

TS Register No: 272/2019-2020

AS Register No:295/2019-2020

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

Abstract Estimate

(Dsor year: **2016**, Cost Index Applied for this estimate is **37.93%**)

1 ROADS AND ANCILLARY WORKS		
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		1412.000 sqm
Say 1412.000 sqm @ Rs 124.27 / sqm		Rs 175469.24
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		141.201 cum
Say 141.201 cum @ Rs 2664.12 / cum		Rs 376176.41
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		211.800 cum
Say 211.800 cum @ Rs 2941.01 / cum		Rs 622905.92
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		1412.000 sqm
Say 1412.000 sqm @ Rs 56.05 / sqm		Rs 79142.60

5	od21449/2019_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	1412.000 sqm
		Say 1412.000 sqm @ Rs 233.96 / sqm	Rs 330351.52
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	1412.000 sqm
		Say 1412.000 sqm @ Rs 10.49 / sqm	Rs 14811.88
7	od21457/2019_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	1412.000 sqm
		Say 1412.000 sqm @ Rs 82.06 / sqm	Rs 115868.72
8	od21461/2019_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	22.000 sqm
		Say 22.000 sqm @ Rs 270.46 / sqm	Rs 5950.12
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	22.000 cum
		Say 22.000 cum @ Rs 7591.39 / cum	Rs 167010.58
10	16.45 Providing and fixing in position pre- moulded joint filler in expansion joints.		

		Net Total Quantity	90.000 per cm depth per cm width per meter length
		Say 90.000 per cm depth per cm width per meter length @ Rs 3.03 / per cm depth per cm width per meter length	Rs 272.70
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	220.000 sqm
		Say 220.000 sqm @ Rs 2000.61 / sqm	Rs 440134.20
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	33.000 cum
		Say 33.000 cum @ Rs 6913.95 / cum	Rs 228160.35
13	od21487/2019_2020	two coats after filling the surface with synthetic enamel paint in all shades on new plastered concrete surfaces	
		Net Total Quantity	88.000 sqm
		Say 88.000 sqm @ Rs 93.43 / sqm	Rs 8221.84
14	od21492/2019_2020	Providing and fixing PVC pipe pieces in weep holes by hacking, jointing and make good, 110 mm pipe 4 kgf/cm ²	
		Net Total Quantity	12.100 metre
		Say 12.100 metre @ Rs 223.20 / metre	Rs 2700.72
15	od21493/2019_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	12.000 each
		Say 12.000 each @ Rs 9635.85 / each	Rs 115630.20

16	od21494/2019_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		249.000 metre
Say 249.000 metre @ Rs 5627.16 / metre		Rs 1401162.84
2 LAND DEVELOPMENT		
1	2.32 Clearing grass and removal of the rubbish up to a distance of 50 m outside the periphery of the area cleared.	
Net Total Quantity		5400.000 sqm
Say 5400.000 sqm @ Rs 5.03 / sqm		Rs 27162.00
2	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		2450.000 sqm
Say 2450.000 sqm @ Rs 9.93 / sqm		Rs 24328.50
3	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		3.000 each
Say 3.000 each @ Rs 302.34 / each		Rs 907.02
4	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		12.000 each
Say 12.000 each @ Rs 1341.65 / each		Rs 16099.80
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		530.000 cum
Say 530.000 cum @ Rs 590.20 / cum		Rs 312806.00

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	5400.000 sqm
		Say 5400.000 sqm @ Rs 19.24 / sqm	Rs 103896.00
3 EXTERNAL WATER SUPPLY			
1	od21450/2019_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	40.000 metre
		Say 40.000 metre @ Rs 842.90 / metre	Rs 33716.00
2	od21454/2019_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	240.000 metre
		Say 240.000 metre @ Rs 507.91 / metre	Rs 121898.40
3	od21479/2019_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	4.000 each
		Say 4.000 each @ Rs 3928.51 / each	Rs 15714.04
4	od21484/2019_2020 Constructing masonry chamber 30x40x60 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 1967.09 / each	Rs 1967.09
5	od21488/2019_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	Rs 295296.62

