance characteristics etc. all complete as required, as per the Architectural drawings, as per item description, as specified, as per the approved shop drawings and as directed by the Engineer in charge.</p> <p>1. Performance Laboratory Test for Air Leakage Test (-50pa to - 300pa) & (+50pa to +300pa) as per ASTM E-283-04 testing method for a range of testing limit 1 to 200 mVhr".</p> <p>2. Static Water Penetration Test. (50pa to 1500pa) as per ASTM E- 331-09 testing method for a range up to 2000 ml."</p> <p>3. Dynamic Water Penetration (50pa to 1500pa) as per AAMA 501.01- 05 testing method for a range upto 2000 ml".</p> <p>4. Structural Performance Deflection and deformation by static air pressure test (1.5 times design wind pressure without any failure) as per ASTM E-330-10 testing method for a range upto 50 mm"</p> <p>5. Seismic Movement Test (upto 30 mm) as per AAMA 501.4-09 testing method for Qualitative test"</p> <p>Tests to be conducted on site</p> <p>6. Onsite Test for Water Leakage for a pressure range 50 kpa to 240 kpa (35psi) upto 2000ml"</p> <p>Providing, assembling and supplying vision glass panels (IGUs) comprising of hermetically-sealed 6-12- 6 mm insulated glass (double glazed) vision panel units of size and shape as required and specified, comprising of an outer heat strengthened float glass 6mm thick, of approved colour and shade with reflective soft coating on surface # 2 of approved colour and shade, an inner Heat strengthened clear float glass 6mm thick, spacer tube 12mm wide, dessicants, including primary seal and secondary seal (structural silicone sealant) etc. all complete for the required performances, as per the Architectural drawings, as per the approved shop drawings, as specified and as directed by the Engineer-in-Charge. The IGUs shall be assembled in the factory/ workshop of the glass processor. (Payment for fixing of IGU Panels in the curtain glazing is included in cost of item No.26.2) For payment, only the actual area of glass on face # 1 of the glass panels (excluding the areas of the grooves and weather silicone sealant) provided and fixed in position, shall be measured in sqm.</p> <p>Note:- 1. The cost of providing extruded aluminium frames, shadow boxes, extruded aluminium section capping for fixing in the grooves of the curtain glazing and vermin proof stainless steel wire mesh shall be paid for separately under relevant items under this subhead. However, for the purpose of payment, only the actual area of structural glazing (including width of grooves) on the external face</p>				
--	---	--	--	--	--

R. Sharma

	<p>shall be measured in sqm. up to two decimal places. Note:-2. The following performance test are to be conducted on structural glazing system if area of structural glazing exceeds 2500 Sqm from the certified laboratories accredited by NABL(National Accreditation Board for Testing and Calibration Laboratories), Department of Science & Technologies, India. Cost of testing is payable separately. The NIT approving authority will decide the necessity of testing on the basis of cost of the work, cost of the test and importance of the work. Performance Testing of Structural glazing system Tests to be conducted in the NBL Certified laboratories</p> <p>(i) Coloured tinted float glass 6mm thick substrate with reflective soft coating on face # 2, + 12mm Airgap + 6mm Heat Strengthened clear Glass of approved make having properties as visible Light transmittance (VLT) of 25 to 35 %, Light reflection internal 10 to 15%, light reflection external 10 to 20 %, shading coefficient (0.25- 0.28) and U value of 3.0 to 3.3 W/m2 degree K etc. The properties of performance glass shall be decided by technical sanctioning authority as per the site requirement.</p>				
99	Extra for openable side / top hung vision glass panels (IGUs) including providing and supplying at site all accessories and hardwares for the openable panels as specified and of the approved make such as heavy duty stainless steel friction hinges, min 4 - point cremone locking sets with stainless steel plates, handles, buffers etc. including necessary stainless steel screws/ fasteners, nuts, bolts, washers etc. all complete as per the Architectural drawings, as per the approved shop drawings, as specified and as directed by the Engineer-in-Charge.	sqm	22.7	3062.25	69513.08
100	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/appropriate z sections and other sections conforming to Is: 733 and IS : 1285 of Jindal, Hindalco, Mahavir or equivalent make approved by Engineer in Charge , fixed with rawl plugs and screws or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with required PVC Plug/neoprene felt etc. Aluminium sections shall be smooth, rust free, straight, mitered and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing/paneling, C.P.brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-In- Charge. (Glazing and paneling to be paid for separately)				0.00
i	For fixed portion and chaukhats	kg.	521.29	339.17	176805.93
101	For shutters of doors, windows & ventilators including providing and fixing hinges/pivots and labour for fixing of fittings wherever required including the cost of PVC Plug / neoprene gasket required	kg.	148.4	351.84	52213.06
102	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with PVC Plug/ neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item) Float glass panes of 5.5 mm thickness	Sqm	29.55	976.58	28857.94
103	Providing Polyester Powder Coating 50 micron any colour specified to aluminium section of various	kg	669.69	50.81	34026.95

