### **Data Analysis**

#### MAIN BUILDING CIVIL WORKS

1 Specification Code: od21358/2019\_2020

od21358/2019\_2020: Finish with top concrete surface of flooring by the process "DENSIFIED FLOOR" MAT FINISH Vid. as Grinding the concrete floor using Coarse, Medium diamond grinding tools for removing the latency and minor level difference and opening up the pores in concrete, Densification of the floor using hybrid densifier, Densifier reacts with the un-hydrated lime present in concrete and makes the concrete surface dense and hard. It offers many benefits such as reduced dusting, higher gloss readings, increased abrasion resistance, and a longer lifespan of the concrete floor. For this to achieve, the concrete floor is allowed to be saturated with densifier, sealing with external grade sealer is applied on the floor after polishing to protect the floor from the effects of weather and to make the floor water repellent and stain resistant, burnishing the floor using a floor burnisher to bring about more shine and remove excess sealer from the floor etc as per technical guidance from with HTC Sweden and Convergent Concrete Technologies, USA. This item shall be executed only by the agency which has all required manufacturing machineries and necessary expertise.

Rate per Sq.m

Code	Description	<i>39</i> ,	Unit	Quantity	Rate	Amount
MR	Finish with top concrete suface of flooring by the p "DENSIFIED FLOOR" MAT FINISH	rocess	sqm	1.00000	547.1	2 547.12
	Other Engineering	Orga	anisatio	ons tota	AL	547.12
	DRI		cost	for one so	ım	547.12
	say					547.12
		1				
	Add Water Charges @ 1.0%					5.47
	Add CPOH @ 15.0%					82.88
	Cost index 37.93 %					0.00
	Total with Cost index					635.48

Say

2 Specification Code: od21359/2019\_2020

od21359/2019\_2020 :Supply and install externally 1st quality 60x30x1.2cm ceramic tile walls cladding of different colours, tile shall be laid and fixed to pre plastered walls in patterns, style and forms of grouting

635.48

and jointing as directed by engineer using approved tile adhesive materials and pointed with approved tile joint filler matching the colour of tiles.

Details of cost for 1 sqm

Code	Description	Unit	Quantity	Rate	Amount
MR	Ceramic tile cladding	sqm	1.02500	762.70	781.77
8731	High polymer modified quickset tile adhesive	kg	10.00000	9.00	90.00
MR	Tile joint filler	kg	0.05140	55.08	2.83
0123	Mason (brick layer) Ist class	Day	0.25000	487.00	121.75
0115	Coolie	Day	0.25000	368.00	92.00
9988	Carriage and sundries	L.S	26.91000	1.73	46.55
		>	TOTA	AL	1134.90
		cost	for one sq	m	1134.90
	say	TA	1		1134.90
		The John States		-	

Add Water Charges @ 1.0%	11.34
Add CPOH @ 15.0%	171.93
Cost index 37.93 %	154.32
Total with Cost index	1472.51
Say	1472.51

**3** Specification Code: od21360/2019\_2020

od21360/2019\_2020 :Supply and install externally 1st quality 30x15x0.8cm brick pattrern ceramic tile for walls cladding, tile shall be laid and fixed to pre plastered walls in patterns, style and forms of grouting and jointing as directed by engineer using approved tile adhesive materials and pointed with approved tile joint filler matching the colour of tiles.

Details of cost for 1 sqm

Code	Code Description		Quantity	Rate	Amount
MR	brick pattern Ceramic tile cladding	sqm	1.02500	720.34	738.35
8731	High polymer modified quickset tile adhesive	kg	10.00000	9.00	90.00

MR	Tile joint filler	kg	0.05140	55.08	2.83
0123	0123 Mason (brick layer) Ist class		0.25000	487.00	121.75
0115	Coolie	Day	0.25000	368.00	92.00
9988	Carriage and sundries	L.S	26.91000	1.73	46.55

			TOTAL	1091.48
cost for one sqm				
say				1091.48

Add Water Charges @ 1.0%	10.91
Add CPOH @ 15.0%	165.35
Cost index 37.93 %	154.32
Total with Cost index	1422.08
Say	1422.08

### 4 Specification Code: od21367/2019\_2020

## Other Engineering Organisations

od21367/2019\_2020 :Supply and fixing steel doors with jamp 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.)