6	od21441/2019_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	21.622 cum
		Say 21.622 cum @ Rs 5805.55 / cum	Rs 125527.60
7	18.19.5.2 Providing and fixing gun metal non-return valve of approved quality (screwed end):65 mm nominal boreVertical		
		Net Total Quantity	2.000 each
		Say 2.000 each @ Rs 2455.36 / each	Rs 4910.72
8	od21491/2019_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 24819.80 / each	Rs 49639.60
4 EXTERNAL SEWERAGE SYSTEM			
1	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	280.000 metre
		Say 280.000 metre @ Rs 814.55 / metre	Rs 228074.00
2	od21436/2019_2020 Constructing Manhole/ chamber for inspection of sewer lines,etc. with RCC M20 over leveling course 150mm thick and 50mm thick projection on all sides with cement concrete in 1:3:6 mix with 40mm nominal size hard granite broken stones, RCC top slab 100mm thick with Ductile iron hinged man hole cover 560x560mm (heavy duty) forming channels at the bottom inside with M20 mix , plastering the inside and exposed surfaces of chamber with cement mortar 1:4, 12mm thick two coats finished smooth with a floating coat of cement including cost of all earth work in all classes of soil except hard rock requiring blasting, back filling the sides, watering and consolidating cost of all necessary, CC and RCC work, cover slab, finishing, etc. Inside dimension 60 x 60 x 60cm.		
		Net Total Quantity	4.000 each
		Say 4.000 each @ Rs 19780.00 / each	Rs 79120.00

3	od21437/2019_2020 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 60x60 cm and 60 cm deep including C.I. cover with frame (medium duty) 500 mm dia internal dimensions, With Sewer bricks conforming to IS : 4885	
Net Total Quantity		28.000 each
Say 28.000 each @ Rs 15964.34 / each		Rs 447001.52
4	od21441/2019_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		23.560 cum
Say 23.560 cum @ Rs 5805.55 / cum		Rs 136778.76
5	od21464/2019_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 52798.55 / each		Rs 158395.65
6	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 2919.15 / each		Rs 2919.15
5 RAIN WATER DRAINAGE		
1	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		240.000 metre
Say 240.000 metre @ Rs 814.55 / metre		Rs 195492.00

2	od21432/2019_2020 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 45x45 cm and 60 cm deep including C.I. cover with frame (medium duty) 300 mmdia internal dimensions, :With Sewer bricks conforming to IS : 4885	
Net Total Quantity		12.000 each
Say 12.000 each @ Rs 6637.91 / each		Rs 79654.92
3	od21437/2019_2020 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 60x60 cm and 60 cm deep including C.I. cover with frame (medium duty) 500 mm dia internal dimensions, With Sewer bricks conforming to IS : 4885	
Net Total Quantity		8.000 each
Say 8.000 each @ Rs 15964.34 / each		Rs 127714.72
4	od21441/2019_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		14.896 cum
Say 14.896 cum @ Rs 5805.55 / cum		Rs 86479.47
5	od21446/2019_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 225959.88 / each		Rs 225959.88
6 EXTERNAL LIGHTING		
1	od24214/2019_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		1.000 no
Say 1.000 no @ Rs 13559.00 / no		Rs 13559.00