	sizes including carriage from market to wrkshop.				
104	Cost of Aluminium fittings ISI marked complete for doors, windows, such as tower bolts, handles and screws etc. for these fittings (excluding sliding bolts).				0.00
i	For shutter area above 0.50 sqm	sqm	26.5	144.04	3817.06
105	Providing and applying Anti Termite Treatment using pre constructional chemical treatment measures as per IS - 6313 - 2001 (Part 2) & using Chemical containing chloropyrifos systemic insecticide diluted to manufacturer's specifications (i) In foundation pits, by treating the bottom & sides up to height of 300mm by uniformly spraying solution @ 5 Litre / sqm (ii) In the refill earth on both sides of all built up walls @ 7.5 Litre / Running meter (width - 300 mm, depth - 450 mm) (iii) Before laying the floor, by uniformly sprinkling the top surface of the consolidated earth within the outer perimeter @ 5 Litre solution per sqm.				0.00
		Ltr	450.113	336.36	151400.01
	TOTAL CIVIL WORKS				38431454.43
	Public health Internal work				
1	Excavation for pipe lines in trenches and pits, including trimming and dressing sides, levelling of beds of trenches to correct grade, cutting joint holes, refilling, consolidation and watering of refill in 15 cm Layers and restoration of unmettled or unpaved surface to its original condition including the cost of necessary shoring, timbering, dewatering of rainwater, diversion for traffic, night singlals, fixing caution boards, crossing over trenches for access to the houses, watching, fencing, etc., and removal of surplus spoil out side/inside the town involving lead upto 1.00km.				
	All classes of soil except rocky.	cum	150	104.5	15675.00
2	Providing ISI marked G.M. ferrule as per IS ;2692, drilling and tapping cast iron pipe lines of all diametres and screwing in Ferrule and connections complete in all respect.				0.00
	15mm i/d Ferrule heavy duty	Each	5	412	2060.00
3	Providing and laying, jointing fixing and testing IS marked G.I. Pipe (as per IS 1239) B-Class Premium make such as(jindalHissar) including cost of specials such as tees, bends,sockets, elbows etc.painting with anti corrosivebitumastic paint testing, cutting,threading Inside building complete.				0.00
i	15mm i/d	mt.	150	175	26250.00
ii	20mm i/d	mt.	100	218	21800.00
iii	25mm i/d	mt.	100	289	28900.00
iv	32mm i/d	mt.	75	367	27525.00
v	40mm i/d	mt.	75	415	31125.00
4	Providing and laying, jointing, fixing,testing G.I. Pipe Lines (as per IS 1239) B- Class,Premium make such as (Jindal Hissar) including cost of Specials such as tees,bends, sockets elbow etc., cutting, threading and testing in trenches in the ground complete.				0.00
i	50mm i/d	mt.	75	443	33225.00
5	Providing, fixing and jointing Union Couplings of approved make with the approval of EIC as per IS 1879 in G.I. Pipe lines complete in all respects.				0.00
i	15mm i/d G.I. Union	Each	12	86.5	1038.00
ii	20mm i/d G.I. Union	Each	9	145.5	1309.50
iii	25mm i/d G.I. Union	Each	9	184.5	1660.50
iv	32mm i/d G.I. Union	Each	9	239	2151.00

R. Sharma

v	40mm i/d G.I. Union	Each	7	319.5	2236.50
vi	50mm i/d G.I. Union	Each	7	409	2863.00
6	Providing, fixing & jointing brass ball valves screwed with SS/Brass ball 7&spindle & Teflon seats on G.I. pipe lines including all carriage complete.				0.00
i	15mm i/d Brass ball Valves.	Each	8	249.5	1996.00
ii	20mm i/d Brass ball valves.	Each	6	333	1998.00
iii	25mm i/d Brass ball Valves.	Each	4	528.5	2114.00
iv	32mm i/d Brass ball valves.	Each	4	863.5	3454.00
v	40mm i/d Brass Ball Valves.	Each	4	1066.5	4266.00
vi	50mm i/d Brass ball Valves.	Each	4	1749.5	6998.00
7	Making connection with the existing G.I.branch main up to 40mm size including cutting and threading pipe etc. complete excluding cost of tee and ling screw, but including all carriages complete.	Each	4	306	1224.00
8	Bailing out water from the trenches for making new connections in fully charged pipe lines including cleaning trimming and dressing the trenches to correct alignment and grade as required by theEngineer-in-charge.Size of the main with which connection is to be made. Upto 300mm i/d	Each	4	608.5	2434.00
9	Painting G.I.Pipes and Specials with Superior and Ordinary Quality Synthetic enamels Paint in all shades as per I.S.I. specification on existing or new work, two coats paints including cleaning rubbing surface, etc.				0.00
i	40mm & 50mm i/d G.I. Pipe	mt.	150	8.5	1275.00
10	Cutting holes upto 23cm through stone masonry or B.B. in cement walls for pipes and making good including repointing, replastering and finishing according to existing finish where required.				0.00
i	Through 11.43cm thickness of walls	Each	25	112.5	2812.50
ii	through 22.86cm thickness of walls	Each	25	160.5	4012.50
11	Cutting holes upto 23cm square for pipes in flooring and roofs of bricks, tiles with lime concrete and making good including repointing, replastering and colour or white washing where required.				0.00
i	Through floor or roof 115mm thick.	Each	25	96	2400.00
12	Providing, lowering, cutting & jointing salt Glazed Stone ware Pipes and Specials ISI marked as per IS 651-2007 class Sp-1 into Trenches for all depths and Laying out the same to correct alignment, Gradients, levels etc., In Trenches including all dressing and trimming of bed and sides of trenches, if required trimming and cutting of concrete beds and joints holes, supporting the pipes and specials, in correct position in a suitable rigid manner while the same are being jointed and until the surrounding benching, haunching and envelopes are completed. The sewer shall rest on the bed at every point through-out its length and to ensure this, it shall be grouted in without extra charge by the contractor with 1:3 cement sand mortar including jointing of pipes and specials in trenches, using cement sand mortar 1:1 and best white italian spun yarn, as per IS :1887, finishing and trowelling of each joint at an angle of 45degree with the longitudinal axes of pipe, watering,keeping the joint covered and wetted till the same are cured, testing the sewerage line for leakage and making all leakages and defects good as laid in the contract				0.00
	specification, chipping and finishing the cut surface to uniform finish to the entire satisfaction of engineer-incharge Including all cartage etc.				0.00
i	100mm i/d pipe	mt.	50	185.9	9295.00
ii	150mm i/d pipe	mt.	100	400.3	40030.00
13	Constructing brick masonry manhole in cement				0.00

