

TS Register No: 1276/2019-2020

AS Register No:666/2019-2020

**UP-GRADATION OF GOVT ITI MALAMPUZHA ON PAR  
WITH INTERNATIONAL STANDARDS-OTHER INFRASTRUCTURAL FACILITIES  
AND SERVICES, PHASE-1, REV-2**

Abstract Estimate

(Dsr year: 2016, Cost Index Applied for this estimate is 31.06%)

<b>1 EXISTING CLASS ROOM CONVERTED TO SMART CLASS ROOM</b>		
1	<p>od19452/2019_2020</p> <p>Supply, deliver and place Trademark registered branded (JALARAM Make JEC 501(C))/Equivalent Executive Visitor Net Chair, &lt;br&gt;Overall Size (approx): H-98 x W-58 x D-63.5 (cm) &lt;br&gt;Seat Height: 48 (cm) &lt;br&gt;Frame structure: Backrest made of Mesh and Seat from hot mould plywood of minimum 12 mm thickness of ergonomic design to avoid back pain. Chrome-plated Arm &amp; Frame 'Tapestry: Minimum average weight required 400 to 490 gms per sq. mtr. &lt;br&gt;Tapestry will be tested quality such as stain test, ultra violet test, glue test &lt;br&gt;and color fastening with average weight of 450 grams per square meter &lt;br&gt;Cushioning: PU foam having density of 50 kgs/m<sup>3</sup> for seat. Average &lt;br&gt;thickness of foam not less than 50 mm + 10 mm Polly foam. &lt;br&gt;Arm rest material: Polyurethane on Chrome &lt;br&gt;Shoes: Nylon Rubber</p>	
Net Total Quantity		16.000 each
Say 16.000 each @ Rs 13013.68 / each		<b>Rs 208218.88</b>
2	<p>od19455/2019_2020</p> <p>Supply deliver and place Trademark registered branded (JALARAM Make-JSD 601(D))/equivalent Two Seater Desk Cum Bench fitted on tubular frame with perforated seat and back for Senior Students.&lt;br&gt;Overall size : H-760 x W-1040 x D-1000 (mm) &lt;br&gt;Seat Height: 460 mm Desk Top (Curvica) of 25 mm thick wood based high quality branded (TESA) post formed Pre-laminated Particle Board (PLB )with 0.6mm laminated with 2mm PVC beading by hot melt glue&lt;br&gt;process all over 4 edges. &lt;br&gt;Bench Main frame tube &amp; Support tube of 32mm, 16swg ERW round tube. &lt;br&gt;Seat &amp; Back frame tube of 19mm, 16swg ERW round tube. &lt;br&gt;Seat &amp; Back support of 25x25x1.6mm (16swg) thick. square ERW tube. &lt;br&gt;Seat &amp; Back of 18swg. Perforated CRCA sheet IS 513. &lt;br&gt;Storage Bucket of 18swg. Perforated CRCA sheet IS 513. &lt;br&gt;Good quality PVC shoes &amp; cap. All steel parts will be epoxy polyester powder coated to the thickness not less than 50 microns finish after 10 tank anti-rust treatment and B grade phosphating.</p>	
Net Total Quantity		240.000 each
Say 240.000 each @ Rs 8936.66 / each		<b>Rs 2144798.40</b>
3	<p>od19465/2019_2020</p> <p>Supply, deliver and place of Trademark registered branded (JALARAM make- JMPT 4A) or approved equivalent Table for with 25 mm top, square tubular frame. Overall size: W-151 x D-90 x H-75(cm) Material Description: Main top 25mm thick wood based high quality Pre-laminated Particle Board(PLB) of TESA with 2mm PVC edge band by hot melt glue process for beading all over edge. Top frame of 1.21mm thick. (18swg) CRAC sheet IS 513. Table frame structure made up of prime quality MS ERW square tube 25x25mm of 18swg. Good quality PVC Shoes. All steel parts should be epoxy polyester powder coated to the thickness not less than 50 microns finish after 10 tank anti-rust treatment and B grade phosphating.</p>	

		Net Total Quantity	16.000 each
		Say 16.000 each @ Rs 8239.56 / each	<b>Rs 131832.96</b>
4	od19471/2019_2020 Sypply and installation of Podium : 600x600x 1200mm ht.		
		Net Total Quantity	16.000 each
		Say 16.000 each @ Rs 19686.26 / each	<b>Rs 314980.16</b>
5	14.46 Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.		
		Net Total Quantity	1738.739 sqm
		Say 1738.739 sqm @ Rs 14.15 / sqm	<b>Rs 24603.16</b>
6	14.53.1 Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade:One or more coats on old work		
		Net Total Quantity	1738.739 sqm
		Say 1738.739 sqm @ Rs 72.41 / sqm	<b>Rs 125902.09</b>
7	14.54.1 Painting with synthetic enamel paint of approved brand and manufacture of required colour to an give even shade:One or more coats on old work		
		Net Total Quantity	175.500 sqm
		Say 175.500 sqm @ Rs 67.23 / sqm	<b>Rs 11798.87</b>
8	11.47.2 Providing and laying Vitrified 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 brand & manufacturer,in all colours and shade, in skirting, riser of steps, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS : 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately).Size of Tile 600x600 mm		
		Net Total Quantity	590.662 sqm
		Say 590.662 sqm @ Rs 1625.93 / sqm	<b>Rs 960375.07</b>
<b>2 ROADS AND ANCILLARY WORKS</b>			
1	16.1 Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earth with lead upto 50 metres.		
		Net Total Quantity	4143.000 sqm
		Say 4143.000 sqm @ Rs 118.09 / sqm	<b>Rs 489246.87</b>

2	16.78.3 Construction of granular sub- base by Providing close graded Material conforming to specifications, mixing in a mechanical mix plant at OMC, Carriage of mixed material by tippers to work site, for all leads & lifts, spreading in uniform layers of specified thickness with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications and directions of Engineer-in- Charge.With material conforming to Grade - III ( size range 26.5 mm to 0.075 mm) having CBR Value - 20	
Net Total Quantity		414.300 cum
Say 414.300 cum @ Rs 2531.42 / cum		<b>Rs 1048767.31</b>
3	16.79 Providing , laying spreading and compacting graded stone aggregate ( size range 53 mm to 0.075 mm) to wet mix macadam (WMM) specification including premixing the material with water at OMC in mechanical mix plant, carriage of mixed material by tipper to site, for all leads & lifts, laying in uniform layers with mechanical paver finisher in sub - base / base course on well prepared surface and compacting with vibratory roller of 8 to 10 tonne capacity to achieve the desired density, complete as per specifications and directions of Engineer - in- Charge.	
Net Total Quantity		621.450 cum
Say 621.450 cum @ Rs 2794.53 / cum		<b>Rs 1736660.67</b>
4	51.16.PC.1pb Primer Coat - Bitumen Emulsion (SS-1) - Using Packed Bitumen Rates Providing and applying primer coat with bitumen emulsion (SS-1) on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.70 - 1.0 kg/sqm using mechanical means as per Technical Specification Clause 502 (low porosity).	
Net Total Quantity		4143.000 sqm
Say 4143.000 sqm @ Rs 61.66 / sqm		<b>Rs 255457.38</b>
5	od19480/2019_2020 2.5 cm premix carpet surfacing with 2.25 cum and 1.12 cum of stone chippings of 13.2 mm and 11.2 mm size respectively per 100 sqm and 52 kg and 56 kg of hot bitumen per cum of stone chippings of 13.2 mm and 11.2 mm size respectively, including a tack coat with hot straight run bitumen, including consolidation with road roller of 6 to 9 tonne capacity etc. complete ( tack coat to be paid for separately): With paving Asphalt grade VG - 10 heated and then mixed with solvent at the rate of 70 grams per kg of asphalt (DSR ITEM NO.16.33.1)	
Net Total Quantity		4143.000 sqm
Say 4143.000 sqm @ Rs 222.31 / sqm		<b>Rs 921030.33</b>
6	51.16.31.1.2 Tack Coat - RS Bitumen Emulsion - On bituminous surface @ 0.25 kg /sqm Providing and applying tack coat using bitumen emulsion conforming to IS : 8887, using emulsion pressure distributor including preparing the surface & cleaning with mechanical broom. 1. With Rapid Setting Bitumen Emulsion 2. On bituminous surface @ 0.25 kg /sqm	
Net Total Quantity		4143.000 sqm