2	od21469/2019_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	320.000 metre
		Say 320.000 metre @ Rs 95.00 / metre	Rs 30400.00
3	od21472/2019_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	160.000 metre
		Say 160.000 metre @ Rs 105.21 / metre	Rs 16833.60
4	od21476/2019_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	80.000 metre
		Say 80.000 metre @ Rs 151.00 / metre	Rs 12080.00
5	od24217/2019_2020 Supply, installation, testing and commissioning of 6 Meter street light pole single arm with 45 W, 4500 lumen LED, IP 65 street light fitting with aluminium housing, stove enameled CRCA sheet steel reflector cover, acrylic cover complete with THD <10%, power factor >0.98, RoHS compliant, duly wired up for use on 230 V AC supply.		
		Net Total Quantity	12.000 no
		Say 12.000 no @ Rs 19366.62 / no	Rs 232399.44
6	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	20.000 metre
		Say 20.000 metre @ Rs 284.14 / metre	Rs 5682.80
7	od21478/2019_2020 Supply, drawing & giving connection for street light/post top lantern/external light points from junction box/DB with of 1.5 sqmm 3 core PVC / XLPE insulated armoured control cables with copper conductors for working voltages up to and including 1100 V conforming to IS 1554 part I 1988 for PVC and IS 7098 Part If for XLPE, in the existing surface / recessed steel/ PVC conduit as required 1.5 sq.mm x 3 core		
		Net Total Quantity	100.000 metre
		Say 100.000 metre @ Rs 157.86 / metre	Rs 15786.00
8	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	24.000 metre
		Say 24.000 metre @ Rs 24.83 / metre	Rs 595.92
9	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	60.000 metre
		Say 60.000 metre @ Rs 34.48 / metre	Rs 2068.80
10	14.14.2 Providing, laying and fixing following dia RCC pipe NP2 class (light duty) in ground complete withRCC 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	16.000 metre
		Say 16.000 metre @ Rs 558.62 / metre	Rs 8937.92
7 DG, CHANGE OVER PANEL AND MODIFICATION OF EXISTING PANELS			
1	od24219/2019_2020 SITC of Change Over Panel (Dhanuvachapuram) 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 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: - 630A, 50kA, FP MCCB -1No, 630A,50kA FP Isolator - 1 No. AMF relay, CT, RYB indicator, MFDM, etc. Outgoing: - 630A , 50 kA FP MCCB - 1No 		
		Net Total Quantity	1.000 no
		Say 1.000 no @ Rs 292373.00 / no	Rs 292373.00
2	od24220/2019_2020 SITC of DG SITC of 320kVA, 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 2033899.00 / no	Rs 2033899.00
3	od21447/2019_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	55.000 metre
		Say 55.000 metre @ Rs 2195.00 / metre	Rs 120725.00
4	od21451/2019_2020 Supply of 3.5C X 300 Sq.mm AYFY Cable		
		Net Total Quantity	60.000 metre
		Say 60.000 metre @ Rs 1731.00 / metre	Rs 103860.00
5	9.1.30 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 300 sq. mm (70mm)		
		Net Total Quantity	4.000 set
		Say 4.000 set @ Rs 1525.51 / set	Rs 6102.04
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	4.000 set
		Say 4.000 set @ Rs 1915.85 / set	Rs 7663.40
7	7.7.4 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.Above 185 sq. mm and upto 400 sq. mm (clamped with 40x3mm MS flat clamp)		
		Net Total Quantity	35.000 metre
		Say 35.000 metre @ Rs 165.52 / metre	Rs 5793.20
8	7.8.4 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.Above 185 sq. mm and upto 400 sq. mm (clamped with 40x3mm MS flat clamp)		
		Net Total Quantity	40.000 metre
		Say 40.000 metre @ Rs 132.41 / metre	Rs 5296.40
9	7.1.4 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, sand cushioning, protective covering andrefilling the trench etc as required.Above 185 sq. mm and upto 400 sq. mm		
		Net Total Quantity	40.000 metre
		Say 40.000 metre @ Rs 342.07 / metre	Rs 13682.80

10	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		3.000 set
Say 3.000 set @ Rs 11433.02 / set		Rs 34299.06
11	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		100.000 metre
Say 100.000 metre @ Rs 117.24 / metre		Rs 11724.00
12	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		20.000 metre
Say 20.000 metre @ Rs 177.93 / metre		Rs 3558.60
13	od24224/2019_2020 Modification of Existing MSB to incorporate 320A, 36kA, 3P MCCB & 250A, 36kA, 3P MCCB for the new panels complete with TP & N Busbar, extention of panels etc.	
Net Total Quantity		1.000 no
Say 1.000 no @ Rs 93220.00 / no		Rs 93220.00
14	od24226/2019_2020 APFC Panel Modification(Dhanuvachapuram) Supply, installation , testing and commissioning of APFC(existing) by the modification of old APFC panel to accommodate total of 65 kVAr capacitor in steps, contactors, MCCB, indicators,inductors etc. 	
Net Total Quantity		1.000 no
Say 1.000 no @ Rs 186441.00 / no		Rs 186441.00
8 RELOCATION OF WORKSHOP ELECTRICAL WORKS		
1	od24227/2019_2020 Temporary Wiring of 6/16Aplugsocket including switch box wiring, clamping etc through PVC pipe as required.	
Net Total Quantity		80.000 no
Say 80.000 no @ Rs 1102.00 / no		Rs 88160.00
2	od21429/2019_2020 Relocation of SSB from Building No. 4 to Building No.2 CNC workshop)	
Net Total Quantity		1.000 no
Say 1.000 no @ Rs 10000.00 / no		Rs 10000.00

