

HINDUSTAN PREFAB LIMITED						
THYCAUD, TRIVANDRUM						
Name of work : Construction of Office Building for Kerala State Backward Community Development Cooperation at Asramam, Kollam District						
Estimate as per DSR 2016						
Sl. No	DSR No:	Description	Units	Qty	Rate	Amount
A		CIVIL WORKS				
		SCHEDULED ITEMS				
		EARTH WORKS				
1	2.32	Clearing grass and removal of the rubbish upto a distance of 50 m outside the periphery of the area cleared.	Sqm	600.00	3.65	2190.00
2	2.9	Earth work in excavation by mechanical means (Hydraulic Excavator)/ manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus				
a	2.9.3	Hard rock (Blasting prohibited)	Cum	250.00	656.70	164175.00
3	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and	Cum	250.00	125.75	31437.50
		CONCRETE WORKS				
4	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering - All work				
a	4.1.8	1:4:8 (1 Cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size)	Cum	47.00	4478.15	210473.05
		REINFORCED CEMENT CONCRETE				
5	5.1	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centring, shuttering, finishing and reinforcement - All work upto plinth level :				
a	5.1.2	1:1.5:3 (1 cement : 1.5 coarse sand (zone-III): 3 graded stone aggregate 20 mm nominal size).	Cum	50.00	6215.35	310767.50
6	5.2	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, post and struts etc., upto floor five level excluding cost of centering,				
a	5.2.2	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20mm nominal size)	Cum	150.00	7145.80	1071870.00
		FORM WORK				
7	5.9	Centering and shuttering including strutting, propping etc. and removal of form for :				
a	5.9.1	Foundations, footings, bases of columns, etc. for mass concrete	Sqm	95.00	193.95	18425.25
b	5.9.3	Suspended floors, roofs, landings, balconies and access platform.	Sqm	580.00	422.30	244934.00
c	5.9.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers.	Sqm	675.00	342.90	231457.50
d	5.9.6	Colums, Pillars, Piers, Abutments, Posts and Struts	Sqm	270.00	467.85	126319.50
e	5.9.7	Stairs (excluding landings) except spiral- staircases	Sqm	55.00	419.35	23064.25
8	5.22	Steel reinforcement for RCC work including straightening, cutting,bending,placing in position and binding all complete.				

a	5.22.6	Thermo-Mechanically Treated bars	Kg	26595.00	56.60	1505277.00
9	7.1	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20mm nominal size) at plinth level with :				
a	7.1.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	15.00	3965.85	59487.75
		MARBLE & GRANITE WORK				
10	8.2	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc.				
a	8.2.2	Granite of any colour and shade				
	8.2.2.1	Area of slab upto 0.50 sqm	Sqm	25.00	3351.95	83798.75
11	8.3	Providing edge moulding to 18 mm thick marble stone counters, Vanities etc., including machine polishing to edge to give high gloss finish etc.				
a	8.3.2	Granite work	Metre	50.00	245.70	12285.00
		WOOD AND P. V. C. WORK				
12	9.84	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with IS : 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc.	Each	6.00	388.40	2330.40
13	9.97	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :				
a	9.97.1	300x10 mm	Each	11.00	99.70	1096.70
14	9.100	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary				
a	9.100.1	125 mm	Each	22.00	51.10	1124.20
15	9.101	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete.				
a	9.101.2	Twin rubber stopper	Each	11.00	38.00	418.00
16	9.141	Providing and fixing PVC Door Frame of size 50x47 mm with a wall thickness of 5 mm (\pm 0.2 mm), made out of single piece extruded PVC profile, with mitred cut joints and joint with 2 nos of PVC bracket of size 190 mm x 100 mm long arms of cross section size 35 x 15 mm & self driven self tapping screws, the vertical door profiles to be reinforced with 40x20 mm M.S. rectangular tube of 0.8 mm , including providing EPDM rubber gasket weather seal throughout the frame, including jointing 5mm PVC frame strip with PVC solvent cement on the back of the profile. The door frame to be fixed to the wall using 8x100 mm long anchor fasteners complete, all as per	Metre	85.00	614.50	52232.50