Say 4143.000 sqm @ Rs 11.35 / sqm		<b>Rs 47023.05</b>
7	od19487/2019_2020 Providing and laying seal coat of premixed fine aggregate ( passing 2.36 mm and retained on 180 micron sieve) with bitumen using 128 kg of bitumen of grade VG -10 bitumen per cum of fine aggregate and 0.60 cum of fine aggregate per 100 sqm of road surface, including rolling and finishing with road roller all complete.(DSR ITEM NO 16.40)	
Net Total Quantity		4143.000 sqm
Say 4143.000 sqm @ Rs 77.97 / sqm		<b>Rs 323029.71</b>
8	od19491/2019_2020 Providing and laying average 100 mm thick sub grade of compacted bed of 20 mm thick nominal size stone aggregate mixed with sand Zone V, including spreading, well ramming, consolidating and finishing smooth etc. all complete as per direction of Engineer-in-charge.	
Net Total Quantity		32.231 sqm
Say 32.231 sqm @ Rs 256.99 / sqm		<b>Rs 8283.04</b>
9	16.42 Cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size ) in pavements, laid to required slope and camber in panels as required including consolidation finishing and tamping complete	
Net Total Quantity		32.231 cum
Say 32.231 cum @ Rs 7213.28 / cum		<b>Rs 232491.23</b>
10	16.45 Providing and fixing in position pre- moulded joint filler in expansion joints.	
Net Total Quantity		150.000 per cm depth per cm width per meter length
Say 150.000 per cm depth per cm width per meter length @ Rs 2.88 / per cm depth per cm width per meter length		<b>Rs 432.00</b>
11	16.90 Providing and laying tactile tile (for vision impaired persons as per standards) of size 300x300x9.8mm having with water absorption less than 0.5% and conforming to IS: 15622 of approved make in all colours and shades in for outdoor floors such as footpath, court yard, multi modals location etc., laid on 20mm thick base of cement mortar 1:4 (1 cement : 4 coarse sand) in all shapes & patterns including grouting the joints with white cement mixed with matching pigments etc. complete as per direction of Engineer-in-Charge.	
Net Total Quantity		322.310 sqm
Say 322.310 sqm @ Rs 1900.96 / sqm		<b>Rs 612698.42</b>

12	16.69 Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature jointed with cement mortar 1:3 ( 1 cement : 3 coarse sand) , including making joints with or without grooves ( thickness of joints except at sharp curve shall not to more than 5 mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge ( length of finished kerb edging shall be measured for payment ). ( Precast C.C. kerb stone shall be approved by Engineer-in-Charge)	
Net Total Quantity		48.347 cum
Say 48.347 cum @ Rs 6569.58 / cum		<b>Rs 317619.48</b>
13	od19531/2019_2020 two coats after filling the surface with synthetic enamel paint in all shades on new plastered concrete surfaces	
Net Total Quantity		128.924 sqm
Say 128.924 sqm @ Rs 88.78 / sqm		<b>Rs 11445.87</b>
14	od19532/2019_2020 Providing and fixing PVC pipe pieces in weep holes by hacking, jointing and make good, 110 mm pipe 4 kgf/cm <sup>2</sup>	
Net Total Quantity		494.000 metre
Say 494.000 metre @ Rs 221.92 / metre		<b>Rs 109628.48</b>
15	od70505/2019_2020 Construct foundation for lighting pole using M30 concrete of overall size 65x65x160 cm and 4 nos M20x75cm long anchor bolt set in concrete using 4mm thick anchor plate as per the drawing and specification.	
Net Total Quantity		30.000 each
Say 30.000 each @ Rs 10154.28 / each		<b>Rs 304628.40</b>
16	od19534/2019_2020 Construct RC drain using 1:1.5:3 mix wall and base 10cm thick of average inside dimensions 40cm wide x 60cm deep covered with 10cm (1:1.5:3) mix precast RC slab etc as per drawing and specification	
Net Total Quantity		818.000 metre
Say 818.000 metre @ Rs 5346.88 / metre		<b>Rs 4373747.84</b>
<b>3 LAND DEVELOPMENT FOR MAIN BUILDING AND PLAYGROUND</b>		
1	2.31 Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared	
Net Total Quantity		4600.000 sqm
Say 4600.000 sqm @ Rs 9.44 / sqm		<b>Rs 43424.00</b>

2	2.33.1 Felling trees of the girth (measured at a height of 1 m above ground level) including cutting of trunks and branches, removing the roots and stacking of serviceable material and disposal of unserviceable material. Beyond 30 cm girth up to and including 60 cm girth	
Net Total Quantity		4.000 each
Say 4.000 each @ Rs 287.28 / each		<b>Rs 1149.12</b>
3	2.33.2 Felling trees of the girth (measured at a height of 1 m above ground level) including cutting of trunks and branches, removing the roots and stacking of serviceable material and disposal of unserviceable material. Beyond 60 cm girth up to and including 120 cm girth	
Net Total Quantity		1.000 each
Say 1.000 each @ Rs 1274.82 / each		<b>Rs 1274.82</b>
4	2.33.3 Felling trees of the girth (measured at a height of 1 m above ground level) including cutting of trunks and branches, removing the roots and stacking of serviceable material and disposal of unserviceable material. Beyond 120 cm girth up to and including 240 cm girth	
Net Total Quantity		4.000 each
Say 4.000 each @ Rs 5903.27 / each		<b>Rs 23613.08</b>
5	2.2.1 Earth work in rough excavation, banking excavated earth in layers not exceeding 20 cm in depth, breaking clods, watering, rolling each layer with 1/2 tonne roller or wooden or steel rammers, and rolling every 3rd and top-most layer with power roller of minimum 8 tonnes and dressing up in embankments for roads, flood banks, marginal banks and guide banks or filling up ground depressions, lead up to 50 m and lift up to 1.5 m. All kinds of soil	
Net Total Quantity		450.000 cum
Say 450.000 cum @ Rs 560.81 / cum		<b>Rs 252364.50</b>
6	2.28.1 Surface dressing of the ground including removing vegetation and in-equalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up to 1.5 m. All kinds of soil	
Net Total Quantity		15690.000 sqm
Say 15690.000 sqm @ Rs 18.28 / sqm		<b>Rs 286813.20</b>
7	4.1.8 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level: 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40 nominal size)	
Net Total Quantity		7.500 cum
Say 7.500 cum @ Rs 5869.06 / cum		<b>Rs 44017.95</b>

8	7.1.1 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 20 mm nominal size) up to plinth level with:Cement mortar 1:6 (1 cement : 6 coarse sand)	
Net Total Quantity		196.875 cum
Say 196.875 cum @ Rs 5197.64 / cum		<b>Rs 1023285.38</b>
9	5.1.2 Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:1:5:3 (1 cement 1.5 coarse sand :3 graded stone aggregate 20 mm nominal size	
Net Total Quantity		13.125 cum
Say 13.125 cum @ Rs 8145.84 / cum		<b>Rs 106914.15</b>
10	5.22.6 Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth levelThermo - Mechanically Treated bars of grade Fe-500D or more	
Net Total Quantity		4687.500 kilogram
Say 4687.500 kilogram @ Rs 74.18 / kilogram		<b>Rs 347718.75</b>
<b>4 EXTERNAL WATER SUPPLY</b>		
1	50.18.9.6.1 Providing and fixing PVC pipes includings jointing of pipes with one step PVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge. 50 mm dia 10Kgf/cm2	
Net Total Quantity		20.000 metre
Say 20.000 metre @ Rs 224.52 / metre		<b>Rs 4490.40</b>
2	18.17.5 Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :65 mm nominal bore	
Net Total Quantity		1.000 each
Say 1.000 each @ Rs 1686.48 / each		<b>Rs 1686.48</b>
3	18.32.1 Constructing masonry chamber 30x30x50 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for stop cock, with C.I. surface box 100x100x75 mm (inside) with hinged cover fixed in cement concrete slab 1:2:4 mix (1 cement : 2 coarse sand: 4 graded stone aggregate 20 mm nominal size), i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design:With common burnt clay F.P.S (non modular) bricks of class designation 7.5	
Net Total Quantity		1.000 each
Say 1.000 each @ Rs 1566.63 / each		<b>Rs 1566.63</b>

4	od19461/2019_2020 Extra over for Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all - round underground PVC pipes.	
Net Total Quantity		9.245 cum
Say 9.245 cum @ Rs 5516.39 / cum		<b>Rs 50999.03</b>
5	od19504/2019_2020 Providing and fixing PVC pipes includings of pipes with one step PVC solvent cement, trenching and refilling & testing of joints complete as per direction of Engineer in Charge. 75 mm dia 10Kgf/cm2	
Net Total Quantity		60.000 metre
Say 60.000 metre @ Rs 365.41 / metre		<b>Rs 21924.60</b>
6	od19507/2019_2020 Providing and fixing PVC pipes includings jointing of pipes with one step PVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge. 63 mm dia 10Kgf/cm2	
Net Total Quantity		360.000 metre
Say 360.000 metre @ Rs 270.74 / metre		<b>Rs 97466.40</b>
7	od19509/2019_2020 Supply, fixing, testing , commissioning 65mm dia Butterfly valve (Manual) with CI body SS disk, Nitrile rubber seal and O-ring P16 pressure rating for water circulation as specified.	
Net Total Quantity		3.000 each
Say 3.000 each @ Rs 3896.44 / each		<b>Rs 11689.32</b>
8	od19513/2019_2020 Supply ,Installation testing and commissioning of Kirloskar make model KS4E 3012 or approved equivalent 3HP, Single phase ,average 10m head 3600 LPH capacity bore well submersible pump including all accessories.	
Net Total Quantity		2.000 each
Say 2.000 each @ Rs 12579.44 / each		<b>Rs 25158.88</b>
9	18.19.5.2 Providing and fixing gun metal non-return valve of approved quality (screwed end):65 mm nominal boreVertical	
Net Total Quantity		3.000 each
Say 3.000 each @ Rs 2333.06 / each		<b>Rs 6999.18</b>
10	od19518/2019_2020 Supply installation testing and commissioning of water treatment plant 5000 LPH capacity with Sand filter,Carbon filter, Iron removal filter,Float switches 4 nos,Filter feed pump (5000 lph,30-35 m head),chemical dosing pump((0-10) lph with all accessories complete as per the direction of engineer in charge	
Net Total Quantity		1.000 each
Say 1.000 each @ Rs 295296.62 / each		<b>Rs 295296.62</b>