3	od21433/2019_2020 Relocation of SSB from Building No. 4 to Building No.8 (SMW, Plumbing and Wiremen workshop)		
		Net Total Quantity	3.000 no
		Say 3.000 no @ Rs 5000.00 / no	Rs 15000.00
4	od24228/2019_2020 Relocation of MDB from Building No. 4 to Building No.5 (Dhanuvachapuram)		
		Net Total Quantity	1.000 no
		Say 1.000 no @ Rs 12750.00 / no	Rs 12750.00
5	od21443/2019_2020 Temporary cabling laying from existing MSB to MDB (TDM workshop)		
		Net Total Quantity	150.000 metre
		Say 150.000 metre @ Rs 50.00 / metre	Rs 7500.00
6	od24230/2019_2020 Relocation of SSB from existing workshop Building No. 4 to Building No.5(TDM workshop)		
		Net Total Quantity	1.000 no
		Say 1.000 no @ Rs 12750.00 / no	Rs 12750.00
7	od21452/2019_2020 Supply of 25 sqmm 4 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	400.000 metre
		Say 400.000 metre @ Rs 238.00 / metre	Rs 95200.00
8	od21455/2019_2020 Supply of 3.5C X 150 Sq.mm AYFY Cable		
		Net Total Quantity	150.000 metre
		Say 150.000 metre @ Rs 894.00 / metre	Rs 134100.00
9	od21459/2019_2020 Supply of 1R X 3.5C X 95 Sq.mm AYFY cable		
		Net Total Quantity	160.000 metre
		Say 160.000 metre @ Rs 628.00 / metre	Rs 100480.00
10	9.1.24 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 95 sq. mm (45mm)		
		Net Total Quantity	4.000 set
		Say 4.000 set @ Rs 664.82 / set	Rs 2659.28

11	9.1.26 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 1/2 X 150 sq. mm (50mm)	
		Net Total Quantity
		2.000 set
		Say 2.000 set @ Rs 816.55 / set
		Rs 1633.10
12	9.1.34 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.4 X 25 sq. mm (28mm)	
		Net Total Quantity
		40.000 set
		Say 40.000 set @ Rs 355.86 / set
		Rs 14234.40
13	od21471/2019_2020 Temporary cabling laying from MDB Building No 5 to SSB at building No.8,2	
		Net Total Quantity
		160.000 metre
		Say 160.000 metre @ Rs 50.00 / metre
		Rs 8000.00
9 EXISTING CLASS ROOMS CONVERTED TO SMART CLASS ROOMS		
1	od21425/2019_2020 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.	
		Net Total Quantity
		11.000 each
		Say 11.000 each @ Rs 8239.56 / each
		Rs 90635.16
2	od21427/2019_2020 Supply,deliver and place Trademark registered branded (JALARAM Make JEC 501(C))/Equivalent Executive Visitor Net Chair, Overall Size (approx): H-98 x W-58 x D-63.5 (cm) Seat Height: 48 (cm) 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 & Frame 'Tapestry: Minimum average weight required 400 to 490 gms per sq. mtr. Tapestry will be tested quality such as stain test, ultra violet test,glue test and color fastening with average weight of 450 grams per square meter Cushioning: PU foam having density of 50 kgs/m3 for seat. Average thickness of foam not less than 50 mm + 10 mm Polly foam. Arm rest material: Polyurethane on Chrome Shoes: Nylon Rubber	
		Net Total Quantity
		11.000 each
		Say 11.000 each @ Rs 13013.72 / each
		Rs 143150.92