P. Sharma

R. Sharma

	mortar 1:5 (1 cement : 5 coarse sand) R.C.C. top slab with 1:2:4 mix (1 cement: 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement: 4 coarse sand : 8 graded stone aggregate 40mm nominal size)inside plastering 12mm thick with cement mortar 1:3 (1 cement: 3 coarse sand) finished with floating coat of neat cement and making benching in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement, Orange coloured PVC steps including FRCC cover with frame (light duty) 455x610 mm internal dimensions.complete as per standard design.				
i	Inside size 90x150 cm and 120 cm deep between top of slab and invert (With MH cover & frame extra heavy duty)	each	2	15347.5	30695.00
14	Extra cost for every additional depth of 0.300 m. upto 1.80 m depth for manholes.				0.00
	Inside size 90x150 cm	Each	2	1889.5	3779.00
15	Construction of brick masonry inspection chambers size as given below upto 0.60 m average depth in 1:5 cement sand mortar, lime concrete with 40 per cent lime mortar 2:3 in foundation, cement concrete 1:2:4 benching 12.50mm thick cement plaster 1:2 with a floating coat of 1mm thick of neat cement, R.C.C.1:2:4 slabs 100mm thick cement concrete topping50mm thick with 455mm x 455mm, 455mm x 610mm inside light duty C.I. inspection chamber cover and frame (Weight as per I.S.I specifications) painted with 3 coats of black bitumastic paint conforming to I.S.I complete as per standard design.				0.00
	600mm x 900mm inside with 455mm x 455mm cover and frame light duty double seal	Each	4	5525.8	22103.20
16	Extra for every 0.30 m depth of inspection chamber.600mm x 900mm	Each	4	1247.3	4989.20
17	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1cement: 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete.				0.00
	For pipes 100 to 200 mm Diametre	Each	2	144.9	289.80
18	Providing and fixing in position Chinaware European type water closet Suit syphonic type with P trap or S trap (to the approval of the Engineer-in-charge) suite-consisting of 10 ltr. low level with PVC flushing cistern , PVC short bend, 32mm. dia. including cost of seat cover complete in all respects to the entire satisfaction of engineer in charge.	Each	25	3995.5	99887.50
19	Extra for providing and fixing 10 litres capacity Chinaware low level flushing cistern with PVC internal fitting, instead of 10 litres capacity PVC flushing cistern.	Each	25	1633	40825.00
20	Providing and fixing jet spray with 2'-6" long PVC pipe.With C.P. Brass nut	Each	RO	444	0.00
21	Providing and fixing PVC 32mm waste pipe complete in all respects.	Each	32	121	3872.00
22	Providing & fixing partitions for different type of urinals. Vitreous white Chinaware Partition Large partitions size 835mm x355mm	Each		3799.5	0.00
23	Providing and fixing in position best Indianmake white ordinary lavatory suites of approved make (to the approval of engineer in charge) consisting of				0.00

R Sharma

	C.P. brass waste 32mm dia, with one CP brass pillar tap complete in all respects.				
	Size 560mm x 410mm [above counter oval)	Each	17	3601.5	61225.50
24	Providing and fixing in position best Indian make chromium plated brass, Bottle trap 32mm dia with 40 mm seal of approved make to the approval of Engineer in charge complete in all respects.	Each	17	1094	18598.00
25	Providing and fixing in position best quality stainless steel sinks with complete fitting.				0.00
	Size 600 mm x 450 mm x 225 mm (Net size excluding flat edge)	Each	1	8409.5	8409.50
26	Providing and fixing in position best Indian make towel rails/ rings to the approval of Enginner in charge fixed in with rewal plugs embedded in walls with c.p brass screws, complete in all respects including cutting and making good the walls etc.				0.00
	C.P. brass towel Rails size 20mm dia 600 mm long	Each	14	1363.5	19089.00
27	Providing and fixing in position Acrylic shelf with Acrylic guard rails fixed in with rawl plugs with C.P brass screws complete including cutting and making good the walls etc.				0.00
	CP Acrylic Corner size 300mmx300mm	Each	24	1782	42768.00
28	Providing & Fixing in position best indian make bevelled edge 5mm thick mirror mounted on asbestos sheet ground fixed in position by means of 4 nos. chromium plated brass screws and washers over rubber washers and rawl plugs embedded in the walls or chromium plated brass clamps with C.P. brass screws (as required by the Engineer-in-Charge) complete including cutting and making good the walls etc.				0.00
	Size 1500 mm x 600 mm or any other size	Sqm	17	2148	36516.00
29	Providing & Fixing in position C.P. Brass flange under various fixtures complete in all respects (as required by the Engineer-in-Charge)	Each	100	52	5200.00
30	Providing & Fixing in position C.P. Brass extension piece 15mm dia, 15mm long or 25mm long or 40mm long with various fixtures complete in all respects (as required by the Engineer-in- Charge)	Each	80	89.5	7160.00
31	Providing & fixing C.P. brass hexa nipple 15mm. of approved make to the approval of Engineer in charge complete in all respects.	Each	20	74.5	1490.00
32	Providing & Fixing in position 15 mm i/d C.P. brass bib cock of best quality (as approved by the Engineer-in-charge).				0.00
i	C.P. brass Bib cock long nose / long body without flange.	Each	75	1043	78225.00
ii	C.P. brass Bib cock without flange.	Each	25	819	20475.00
33	Providing & Fixing in position stop cock /Angle valve (as approved by the Engineer-incharge).				0.00
i	C.P.brass 15mm Concealed stop cock with flange.	Each	25	1185.5	29637.50
ii	C.P.brass 15mm Concealed Angle valve	Each	50	796	39800.00
34	Providing & Fixing in position C.P.brass liquid soap container of best quality (as required by the Engineer-in-charge) complete in all respects.	Each	8	460.5	3684.00
35	Providing & fixing in position best Indian make flexible tube connection of approved make to the approval of engineer in charge complete in all respects.				0.00
i	PVC tube connection of size 15 mm x450 mm with C.P. Brass nut	Each'	50	160	8000.00
36	Providing & fixing in position best Indian make C.P. Copper tube connection of approved make to the approval of engineer in charge complete in all respects.				0.00
i	C.P. copper tube connection of size 15 mm x 450 mm with C.P. Brass nut	Each	50	295	14750.00