11	od19521/2019_2020 Supply ,Installation testing and commissioning of Kirloskar make or approved equivalent 1HP, Single phase ,average 10m head 2500 LPH capacity submersible pump including all accessories.	
Net Total Quantity		2.000 each
Say 2.000 each @ Rs 24686.69 / each		<b>Rs 49373.38</b>
<b>5 EXTERNAL SEWERAGE SYSTEM</b>		
1	50.18.9.9.1 Providing and fixing PVC pipes includings jointing of pipes with one step PVC solvent cement, trenching, refilling & testing of Joints complete as per direction of engineer in charge.110 mm dia 6Kgf/cm2	
Net Total Quantity		40.000 metre
Say 40.000 metre @ Rs 428.72 / metre		<b>Rs 17148.80</b>
2	50.18.9.10.1 Providing and fixing PVC pipes includings jointing of pipes with one step pvc solvent cement, trenching , refilling & testing of joints complete as per direction of Engineer in Charge. 150 mm dia 6 Kgf/cm2	
Net Total Quantity		170.000 metre
Say 170.000 metre @ Rs 805.57 / metre		<b>Rs 136946.90</b>
3	19.7.1.1 Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand) with R.C.C. top 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 40 mm nominal size,) inside plastering 12 mm 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 nominal size ) finished with a floating coat of neat cement complete as per standard design: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 (weigh of cover 23 kg and weight of frame 15 kg):With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	
Net Total Quantity		6.000 each
Say 6.000 each @ Rs 11315.85 / each		<b>Rs 67895.10</b>
4	19.7.2.1 Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand) with R.C.C. top 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 40 mm nominal size,) inside plastering 12 mm 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 nominal size ) finished with a floating coat of neat cement complete as per standard design: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):With common burnt clay F.P.S ( non modular) bricks of class designation 7.5	
Net Total Quantity		4.000 each
Say 4.000 each @ Rs 24144.40 / each		<b>Rs 96577.60</b>

5	19.7.3.1 Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand) with R.C.C. top 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 40 mm nominal size,) inside plastering 12 mm 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 nominal size ) finished with a floating coat of neat cement complete as per standard design:Inside size 120x 90 cm and 90 cm deep including C.I. cover with frame ( heavy duty ) 560 mm internal diameter, total weight of cover and frame to be not less than 208 kg ( weight of cover 108 kg and weight of frame 100 kg)With common burnt clay F.P.S. ( non modular) bricks of class designation 7.5	
Net Total Quantity		14.000 each
Say 14.000 each @ Rs 30121.85 / each		<b>Rs 421705.90</b>
6	19.8.1.1 Extra for depth for manholesSize 90x80 cmWith common burnt clay F.P.S. ( non modular ) bricks of class designation 7.5	
Net Total Quantity		0.900 metre
Say 0.900 metre @ Rs 7494.80 / metre		<b>Rs 6745.32</b>
7	19.8.2.1 Extra for depth for manholesSize 120x90 cmWith common burnt clay F.P.S. ( non modular ) bricks of class designation 7.5	
Net Total Quantity		2.100 metre
Say 2.100 metre @ Rs 8978.53 / metre		<b>Rs 18854.91</b>
8	19.33 Constructing soak pit 1.20x1.20 m filled with brickbats including S.W. drain pipe 100 mm diameter and 1.20 m long complete as per standard design.	
Net Total Quantity		1.000 each
Say 1.000 each @ Rs 2773.75 / each		<b>Rs 2773.75</b>
9	od19496/2019_2020 Supplying and installing ready made reinforced concrete Septic tank for 100 users cylindrical shape 5000L(1.60m dia x 2.50m long) including the cost of carriage, trenching, placing at the level below ground level as specified as per the direction of engineer in charge (Provision for CC/RCC/Sand/06mm aggregate for the preparation of bed shall be paid separately)	
Net Total Quantity		3.000 each
Say 3.000 each @ Rs 52251.48 / each		<b>Rs 156754.44</b>
<b>6 RAIN WATER DRAINAGE</b>		
1	50.18.9.9.1 Providing and fixing PVC pipes includings jointing of pipes with one step PVC solvent cement, trenching, refilling & testing of Joints complete as per direction of engineer in charge.110 mm dia 6Kg/cm2	
Net Total Quantity		20.000 metre

Say 20.000 metre @ Rs 428.72 / metre		<b>Rs 8574.40</b>
2	50.18.9.10.1 Providing and fixing PVC pipes includings jointing of pipes with one step pvc solvent cement, trenching , refilling & testing of joints complete as per direction of Engineer in Charge. 150 mm dia 6 Kgf/cm2	
Net Total Quantity		340.000 metre
Say 340.000 metre @ Rs 805.57 / metre		<b>Rs 273893.80</b>
3	19.7.1.1 Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand) with R.C.C. top 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 40 mm nominal size,) inside plastering 12 mm 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 nominal size ) finished with a floating coat of neat cement complete as per standard design: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 (weigh of cover 23 kg and weight of frame 15 kg):With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	
Net Total Quantity		22.000 each
Say 22.000 each @ Rs 11315.85 / each		<b>Rs 248948.70</b>
4	19.8.1.1 Extra for depth for manholesSize 90x80 cmWith common burnt clay F.P.S. ( non modular ) bricks of class designation 7.5	
Net Total Quantity		3.300 metre
Say 3.300 metre @ Rs 7494.80 / metre		<b>Rs 24732.84</b>
5	od19461/2019_2020 Extra over for Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all - round underground PVC pipes.	
Net Total Quantity		43.418 cum
Say 43.418 cum @ Rs 5516.39 / cum		<b>Rs 239510.62</b>
6	od19467/2019_2020 Supply all material and construct RCC rain water filtration tank cum collection tank of overall size 5.1x2.65x1.60m using 1:1.5:3 concrete mix etc. all complete as per the drawing and specification.	
Net Total Quantity		1.000 each
Say 1.000 each @ Rs 215339.93 / each		<b>Rs 215339.93</b>
<b>7 EXTERNAL FIRE PROTECTION SYSTEM</b>		

1	od19781/2019_2020 FIRE PUMPS (Jockey) : - "Supplying, installing, testing & commissioning of electric driven pressurization pump (jockey pump) suitable for automatic operation and consisting of following: complete in all respect as required : "Horizontal type, multistage, centrifugal pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal to ensure a minimum pressure of 3.5 kg/sq.cm. at highest and farthest outlet at specified flow of 180 lpm at 80m. head conforming to IS 1520." "Make :- ISI Approved. 	
Net Total Quantity		1.000 each
Say 1.000 each @ Rs 49785.72 / each		<b>Rs 49785.72</b>
2	od19792/2019_2020 FIRE PUMPS (Electrical) : - Supplying, installing, testing & commissioning of electric driven main fire pump suitable for automatic operation and consisting of following: complete in all respect as required :Horizontal type, multistage, centrifugal, split casing pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal to ensure a minimum pressure of 3.5 kg/sq.cm. at highest and farthest outlet at specified flow of 1620 lpm at 50 m. head conforming to IS 1520. Suitable HP squirrel cage induction motor, TEFC, synchronous speed 1500 RPM, suitable for operation on 415 volts, 3 phase 50 Hz. AC with IP 55 protection for enclosure, horizontal foot mounted type with Class – 'F' insulation, conforming to IS – 325.Make :- ISI Approved. 	
Net Total Quantity		1.000 each
Say 1.000 each @ Rs 273055.08 / each		<b>Rs 273055.08</b>
3	od19795/2019_2020 FIRE PUMPS (Diesel) : - Supplying, installing, testing & commissioning of diesel engine driven main fire pump suitable for automatic operation and consisting of following: complete in all respect as required :Horizontal type, multistage, centrifugal pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal to ensure a minimum pressure of 3.5 kg/sq.cm. at highest and farthest outlet at specified flow of 1620 lpm at 50-m. head conforming to IS 1520."Make :- ISI Approved. 	
Net Total Quantity		1.000 each
Say 1.000 each @ Rs 354602.00 / each		<b>Rs 354602.00</b>
4	od19462/2019_2020 Providing and fixing Testing arrangement in the pump house comprising one no. 50mm dia. GM ball valve and 10RM of 50mm dia MS pipe (C Class) confirming to IS 1239.Make :- ISI Approved.	
Net Total Quantity		1.000 each
Say 1.000 each @ Rs 12007.34 / each		<b>Rs 12007.34</b>
5	od19468/2019_2020 Supplying, testing, installation & commissioning of pressure switches for Hydrant, Standby and Jockey Pumps, including necessary wiring upto control panel & other materials. Make :- ISI Approved. 	
Net Total Quantity		3.000 each
Say 3.000 each @ Rs 3610.67 / each		<b>Rs 10832.01</b>