17	9.142	35 mm thick factory made Solid panel PVC Door shutter, made out of single piece extruded solid PVC profiles, 5 mm (\pm 0.2 mm) thick, having styles & rails (except lock rail) of size 95 mm x 35 mm x 5 mm, out of which 75 mm shall be flat and 20 mm shall be tapered (on both side), having one side thickness of 15 mm integrally extruded on the hinge side of the profile for better screw holding power, including reinforcing with MS tube of size 40 mm X 20 mm x 1 mm, joints of styles & rails to be mitered cut & joint with the help of PVC solvent cement, self driven self tapping screws & M.S. rectangular pipes bracket of size 190 mm X100 mm of cross section size 35 mm x 17 mm x 1 mm at each corner. Single piece extruded 5 mm thick solid PVC Lock rail of size 115 mm x35 mm, out of which 75 mm to be flat and 20 mm to be tapered at both ends, having 15 mm solid core in middle of rail section integrally extruded, fixing the styles & rails with the help of solvent and self driven self tapping screws of 125 mm x 11 mm, including providing 5 mm Single piece solid PVC				
a	9.142.2	Decorative finish (wood grained finish)	Sqm	26.78	3241.10	86796.66
		STEEL WORK				
18	10.6	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required				
a	10.6.1	80x1.25 mm M.S. laths with 1.25 mm thick top cover	Sqm	12.00	2316.10	27793.20
19	10.7	Providing and fixing ball bearing for rolling shutters.	Each	6.00	379.30	2275.80
20	10.16	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped				
a	10.16.1	Hot finished welded type tubes	Kg	5000.00	90.25	451250.00
21	10.25	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.				
a	10.25.2	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	Kg	1312.50	85.95	112809.38
		FLOORING				
22	11.20	Chequered precast cement concrete tiles 22 mm thick in footpath & courtyard, jointed with neat cement slurry mixed with pigment to match the shade of tiles, including rubbing and cleaning etc. complete, on 20mm thick bed of cement mortar				
a	11.20.2	Medium shade pigment using 50% white cement 50% Grey cement	Sqm	57.00	878.60	50080.20
23	11.36	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of	Sqm	185.00	744.80	137788.00

24	11.39	Providing and laying rectified Glazed Ceramic floor tiles of size 300x300mm or more (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in colours White,Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4(1 Cement: 4 Coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including grouting the joints with white cement and matching	Sqm	55.00	822.45	45234.75
25	11.41	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),jointing with grey cement slurry @ 3.3kg/sqm including grouting the joints				
a	11.41.2	Size of Tile 600x600 mm	Sqm	475.00	1119.40	531715.00
		FINISHING				
26	13.1	12 mm cement plaster of mix :				
a	13.1.2	1:6 (1 cement: 6 fine sand)	Sqm	2550.00	160.35	408892.50
27	13.3	20 mm cement plaster of mix :				
a	13.3.2	1:6 (1 cement: 6 fine sand)	Sqm	600.00	220.60	132360.00
28	13.16	6 mm cement plaster of mix :				
a	13.16.1	1:3 (1 cement : 3 fine sand)	Sqm	600.00	143.80	86280.00
29	13.26	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even	Sqm	2550.00	118.70	302685.00
30	13.37	White washing with lime to give an even shade :				
a	13.37.1	New work (three or more coats)	Sqm	600.00	17.25	10350.00
31	13.47	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade:				
a	13.47.1	New work (Two or more coats applied @ 1.43 ltr/10 sqm over and including priming coat of exterior primer applied@ 2.20	Sqm	600.00	96.80	58080.00
32	13.60	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade :				
a	13.60.1	Two or more coats on new work	Sqm	2550.00	84.45	215347.50
33	13.61	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
a	13.61.1	Two or more coats on new work	Sqm	332.23	78.40	26046.83
		ALUMINIUM WORK				
34	21.1	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/appropriate Z sections and other sections of approved makeconforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred 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,				
a	21.1.1	For fixed portion				
(i)	21.1.1.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	Kg	440.00	384.50	169180.00