37	Providing and fixing in position centrifugal cast iron soil waste vent or antisiphonage pipes to I.S.I. specification IS 3989 of approved make to the approval of Engineer in charge including cutting, jointing, wastage, but excluding cost of lead jointing.				0.00
i	100mm i/d centrifugal cast iron pipe lines laid complete	mt.	300	1101	330300.00
38	Providing & fixing in position C.I. gully trap cover weighing approximately 7.26 kg & frame for gully trap chamber clear opening size 300mm x 300mm & out side size 330mmx330mm including painting the exposed surface with 3 coats of black bitumastic superior paint of approved manufacture etc.	Each	5	677.5	3387.50
39	Providing and fixing in position gratings 150mm x 150mm for gully trap.				0.00
i	H.C.I. grating including painting with black bitumastic superior paint of approved manufacture three coats.	Each	5	93	465.00
40	Providing lead caulked joints to H.C.I. pipes and specials conforming to I.S.I. Specification of E.L.C. manufacture or any other reputed firm including cost of lead yarn, fuel and tools etc.				0.00
i	100mm internal diameter (1.36 kg)	Each	350	385.5	134925.00
41	Providing & Fixing in position M.S or heavy flat iron clamps made out of M.S flat iron not less than 5 mm of the approved design for fixing C.I. soil waste, vent or antisiphonage pipes to walls complete in all respects including cutting and making good the walls and floors etc. and painting.				0.00
i	M.S. Holder bats clamps for 100mm i/d H.C.I. pipes	Each	80	164.5	13160.00
42	Providing & fixing H.C.I. Floor traps conforming to I.S.I. Specification (IS 1729) of reputed firm of the self cleaning design with C.P. brass hinged grating with frame with or without vent arm and including cement concrete 1:2:4 under & around the floor trap where required upto floor level complete in all respects including cutting & making good the walls & floors, etc. minimum depth of water should be 150 mm with minimum seal 50 mm.				0.00
i	With 100mm i/d outlet shallow seal	each	56	850.5	47628.00
43	Providing and fixing in position Centrifugally cast iron special for soil waste vent or anti syphonage pipes to I.S.I specifications of E.L.C manufacture or any other reputed firm including cutting and wastage etc. cutting holes in walls roofs or floors etc. and making good to its original condition but excluding cost of lead joining.				0.00
a	For 100mm i/d pipes				0.00
i	100mm i/d H.C.I. Heal Rest Bend	Each	12	566.5	6798.00
ii	100mm i/d Single junction with door.	Each	36	723	26028.00
iii	Single junction plain.	Each	36	632.5	22770.00
iv	Bend with plug	Each	13	535.5	6961.50
v	Bend plain	Each	13	483	6279.00
vi	Cowls	Each	13	382.5	4972.50
vii	Collars	Each	70	394.5	27615.00
viii	P-Trap	Each	28	785.5	21994.00
44	Cutting chase in brick walls in cement or in floor for embedding G.I. or C.I pipes lines and making good the same to its original condition.				0.00
i	Size 150 mm x 150 mm	mt.	150	92.5	13875.00
45	Painting H.C.I soil waste and vent pipes and fitting with black bitumastic ISI marked paint of approved manufacture two coats on new work.				0.00
i	100mm i/d H.C.I. Pipe	mt.	300	20	6000.00
46	Providing and fixing in position automatic brass ball valves in tanks.				0.00
i	50mm i/d Brass ball valve with plastic ball with G.I. socket	Each	6	2808	16848.00

R. Sharma

47	Providing & fixing in position on terrace(at all levels) HDPE tank cover for water storage tanks of approved makes to the approval of Engineer-in-Charge with cover with suitable locking arrangement & making necessary holes for inlet, outlet and over flow pipes but without fittings and base support for tank. complete.				0.00
i	Triple layer tanks.	ltr.	24000	11	264000.00
48	Providing & fixing in position G.I.tank nipple of approved make to the approval of engineer in charge in PVC water storage tanks complete in all respects.				0.00
i	G.I. tank nipple 40mm. i/d.	Each	4	321	1284.00
ii	G.I. tank nipple 50mm. i/d.	Each	4	496	1984.00
49	Providing & fixing in position gully traps fixed in cement concrete 1:4:8 complete with H.C.I. Grating 150 mm x 150mm cast iron cover weighing approximately 7.26 kg. & frame clear opening 300mm x 300mm & out of side size 330 mm x 330 mm & chamber including cost of all bricks work in cement mortar 1:5 cement concrete 1:2:4 in coping around C.I. cover and frame etc. with three coats of black bitumastic superior paint of approved manufacture on all C.I. work as per standard design minimum depth of water should be 150 mm with a minimum seal 50mm.				0.00
i	100mm internal Diametre H.C.I. gully trap with H.C.I. grating and cast iron cover weighing approximately 7.26 kg. and frame clear opening 300mm x300mm and out of side size 330mm x 330mm	Each	5	2413.5	12067.50
50	Providing and fixing in position best Indian make vitreous Chinaware white channel of size 600 mmx100mm including laying and fixing in cement concrete 1:2:4 complete as per required by the Engineer-in-charge.	each	24	538.5	12924.00
51	Providing and fixing in position best Indian make (To the approval of Engineer-in- Charge) storage type automatic electric water heater pressure / non pressure type thermostatically controlled, suitable for phase, vertical wall mounting fitted with drawable and adjustable type A.C the with emostat thermostats knob to be readily accessible through the opening of suitable cover for adjustment of temperature in the installed position of heater and the thermostat should be with drawn without having to drain the water electric heating element made out of copper tube(heating element should be easily removed and replaced in the installed position of heater) a neon indicator I Amp. inner container made out of copper tinned both from inside and outside outer container made out of mild steel sheet finished in gleaming white stove enamel paint insulated between the inner and outer with fibre glass wool with 1 meter length of suitable capacity 3 core flexible cord with plug and non-return valve plastic/lead connections or pressure release valve (Where required) complete including fixing and testing for a week (as required by the Engineer-in-Charge).				0.00
	thermostat should be with drawn without having to drain the water electric heating element made out of copper tube(heating element should be easily removed and replaced in the installed position of heater) a neon indicator I Amp. inner container made out of copper tinned both from inside and outside outer container made out of mild steel sheet finished in gleaming white stove enamel paint insulated between the inner and outer with fibre glass wool				0.00