Code	Descri	ption			Unit	Quantity	Rate	Amount
MR	MR Supply and fixing door			sqm	1.00000	11265.25	11265.25	
MR	MR Fittings			sqm	1.00000	1271.18	1271.18	
MR	MR Transportation			sqm	1.00000	200.00	200.00	
						TOTA	AL 1	12736.43
	cost for					of door are	ea 1	12736.43
		say					1	12736.43

Add Water Charges @ 1.0%		127.36
Add CPOH @ 15.0%		1929.56

Cost index 37.93 %		-0.01
Total with Cost index		14793.36
Say		14793.36

5	Specification	Code:	od21356/2019	2020

od21356/2019\_2020 :Supplying fully finished Pre Hung Door:- Both side HP Laminate vertical grain pattern Flush door with matching PVC <br/>
bry>Wrapped WPC Jamb with front side Architrave other side Tackers. Door of 35mm thick with 4 side edges painted / Lock Hole Boring (Using mortise lock)/ Hinge Rebate Cutting (4 Nos) ,Jamb width 100 mm. Latch with Lever handles without Keys SS finish - 1 No, Hinges 4" x 3" x 3mm SS finish - 4 Nos .Tower Bolt 6" SS Finish - 1 No.(Jacsons or Approved equivalent)

Code	Description	14			Unit	Quantity	Rate	Amount
MR	Supply	1.50		MENT DI	sqm	1.00000	7085.16	7085.16
MR	Cartage	Oth	or Enginee	ring Org	sqm	1.00000	200.00	200.00
			ci Enginee			TOTA	AL	7285.16
		P	' K	cost for	one sqm	of door are	ea	7285.16
		say						7285.16

Add Water Charges @ 1.0%		72.85
Add CPOH @ 15.0%		1103.70
Cost index <b>37.93</b> %		0.00
Total with Cost index		8461.71
Say		8461.71

6 Specification Code: od21368/2019\_2020

od21368/2019\_2020 :Supplying fully finished Pre Hung Door:-Both side Veneered (Sapeli/ Beech /RC Walnut/RC Teak etc) vertical grains Flush door with matching Veneer Wrapped Engineered wood Jamb

(Frame) with front side Architraves and other side Tackers, all with specialised Lacquer Polish. Door of 35 mm thick with 4 side PVC Lipping / Lock Hole Boring (using mortise lock) / Hinge Rebate cutting (4 Nos.) /Extruded Sauerland core / Honey comb core filling. 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 fiting lock, hinges, hardware items etc. ( Jacsons or approved equivalent) for 1 Sq.m

Code	Description			Quantity	Rate	Amount
MR	S Supply rate			1.00000	6844.07	6844.07
MR	MR Cartage		sqm	1.00000	200.00	200.00
MR	Fixing Charges	sqm	1.00000	250.00	250.00	
		MIN		TOTA	AL	7294.07
	cost for one sqm					7294.07
	say	TO BOOK				7294.07

Add Wa	ter Charges @ 1.0%	72.9
	Add CPOH @ 15.0%	1105.0
Ot	Cost index 37.93 %	nisations 0.00
T	Total with Cost index	8472.06
	Say	8472.06

7 Specification Code: od21369/2019 2020

od21369/2019\_2020 :Supply 100x100x4mm thick 6.00 m long Galvanized square hollow section member (AS 1163-2009 Grade min C350L0 AS/NZS 4792 Galvanised coatings on ferrous hollow sections) fixed vertically and anchored to RC parapet and base up stand, will be given a priming coat of Zinc primer as approved by Engineer-in-charge and painted with two or more coats of epoxy paint (Shop drawings shall be submitted by the contractor to the Engineer in-charge for approval before execution).

Considering 6.00m length

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply 100x100x4mm thick 6.00 m long Galvanized square hollow section member including anchoring.	kg	73.08000	55.08	4025.25
0102	Blacksmith 1st class	Day	0.12500	487.00	60.88

0114	Beldar	Day	0.12500	368.00	46.00
1215	Welding by electric plant	cm	120.00000	2.00	240.00
0123	Mason (brick layer) Ist class	Day	0.12500	487.00	60.88
0115	Coolie	Day	0.12500	368.00	46.00
MR	Cement mortar 1:3 (1 cement : 3 fine sand).	cum	0.03000	3603.98	108.12
1213	Water proofing materials	kilogram	0.10000	35.00	3.50
13.52.1	Rate as per item number 13.52.1 of SH: Finishing	sqm	2.40000	105.47	253.13
9999	Sundries	L.S	59.00000	1.73	102.07