b	21.1.2	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be				
(i)	21.1.2.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	Kg	450.00	444.90	200205.00
35	21.2	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS:12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of Engineer-in-charge.				
a	21.2.1	Pre-laminated particle board with decorative lamination on one side and balancing lamination on other side	Sqm	10.00	826.35	8263.50
36	21.3	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / 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):				
a	21.3.1	With float glass panes of 4.0 mm thickness	Sqm	75.00	741.50	55612.50
		Sub Total				7272209.67
		Add Cost Index 51.96%				3778640.14
		Total Schedule Items				11050849.81
		NON SCHEDULE ITEMS				
37	1	Supplying and filling available excavated earth from outside, consolidating etc. complete	Cum	800.00	700.00	560000.00
38	2	Solid block masonry in superstructure above plinth level upto floor five level using concrete block of size 40 x 15 x 20 cm / 40 x 10 x 20 cm including cost and conveyance of all materials and labour charges etc.complete.				
a	a	In Cement mortar 1:6	Cum	210.00	6300.00	1323000.00
39	3	Supplying and fixing Stainless Steel Aldrop 300mm for	Each	11.00	750.00	8250.00
40	4	Providing and fixing at all height false ceiling of 3mm thick P.V.C rigid foam sheet including providing and fixing of frame works made of special sections powder pressed from M.S sheet and galvanised in accordance with zinc coating 350 as per IS:277 and consisting of angle cleats of size 25mm wide x 1.6mm thick with flanges of 22mm and 37mm at 1200 mm center to center one flange fixed to the ceiling with dash fastener 12.5mm dia x 40mm long with 6mm dia bolts to the angle hanger of 25x25x0.55 mm of required length, and other end of angle hanger being fixed with nut and bolts to G.I channels 45x45x0.9mm running at the rate of 1200mm center to center to which the ceiling section 0.5mm thick bottom wedge of 80mm with tapered flanges of 26mm each having clips of 10.5mm at 450mm center to center shall be fixed in a direction perpendicular to G.I wire at every junction including fixing the P.V.C rigid form sheet with coilingsection and perimeter channels 0.5mm thick 27mm nut and bolts to G.I channels 45x45x0.9mm running at the rate of 1200mm center				

		center shall be fixed in a direction perpendicular to G.I wire at every junction including fixing the P.V.C rigid form sheet with coiling section and perimeter channels 0.5mm thick and 27mm high having flanges of 20mm and 30mm long the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450mm center to center with 25mm long drive-all screws@230mm interval including jointing and fixing to a flush finish of the P.V.C sheet as per manufacturers specification and including the cost of making opening for light fittings,grills,diffusers,cutouts made with the frame of	Sqm	540.00	950.00	513000.00
41	5	Providing and fixing in position Ceramic partition including other required fittings for Urinal partition for required cutting	Each	12.00	2070.00	24840.00
42	6	Supplying and fixing of Signage board with Teakwood at the front of rooms including all screws etc.complete.	Each	25.00	1000.00	25000.00
43	7	Designing, fabricated, testing, installing and fixing in position curtain wall with Aluminium composite panel cladding with open grooves for linear as well as curvilinear portions of the building, for all heights and levels etc. The items includes cost of all material & labour component, the cost of all mock ups at site, cost os all samples of the individual components for testing in an approved laboratory, field tests on the assembled working curtain wall with aluminium composite panel cladding, cleaning and protection of the curtain wall with	Sqm	150.00	4000.00	600000.00
44	8	Providing Roofing with Galvanium sheet 0.50mm thick ,550 Mpa, AEZ150gm/Sqm including all fittings and fixtures, scaffolding etc. complete	Sqm	500.00	950.00	475000.00
45	9	Providing Ridge for the Roofing with Galvanium sheet 0.50mm thick, including fitting and fixtures, scaffolding etc. complete	RM	100.00	1050.00	105000.00
		Total Non Schedule Items				3634090.00
		TOTAL CIVIL WORKS				14684939.81
B		SANITARY AND PLUMBING				
		SANITARY INSTALLATIONS				
46	17.1	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required:				
a	17.1.1	White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests	Each	2.00	3494.20	6988.40
47	17.3	Providing and fixing white vitreous china pedestal type water closet(European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I. brackets,40 mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and				
a	17.3.2	W.C. pan with ISI marked black solid plastic seat and lid	Each	10.00	4570.50	45705.00
48	17.4	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350mm and 340x410x265mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and				