R. Sharma

	with 1 meter length of suitable capacity 3 core flexible cord with plug and non-return valve plastic/lead connections or pressure release valve (Where required) complete including fixing and testing for a week (as required by the Engineer-in-Charge).				
	25 litre capacity water heater	Each	16	8551	136816.00
52	Providing, Stringing out, cutting, Jointing and testing of ISI Marked C.I. Pipes Class-LA per IS:1536 and laying the same in trenches to correct alignment and gradients, jointed with rubber tyton joints fitted complete including all cartage.				0.00
i	100mm i/d pipe line laid complete.	mt.	100	1342	134200.00
ii	Extra 10% for ISI pipes as per CSR note.	mt.	100	146.28	14628.00
53	Supplying and laying C.I. specials complete as desired by Engineer-in-Charge conforming to ISI specifications				0.00
	C.I. specials upto 300mm i/d				0.00
i	Bend				0.00
ii	T- junction				0.00
iii	Sluice valve				0.00
	Total wt of fittings	Kg.	422	65.5	27641.00
54	Construction of masonry Sluice Valve Chamber excluding				0.00
	Sluice valve cover as per standard design & drawings of public health department.				0.00
i	Size 0.6 m. x0.6 m.	Each	2	4818	9636.00
	Fire Fighting Equipments				0.00
55	Providing, laying, fixing, testing and commissioning of 'C' Class heavy duty MS Pipe conforming to Indian Standard IS 1239/3589 including fittings like tees, bends, sockets, elbows, flanges, tapers, nuts bolts, gaskets etc. in ground with anti corrosive treatment with wrapping coating tape (4mm pypkote tape) as per IS : 10221 including cost of primer etc. excluding cost of excavation and refilling complete in all respects.				0.00
	100mm internal diameter	mt.	40	1504	60160.00
56	Providing, laying, fixing, testing and commissioning of 'C' Class heavy duty MS Pipe conforming to Indian Standard IS 1239/3589 including fittings like tees, bends, sockets, elbows, flanges, tapers, nuts bolts, gaskets etc. on surface and providing angle iron support or cement concrete block as support including painting with two or more coats of synthetic enamel paint of required shade complete in all respects.				0.00
	100mm internal diameter	mt.	30	1325.5	39765.00
57	Providing, laying, fixing, testing and commissioning of 'C' Class heavy duty MS Pipe conforming to Indian Standard IS 1239/3589 including fittings like tees, bends, sockets, elbows, flanges, tapers, nuts bolts, gaskets etc. fixing the pipe on the wall I ceiling with suitable clamps and painting with two or more coats of synthetic enamel paint of required shade complete in all respects.				0.00
i	25mm internal diameter	mt.	4	272.5	1090.00
ii	32mm internal diameter	mt.	4	344	1376.00
iii	40mm internal diameter	mt.	4	407.5	1630.00
iv	50mm internal diameter	mt.	4	601	2404.00
v	65mm internal diameter	mt.	4	749	2996.00
vi	80mm internal diameter	mt.	4	909.5	3638.00
58	Supplying, Installation, Testing and Commissioning of G.M Single headed hydrant valve with instantaneous Gun metal peet coupling of 63 mm	Each	2	6394	12788.00

R. Sharma

	diawith cast iron wheel ISI marked conforming to IS 5290 (TypeA) with blank Gunmetal Cap and chain including orifice plate made of 6mm th Stainless steel to keep the pressure not more than 3.5 per sqcm at any point complete in all respects.				
59	Supplying, Installation, Testing and Commissioning 63 mm dia gun-metal Branch Pipe (ISI marked) with 20mm (nominal internal dia) size Gun metal nozzle confirming to IS 903, suitable for instantaneous connection to interconnect hose pipe coupling as required.	Each	7	1929.5	13506.50
60	Providing and fixing fire brigade inlet connection of cast iron body with Gun metal 63mm dia instantaneous type male coupling with built in check valves and 150mm dia flanged outlet complete with bolts, nuts and rubber insertions as per IS:904. (to be connected to static tank).	Each	2	6157	12314.00
	Two Way inlet connection				0.00
61	Supplying, Installation, Testing & Commissioning of RRL FIRE hose Type A, IS:636, 63 mm dia x 15m long with gunmetal male & female couplings (ISI marked) bound & riveted to hose pipes with copper rivets and copper wire as required.	Each	8	4453.5	35628.00
62	Supplying, Installation, Testing and Commissioning of First Aid-fire Hose reel with MS construction spray painted in post office red, confirming to IS 884 with upto date amendments, complete with rubber hose pipe (IS:444 /1987) 20mm dia 30 meter long type-2, hose reel Drum with bracket as per IS:884, 20mm dia GM nozzle and 20mm dia GM gate valve as required complete with G.I pipe	Each	8	8846	70768.00
63	Supplying, Installation, Testing and Commissioning standard Fire Man's axe with heavy insulated rubber conforming to IS 936 complete in all respect	Each	8	706	5648.00
64	Supplying & fixing air vessel made out of 450mm. Dia, 8 mm thick MS sheet, 2000mm height with air release valves on top and flanged connection to risers, drain arrangements with 50 mm dia gunmetal wheel valves, with required accessories, pressure gauge and painting with synthetic enamel paint of approved shade as required	Each	2	21402	42804.00
65	Providing and fixing of Pressure switch of approved make in MS pipe line suitable for line pressure up to 15kg/cm ² & including connection with main panel etc. as required complete in all respect	Each	2	3376	6752.00
66	Providing and fixing S.S Pressure Gauge complete as required complete in all respect.	Each	2	650	1300.00
67	Providing and fixing of FIRE EXTINGUISHER, ABC Powder type (stored pressure) as per IS: 15683 complete with all accessories as per Manufactures Specification. ISI Mark complete in all respect.				0.00
	6 Kg. Capacity	Each	12	2742	32904.00
68	Providing & fixing of FIRE EXTINGUISHER, CO ₂ type as per IS: 15683 complete with all accessories as per Manufactures Specification. ISI Mark complete in all respect.				0.00
	4.5 Kg. Capacity	Each	12	6735	80820.00
69	Supplying and Installation control valve CIW water motor gong complete with alarm Valve, constant trim, water motor bell, 2No. Pressure Gauge. All parts UL listed. Make				0.00
	100 mm control valve	Each	2	27700.5	55401.00
70	Supplying, Laying, Testing and Commissioning of ISI marked BUTTERFLY VALVE PN 1.6, with Gun metal seal duly ISI marked complete with rubber insertion, nuts, bolts and washers, matching				0.00