		~	TOTAL	4945.83
cost for 6.0 metre				4945.83
cost for one metre	LKO	SAL		824.30
say	11. LL		D.L	824.30

Add Water Charges @ 1.0%	8.24
Other CPOH @ 15.0% Organisati	ions 124.88
Cost index 37.93 %	59.65
Total with Cost index	1017.08
Say	1017.08

8 Specification Code: od21370/2019\_2020

od21370/2019\_2020 :Supply Corten A grade 3mm thick warm rolled sloted cassettes fixed to plastered wall spacing in the hidden plastic suspension mounts with stainless steel class A2, 35 mm long and 8 mm dia pins and anchor bolts etc.

Detail of cost for 1 sqm

Code	Description		Quantity	Rate	Amount
MR	supply of 3mm thick corton steel cassets	kg	24.73000	67.80	1676.69

MR	Add 7% for supply of concealed mounts, stainless steel pins and anchor bolts etc.	L.S	0.07000	1676.60	117.36
0116	Fitter(grade1)	Day	0.20000	487.00	97.40
0115	Coolie	Day	0.20000	368.00	73.60
9999	Sundries	L.S	1.26100	1.73	2.18

				TOTAL	1967.23
cost for one sqm					1967.24
	say				1967.24

Add Water Charges @ 1.0%	19.67
Add CPOH @ 15.0%	298.03
Cost index 37.93 %	76.29
Total with Cost index	2361.24
Say	2361.24

9 Specification Code: od21371/201912020 Engineering Organisations

od21371/2019\_2020 :Supply and fixing White Board: 4'x6' magnetic White

FOR ONE ITEM

Code	Description			Unit	Quantity	Rate	Amount	
MR	SUPPLY and fix			each	1.00000	6355.93	6355.93	
	TOTAL						AL	6355.93
	cost for one each						ch	6355.93
		say						6355.93

Add Water Charges @ 1.0%		63.55
Add CPOH @ 15.0%		962.92
Cost index <b>37.93</b> %		0.00
Total with Cost index		7382.41

Say		7382.41

**10** Specification Code: od21376/2019\_2020

od21376/2019\_2020 :Supply & Fixing square Cockroach proof Traps with CP Gratings. Unloading materials supplied at site and storing it in safe place provided in the site. (Make: ACO/SGS)

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply of trap with grating	each	1.00000	500.00	500.00
0123	Mason (brick layer) Ist class	Day	0.06300	487.00	30.68
9999	9999 Sundries		10.00000	1.73	17.30
		MALL	ТОТ	AL	547.98
	1ATU	cost	for one ea	ch	547.98
	say		-5		547.98

Add Water Charges @ 1.0%	)rganisa	tions	5.47
Add CPOH @ 15.0%			83.01
Cost index 37.93 %			21.13
Total with Cost index			657.62
Say			657.62

**11** Specification Code: od21377/2019\_2020

od21377/2019\_2020 :Providing and fixing 100mm dia Cleanout with Spigot, with SS 304 Square Frame & Round Frame with Flat Round Cover with Rubber Seal & SS Screw including cost and conveyance of all materials, labour charges, sundries etc complete as directed by the Engineer in charge at all levels.

Rate per each

Code Description		Unit	Quantity	Rate	Amount
MR	Cleanout 100mm dia	no	1.00000	997.00	997.00

MR	Carriage of materials and fixing charges	L.S	13.91000	2.68	37.28
0116	Fitter(grade1)	Day	0.30000	487.00	146.10
0124	Mason (brick layer )2nd class	Day	0.30000	448.00	134.40

		TOTAL	1314.78
	СО	st for one each	1314.78
say			1314.78

Add Wa	ater Charges @ 1.0%	13.14
	Add CPOH @ 15.0%	199.18
	Cost index <b>37.93</b> %	123.57
	Total with Cost index	1650.69
	Say	1650.69

### **12** Specification Code: od21378/2019\_2020

## Other Engineering Organisations

od21378/2019\_2020 :Providing and fixing 75mm dia Cleanout with Spigot, with SS 304 Square Frame & Round Frame with Flat Round Cover with Rubber Seal & SS Screw including cost and conveyance of all materials, labour charges, sundries etc complete as directed by the Engineer in charge at all levels.