6	od19473/2019_2020 Providing & fixing pressure gauges of not less than 100mm dia dial of pressure range 0-10 kg/cmsq complete with shut off valve duly calibrated before installation.Make:- ISI Approved. 		
		Net Total Quantity	3.000 each
		Say 3.000 each @ Rs 970.99 / each	<b>Rs 2912.97</b>
7	od19476/2019_2020 Providing and fixing cast 65 mm Dia. iron Butterfly valve of the following size complete with S.S. 304 disc, bolts, nuts, washers and neoprene gaskets as per specifications. Make:- ISI Approved.		
		Net Total Quantity	4.000 each
		Say 4.000 each @ Rs 3893.79 / each	<b>Rs 15575.16</b>
8	od19482/2019_2020 Providing and fixing 80mm Dia. cast iron Butterfly valve of the following size complete with S.S. 304 disc, bolts, nuts, washers and neoprene gaskets as per specifications. 		
		Net Total Quantity	2.000 each
		Say 2.000 each @ Rs 4336.78 / each	<b>Rs 8673.56</b>
9	od19488/2019_2020 Providing and fixing 150mm Dia. cast iron Butterfly valve of the following size complete with S.S. 304 disc, bolts, nuts, washers and neoprene gaskets as per specifications.		
		Net Total Quantity	2.000 each
		Say 2.000 each @ Rs 9146.76 / each	<b>Rs 18293.52</b>
10	od19492/2019_2020 Providing and fixing 150mm dia. Cast iron Non-Return Valve. Make:- ISI Approved.  		
		Net Total Quantity	1.000 each
		Say 1.000 each @ Rs 7011.71 / each	<b>Rs 7011.71</b>
11	od19585/2019_2020 Providing 63mm (2½ )" dia 15 m long canvas hose pipe complete with stainless steel male & female coupling stainless steel wire wound with the pipe The pipe shall confirm to IS. 4927. Make: ISI Approved.		
		Net Total Quantity	17.000 each
		Say 17.000 each @ Rs 5267.48 / each	<b>Rs 89547.16</b>
12	od19593/2019_2020 M.S Hose Cabinet : - Providing & fixing M.S Hose cabinet door with powder coating of postal red color (of size minimum 1200mm wide, 2100mm height) made of M.S sheet 14 G with glass front door and locking arrangement to accommodate 2-hoses, one branch pipe and to accommodate F.A. hose reel in addition for internal hydrant complete as per direction of Engineer incharge.		
		Net Total Quantity	17.000 each
		Say 17.000 each @ Rs 6147.95 / each	<b>Rs 104515.15</b>

13	od19596/2019_2020 Providing and fixing 63 mm dia standard stainless steel short Branch Pipe female instantaneous inlet, male threaded outlet, complete with hexagonal base nozzle as per IS 903 with 20 mm nozzle complete with fixing clamps. Make: Essel/Priyanka/Newage	
Net Total Quantity		17.000 each
Say 17.000 each @ Rs 2676.48 / each		<b>Rs 45500.16</b>
14	od19597/2019_2020 Supplying and fixing stainless steel Single headed internal hydrant valves with instantaneous stainless steel couplings of 63mm dia. With cast iron wheel ISI marked conforming to IS 5290 (Type-A) with blank stainless steel cap and chain, stainless steel orifice plate for reducing the pressure upto 3.5 kg/cm2 at outlet. Make:- ISI Approved	
Net Total Quantity		17.000 each
Say 17.000 each @ Rs 8206.68 / each		<b>Rs 139513.56</b>
15	od19796/2019_2020 Above Ground Piping :- Providing, fixing, welding joints and testing of 65 mm Dia. heavy class MS ERW Black pipes as per relevant IS 1239/3589 with special accessories tees, elbows, flanged joints, rubber insertion, nuts, bolts, washers or welded joint with flange joints on bends, including fixing the pipe with suitable flat iron strip clamps/brackets structural members dash fastener,civil breakage,making good the same etc. painting with a primer coat and two coats of postal red enamel etc. complete as required. (for wet riser system)	
Net Total Quantity		18.000 metre
Say 18.000 metre @ Rs 689.32 / metre		<b>Rs 12407.76</b>
16	od19514/2019_2020 Above Ground Piping :- Providing, fixing, welding joints and testing of 80 mm Dia. heavy class MS ERW Black pipes as per relevant IS 1239/3589 with special accessories tees, elbows, flanged joints, rubber insertion, nuts, bolts, washers or welded joint with flange joints on bends, including fixing the pipe with suitable flat iron strip clamps/brackets structural members dash fastener,civil breakage,making good the same etc. painting with a primer coat and two coats of postal red enamel etc. complete as required. (for wet riser system)	
Net Total Quantity		38.000 metre
Say 38.000 metre @ Rs 1119.26 / metre		<b>Rs 42531.88</b>
17	od19823/2019_2020 Above Ground Piping :- Providing, fixing, welding joints and testing of 100 mm Dia. heavy class MS ERW Black pipes as per relevant IS 1239/3589 with special accessories tees, elbows, flanged joints, rubber insertion, nuts, bolts, washers or welded joint with flange joints on bends, including fixing the pipe with suitable flat iron strip clamps/brackets structural members dash fastener,civil breakage,making good the same etc. painting with a primer coat and two coats of postal red enamel etc. complete as required. (for wet riser system)	
Net Total Quantity		18.000 metre
Say 18.000 metre @ Rs 1313.44 / metre		<b>Rs 23641.92</b>

18	od19800/2019_2020 Above Ground Piping :- Providing, fixing, welding joints and testing of 150 mm Dia. heavy class MS ERW Black pipes as per relevant IS 1239/3589 with special accessories tees, elbows, flanged joints, rubber insertion, nuts, bolts, washers or welded joint with flange joints on bends, including fixing the pipe with suitable flat iron strip clamps/brackets structural members dash fastener,civil breakage,making good the same etc. painting with a primer coat and two coats of postal red enamel etc. complete as required. (for wet riser system)	
Net Total Quantity		4.000 metre
Say 4.000 metre @ Rs 1829.67 / metre		<b>Rs 7318.68</b>
19	od19825/2019_2020 Below Ground Piping :- Providing, fixing, welding joints and testing of 150 mm Dia. heavy class MS ERW Black pipes as per relevant IS 1239/3589 with special accessories tees, elbows, flanged joints, rubber insertion, nuts, bolts, washers or welded joint with flange joints on bends and other fitting etc, painting with one coat of anti-corrosive paint and two coats of epoxy paint and and wrapping with polymer corrosion protection tape confirming to IS 10221 with proper overlapping, trimming etc. complete as required . (for wet riser system)	
Net Total Quantity		533.000 metre
Say 533.000 metre @ Rs 2097.95 / metre		<b>Rs 1118207.35</b>
20	od19829/2019_2020 Below Ground Piping :- Providing, fixing, welding joints and testing of 100 mm Dia. heavy class MS ERW Black pipes as per relevant IS 1239/3589 with special accessories tees, elbows, flanged joints, rubber insertion, nuts, bolts, washers or welded joint with flange joints on bends and other fitting etc, painting with one coat of anti-corrosive paint and two coats of epoxy paint and and wrapping with polymer corrosion protection tape confirming to IS 10221 with proper overlapping, trimming etc. complete as required	
Net Total Quantity		510.000 metre
Say 510.000 metre @ Rs 1572.55 / metre		<b>Rs 802000.50</b>
21	od19833/2019_2020 Below Ground Piping :- Providing, fixing, welding joints and testing of 80 mm Dia. heavy class MS ERW Black pipes as per relevant IS 1239/3589 with special accessories tees, elbows, flanged joints, rubber insertion, nuts, bolts, washers or welded joint with flange joints on bends and other fitting etc, painting with one coat of anti-corrosive paint and two coats of epoxy paint and and wrapping with polymer corrosion protection tape confirming to IS 10221 with proper overlapping, trimming etc. complete as required	
Net Total Quantity		340.000 metre
Say 340.000 metre @ Rs 1331.86 / metre		<b>Rs 452832.40</b>
22	od19527/2019_2020 Providing and fixing 25 mm dia. Air Releasing Valve. Make:- ISI Approved.	
Net Total Quantity		6.000 each
Say 6.000 each @ Rs 1579.15 / each		<b>Rs 9474.90</b>