	flanges of required thickness, etc. 100 mm i/d				
	100 mm i/d	Each	2	6585	13170.00
71	Providing, fixing, installation, testing & commissioning of electrical motor with Pump fixed on common plateform for lifting & supplying water in pipe lines complete in all respects.	Each	2	70000	140000.00
72	Providing, installation, testing & commissioning of electrical Panel for motor & pump.	Each	2	9000	18000.00
	TOTAL PUBLIC HEALTH SERVICES				2843645.20
	Electrical Installation Work				
1	RECESSED CONDUIT PIPE WIRING SYSTEM WITH MODULAR SWITCHES:				
	Wiring in P.V.C. insulated Fire Retardant copper conductor ISI marked (Unsheathed) flexible multistrand cable to be laid in heavy gauge welded conduit pipe 20 mm / 25mm dia (1.6mm thick) ISI marked, recessed in wall etc., complete with powder coated/anodized concealed metal boxes required for suitable number of modules, for having electronic fan regulators, bell push, electronic buzzer, 5pin 6Amp., 6pin 16/20Amp. Sockets and 6/16/20Amp. Switches (Screw Type Modular Accessories) etc., and covered with Frame Plate etc., & including the cost of required number of modular switches/ sockets, step type electronic fan regulator 100watts, PVC connector (For Fan Box and Electronic Buzzer), PVC Bush, Steel Hooks, Circular Inspection Box (Recessed Type and Deep Type) conduit pipe & copper wire and other Petty material etc. including the cost of cutting and filling up of chases:-				
a	Wiring Fan point with Sheet Metal fan box (Shape Hexagonal & Sheet Thickness not less than 1.6mm) in 1.5mm ² Copper conductor cable with step type electronic fan regulator 100watts.	Each	150	1246.22	186933.00
b	Wiring light point in PVC insulated copper conductor single core FRLS cable (ISI marked) overall 1.5 sq. mm, 1100volts grade.	Each	425	759.29	322698.25
c	Wiring call-bell point in 1.5mm ² Copper conductor cable with bell push and electronic buzzer 230 Volts AC (including the cost of bell push, electronic buzzer & powder coated concealed metal box for electronic buzzer).	Each	2	847.26	1694.52
d	Wiring 3 pin 6 Amp. wall socket (Shuttered) point in PVC insulated copper conductor single core FR cable (ISI marked) overall 1.5 sq. mm, 1100volts grade complete with bonding to existing earth with PVC insulated copper conductor single core FR cable (ISI marked) overall 1sq. mm, 1100volts grade.	Each	160	646.63	103460.80
e	Wiring 3 Pin 6 Amp. Plug control comprising wall socket (shuttered) and switch including bonding to existing earth with PVC insulated copper conductor single core FR cable (ISI marked) overall 1 sq. mm, 1100volts grade complete.	Each	250	393.8	98450.00
f	Wiring 3 pin 16/20 amp. power plug control (shuttered) and switch.	Each	100	425.31	42531.00
g	Wiring light point in PVC insulated copper conductor single core FR cable (ISI marked) overall 1.5 sq. mm, 1100volts grade complete without control switch.	Each	50	327.26	16363.00
h	Wiring light point in PVC insulated copper conductor single core FR cable (ISI marked) overall 1.5 sq. mm, 1100volts grade complete with double control	Each	100	1160.63	116063.00

R. Sharma

R. Sharma

	switches.				
i	Wiring TV sockets and Telephone socket points in powder coated/anodized concealed metal boxes recessed in wall required for suitable number of modules, for having TV sockets, Telephone sockets RJ11 & RJ45 (one module) etc., and covered with Frame Plate etc., & including the cost of required number of modular TV sockets, Telephone sockets RJ11 & RJ45 (one module) and other petty material etc. including the cost of cutting and filling up of chases:-				
j	Wiring TV socket point (one module)	Each	2	217.74	435.48
k	Wiring Telephone socket point RJ11 (one module)	Each	2	231.75	463.50
	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ recessed steel/ PVC conduit as required.	Mtr	35	28	980.00
2	PVC INSULATED SINGLE CORE FR COPPER CONDUCTOR CABLE:				0.00
a	Supply and erection of PVC insulated single core FR copper conductor cable ISI marked left bare in pipe or casing of suitable size excluding the cost of supply and erection of pipe or casing.				
b	PVC insulated copper conductor single core FR cable (ISI marked) overall 1 sq.mm, 1100volts grade	mt.	100	11.41	1141.00
c	PVC insulated copper conductor single core FR cable (ISI marked) overall 1.5 sq.mm, 1100volts grade	mt.	1000	15.11	15110.00
d	PVC insulated copper conductor single core FR cable (ISI marked) overall 2.5 sq.mm, 1100volts grade	mt.	8500	21.61	183685.00
e	PVC insulated copper conductor single core FR cable (ISI marked) overall 4 sq.mm, 1100volts grade	mt.	9500	29.97	284715.00
f	PVC insulated copper conductor single core FR cable (ISI marked) overall 6 sq.mm, 1100volts grade	mt.	300	45.01	13503.00
g	PVC insulated copper conductor single core FR cable (ISI marked) overall 10 sq.mm, 1100volts grade	mt.	450	73.27	32971.50
h	PVC insulated copper conductor single core FR cable (ISI marked) overall 16 sq.mm, 1100volts grade	mt.	20	112.83	2256.60
3	XLPE/ PVC INSULATED ARMoured CABLES				0.00
a	Supply & laying of XLPE/ P.V.C.insulated PVC sheathed armoured and served cable to be laid 1 m below ground level including excavation, sand cushioning,covering with sand & bricks and back filling the trench etc.,ofthe required size as per PWD GeneralSpecifications 2010:-				0.00
b	Aluminium conductor XLPE/ PVC insulated PVC sheathed armoured and served cable working voltage 1100volts grade 95sq.mm (3 ½ Core)	mt.	350	560.57	196199.50
c	Aluminium conductor XLPE/ PVC insulated PVC sheathed armoured and served cable working voltage 1100volts grade 50sq.mm (3 ½ Core)	mt.	175	384.79	67338.25
4	XLPE/ PVC INSULATED ARMoured CABLES (LOOSE):				0.00
a	Supply & laying of aluminium conductor XLPE/ P.V.C.insulated armoured and served cable to be laid loose in the existing trench or pipe as per PWD General Specifications 2010:-				0.00
b	Aluminium conductor XLPE/ PVC insulated PVC sheathed armoured and served cable working voltage 1100volts grade 95sq.mm (3 ½ Core)	mt.	100	460.62	46062.00
c	Aluminium conductor XLPE/ PVC insulated PVC sheathed armoured and served cable working	mt.	50	287.5	14375.00