3	od21430/2019_2020 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. Overall size : H-760 x W-1040 x D-1000 (mm) 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 process all over 4 edges. Bench Main frame tube & Support tube of 32mm, 16swg ERW round tube. Seat & Back frame tube of 19mm, 16swg ERW round tube. Seat & Back support of 25x25x1.6mm (16swg) thick. square ERW tube. Seat & Back of 18swg. Perforated CRCA sheet IS 513. Storage Bucket of 18swg. Perforated CRCA sheet IS 513. Good quality PVC shoes & 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.		
		Net Total Quantity	165.000 each
		Say 165.000 each @ Rs 8935.68 / each	Rs 1474387.20
4	od21434/2019_2020 Supply and installation of Podium : 600x600x 1200mm ht.		
		Net Total Quantity	11.000 each
		Say 11.000 each @ Rs 19686.44 / each	Rs 216550.84
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	1201.200 sqm
		Say 1201.200 sqm @ Rs 14.90 / sqm	Rs 17897.88
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	1201.200 sqm
		Say 1201.200 sqm @ Rs 76.21 / sqm	Rs 91543.45
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	194.700 sqm
		Say 194.700 sqm @ Rs 70.76 / sqm	Rs 13776.97
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	396.000 sqm
		Say 396.000 sqm @ Rs 1711.16 / sqm	Rs 677619.36
10 DEMOLITION WORKS			
1	15.2.2 Demolishing cement concrete manually / by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in-Charge.Nominal concrete 1:4:8 leaner mix (including equivalent design mix)		
		Net Total Quantity	123.800 cum
		Say 123.800 cum @ Rs 848.48 / cum	Rs 105041.82
2	15.3 Demolishing R.C.C. work manually / by mechanical means including stacking of steel bars and disposal of unserviceable material with in 50 metres lead as per direction of Engineer -in-Charge.		
		Net Total Quantity	657.150 cum
		Say 657.150 cum @ Rs 2006.26 / cum	Rs 1318413.76
3	15.7.4 Demolishing brick work manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-Charge.In cement mortar		
		Net Total Quantity	843.770 cum
		Say 843.770 cum @ Rs 1162.34 / cum	Rs 980747.62
4	15.9.2 Demolishing stone rubble masonry manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer -in-Charges:In cement mortar		
		Net Total Quantity	223.000 cum
		Say 223.000 cum @ Rs 1387.16 / cum	Rs 309336.68
5	15.12.1 Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead:Of area 3 sq. metres and below		
		Net Total Quantity	88.000 each
		Say 88.000 each @ Rs 217.72 / each	Rs 19159.36
6	15.12.2 Of area beyond 3 sq. metres		
		Net Total Quantity	50.000 each
		Say 50.000 each @ Rs 298.48 / each	Rs 14924.00

7	15.18 Dismantling steel work in built up sections in angles, tees, flats and channels including all gusset plates, bolts, nuts, cutting rivets, welding etc. including dismembering and stacking within 50 metres lead.		
		Net Total Quantity	11966.000 kg
		Say 11966.000 kg @ Rs 3.31 / kg	Rs 39607.46
8	15.28.2 Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material within 50 metres lead of :Asbestos Sheet		
		Net Total Quantity	2392.000 sqm
		Say 2392.000 sqm @ Rs 45.31 / sqm	Rs 108381.52
9	15.60 Disposal of building rubbish/ malba/ similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved		
		Net Total Quantity	1736.000 cum
		Say 1736.000 cum @ Rs 166.27 / cum	Rs 288644.72
11 TEMPORARY BUILDING FOR STORE [100 M2]			
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	13.620 cum
		Say 13.620 cum @ Rs 173.72 / cum	Rs 2366.07
2	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	10.100 cum
		Say 10.100 cum @ Rs 6176.71 / cum	Rs 62384.77
3	5.1.3 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:1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)		
		Net Total Quantity	1.950 cum
		Say 1.950 cum @ Rs 7962.22 / cum	Rs 15526.33

4	50.6.1.1 Solid block masonry using pre cast solid blocks (factory made) of size 40x20x20cm or nearest available size confirming to IS 2185 part 1 of 1979 for foundation and plinth with thickness 20 cm and above in: CM 1:6 (1 cement : 6 coarse sand) etc complete	
Net Total Quantity		24.000 cum
Say 24.000 cum @ Rs 5172.32 / cum		Rs 124135.68
5	50.6.5.2 Hollow block masonry using pre cast blocks (Factory made) of size 40x20x15cm or nearest available size confirming to IS 2185 part 1 of 1979 for super structure up to floor two level with thickness 15cm in: CM 1:6 (1 cement : 6 coarse sand) etc complete	
Net Total Quantity		4.500 cum
Say 4.500 cum @ Rs 5041.70 / cum		Rs 22687.65
6	5.15 Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in lintels, beams and bressumers including setting in cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centering and shuttering but excluding the cost of reinforcement with, 1:1.5:3 (1 cement : 1.5 coarse sand (Zone - III) : 3 graded stone aggregate 20 mm nominal size)	
Net Total Quantity		0.500 cum
Say 0.500 cum @ Rs 11977.22 / cum		Rs 5988.61
7	5.22.6 Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth level Thermo - Mechanically Treated bars of grade Fe-500D or more	
Net Total Quantity		62.500 kilogram
Say 62.500 kilogram @ Rs 78.07 / kilogram		Rs 4879.38
8	10.16.1 Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete. Hot finished welded type tubes	
Net Total Quantity		1259.000 kg
Say 1259.000 kg @ Rs 124.48 / kg		Rs 156720.32
9	13.4.2 12 mm cement plaster of mix:1:6 (1 cement : 6 coarse sand)	
Net Total Quantity		118.000 sqm
Say 118.000 sqm @ Rs 232.07 / sqm		Rs 27384.26
10	13.43.1 Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface: Water thinnable cement primer	
Net Total Quantity		118.000 sqm