23	od19924/2019_2020 Providing and fixing Four Way Fire Brigade Inlet to Hydrant outside the Building (Butterfly valve and non return valve to be paid separately) complete in all respects : Make:- ISI Approved.	
Net Total Quantity		1.000 each
Say 1.000 each @ Rs 12118.65 / each		<b>Rs 12118.65</b>
24	od19529/2019_2020 Providing and fixing 50 mm dia. Cast iron Non-Return Valve. Make:- ISI Approved.	
Net Total Quantity		1.000 each
Say 1.000 each @ Rs 3649.82 / each		<b>Rs 3649.82</b>
25	od19530/2019_2020 Providing and fixing 65 mm dia. Cast iron Non-Return Valve. Make:- ISI Approved.	
Net Total Quantity		2.000 each
Say 2.000 each @ Rs 2427.23 / each		<b>Rs 4854.46</b>
<b>8 EXTERNAL LIGHTING</b>		
1	od19458/2019_2020 Supplying and laying 8 SWG Cu wire at 0.50 metre below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required.	
Net Total Quantity		40.000 metre
Say 40.000 metre @ Rs 103.90 / metre		<b>Rs 4156.00</b>
2	od19474/2019_2020 Supply of 16 sqmm 3 core PVC/ XLPE insulated armoured cable with aluminium conductors for working voltages up to and including 1100 volts conforming IS 1584/part I/1988 for PVC IS 7098 part I for XLPE	
Net Total Quantity		240.000 metre
Say 240.000 metre @ Rs 151.00 / metre		<b>Rs 36240.00</b>
3	1.14.1 Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface / recessed medium class PVC conduit as required 2x1.5 sq.mm + 1x1.5 sq.mm earth wire	
Net Total Quantity		200.000 metre
Say 200.000 metre @ Rs 146.79 / metre		<b>Rs 29358.00</b>
4	od19477/2019_2020 Supply of 4 sqmm 3 core PVC/ XLPE insulated armoured cable with aluminium conductors for working voltages up to and including 1100 volts conforming IS 1584/part I/1988 for PVC IS 7098 part I for XLPE	
Net Total Quantity		800.000 metre
Say 800.000 metre @ Rs 95.00 / metre		<b>Rs 76000.00</b>

5	od69954/2019_2020 SITC of 5 metre Hot dipped galvanised Octogonal pole in single section with 70mm top diameter, 130mm bottom diameter, 3mm sheet thickness, base plate dimensions of 200 x 200x 12 mm with 1.0 M long single arm bracket with 36W LED street light complete with all other accessories as required.	
Net Total Quantity		10.000 each
Say 10.000 each @ Rs 21848.49 / each		<b>Rs 218484.90</b>
6	od69949/2019_2020 SITC of 6 metre Hot dipped galvanised Octogonal pole in single section with 70mm top diameter, 130mm bottom diameter, 3mm sheet thickness, base plate dimensions of 200 x 200x 12 mm with 1.0 M long single arm bracket with 45W LED street light complete with all other accessories as required.	
Net Total Quantity		20.000 each
Say 20.000 each @ Rs 17742.49 / each		<b>Rs 354849.80</b>
7	od69950/2019_2020 SITC Of feeder pillar complete with the following accessories. Incomer: 40A, DP Isolator. 40A, DP, RCCB, 100mA. Timer control with contactor. Auto/ Manual switch. Outgoing: 10A, SP MCB - 4 Nos.	
Net Total Quantity		2.000 each
Say 2.000 each @ Rs 19432.33 / each		<b>Rs 38864.66</b>
8	14.14.2 Providing, laying and fixing following dia RCC pipe NP2 class (light duty) in ground complete with RCC collars, jointing with cement mortar 1:2 (1 cement : 2 fine sand) including trenching (75 cm deep) and refilling etc as required.150 mm dia	
Net Total Quantity		46.000 metre
Say 46.000 metre @ Rs 530.79 / metre		<b>Rs 24416.34</b>
9	7.1.1 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.Upto 35 sq. mm	
Net Total Quantity		820.000 metre
Say 820.000 metre @ Rs 269.98 / metre		<b>Rs 221383.60</b>
10	7.5.1 Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in the existing RCC/ HUME/ METAL pipe as required.Upto 35 sq. mm	
Net Total Quantity		80.000 metre
Say 80.000 metre @ Rs 23.59 / metre		<b>Rs 1887.20</b>
11	7.7.1 Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on wall surface as required.Upto 35 sq. mm (clamped with 1mm thick saddle)	
Net Total Quantity		40.000 metre

Say 40.000 metre @ Rs 32.77 / metre		<b>Rs 1310.80</b>
12	9.1.8 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.3 X 16 sq. mm (25mm)	
Net Total Quantity		4.000 set
Say 4.000 set @ Rs 264.74 / set		<b>Rs 1058.96</b>
13	7.8.1 Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KVgrade of following size on cable tray as required.Upto 35 sq. mm (clamped with 1mm thick saddle)	
Net Total Quantity		40.000 metre
Say 40.000 metre @ Rs 27.52 / metre		<b>Rs 1100.80</b>
14	5.2 Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providingmasonry enclosure with cover plate having locking arrangement and watering pipe etc. withcharcoal/ coke and salt as required	
Net Total Quantity		2.000 set
Say 2.000 set @ Rs 4812.52 / set		<b>Rs 9625.04</b>
<b>9 EXISTING SMART CLASSROOM - ELECTRICAL AND ELV WORKS</b>		
1	od19448/2019_2020 Supply, installation, testing and commissioning of Cat6 I/O for Patch Panel Shuttered.	
Net Total Quantity		24.000 no
Say 24.000 no @ Rs 260.00 / no		<b>Rs 6240.00</b>
2	od19608/2019_2020 Supply, installation, testing and commissioning of Bio Metric Finger Print scan attendance system with LCD/LED display & keypad & TCPIP LAN, USB Connectivity along with Attendance monitoring & report software (Web based Terminal)	
Net Total Quantity		16.000 no
Say 16.000 no @ Rs 7600.00 / no		<b>Rs 121600.00</b>
3	od19459/2019_2020 Supply Installation testing and Commissioning of 10/100/1000 Mbps 8 Port Network Switch to provide networks and internet on class room etc.	
Net Total Quantity		1.000 no
Say 1.000 no @ Rs 4130.00 / no		<b>Rs 4130.00</b>
4	od19464/2019_2020 Supply, Installation, testing and commissioning of Cat6 16 Port un loaded Patch Panel.	
Net Total Quantity		1.000 no

		Say 1.000 no @ Rs 874.00 / no	<b>Rs 874.00</b>
5	od19470/2019_2020	Supply, Installation, testing and commissioning of Cat6 8 Port un loaded Patch Panel.	
		Net Total Quantity	1.000 no
		Say 1.000 no @ Rs 474.00 / no	<b>Rs 474.00</b>
6	od19475/2019_2020	Supply Installation testing and Commissioning of 10/100/1000 Mbps 16 Port Network Switch to provide networks and internet on class room etc.	
		Net Total Quantity	1.000 no
		Say 1.000 no @ Rs 7375.00 / no	<b>Rs 7375.00</b>
7	od19478/2019_2020	Supply Installation testing and Commissioning of 10/100/1000 Mbps 8 Port Network Switch to provide networks and internet on class room etc.	
		Net Total Quantity	1.000 no
		Say 1.000 no @ Rs 4130.00 / no	<b>Rs 4130.00</b>
8	od19610/2019_2020	Supply, installation, testing and commissioning of 16 Port 10/100/1000 Mbps PoE Switch.	
		Net Total Quantity	1.000 no
		Say 1.000 no @ Rs 14220.00 / no	<b>Rs 14220.00</b>
9	od19611/2019_2020	Supply and drawing of CAT6 4 pair cable including all necessary connector.	
		Net Total Quantity	1100.000 metre
		Say 1100.000 metre @ Rs 39.00 / metre	<b>Rs 42900.00</b>
10	od19489/2019_2020	Supply, Installation, Testing and commissioning Of distribution box for CCTV 6Ux600Wx600D With Front Glass Door,Side Openable Panels with Lock & Key,4Way 5A PDU,1U Cable Manager,Cooling Fan,H/W Kit10	
		Net Total Quantity	1.000 no
		Say 1.000 no @ Rs 7611.00 / no	<b>Rs 7611.00</b>
11	od19615/2019_2020	Supply, installation, testing and commissioning of wall mounted 15Ux600Wx600D With Front Glass Door With Lock & Key,Side Openable Panels with Lock & Key,6Way 5A PDU,1U Cable Manager,Cooling Fan,H/W Kit10	
		Net Total Quantity	3.000 no
		Say 3.000 no @ Rs 8625.00 / no	<b>Rs 25875.00</b>