a	17.4.3	Range of three urinal basins with 10litre white P.V.C. automatic flushing cistern.	Each	4.00	7403.35	29613.40
49	17.7	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require:				
a	17.7.2	White Vitreous China Wash basin size 630x450 mm with a single 15 mm C.P. brass pillar tap	Each	8.00	2020.60	16164.80
50	17.32	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing :				
a	17.32.4	Rectangular shape 1500x450 mm	Each	5.00	1323.10	6615.50
51	17.69	Providing and fixing PTMT Waste Coupling for wash basin and sink,of approved quality and colour.				
a	17.69.2	Waste coupling 38 mm dia of 83 mm length and 77mm breadth, weighing not less than 60 gms	Each	6.00	98.80	592.80
52	17.70	Providing and fixing PTMT Bottle Trap for Wash basin and sink.				
a	17.70.2	Bottle trap 38 mm single piece moulded with height of 270 mm, effective length of tail pipe 260 mm from the centre of the waste coupling, 77 mm breadth with 25 mm minimum water seal, weighing not less than 263 gms	Each	6.00	305.55	1833.30
53	17.73	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fittings arrangement of approved quality and colour.				
a	17.73.1	450 mm long towel rail with total length of 495 mm, 78mm wide and effective height of 88 mm, weighing not less than 170 gms	Each	6.00	390.20	2341.20
		WATER SUPPLY				
54	18.7	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes,having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.				
a	18.7.2	20 mm nominal outer dia Pipes	Metre	15.00	179.95	2699.25
b	18.7.3	25 mm nominal outer dia Pipes	Metre	18.00	216.20	3891.60
c	18.7.4	32 mm nominal outer dia Pipes	Metre	22.00	289.05	6359.10
d	18.7.5	40 mm nominal outer dia Pipes	Metre	26.00	385.50	10023.00
e	18.7.6	50 mm nominal outer dia Pipes	Metre	30.00	548.55	16456.50
55	18.18	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :				
a	18.18.3	25 mm nominal bore	Each	2.00	331.95	663.90
56	18.48	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	Per Litre	2000.00	7.25	14500.00
57	18.49	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931 :				
a	18.49.1	15 mm nominal bore	Each	13.00	371.70	4832.10

58	18.51	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not				
a	18.51.1	15 mm nominal bore	Each	2.00	492.55	985.10
59	18.52	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931.				
a	18.52.1	15 mm nominal bore	Each	24.00	545.95	13102.80
60	18.53	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931				
a	18.53.1	15mm nominal bore	Each	12.00	475.70	5708.40
61	18.58	Providing and fixing PTMT grating of approved quality and colour.				
a	18.58.2	Rectangular type with openable circular lid				
(i)	18.58.2.1	150 mm nominal size square 100 mm diameter of the inner hinged round grating	Each	6.00	150.05	900.30
62	18.65	Providing and fixing PTMT Soap Dish Holder having length of 138mm,breadth 102mm, height of 75mm with concealed fitting arrangements,weighing not less than 106 gms.	Each	6.00	112.30	673.80
		DRAINAGE				
63	19.7	Constructing brick masonry manhole in cement mortar 1:4 (1cement : 4 coarse sand) with R.C.C. top slab with 1:2:4 mix (1cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8graded stone aggregate 40 mm 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 channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm				
a	19.7.1	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions,total weight of cover and frame to be not less than 38 kg(weight of cover 23 kg and weight of frame 15 kg) :				
(i)	19.7.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	2.00	8634.10	17268.20
b	19.7.2	Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (medium duty) 500 mm internal diameter, total weight of cover and frame to be not less than 116 kg (weight of cover 58 kg and weight of frame 58 kg) :				
(i)	19.7.2.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	2.00	18422.40	36844.80
64	19.20	Supplying and fixing C.I. cover 300x300 mm without frame for gully	Each	4.00	279.60	1118.40
65	19.32	Making soak pit 2.5 m diameter 3.0 metre deep with 45 x 45 cm dry brick honey comb shaft with bricks and S.W. drain pipe 100 mm diameter, 1.8 m long complete as per standard				
a	19.32.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	2.00	20681.55	41363.10
		Sub Total				287244.75
		Add Cost Index 51.96%				149252.37
		Total Schedule Items				436497.12
		NON SCHEDULE ITEMS				