Say 118.000 sqm @ Rs 50.97 / sqm		Rs 6014.46
11	10.2 Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	
Net Total Quantity		550.000 kg
Say 550.000 kg @ Rs 93.31 / kg		Rs 51320.50
12	12.1.3 Providing corrugate G.S. sheet roofing including vertical/ curved surface fixed with polymer coated J or L hooks, bolts and nuts 8 mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead, including a coat of approved steel primer and two coats of approved paint on overlapping of sheets complete (up to any pitch in horizontal / vertical or curved surfaces), excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.0.63 mm thick with zinc coating not less than 275 gm/m2	
Net Total Quantity		124.000 sqm
Say 124.000 sqm @ Rs 966.27 / sqm		Rs 119817.48
13	od21463/2019_2020 Providing and fixing factory made uPVC white colour casement/casement cum fixed glazed windows comprising of uPVC multi-chambered frame, sash and mullion (where ever required) extruded profiles duly reinforced with 1.60 +/- 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), uPVC extruded glazing beads of appropriate dimension, EPDM gasket, stainless steel (SS 304 grade) friction hinges, zinc alloy (white powder coated) casement handles, G.I fasteners 100 x 8 mm size for fixing frame to finished wall, plastic packers, plastic caps and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, mullion (if required) shall be also fusion welded including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Engineer-in-Charge.Note: For uPVC frame, sash and mullion extruded profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. Casement window double panels with top fixed with S.S. friction hinges (350 x 19 x 1.9 mm) made of (small series) frame 47 x 50 mm, sash 47 x 68 mm & mullion 47 x 68 mm all having wall thickness of 1.9 0.2 mm and single glazing bead of appropriate dimension. Inclusive of glazing cost using 4mm thick frosted glass make Saint Gobain or approved equivalent (Area of window upto 2.50 sqm).	
Net Total Quantity		6.000 sqm
Say 6.000 sqm @ Rs 8536.30 / sqm		Rs 51217.80
14	od26890/2019_2020 Supply and fixing steel doors with jump of as per drawing and agreed schedule of rates inclusive of all applicable taxes to the satisfaction of site Engineer in charge.The above rate included all fixing and fitting lock,hinges,hardware items etc.(Ileaf, jsw, tata or approved equivalent.)	
Net Total Quantity		2.880 sqm of door area
Say 2.880 sqm of door area @ Rs 14791.70 / sqm of door area		Rs 42600.10

12 EXISTING SMART CLASSROOM - ELECTRICAL AND ELV WORKS		
1	od21424/2019_2020 Supply, installation, testing and commissioning of LAN socket.	
Net Total Quantity		11.000 no
Say 11.000 no @ Rs 260.00 / no		Rs 2860.00
2	od24233/2019_2020 Supply, installation, testing and commissioning of 32" Flat Screen VGA Color Monitor.	
Net Total Quantity		1.000 no
Say 1.000 no @ Rs 22000.00 / no		Rs 22000.00
3	od24235/2019_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		22.000 no
Say 22.000 no @ Rs 5945.00 / no		Rs 130790.00
4	od24239/2019_2020 Supply & laying of twin twisted 2x1.5 sqmm Cu flexible wire 1.1 kv grade PVC insulated through PVC conduit.	
Net Total Quantity		240.000 no
Say 240.000 no @ Rs 69.00 / no		Rs 16560.00
5	od24251/2019_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		Rs 12150.00
6	od21444/2019_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		Rs 979.00
7	od21445/2019_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		Rs 874.00
8	od21453/2019_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	Rs 7375.00
9	od21456/2019_2020	Supply and installation of GI box for modular switch installation including base plate and front plate 1/2 M	
		Net Total Quantity	11.000 no
		Say 11.000 no @ Rs 234.00 / no	Rs 2574.00
10	od24257/2019_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	22.000 no
		Say 22.000 no @ Rs 1350.00 / no	Rs 29700.00
11	od24261/2019_2020	SITC Of 350W RMS MIXER AMPLIFIER, 3 MIC, 2 AUX, 100V/70V AND 4OHMS , 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	Rs 28325.00
12	od21465/2019_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	Rs 6250.00
13	od24255/2019_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	11.000 no
		Say 11.000 no @ Rs 7600.00 / no	Rs 83600.00
14	od21468/2019_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	Rs 6240.00
15	od24269/2019_2020	Supply and drawing of CAT6 4 pair cable including all necessary connector.	
		Net Total Quantity	680.000 metre
		Say 680.000 metre @ Rs 39.00 / metre	Rs 26520.00