12	od69964/2019_2020 Supply, installation, Testing and commissioning of 19" Flat Screen VGA colour monitor complete with all other accessories as required.	
Net Total Quantity		2.000 each
Say 2.000 each @ Rs 9286.00 / each		<b>Rs 18572.00</b>
13	od19743/2019_2020 Supply, installation, testing and commissioning of indoor IR IP dome camera 2 MP  2.1mm/4mm/6mm focal length lens capable to 1.0 lux sensitivity, with IR n 480 TV lines.	
Net Total Quantity		32.000 no
Say 32.000 no @ Rs 5945.00 / no		<b>Rs 190240.00</b>
14	od19745/2019_2020 Supply & laying of twin twisted 2x1.5 sqmm Cu flexible wire 1.1 kv grade PVC insulated through PVC conduit.	
Net Total Quantity		380.000 no
Say 380.000 no @ Rs 69.00 / no		<b>Rs 26220.00</b>
15	od19747/2019_2020 Supply, Installation, Testing and commissioning of XLR cables and connectors	
Net Total Quantity		6.000 no
Say 6.000 no @ Rs 2025.00 / no		<b>Rs 12150.00</b>
16	od19505/2019_2020 Supply, Installation, Testing and commissioning of Distribution box for PA distribution made out of 16 SWG CRCA sheet with lockable door arrangement having connectors (10 NOS) suitable for 1.5sqmm wire with facility for cable termination of 4cx10 sqmm ALAR. Required at each floor for PA wire termination.	
Net Total Quantity		1.000 no
Say 1.000 no @ Rs 979.00 / no		<b>Rs 979.00</b>
17	od19753/2019_2020 SITC Of 350W RMS MIXER AMPLIFIER, 3 MIC, 2 AUX, 100V/70V AND 40HMS , BALANCED MIC,FREQUENCY RESPONSE (50 HZ-16000HZ),S/N RATIO-MIC1,2,3,4:66DB;AUX 1:80 DB,THD-LESS THAN 1% AT 1 KHZ,1/3 RATED POWER, MUTING FUNCTION-MIC 1 OVERRIDES OTHER INPUT SIGNALS WITH 0-30 DB ATTENUATION,CONTROLS-INDIVIDUAL GAIN CONTROLS, POWER SWITCH;BASS: 10DB AT 100HZ,TREBLE: 10DB AT10000HZ.	
Net Total Quantity		1.000 no
Say 1.000 no @ Rs 28325.00 / no		<b>Rs 28325.00</b>
18	od19511/2019_2020 Supply, installation, testing and commissioning of LAN socket.	
Net Total Quantity		16.000 no
Say 16.000 no @ Rs 260.00 / no		<b>Rs 4160.00</b>

19	od19512/2019_2020 Supply and installation of GI box for modular switch installation including base plate and front plate 1/2 M	
Net Total Quantity		16.000 no
Say 16.000 no @ Rs 234.00 / no		<b>Rs 3744.00</b>
20	od19764/2019_2020 Supply, Installation, Testing and commissioning of 6W Wall mount speakers with perforated metal grille with line matching transformer suitable for 4 ohm impedance 200 mm dia LBD 0606/10	
Net Total Quantity		32.000 no
Say 32.000 no @ Rs 1350.00 / no		<b>Rs 43200.00</b>
21	od19519/2019_2020 Supply and laying of Cat6 outdoor cable including necessary connectors	
Net Total Quantity		40.000 no
Say 40.000 no @ Rs 84.00 / no		<b>Rs 3360.00</b>
22	od19522/2019_2020 SITC Of NVR 8 Channel for CCTV	
Net Total Quantity		1.000 no
Say 1.000 no @ Rs 8500.00 / no		<b>Rs 8500.00</b>
23	od19524/2019_2020 Supply, installation, testing and commissioning of 8 port PoE switch	
Net Total Quantity		1.000 no
Say 1.000 no @ Rs 6250.00 / no		<b>Rs 6250.00</b>
24	od19774/2019_2020 Supply, installation, testing and commissioning of Promethean Board AB2T78 complete with all other accessories. Active inspire software will be complimentary with Promethean board.	
Net Total Quantity		16.000 no
Say 16.000 no @ Rs 34000.00 / no		<b>Rs 544000.00</b>
25	1.14.1 Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface / recessed medium class PVC conduit as required 2x1.5 sq.mm + 1x1.5 sq.mm earth wire	
Net Total Quantity		360.000 metre
Say 360.000 metre @ Rs 146.79 / metre		<b>Rs 52844.40</b>
26	1.14.2 Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface / recessed medium class PVC conduit as required 2X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	
Net Total Quantity		360.000 metre

Say 360.000 metre @ Rs 179.55 / metre		<b>Rs 64638.00</b>
27	1.24.1 Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.5/6 amps switch	
Net Total Quantity		32.000 each
Say 32.000 each @ Rs 110.09 / each		<b>Rs 3522.88</b>
28	1.24.3 Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.15/16 amp switch	
Net Total Quantity		16.000 each
Say 16.000 each @ Rs 149.41 / each		<b>Rs 2390.56</b>
29	1.24.4 Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.3 pin 5/6 amp socket outlet	
Net Total Quantity		32.000 each
Say 32.000 each @ Rs 106.16 / each		<b>Rs 3397.12</b>
30	1.24.5 Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.6 pin 15/16 amp socket outlet	
Net Total Quantity		16.000 each
Say 16.000 each @ Rs 200.52 / each		<b>Rs 3208.32</b>
31	1.27.2 Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required.3 Module (100mmX75mm)	
Net Total Quantity		16.000 each
Say 16.000 each @ Rs 242.46 / each		<b>Rs 3879.36</b>
32	1.27.4 Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required.6 Module (200mmX75mm)	
Net Total Quantity		16.000 each
Say 16.000 each @ Rs 338.13 / each		<b>Rs 5410.08</b>
<b>10 SUMP TANK ELECTRICAL WORKS</b>		
1	od19449/2019_2020 Supply of 35 sqmm 3.5 core PVC/XLPE insulated armoured cable with aluminium conductors for working voltages up to and including 1100 volts conforming IS 1584/part I/1988 for PVC IS 7098 part I for XLPE	
Net Total Quantity		270.000 metre
Say 270.000 metre @ Rs 279.00 / metre		<b>Rs 75330.00</b>

2	9.1.21 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.3 1/2X 35 sq. mm (32mm)	
Net Total Quantity		2.000 set
Say 2.000 set @ Rs 369.59 / set		<b>Rs 739.18</b>
3	od70792/2019_2020 SITC of SSB (WTP Panel, Malampuzha ) Supply, installation , testing and commissioning of totally enclosed compartmentalized dust and vermin proof cubical segregated and modular in construction M.V. panel board free standing fabricated with14swg and 16swg of CRCA M.S. sheet, powder coated , busbar chamber ,outgoing switchgear etc. (all feeder unit Would be compart mentalized), color coded PVC sleeved vertical / horizontal Aluminium busbar of required size of length, ( bus-bar distances shall be minimum 32 mm ) insulators, hardware,   neoprene gasket , hinged door, interconnecting single core multi strand lugged copper wire having current density of 2A / sqmm of suitable capacity & size with lugs from busbar to switchgears / MCCB / MCB or where ever required, control wiring with 1 sqmm FRLS cable, ON/OFF, RYB phase indicators, two earthing terminal busbar of size 25 x 5 mm copper with nut & bolts at outside of the panel, rating and name plates for all incoming & outgoing etc comprising with the followings as per the KEI standard. Switch gears – ABB/ Equivalent, Contactors – ABB, L&T/Equivalent. Incomer: - 63A TPN Isolator – 1 No. Outgoing: - 10A 3P MCB – 4 No., 25A 3P MCB – 5 No., 25A SP MCB – 1 No., 5 hp DOL starter with OLR - 1 No, 3 hp DOL starter with OLR - 2 No.1 hp DOL starter with OLR - 4 No.	
Net Total Quantity		1.000 each
Say 1.000 each @ Rs 136159.58 / each		<b>Rs 136159.58</b>
4	7.1.1 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 andrefilling the trench etc as required.Upto 35 sq. mm	
Net Total Quantity		240.000 metre
Say 240.000 metre @ Rs 269.98 / metre		<b>Rs 64795.20</b>
5	od19460/2019_2020 Supply of 10 sqmm 3 core PVC/ XLPE insulated armoured cable with aluminium conductors for working voltages up to and including 1100 volts conforming IS 1584/part I/1988 for PVC IS 7098 part I for XLPE	
Net Total Quantity		80.000 metre
Say 80.000 metre @ Rs 274.00 / metre		<b>Rs 21920.00</b>
6	7.7.1 Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KVgrade of following size on wall surface as required.Upto 35 sq. mm (clamped with 1mm thick saddle)	
Net Total Quantity		10.000 metre
Say 10.000 metre @ Rs 32.77 / metre		<b>Rs 327.70</b>