66	1	Providing,Fixing, Testing and commissioning at site ablation Health Spray Faucet,C.P.Flexible Hose 750mm long nozzle tube, tube holder etc. all complete	Each	3.00	1100.00	3300.00
67	2	Supply,Installation,Testing &Commissioning of Supreme PVC pasted pipe 6kg using Solvent Cement ISI Marked with Heavy duty ISI Marked PVC fittings, Tees,Elbows, Bends,'Y's etc. Adaptors,Air vents, Clamping with GI U Clamps as required for firmly install				
a	a	50mm OD 6KG/Sq.cm internal Waste Piping				
		Supply,installation & Commissioning	Metre	20.00	315.00	6300.00
		Labour/ Installation/ Erection:				
b	b	75mm OD 6KG/Sq.cm internal Waste Piping				
		Supply,installation & Commissioning	Metre	25.00	540.00	13500.00
		Labour/ Installation/ Erection:				
c	c	110mm OD 6KG/Sq.cm internal Soil Piping				
		Supply,installation & Commissioning	Metre	28.00	650.00	18200.00
		Labour/ Installation/ Erection:				
d	d	110mm OD 6KG/Sq.cm external Soil & Waste Piping				
		Supply,installation & Commissioning	Metre	30.00	650.00	19500.00
		Labour/ Installation/ Erection:				
e	e	160mm OD 6KG/Sq.cm external Soil & Waste Piping				
		Supply,installation & Commissioning	Metre	50.00	840.00	42000.00
		Labour/ Installation/ Erection:				
68	3	Supplying and fixing PVC Multi Inlet 110MM X 63MM X 50mm Diameter etc. complete.				
		Supply,installation & Commissioning	Metre	6.00	600.00	3600.00
		Labour/ Installation/ Erection:				
69	4	Supplying and fixing Precast RCC septic tank with soak pit including the cost of earthwork excavation, filling, testing and				
a	a	40 usage capacity	Each	1.00	45000.00	45000.00
		Total Non Schedule Items				151400.00
		TOTAL FOR SANITARY AND PLUMBING WORKS				587897.12
		ELECTRICAL WORKS				
		SCHEDULED ITEMS				
		WIRING				
70	1.10	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor singlecore cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.				
a	1.10.3	Group C	Point	130.00	757.00	98410.00
71	1.11	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch,modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single	Point	4.00	809.00	3236.00
72	1.17	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/recessed steel/ PVC conduit as required.				
a	1.17.3	3 x 1.5 sq. mm	Metre	115.00	50.00	5750.00
b	1.17.12	3 x 2.5 sq. mm	Metre	700.00	75.00	52500.00
c	1.17.21	3 x 4 sq. mm	Metre	210.00	111.00	23310.00

73	1.18	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as				
a	1.18.2	2 Pair	Metre	350.00	19.00	6650.00
74	1.19	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.	Metre	60.00	29.00	1740.00
75	1.21	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
a	1.21.1	20 mm	Metre	900.00	57.00	51300.00
b	1.21.2	25 mm	Metre	350.00	69.00	24150.00
76	1.24	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
a	1.24.6	Telephone socket outlet	Each	8.00	96.00	768.00
b	1.24.7	TV antenna socket outlet	Each	2.00	97.00	194.00
77	1.25	Supplying and fixing two module stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	Each	34.00	288.00	9792.00
78	1.26	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	Each	18.00	24.00	432.00
79	1.27	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc. as required.				
a	1.27.1	1 or 2 Module (75 mmX75 mm)	Each	7.00	175.00	1225.00
80	1.31	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular switch, connections etc. as required.	Each	22.00	313.00	6886.00
81	1.32	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 A & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	Each	30.00	406.00	12180.00
82	1.34	Supplying and fixing brass batten/ angle holder including connections etc. as required.	Each	16.00	75.00	1200.00
83	1.38	Supplying and fixing call bell/ buzzer suitable for single phase,230 V, complete as required.	Each	5.00	61.00	305.00
84	1.41	Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting of all types, complete with all accessories and tube/lamp etc. directly on ceiling/ wall, including connections with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and	Each	68.00	100.00	6800.00
85	1.44	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5sq. mm FRLS PVC insulated, copper conductor,	Each	34.00	105.00	3570.00