16	od21473/2019_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		Rs 7611.00
17	od24279/2019_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		2.000 no
Say 2.000 no @ Rs 8625.00 / no		Rs 17250.00
18	od21477/2019_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		Rs 4130.00
19	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 required2x1.5 sq.mm + 1x1.5 sq.mm earth wire	
Net Total Quantity		280.000 metre
Say 280.000 metre @ Rs 154.48 / metre		Rs 43254.40
20	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 required2X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	
Net Total Quantity		280.000 metre
Say 280.000 metre @ Rs 188.96 / metre		Rs 52908.80
21	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		22.000 each
Say 22.000 each @ Rs 115.86 / each		Rs 2548.92
22	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		11.000 each

		Say 11.000 each @ Rs 157.24 / each	Rs 1729.64
23	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	22.000 each
		Say 22.000 each @ Rs 111.72 / each	Rs 2457.84
24	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	11.000 each
		Say 11.000 each @ Rs 211.03 / each	Rs 2321.33
25	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	11.000 each
		Say 11.000 each @ Rs 255.17 / each	Rs 2806.87
26	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	11.000 each
		Say 11.000 each @ Rs 355.86 / each	Rs 3914.46
27	od24286/2019_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	Rs 14220.00
28	od21481/2019_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	Rs 474.00
29	od24322/2019_2020	Supply, installation, testing, and commissioning of LT Projector and roof mount for LT projector complete with all accessories as required.	
		Net Total Quantity	11.000 set
		Say 11.000 set @ Rs 24590.00 / set	Rs 270490.00
30	od24358/2019_2020	Supply and laying of Cat6 Outdoor cable including necessary connectors.	
		Net Total Quantity	60.000 metre

Say 60.000 metre @ Rs 45.00 / metre		Rs 2700.00
31	od21489/2019_2020 SITC Of NVR 8 Channel for CCTV	
Net Total Quantity		1.000 no
Say 1.000 no @ Rs 8500.00 / no		Rs 8500.00
32	od24326/2019_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		11.000 no
Say 11.000 no @ Rs 34000.00 / no		Rs 374000.00
13 SIGNAGE AND BOARDS		
1	od26895/2019_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		Rs 54358.20
2	od26896/2019_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		9576.000 sqcm
Say 9576.000 sqcm @ Rs 0.36 / sqcm		Rs 3447.36
3	od26897/2019_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		16938.320 sqcm

Say 16938.320 sqcm @ Rs 0.74 / sqcm		Rs 12534.36
4	od26898/2019_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		36000.000 sqcm
Say 36000.000 sqcm @ Rs 0.43 / sqcm		Rs 15480.00
5	od26899/2019_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		820.000 cm
Say 820.000 cm @ Rs 36.01 / cm		Rs 29528.20
6	od26900/2019_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		3724.000 sqcm
Say 3724.000 sqcm @ Rs 0.85 / sqcm		Rs 3165.40
7	od26901/2019_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		0.982 sqm
Say 0.982 sqm @ Rs 1393.80 / sqm		Rs 1368.71
14 CONTINGENCIES		
Lump-Sum Total		Rs 186559.00
Provision for GST payments (in %) @		12.0%
Amount reserved for GST payments		2261092.14
Total		21103527.14
Lumpsum for round off		72.86
TOTAL Rs 21103600.00		
Rounded Total Rs 2,11,03,600		
Rupees Two Crore Eleven Lakh Three Thousand Six Hundred Only		

(Cost Index Applied for this estimate is 37.93%)



Other Engineering Organisations

PRICE