7	7.8.1 Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on cable tray as required. Upto 35 sq. mm (clamped with 1mm thick saddle)	
Net Total Quantity		20.000 metre
Say 20.000 metre @ Rs 27.52 / metre		<b>Rs 550.40</b>
8	9.1.7 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. 3 X 10 sq. mm (22mm)	
Net Total Quantity		12.000 set
Say 12.000 set @ Rs 224.11 / set		<b>Rs 2689.32</b>
9	5.2 Earthing with G.I. earth pipe 4.5 metre 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	
Net Total Quantity		2.000 set
Say 2.000 set @ Rs 4812.52 / set		<b>Rs 9625.04</b>
10	5.9 Supplying and laying 25 mm X 5 mm G.I. strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)	
Net Total Quantity		30.000 metre
Say 30.000 metre @ Rs 111.40 / metre		<b>Rs 3342.00</b>
11	5.15 Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	
Net Total Quantity		15.000 metre
Say 15.000 metre @ Rs 169.07 / metre		<b>Rs 2536.05</b>
<b>11 DG SET, CHANGE OVER PANEL AND UP-GRADATION OF EXISTING PANELS</b>		
1	od19450/2019_2020 Supply of 400 sqmm 3.5 core PVC/XLPE insulated armoured cable with aluminium conductors for working voltages up to and including 1100 volts conforming IS 1584/part I/1988 for PVC IS 7098 part I for XLPE	
Net Total Quantity		80.000 metre
Say 80.000 metre @ Rs 2195.00 / metre		<b>Rs 175600.00</b>
2	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 of 2.7 metre long etc. with charcoal/ coke and salt as required.	

		Net Total Quantity	6.000 set
		Say 6.000 set @ Rs 10863.56 / set	<b>Rs 65181.36</b>
3	5.9	Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earthelectrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required.(Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)	
		Net Total Quantity	180.000 metre
		Say 180.000 metre @ Rs 111.40 / metre	<b>Rs 20052.00</b>
4	od70801/2019_2020	SITC of Change over panel Supply, installation , testing and commissioning of totally enclosed compartmentalized dust and vermin proof cubical segregated and modular in construction M.V. panel board free standing fabricated with14swg and 16swg of CRCA M.S. sheet, powder coated , bus-bar chamber ,outgoing switchgear etc. (all feeder unit Would be compartmentalized), color coded PVC sleeved vertical / horizontal Aluminium busbar of required size of length, (bus-bar distances shall be minimum 32 mm ) insulators, hardware, neoprene gasket , hinged door, interconnecting single core multi strand lugged copper wire having current density of 2A / sqmm of suitable capacity & size with lugs from busbar to switchgears / MCCB / MCB or where ever required, control wiring with 1 sqmm FRLS cable, ON/OFF, RYB phase indicators, two earthing terminal busbar of size 25 x 5 mm copper with nut & bolts at outside of the panel, rating and name plates for all incoming & outgoing etc. comprising with the followings as per the KEI standard. Switch gears – ABB/ Equivalent, Contactors – ABB, L&T/Equivalent. Incomer: - 800A, 50kA, 4P MCCB - 1 No, 800A, FP Isolator - 1 no. Outgoing: 800A, 50kA, 4P MCCB - 1 No. with AMF relay, contactors etc as required.	
		Net Total Quantity	1.000 each
		Say 1.000 each @ Rs 514732.37 / each	<b>Rs 514732.37</b>
5	5.15	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	
		Net Total Quantity	80.000 metre
		Say 80.000 metre @ Rs 169.07 / metre	<b>Rs 13525.60</b>
6	9.1.31	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.3 1/2X 400 sq. mm (82mm)	
		Net Total Quantity	16.000 set
		Say 16.000 set @ Rs 1820.42 / set	<b>Rs 29126.72</b>
7	7.3.4	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 and refilling the trench etc as required, but excluding sand cushioning and protective covering.Above 185 sq. mm and upto 400 sq. mm	
		Net Total Quantity	40.000 metre

Say 40.000 metre @ Rs 182.17 / metre		<b>Rs 7286.80</b>
8	7.8.4 Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on cable tray as required. Above 185 sq. mm and upto 400 sq. mm (clamped with 40x3mm MS flat clamp)	
Net Total Quantity		110.000 metre
Say 110.000 metre @ Rs 125.82 / metre		<b>Rs 13840.20</b>
9	od19940/2019_2020 SITC of DG  SITC of 400kVA, 415V DG with DG control panel, MCCB at outgoing with earth fault, over-current protection, fuel tank with capacity for 8hrs of operation, acoustic enclosure etc as per KEI norms. 	
Net Total Quantity		1.000 no
Say 1.000 no @ Rs 2372882.00 / no		<b>Rs 2372882.00</b>
10	od74398/2019_2020 Supply of 240 sqmm 3.5 core PVC/XLPE insulated armoured cable with aluminium conductors for working voltages up to and including 1100 volts conforming IS 1584/part I/1988 for PVC IS 7098 part I for XLPE	
Net Total Quantity		30.000 metre
Say 30.000 metre @ Rs 1240.00 / metre		<b>Rs 37200.00</b>
11	od74401/2019_2020 Supply of 3 core 150 sqmm 11KV stranded compact circular aluminium conductor, conductors screened with extruded semi conducting compound XLPE insulated, insulation screened with extruded semi conducting compound in combination with copper tape (0.3KA for 1 sec.) cores laid up. inner sheath of PVC tape, galvanized steel flat strip armoured, and overall PVC sheathed cable conforming to IS: 7098 part II 1985 with latest amendments	
Net Total Quantity		175.000 metre
Say 175.000 metre @ Rs 1176.00 / metre		<b>Rs 205800.00</b>
12	8.1.2 Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 11 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. Above 120 sq. mm and upto 400 sq. mm	
Net Total Quantity		164.000 metre
Say 164.000 metre @ Rs 390.56 / metre		<b>Rs 64051.84</b>
13	8.3.2 Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 11 KV grade of following size in the existing RCC/ HUME/ METAL pipe as required. Above 120 sq. mm and upto 400 sq. mm	
Net Total Quantity		11.000 metre
Say 11.000 metre @ Rs 85.19 / metre		<b>Rs 937.09</b>

14	14.14.2 Providing, laying and fixing following dia RCC pipe NP2 class (light duty) in ground complete with RCC collars, jointing with cement mortar 1:2 (1 cement : 2 fine sand) including trenching (75 cm deep) and refilling etc as required.150 mm dia	
Net Total Quantity		11.000 metre
Say 11.000 metre @ Rs 530.79 / metre		<b>Rs 5838.69</b>
15	7.7.4 Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on wall surface as required.Above 185 sq. mm and upto 400 sq. mm (clamped with 40x3mm MS flat clamp)	
Net Total Quantity		60.000 metre
Say 60.000 metre @ Rs 157.27 / metre		<b>Rs 9436.20</b>
16	9.1.29 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.3 1/2X 240 sq. mm (62mm)	
Net Total Quantity		4.000 set
Say 4.000 set @ Rs 1296.18 / set		<b>Rs 5184.72</b>
17	od74631/2019_2020 SITC of 60 KVAR APFC Panel (60 KVAR Only for phase 1. In phase 2, the APFC panel shall be upgraded to 200 KVAR). Supply, installation, testing and commissioning of totally enclosed compartmentalized dust and vermin proof cubical segregated and modular in construction M.V. panel board free standing fabricated with 14swg and 16swg of CRCA M.S. sheet, powder coated, bus-bar chamber, outgoing switchgear etc. (all feeder unit Would be compartmentalized), color coded PVC sleeved vertical / horizontal Aluminium busbar of required size of length, (bus-bar distances shall be minimum 32 mm) insulators, hardware, neoprene gasket, hinged door, interconnecting single core multi strand lugged copper wire having current density of 2A / sqmm of suitable capacity & size with lugs from busbar to switchgears / MCCB / MCB or where ever required, control wiring with 1 sqmm FRLS cable, ON/OFF, RYB phase indicators, two earthing terminal busbar of size 25 x 5 mm copper with nut & bolts at outside of the panel, rating and name plates for all incoming & outgoing etc. comprising with the followings as per the KEI standard. Switch gears – ABB/ Equivalent, Contactors – ABB, L&T/Equivalent. Incomer: - 630A, 4P Isolator. Outgoing: 63A 25kA 3P MCCB - 1 no, 40A 25kA 3P MCCB - 1 no & 25A 25kA 3P MCCB - 2 nos. Capacitors: 25KVAR - 1 no, 20KVAR - no, 10KVAR - 1 no & 5 KVAR - 1 no capacitors in steps with capacitor duty contactors.	
Net Total Quantity		1.000 each
Say 1.000 each @ Rs 173275.50 / each		<b>Rs 173275.50</b>