Rate per each

Code	Description				Unit	Quantity	Rate	Amount
MR	Clean	out 75mm dia			no	1.00000	872.00	872.00
MR Carriage of materials and fixing charges					L.S	13.91000	2.68	37.28
0116	0116 Fitter(grade1)				Day	0.30000	487.00	146.10
0124	Masor	n (brick layer )2nd c	ass		Day	0.30000	448.00	134.40
						TOTA	AL	1189.78
			cost	for one ea	ch	1189.78		
say								1189.78

Add Water Charges @ 1.0%		11.89
Add CPOH @ 15.0%		180.25

Cost index 37.93 %		123.57
Total with Cost index		1505.51
Say		1505.51

**13** Specification Code: od21379/2019\_2020

od21379/2019\_2020 :Providing and fixing PVC pipes including fixing the pipe with clamps/ clip at 1.00 m spacing . This includes jointing of pipes with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge 63 mm dia 10 Kgf/cm2 - External work - Exposed on wall Details of cost for 10 metre

MATERIALS:

Code	Descrip	tion	LUNE		Unit	Quantity	Rate	Amount
MR	-	PVC pipe 63 mm outer dia . 10kgf/cm2 (30% added for wastage and clamps etc)			metre	13.00000	136.47	1774.11
9999	Sundrie	Sundries Carriage of materials			L.S	22.53000	1.73	38.98
9999	Sundrie	es Adhesive, a	and sundries etc.	a Ora	L.S	10.27000	1.73	17.77
0116	Fitter(g	rade1) <br< td=""><td>of Engineerin</td><td>ig Oig</td><td>Day</td><td>0.32000</td><td>487.00</td><td>155.84</td></br<>	of Engineerin	ig Oig	Day	0.32000	487.00	155.84
0114	Beldar				Day	0.62000	368.00	228.16
0100	Bandha	Bandhani br>			Day	0.13000	407.00	52.91
9999	Sundrie	es Scaffolding	etc.		L.S	30.98000	1.73	53.60
						TOTA	AL	2321.37
		cost for 10.0 metre						2321.37
		cost for one metre						232.14
		say						232.14
		Add Wate	Charges @ 1.0%	, o				2.32

Add CPOH @ 15.0%

Cost index 37.93 %

24.11

35.16

Total with Cost index		293.74
Say		293.74

**14** Specification Code: od21380/2019\_2020

od21380/2019\_2020 :Providing and fixing PVC pipes including fixing the pipe with clamps/clips at 1.00 m spacing. This included jointing of pipes with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge 75 mm dia 10Kgf/cm2 - External work- Exposed on wall

Details of cost for 10.00 m

MATERIALS:

Code	Descri	ption	CF 9	K X	Unit	Quantity	Rate	Amount
MR		oipe 75 mm outer dia tage and clamps etc		0% added	metre	13.00000	193.48	2515.24
9999	Sundr	ies Carriage of	L.S	22.53000	1.73	38.98		
9999	Sundr	ies Adhesive, a	and sundries etc	N) 01	L.S	10.27000	1.73	17.77
0116	Fitter(grade1)				Day	0.32000	487.00	155.84
0114	Belda	Beldar br>				0.62000	368.00	228.16
0100	Bandh	nani <br< td=""><td></td><td></td><td>Day</td><td>0.13000</td><td>407.00</td><td>52.91</td></br<>			Day	0.13000	407.00	52.91
9999	Sundr	ies Scaffolding		L.S	30.98000	1.73	53.60	
						TOTA	AL	3062.50
		cost for 10.0 metre						3062.50
		cost for one metre						306.25
		say						306.25

Add Water Charges @ 1.0%		3.06
Add CPOH @ 15.0%		46.39
Cost index <b>37.93</b> %		24.11
Total with Cost index		379.82

Say       379.82
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**15** Specification Code: od21381/2019\_2020

od21381/2019\_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.

For Each

Code Description		Unit	Quantity	Rate	Amount	
MR	MR Supply of 65mm dia Butterfly valve		1.00000	2828.00	2828.00	
0116	Fitter(grade1)	Day	0.47000	487.00	228.89	
0114	Beldar	Day	0.47000	368.00	172.96	
			TOTA	AL	3229.85	
	cost for one each					
	say	in of the			3229.85	

Add Water Charges @ 1.0%	Organisatio	ons	32.29
Add CPOH @ 15.0%		<u>'</u>	489.32
Cost index 37.93 %			177.03
Total with Cost index			3928.51
Say			3928.51

**16** Specification Code: od21382/2019\_2020

od21382/2019\_2020 :Supply, fixing, testing, commissioning 80mm dia Butterfly valve (Manual) with CI body SS disk, Nitrile rubber seal and O-ring P16 pressure rating for water circulation as specified.