86	1.47	Supplying and fixing extra down rod of 10 cm length G.I. pipe, 15mm dia, heavy gauge including painting etc. as required. (Note: More than 5 cm length shall be rounded to the nearest 10 cm and 5 cm or less shall be ignored)	Each	34.00	22.00	748.00
87	1.50	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning				
a	1.50.1	Upto 450 mm sweep	Each	8.00	224.00	1792.00
		MCCB, MCB & DB'S				
88	2.2	Providing and fixing following rating and breaking capacity and pole MCCB with thermomagnetic release and terminal spreaders in existing cubicle panel board including drilling holes in cubicle panel, making connections, etc. as required.				
a	2.2.1	100 A, 16 kA, TPMCCB	Each	1.00	3218.00	3218.00
89	2.4	Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/				
a	2.4.2	6 way (4 + 18), Double door	Each	1.00	2659.00	2659.00
90	2.5	Supplying and fixing of following ways surface/ recess mounting, vertical type, 415 V, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 A, tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCBs (but without MCBs and incomer) as required. (Note : Vertical type MCB TPDB is normally used				
a	2.5.2	8 way (4 + 24), Double door	Each	4.00	5664.00	22656.00
91	2.10	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
a	2.10.1	Single pole	Each	68.00	173.00	11764.00
b	2.10.4	Triple pole	Each	4.00	700.00	2800.00
c	2.10.5	Triple pole and neutral	Each	4.00	891.00	3564.00
92	2.11	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	Each	16.00	7.00	112.00
93	2.13	Supplying and fixing following rating, four pole, 415 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
a	2.13.1	40 A	Each	4.00	667.00	2668.00
b	2.13.2	63 A	Each	2.00	678.00	1356.00
94	2.15	Supplying and fixing following rating, four pole, (three phase and neutral), 415 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
a	2.15.2	40 A	Each	4.00	2131.00	8524.00
b	2.15.3	63 A	Each	2.00	2302.00	4604.00

95	2.18	Supplying and fixing 20 A, 240 V, SPN Industrial type socket outlet, with 2 pole and earth, metal enclosed plug top alongwith 20 A, "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	Each	12.00	980.00	11760.00
		EARTHING				
96	5.2	Earthing with G.I. earth pipe 4.5 meter long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/coke and salt as required.	Set	2.00	3672.00	7344.00
97	5.6	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe	Set	2.00	8289.00	16578.00
		MV CABLE LAYING				
98	7.1	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 kV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc. as required.				
a	7.1.1	Upto 35 sq. mm	Metre	140.00	206.00	28840.00
b	7.1.2	Above 35 sq. mm and upto 95 sq. mm	Metre	8.00	214.00	1712.00
99	7.10	Supplying and fixing cable route marker with 10 cm x 10 cm x 5 mm thick G.I. plate with inscription there on, bolted /welded to 35 mm x 35 mm x 6 mm angle iron, 60 cm long and fixing the same in ground as required.	Each	5.00	269.00	1345.00
		MV CABLE JOINTING & END TERMINATION				
100	9.1	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 kV grade as required.				
a	9.1.22	3.5 x 50 sq. mm (35 mm)	Each	4.00	354.00	1416.00
b	9.1.33	4 x 16 sq. mm (28mm)	Each	4.00	255.00	1020.00
c	9.1.34	4 x 25 sq. mm (28mm)	Each	10.00	258.00	2580.00
		COMBINED SCHEDULED ITEMS				
101	1.31	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 4numbers 3 pin 5/6 A modular socket outlet and 4	Each	15.00	1252.00	18780.00
		Sub Total				468238.00
		Add Cost Index 51.96%				243296.46
		Total Schedule Items				711534.46
		NON SCHEDULED ITEMS				
102	1	S/F 'C' Series, TP MCB : Supplying and fixing the following rating 415 volts C series, triple pole miniature circuit breaker suitable for lighting and other loads, in the existing MCB DB complete with connections testing and commissioning etc as required.				
	a	40/63A TP	Each	8.00	1800.00	14400.00
103	2	S/F 4P MCB metal enclosure: Supply and fixing 4 way metal enclosure, on surface / recess, complete with , earth bar, din bar, detachable gland plate, inter -connections, phosphatized and powder painted including earthing etc. as	Each	4.00	545.00	2180.00