18	od74632/2019_2020 SITC of MSB (for Phase 1). Supply, installation , testing and commissioning of totally enclosed compartmentalized dust and vermin proof cubical segregated and modular in construction M.V. panel board free standing fabricated with 14swg and 16swg of CRCA M.S. sheet, powder coated , bus-bar chamber ,outgoing switchgear etc. (all feeder unit Would be compartmentalized), color coded PVC sleeved vertical / horizontal Aluminium busbar of required size of length, (bus-bar distances shall be minimum 32 mm ) insulators, hardware, neoprene gasket , hinged door, interconnecting single core multi strand lugged copper wire having current density of 2A / sqmm of suitable capacity & size with lugs from busbar to switchgears / MCCB / MCB or where ever required, control wiring with 1 sqmm FRLS cable, ON/OFF, RYB phase indicators, two earthing terminal busbar of size 25 x 5 mm copper with nut & bolts at outside of the panel, rating and name plates for all incoming & outgoing etc. comprising with the followings as per the KEI standard. Switch gears – ABB/ Equivalent, Contactors – ABB, L&T/Equivalent. Incomer: - 800A, 50kA, 4P MCCB - 1 No, 800A, FP Isolator - 1 no. Outgoing: 250A, 36kA, 3P MCCB - 1 No, 320A, 36kA 3P MCCB - 1 no & 400A 36kA 3P MCCB - 1 no. (Switch gears are considered Only for phase 1)	
Net Total Quantity		1.000 set
Say 1.000 set @ Rs 183881.58 / set		<b>Rs 183881.58</b>
19	od169080/2019_2020 Supply and erection of 10 meter long 152x152 mm RSJ double pole structure having 11 kV 600A double breaking isolators along with earth switch, 11 kV disc insulators support insulators, 11 kV lightning arrestors, mechanical interlocks for open/close of main pole and earthing, jumpering, angle iron supports, 2 nos stay wires with guy insulators, painting, earthing, bus conductors, stringing, steel members, fastners, clamps etc. Erection of chain link mesh of size 3 inch x 3 inch to a height of 2.4m with supporting pole span of 3 m using suitable ISI angle 50x50x6 mm around the double pole structure yard, earthing etc. Suitsble weld mesh door with frame work shall be provided. Supply and spreading 40mm size blue metal jelly in the DP structure yard to a height of 150mm	
Net Total Quantity		1.000 each
Say 1.000 each @ Rs 155000.00 / each		<b>Rs 155000.00</b>
20	od169129/2019_2020 Supply, installation, testing and commissioning of Outdoor USS 400KVA Ratio 11KV/433V, 50 Hz, 3 Phase, Vector DYN-11, complete with all accessories including Load Break Switch, PT & TOD Meter etc as required	
Net Total Quantity		1.000 each
Say 1.000 each @ Rs 895644.00 / each		<b>Rs 895644.00</b>
21	od169169/2019_2020 Supplying and making Indoor heat shrinkable cable jointing kit with lugs for 11 KV grade XLPE cable for 3 core 150 sq. mm (Make: Raychem)	
Net Total Quantity		1.000 each
Say 1.000 each @ Rs 5233.00 / each		<b>Rs 5233.00</b>

22	od169170/2019_2020 Supplying and making Outdoor heat shrinkable cable jointing kit with lugs for 11KV grade XLPE cable for 3 core 150 sq. mm (Make: Raychem)	
Net Total Quantity		2.000 each
Say 2.000 each @ Rs 5693.00 / each		<b>Rs 11386.00</b>
<b>12 SIGNAGE AND BOARDS</b>		
1	od22586/2019_2020 Providing and fixing of Advance Direction / Way finding / Reassurance Sign board of size 1000 mm x 1500 mm made out of Type-XI encapsulated lens type retro reflective sheeting wide. Base Sheeting shall be of White Color Type XI Retro Reflective Sheeting fixed over 2 mm thick Aluminium Composite Material sheet with area exceeding 0.9 sqm fixed over back support frame of M.S.Angle 35 x 35 x 5 mm all round mounted on two 50 mm dia MS Pipe with clear height of not less than 2.1 m from the ground level to the bottom of the board as per approved drawings. The sign post should be painted with one coat of red oxide paint and two coats of 1 st quality synthetic enamel paint Black & white colour with bands of 30 cm height. The sign post shall be firmly fixed in to the ground by means of properly designed foundation with M15 grade concrete size 450mm x 450mmx 600 mm, including cost,conveyance of all materials, equipment,machinery and labour with all leads and lift,loading charges necessary for satisfactory completion of the work as directed by Engineer in-Charge.	
Net Total Quantity		3.000 each
Say 3.000 each @ Rs 18119.40 / each		<b>Rs 54358.20</b>
2	od22587/2019_2020 Supply and fixing sticker type signage at site (on door or similar locations) in proper line & level. The signage letters shall be made with premium quality vinyl sheet of approved colour, pasted on "3M"make self-adhesive film of approved colour, including supply of all material labour etc. required for proper completion of work. Before making the signage text & font of letters in best fit size will be set in computer so as to give aesthetic look as per sample available with ITD	
Net Total Quantity		8778.000 sqcm
Say 8778.000 sqcm @ Rs 0.36 / sqcm		<b>Rs 3160.08</b>
3	od22588/2019_2020 Supply and fixing bilingual signage in English. The signage letters will be made with premium quality vinyl sheet of approved colour, pasted on 3mm thick aluminium composite panel backing. The signage will be either fixed on the wall with the screws & double tape or hanged from the false ceiling with the help of hooks & chains complete work.	
Net Total Quantity		28501.201 sqcm
Say 28501.201 sqcm @ Rs 0.74 / sqcm		<b>Rs 21090.89</b>
4	od22593/2019_2020 Supply & fixing 5 mm thick aluminum compressed Panel (ACP) sheet in the required size for building name signage. The sheet will be cut into size as per the size of signage to be fixed in position (Stone façade, grit wash, gypsum board etc.) with screws & tape including s/o all material labour T&P etc. required for proper completion of work.	

		Net Total Quantity	46800.000 sqcm
		Say 46800.000 sqcm @ Rs 0.43 / sqcm	<b>Rs 20124.00</b>
5	od22594/2019_2020 Supply & fixing stainless steel (SS) letters made with SS-304 grade 20 gauge sheet as per the approved size & shade including fixing on ACP sheet in required height line & level including s/o all T&P etc. required for proper completion of work. Before making the letters the font & size will be got approved from ITD.		
		Net Total Quantity	880.000 cm
		Say 880.000 cm @ Rs 36.01 / cm	<b>Rs 31688.80</b>
6	od22589/2019_2020 Supply and fixing symbol signage such as No. Smoking, No Spitting, Drinking Water etc. signage of standard sizes as per conventional design/ colour code on 3 mm thick aluminium composite panel. The signage will be either fixed on the wall with the help of screws & double tape or hanged from the false ceiling with the help of chain & screws etc. complete work.		
		Net Total Quantity	4788.000 sqcm
		Say 4788.000 sqcm @ Rs 0.85 / sqcm	<b>Rs 4069.80</b>
7	od22590/2019_2020 Printing of floor plans on approx. A2 size poster sheet with indelible ink framing the same in 3mm thick acrylic sheet and 1" studs complete. The floor plans will be fixed on the wall with the help of screws and double tape etc. to give neat & finished look		
		Net Total Quantity	1.248 sqm
		Say 1.248 sqm @ Rs 1393.80 / sqm	<b>Rs 1739.46</b>
<b>13 BUILDERS WORK FOR OUT DOOR USS AND DG SET</b>			
1	2.6.1 Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed.All kinds of soil		
		Net Total Quantity	2.220 cum
		Say 2.220 cum @ Rs 165.07 / cum	<b>Rs 366.46</b>
2	4.1.3 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:2:4 (cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)		
		Net Total Quantity	6.300 cum
		Say 6.300 cum @ Rs 7184.64 / cum	<b>Rs 45263.23</b>

3	4.1.8 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40 nominal size)		
		Net Total Quantity	2.088 cum
		Say 2.088 cum @ Rs 5869.06 / cum	<b>Rs 12254.60</b>
4	4.3.1 Centering and shuttering including strutting, propping etc. and removal of form work for:Foundations, footings, bases for columns		
		Net Total Quantity	8.400 sqm
		Say 8.400 sqm @ Rs 254.19 / sqm	<b>Rs 2135.20</b>
<b>14 CONTINGENCIES</b>			
		Lump-Sum Total	<b>Rs 307321.00</b>
		Provision for GST payments (in %) @	<b>12.0%</b>
		Amount reserved for GST payments	<b>3724734.80</b>
		Total	<b>34764191.80</b>
		Lumpsum for round off	<b>0.00</b>
			<b>TOTAL Rs 34764191.80</b>
			<b>Rounded Total Rs 3,47,64,192</b>
Rupees Three Crore Forty Seven Lakh Sixty Four Thousand One Hundred and Ninety Two Only			

(Cost Index Applied for this estimate is 31.06%)