For Each

Code	Code Description		Quantity	Rate	Amount
MR	Supply of 80mm dia Butterfly valve	each	1.00000	3242.00	3242.00

0116	Fitter(grade1)	Day	0.47000	487.00	228.89
0114	Beldar	Day	0.47000	368.00	172.96

				TOTAL	3643.85
cost for one each					3643.85
	say				3643.85

Add Water Charges @ 1.0%		36.43
Add CPOH @ 15.0%		552.04
Cost index 37.93 %		177.03
Total with Cost index		4409.37
Say	170	4409.37

17	Specification	Code:	od21383/2019	2020

od21383/2019\_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

Details of cost for 10.00 meter

MATERIALS:

Code	Descri	ption			Unit	Quantity	е	Amount	
MR	PVC p	oipe 63 mm outer dia e etc.	metre	10.50000	13	36.47	1432.94		
0116	Fitter(grade1)					0.25000	48	37.00	121.75
0114	Belda	Beldar Trenching and refilling etc.				0.66000		68.00	242.88
0114	Belda	r	Day	Day 0.66000		68.00	242.88		
0115	Coolie	e	Day	ay 0.66000		68.00	242.88		
	TOTAL								2283.33
		cost for 10.0 metre							2283.33

cost for one metre		228.33
say		228.33

Add Wate	r Charges @ 1.0%	2.28
A	dd CPOH @ 15.0%	34.59
	Cost index <b>37.93</b> %	37.46
-	Total with Cost index	302.67
	Say	302.67

**18** Specification Code: od21384/2019\_2020

od21384/2019\_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

Details of cost for 10 metre

MATERIALS:

Other Engineering Organisations

Code	Descrip	otion			Unit		Quantity	Rate	Amount
MR	PVC p	pipe 75 mm outer dia	a 10 kgf/cm2 Add 59	% for	metre	÷	10.50000	193.48	2031.54
0116	Fitter(	grade1)			Day		0.25000	487.00	121.75
0114	Beldar	 c t r or or br> Trenching and	d refilling etc.		Day		0.66000	368.00	242.88
0114	Beldar	r			Day		0.66000	368.00	242.88
0115	Coolie	•			Day		0.66000	368.00	242.88
							TOTA	AL	2881.93
		cost for 10.0 metre							2881.93
		cost for one metre							288.19
		say							288.19

Add Water Charges @ 1.0%		2.88
Add CPOH @ 15.0%		43.66
Cost index <b>37.93</b> %		37.46
Total with Cost index		372.20
Say		372.20

**19** Specification Code: od21385/2019\_2020

od21385/2019\_2020 :Providing and fixing PVC pipes including fixing the pipe with clamps/ clips/ at 1.00 m spacing. This includes jointing of pipes with one step PVC solvent cement and testing of joints complete as per the direction of Engineer-in-Charge 160 mm dia 6 Kgf/cm2 - External work- Exposed on wall Details of cost for 10.00 meter MATERIALS:

Code	Descri	ption			Unit	Quantity	Rate	Amount
MR56	PVC p	pipe 150 mm outer d	ia 6kgf/cm2	a way	metre	10.50000	520.00	5460.00
9999	Sundr	ies Carriage of	r Engineeri materials	ng Org	ani <u>s</u> ati	133.80000	1.73	58.47
9999		ies Adhesive, a			L.S	15.41000	1.73	26.66
0116	Fitter(	grade1)			Day	0.37000	487.00	180.19
0114	Belda	r			Day	0.97000	368.00	356.96
0100	Bandh	nani			Day	0.13000	407.00	52.91
9999	Sundr	ies Scaffolding	etc.		L.S	30.98000	1.73	53.60
						TOTA	AL.	6188.79
		cost for 10.0 metre						6188.79
		cost for one metre						618.88
		say				-		618.88