104	3	S/F modular type data socket (RJ45 Cat 6) : Supplying and fixing of modular type RJ-45 (Cat 6) data socket on the existing modular plate & switch box including connections but excluding modular plate etc as required.	Each	16.00	419.00	6704.00
105	4	S/F 12 mm steel 'S' type fan hook : Supply and providing 12 mm dia steel 'S' type fan hooks, on the RCC roof, making good the damages of roof etc. as required	Each	34.00	120.00	4080.00
106	5	Supply of 1x36W decorative box type FTL fittings: Supply of 1 x 36 watts box type fluorescent tube lamp (FTL) with precoated CRCA sheet steel housing wired with commercial HF ballast, decorative end caps, complete with all accessories and one number 36 watts tube etc. as per the direction of	Each	35.00	775.00	27125.00
107	6	Supply of 3x36W low glare mirror optic CFL fittings : Supply of 3 x 36 watts recessed mounting type low glare Compact Fluorescent Lamp (CFL) mirror optic luminaire with powder coated CRCA sheet steel housing with square paralite P5 louver block in a perforated metallic frame complete with all accessories and 3 numbers 36 watts 'L' type CF lamps etc. as per the direction of engineer in charge as required.	Each	25.00	6075.00	151875.00
108	7	Supply of 2x11W mirror optic CFL : Supply of 2 x 11W mirror optic surface/ recess mounting type compact fluorescent lamp (CFL) fittings with white powder coated CRCA sheet steel housing, aluminium mirror reflector, including all accessories and 2 Nos 11watts 'S' type CF lamps etc. as per the direction of engineer in charge as required.	Each	10.00	2340.00	23400.00
109	8	Supply & fixing of 18W CFL mirror light fittings : Supply & fixing of 18 watts compact fluorescent lamp (CFL) mirror light fittings with white powder coated CRCA sheet steel housing with opal acrylic diffuser and decorative end plates, complete with all accessories and one number 18watts 'L' type CF lamp etc. as per the direction of engineer in charge as required.	Each	4.00	1660.00	6640.00
110	9	SITC OF 2X36W CFL outdoor fittings : supply ,installation, testing and commissioning 2 x 36 W CFL lamp fittings of epoxy black powder coated steel housing , with epoxy white powder coated CRCA steel gear tray, clear acrylic cover , aluminum reflector with complete accessories with two numbers of 36W CFL lamp etc., including supply of suitable size class - B G.I pipe(2m), top of pipe bend to required angle and providing and fixing the CFL lamp fitting, painting with 2 coat of white color paint ,over a coat of primer , fixing on the wall by using by using suitable clamp and giving connections using required lamp of 2.5 sq. mm . PVC installed and	Each	10.00	4250.00	42500.00
111	10	Supply of 1200mm Ceiling Fan : Supply of 1200 mm sweep Electric Ceiling Fan, White Colour, capacitor type with double ball bearing, shackles, down rod, canopies, blades suitable for operation on 220/ 240V, 50 Hz, single phase AC supply conforming to IS - 374 / 1979 class I (without regulator) high speed, etc. as per direction of engineer in charge as required.	Each	34.00	2124.00	72216.00
112	11	Supply of 305mm Exhaust Fan with front guard : Supply of 305 mm sweep, 1400 rpm heavy duty exhaust fan with front guard, working on 230 V AC supply, etc. as per the direction of engineer in charge as required.	Each	8.00	2950.00	23600.00