	voltage 1100volts grade 50sq.mm (3 ½ Core)				
5	HEAVY GUAGE WELDED CONDUIT PIPES:				0.00
a	Supply & erection of pipe for wiring purposes including bends,inspection boxes etc., where necessary including painting as per PWD General Specifications 2010:-				0.00
b	Heavy gauge welded conduit pipe 20mm dia. (ISI marked 1.60mm thick) Flushed	mt.	1000	84.75	84750.00
c	Heavy gauge welded conduit pipe 25mm dia. (ISI marked 1.60mm thick) Flushed	mt.	2000	100.23	200460.00
d	Heavy gauge welded conduit pipe 32mm dia. (ISI marked 1.60mm thick) Flushed	mt.	150	139.65	20947.50
e	Heavy gauge welded conduit pipe 40mm dia. (ISI marked 1.60mm thick) Flushed	mt.	10	219.91	2199.10
f	Heavy gauge welded conduit pipe 50mm dia. (ISI marked 1.60mm thick) Flushed	mt.	10	364.17	3641.70
6	Supply and erection of PVC flexible pipe complete with compression glands, having locking arrangement,check-nuts as required :-				0.00
a	PVC flexible pipe 20mm dia.	mt.	10	32.87	328.70
b	PVC flexible pipe 25mm dia.	mt.	10	39.08	390.80
c	PVC conduit pipe 25mm dia.ISI marked 2mm thick	mt.	150	40.89	6133.50
7	Galvanised iron flexible pipe complete as additional length				0.00
a	Size 20mm dia.	mt.	20	31.92	638.40
b	Size 32mm dia.	mt.	20	39.9	798.00
c	Size 40mm dia.	mt.	20	58.8	1176.00
8	End termination of cables with brass glands & lugs including cutting of mssheet(hole) for cable entry,connections etc. complete in all respect.				0.00
a	Aluminium conductor XLPE/ PVC insulated PVC sheathed armoured and served cable working voltage 1100volts grade 95sq.mm (3 ½ Core)	Each	4	675	2700.00
b	Aluminium conductor XLPE/ PVC insulated PVC sheathed armoured and served cable working voltage 1100volts grade 50sq.mm (3 ½ Core)	Each	2	405	810.00
c	Copper conductor 6sq.mm 6 core.	Each	4	155	620.00
d	Copper conductor 10sq.mm 6 core.	Each	8	155	1240.00
9	MINIATURE CIRCUIT BREAKERS/ RCBO's/ RCCB's:				0.00
a	Supply and erection of Miniature Circuit Breakers/ RCBO's/RCCB's in the existing MCB distribution board as per PWD General Specifications 2010 including connections with suitable size of thimbles/lugs.				0.00
b	GROUP-A: (Siemens (Beta Guard), Legrand (Lexic) & Schneider (Neo Break).				0.00
c	Miniature circuit breaker single pole 6 to 32amp. (Breaking capacity 10kA, Curve-C) suitable for 240/ 415 volts 50cycles AC supply	Each	264	173.26	45740.64
d	Miniature circuit breaker double pole 6 to 32amp. (Breaking capacity 10kA, Curve-C) suitable for 240/ 415 volts 50cycles AC supply	Each	180	514.64	92635.20
e	Miniature circuit breaker four pole 40amp. (Breaking capacity 10kA, Curve-C) suitable for 240/ 415 volts 50cycles AC supply	Each	4	1468.56	5874.24
f	Miniature circuit breaker four pole 50, 63amp. (Breaking capacity 10kA, Curve-C) suitable for 240/ 415 volts 50cycles AC supply	Each	8	1624.33	12994.64
10	RCCB's:				0.00
a	Residual Current Circuit Breaker (RCCB for earth leakage protection) double pole 32/40amp., sensitivity 100mA (as per standard IEC 61008) suitable for 240/415 volts 50 cycles AC supply	Each	12	2083.19	24998.28

R. Sharma

R. Sharma

b	Residual Current Circuit Breaker (RCCB for earth leakage protection) double pole 63amp., sensitivity 100mA (as per standard IEC 61008) suitable for 240/415 volts 50 cycles AC supply	Each	24	2406.02	57744.48
11	SHEET METAL DOUBLE DOOR DISTRIBUTION BOARD FOR MCB/ RCBO/ RCCB's:				0.00
	Supply and erection of sheet metal double door distribution boards of suitable size and of required no. of ways for mounting miniature circuit breakers/ RCBO's/ RCCB's in the existing MCB distribution board as per PWD General Specifications 2010 including connections with suitable size of thimbles and bonding to existing earth etc.				0.00
	GROUP-A: (Siemens (Beta Guard), Legrand (Lexic) & Schneider (Neo Break).				0.00
a	Sheet metal double door S.P. & N. distribution board (dust protected) provided with bus bar, neutral link and din bar, suitable for incorporating MCB's/ RCBO/ RCCB's, 4 way each	Each	55	935.54	51454.70
b	Sheet metal double door S.P. & N. distribution board (dust protected) provided with bus bar, neutral link and din bar, suitable for incorporating MCB's/ RCBO/ RCCB's, 8 way each	Each	23	1277.55	29383.65
c	Sheet metal double door T.P. & N. distribution board (dust protected) provided with bus bar, neutral link and din bar, suitable for incorporating FP/ TPN MCB's/ isolators for incoming and DP/ SP & N/ Single Pole MCB's/ RCBO/ RCCB's for outgoing 8 way each	Each	8	3667.9	29343.20
d	Sheet metal double door T.P. & N. distribution board (dust protected) provided with bus bar, neutral link and din bar, suitable for incorporating FP/ TPN MCB's/ isolators for incoming and DP/ SP & N/ Single Pole MCB's/ RCBO/ RCCB's for outgoing 12 way each	Each	4	5276.18	21104.72
12	Fixtures				0.00
	Supply and erection of switches, sockets, power switch and sockets and other accessories (flush piano type/ modular accessories) in the existing bakelite/ modular cover frame including connections and petty material etc.				0.00
a	Ceiling rose (flush piano type)	Each	200	27.87	5574.00
b	Bakelite batten holder large size	Each	200	27.86	5572.00
13	Erection of wall bracket /ceiling fittings of all sizes per fitting, complete with all accessories including connection etc. as required. of Surface tube light 1x36 watt with tube rod	Each	80	52	4160.00
14	Erection of wall bracket /ceiling fittings of all sizes per fitting, complete with all accessories including connection etc. Recess/surface Ceiling LED lights 6 watt	Each	114	52	5928.00
15	Erection of ceiling fan having connection with PVC insulated PVC sheathed two single core copper conductor (FRLS) cable 0.75mm sq. complete.	Each	200	61.46	12292.00
16	Erection of exhaust fan on the wall/ window grill having connection with PVC insulated PVC sheathed two single core copper conductor (FRLS) cable 0.75mm sq. complete.	Each	16	105.24	1683.84
17	Erection of wall bracket /ceiling fittings of all sizes per fitting, complete with all accessories including connection etc. Recessed Led Light 18 watt	Each	16	52	832.00
18	Earthing of Sheet metal/ iron clad switches and metallic cases etc., with 20 mm x 3 mm thick electrolytic copper tape rivetted (with 10 nos. copper rivets) to 30 cm x 120 cm x 3 mm thick tinned copper plate (made cylindrical) buried 10 metre below	Each	3	14481.34	43444.02