Add Water Charges @ 1.0%		6.18
Add CPOH @ 15.0%		93.76

Cost index <b>37.93</b> %		32.10
Total with Cost index		750.94
Say		750.94

### MAIN BUILDING - ELECTRICAL WORKS

1 Specification Code: od21267/2019\_2020

od21267/2019
\_2020:
Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV<br/>sprade of following size on wall surface as required.<br/>dry1R X 3.5C X 70 Sq.mm AYFY

Code	Description	Unit	Quantity	Rate	Amount
2862	32mm X 8mm bolts & nuts	each	350.000 00	4.00	1400.00
	Add Cartage@1.00				14.00
	Other Engineering	Organ	ications		1414.00
2809	20/25 mm X 3mm flat iron	kg	9.06000	37.80	342.47
	Add Cartage@1.00		H,		3.42
	total				345.89
2855	Steel fastener 6 mm X 75 mm	each	336.000 00	5.00	1680.00
	Add Cartage@1.00				16.80
	total				1696.80
MR797	70 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	metre	100.000	420.00	42000.00
	Add Cartage@1.00				420.00
	Add Wastage@5.00				2100.00

	total				44520.00
		Tot	al Cost of	Materials	47976.69
1001	Wireman	Day	1.25000	447.00	558.75
1005	Fitter, Grade 2	Day	0.33000	407.00	134.31
1009	Blacksmith, Grade 1	Day	0.33000	407.00	134.31
1010	Mason, Grade 2	Day	0.33000	407.00	134.31
1007	Khallasi	Day	5.00000	368.00	1840.00

TOTAL	50778.37
Add CPOH @ 15%	7616.76
cost for 100.0 metre	58395.13
cost for one metre	584.0
Say	584.0
Cost index 37.93 %	27.31
Total with Cost index	611.31
Other Engineering Organisations Say	611.31

2 Specification Code: od21293/2019\_2020

Supplying and drawing of 1R x 4C x 10 Sq.mm AYFY cable through 40mm od21293/2019 medium class PVC conduit along with accessories in surface/ recess including \_2020: cutting the wall and making good the same in case of recessed conduit as required.

Code	Description	Unit	Quantity	Rate	Amount
1227	40 mm dia. ISI marked, PVC conduit	metre	52.5000 0	47.37	2486.92
	Add Cartage@1.00				24.87
	total				2511.79
1232	40 mm PVC bends	each	4.00000	20.98	83.92

	T		1		
	Add Cartage@1.00				0.84
	total				84.76
1237	40 mm PVC couplers	each	15.0000 0	10.44	156.60
	Add Cartage@1.00				1.57
	total				158.17
1221	40 mm iron staples/ saddles/screws	each	85.0000 0	4.31	366.35
	Add Cartage@1.00				3.66
	total				370.01
2857	PVC fastener 40mm long	each	85.0000 0	0.28	23.80
	Add Cartage@1.00	KAY	31		0.24
	total		SHIP!		24.04
2935	Cement, paint, sand etc.	L.S	1.00000	4.50	4.50
	Add Cartage@1.00	Organ	ications		0.05
	total	Organ			4.55
MR807	10 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	metre	50.0000 0	120.00	6000.00
	Add Cartage@1.00				60.00
	Add Wastage@5.00				300.00
	total				6360.00
		To	tal Cost of	Materials	9513.32
1001	Wireman	Day	1.50000	447.00	670.50
1010	Mason, Grade 2	Day	0.75000	407.00	305.25
1007	Khallasi	Day	2.25000	368.00	828.00

TOTAL	11317.07
Add CPOH @ 15%	1697.56
cost for 50.0 metre	13014.63
cost for one metre	260.0
Say	260.0

Cost index 37.93 %	43.24
Total with Cost index	303.24
Say	303.24

3 Specification Code: od69867/2019\_2020

SITC of MDB 2 (Main Building Workshops, Dhanuvachapuram )<br/>br>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 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 & outgoings etc comprising with the followings as per the KEI standard. Switch gears – ABB/ Equivalent, Contactors - ABB, L&T/Equivalent. Incomer: - 250A TPN Isolator - 1 No. Outgoing: - 50A 3P MCCB - 2 No., 100A 3P MCCB - 42 No., 63A 3P MCCB - 1 No.

od69867/2019 2020 :

Code	Description	Unit	Quantity	Rate	Amount
	Red, Green, Black, Yellow, Orange colours LED indicator, AC/DC, 22.5 mm cut out dia	each	3.00000	44.07	132.21