113	12	Supply of Al XLPE armoured power cable : Supply of following size heavy duty XLPE insulated and PVC sheathed armoured power cable, conductors of best conductivity aluminium, 1.1 KV grade, conforming to IS 7098 (part-I) etc, as required.				
a		4C x 16 sq.mm	Metre	25.00	224.00	5600.00
b		4C x 25 sq.mm	Metre	90.00	242.00	21780.00
c		3.5C x 50 Sq.mm	Metre	60.00	357.00	21420.00
114	13	S/L of Cat 6 4 pair UTP Ethernet cable : Supply and laying CAT6 4Pair UTP Ethernet Cable using PVC Conduits maintaining proper clearances for the entire route as per	Metre	550.00	154.00	84700.00
115	14	S/F Krone box/ Telephone DB : Supply and fixing of lockable, syntax or PVC telephone terminal Box for 2 pair telephone cables, dust tight and vermin proof. The work should also include supply of all materials and termination of two pair telephone wires & incoming Telephone cable etc. as required.	Each	1.00	800.00	800.00
116	15	S/F RJ 45 (Cat 6) Data cable termination Box: Supply and fixing of 9U powder coated GI server rack with port switch, spike & necessary patch codes with lockable acrylic front door, including power plugs, termination & testing etc. as required.	Each	2.00	25540.00	51080.00
117	16	S/F of Stainless steel hanging chain: Supply & fixing of stainless steel hanging chains for hanging the light fixtures from tress work etc., as per the direction of engineer in charge	Metre	35.00	20.00	700.00
118	17	S/F bare Cu wire for loop earth : Supply and laying one number of the following SWG good quality bare copper wire on surface for loop earthing along with existing XLPE insulated aluminium cable as required.	Metre	175.00	80.00	14000.00
a	a	10 SWG Cu				
119	18	S/L 25mm X 3mm Copper strip on ground : Supplying and laying 25 mm X 3 mm Copper strip, as earth conductor, 0.5 mtr below the ground level, including soldering, jointing surface must be lead plated and using brass nut & bolts, etc. as	Metre	75.00	680.00	51000.00
120	19	SITC of KSEB Meter board : Fabrication, supply, Installation, testing & commissioning one number cubicle type energy meter board made out of 2mm thick MS sheet, Powder coated, including provision for fixing KSEB 3phase energymeter with CTs providing & fixing of 3nos 100A cut out fuses, 3 nos of 100/5A class 1.0, 15VA CTs, control fuse, phase indication lamps and one number 100 A 4P SDF with HRC and provision for locking the incoming & Metering section and terminating 3.5x 50 sq. mm AL XLPE cable for	Each	1.00	35500.00	35500.00
121	20	SITC of Split Air-conditioned with stabilizer : Supplying, installation testing & commissioning of 2TR split Air conditioners suitable for single phase ,50 Hz, 230 Volts , A/C supply with hermitically sealed compressor with air cooled condenser , motor capacitor start run ,capacitor relay and overload protector interconnections including all accessories and remote with special	Each	10.00	50000.00	500000.00
		MISCELLANEOUS ITEMS.				
122	21	S/F DCP fire extinguisher (4kg) : Supply and Installation of 4 kg Dry Chemical Powder type (DCP) fire extinguishers having ISI mark along with mounting supports etc. as required.	Each	2.00	3850.00	7700.00
		DOCUMENTS & APPROVAL :				

123	22	Preparation of necessary forms, documents drawings etc. with necessary certifications & test reports and procuring approval and energisation certificate from Electrical Inspectorate & Kerala state Electricity Board, including all expenses & formalities shall be met by contractor except statutory fees etc. complete.	Job	1.00	25000.00	25000.00
		Total Non Schedule Items				1194000.00
		TOTAL FOR ELECTRICAL WORKS				1905534.46
		GRAND TOTAL				17178371.39