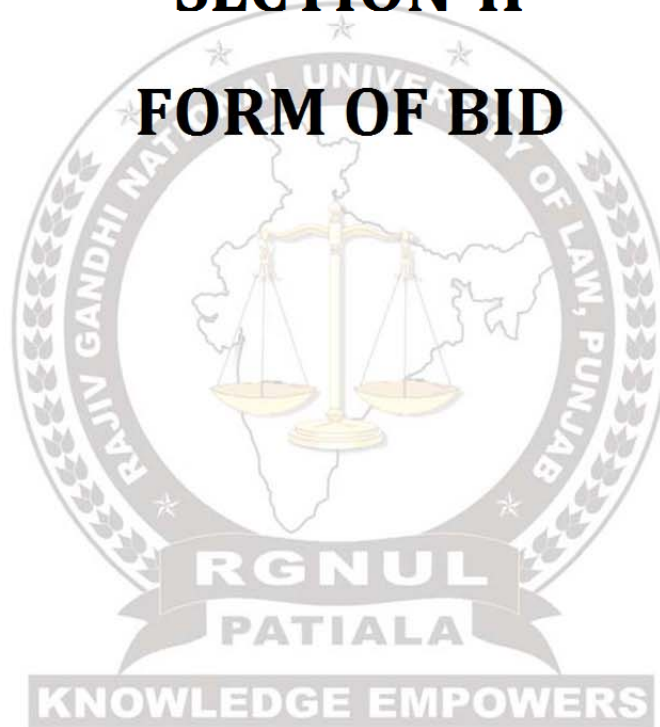
R Sharma

	ground level in the hole of excavation having bore dia. 125mm and surrounded by salt & charcoal dust mixture (20 kg.) including fixing the copper tape on wall and in floor etc., up to 13 metre in length (including bore length). G.I. pipe 20mm dia. (A-class) should be laid in the hole of excavation from bore surface level to 1 feet below ground level and having wire mesh funnel fixed on the top level of the pipe. 300mm x 300mm x 300mm deep haudi of bricks finished with 1:4 cement plaster and haudi covered with cast iron lid having size 300mm x 300mm around the hole of excavation.				
i	Supply and Erection of 20mm x 3mm thick copper tape (As additional length).	mt.	50	343.539	17176.95
19	Providing, cutting to required size, making holes, fixing handles for lifting & laying in position of mild steel chequered plates of desired thickness.				0.00
	Total weight	qtl.	1.75	7605.82	13310.19
	TOTAL ELECTRICAL WORKS				2555509.85
	G.TOTAL			Total	43830609
				Say	Rs. 438.31 Lakh

NOTE:-All the nomenclature, unit & rates as depicted in bill of quantities are subject to corrections as per CSR 2010 & DSR 2014 corrected up to date.

SECTION-II

FORM OF BID



R. Sharma

FORM OF BID

Description of the Work

Construction of 01 no Hostel block for Girls including internal & external Public Health & Electrical Services (under Babu Jagjivan Ram Chhatrawas Yojna) in RGNUL campus, Sidhuwal, Patiala

To

**Registrar,
RGNUL
Patiala.**

I/we have gone through the terms and conditions of this bidding document diligently.

My/our bid is under:-

1. My/Our bid _____ the total tendered amount calculated above **Rs** (Fill in below/at par with/above as applicable).

2. My/Our bid is below/ at par with/above by _____% (In words _____ percent).

For payment purposes, the above percentage shall be applicable uniformly to the rates of items described in the above Technical Schedule.

3. We undertake, if our Bid is accepted, to commence the Works as soon as is reasonably possible after the receipt of the Engineer's notice to commence and to complete the whole of the Works comprised, the Contract within the time stated in the document.
4. We agree to abide by this Bid for the period of **120 days** from the date fixed for receiving the same and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
5. Unless and until a formal Agreement is prepared and executed, this Bid together with your written acceptance thereof shall constitute a binding contract between us.

R. Sharma

6. We understand that you are not bound to accept the lowest or any tender, you may receive.

Unconditional Rebate if any:-

Dated this _____ day of _____ 2012.

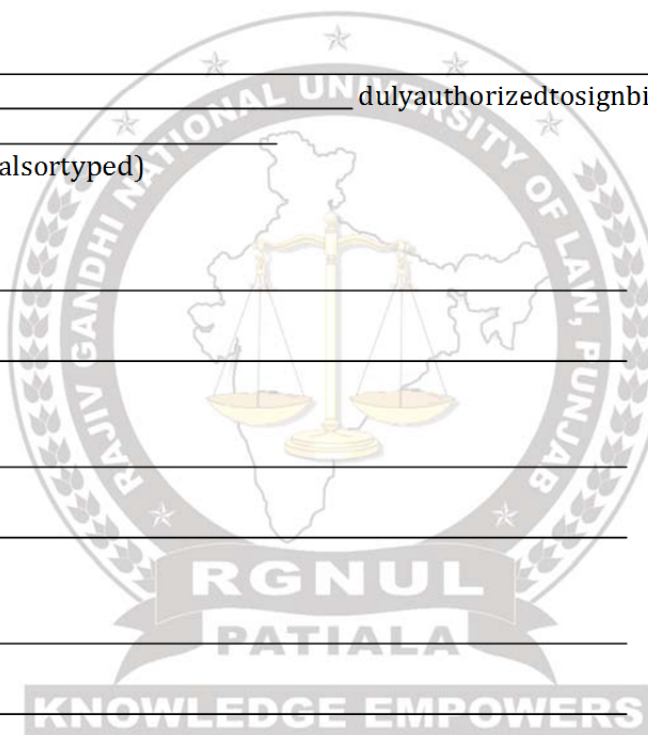
Signature _____ in the capacity
of _____ duly authorized to sign bids for and on
behalf of _____
(In Block capitals or typed)

Address

Witness

Address

Occupation



Registrar, RGNUL