	Add Carta va @ 2 00				0.07
	Add Cartage@3.00				3.97
	total				136.18
MR	250A, TPN Isolator (Make: ABB, Cat no. OT250E04P)	each	1.00000	10169.4 9	10169.49
	Add Cartage@1.00				101.69
	total				10271.18
MR1586	Rotary handle (including BUC handle with door inter-lock defeat and pad lock facility) Up to 250A extended type	each	8.00000	1355.93	10847.44
	Add Cartage@1.00	\			108.47
	total	5			10955.91
MR731	1.0 sqmm ISI marked FR LS PVC insulated single core copper conductor cable	metre	32.0000 0	7.03	224.96
	Add Cartage@1.00				2.25
	Add Wastage@5.00	mis mis			11.25
	Other Engineering	Organ	isations		238.46
MR732	25 sqmm ISI Marked FR LS PVC insulated single core copper conductor cable	metre	7.20000	177.12	1275.26
	Add Cartage@1.00				12.75
	Add Wastage@5.00				63.76
	total				1351.78
	Total Cost of Materials				
2.10.1	Rate as per item number 2.10.1 of SH: MCCB, MCB & DBS	each	3.00000	150.43	451.29
90.14.10	Rate as per item number 90.14.10.2 of SH: OD Electrical	no	8.00000	4148.70	33189.60
90.14.1.	Rate as per item number 90.14.1.2 of SH: OD Electrical	sqm	14.5000 0	2014.78	29214.31

90.14.7	Rate as per item number 90.14.7 of SH: OD Electrical	Cum cm	720.000 00	5.22	3758.40
90.14.2.	Rate as per item number 90.14.2.1 of SH: OD Electrical	sqm	0.52000	2566.96	1334.82
90.14.3.	Rate as per item number 90.14.3.1 of SH: OD Electrical	metre	35.0000 0	40.00	1400.00
MR	Supply and providing Aluminium bus bars including finger type SMC bus bar supports in the bus chamber, suitable size nut & bolt, providing heat shrink sleeves etc. as required.	Cum cm	2800.00 000	3.00	8400.00
90.14.4	Rate as per item number 90.14.4 of SH: OD Electrical	metre	4.80000	796.52	3823.30
MR701	Electrician	Day	2.00000	750.00	1500.00
MR720	Khalasi	Day	2.00000	750.00	1500.00
1001	Wireman	Day	2.00000	447.00	894.00

Other Engineering Organisations TOTAL	35247.51
Add CPOH @ 15%	16262.88
cost for one each	124680.0
Say	124680.0
Cost index 37.93 %	2176.42
Total with Cost index	126856.42
Say	126856.42

4 Specification Code: od69868/2019\_2020

od69868/2019 2020 :

SITC of MDB 1 (Main Building, Dhanuvachapuram)<br/>
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 & outgoings etc comprising with the followings as per the KEI standard. Switch gears – ABB/ Equivalent, Contactors – ABB, L&T/Equivalent. Incomer: - 250A TPN Isolator – 1 No. Outgoing: - 125A 3P MCCB – 1 No., 100A 3P MCCB – 2 No., 63A 3P MCCB – 2 No.

Code	Description	Unit	Quantity	Rate	Amount
MR1885	Red, Green, Black, Yellow, Orange colours LED indicator, AC/DC, 22.5 mm cut out dia	each	3.00000	44.07	132.21
	Add Cartage@1.00	intg.			1.32
	Other Engineering total	Organ	isations		133.53
MR	250A TPN Isolator (Make: ABB, Model no. OT250E04P)	each	1.00000	10169.4 9	10169.49
	Add Cartage@1.00				101.69
	total				10271.18
MR1586	Rotary handle (including BUC handle with door inter-lock defeat and pad lock facility) Up to 250A extended type	each	5.00000	1355.93	6779.65
	Add Cartage@1.00				67.80
	total				6847.45
MR731	1.0 sqmm ISI marked FR LS PVC insulated single core copper conductor cable	metre	30.0000	7.03	210.90
	Add Cartage@1.00				2.11
	Add Wastage@5.00				10.55

	total				223.55
MR732	25 sqmm ISI Marked FR LS PVC insulated single core copper conductor cable	metre	3.60000	177.12	637.63
	Add Cartage@1.00				6.38
	Add Wastage@5.00				31.88
	total				675.89
		Tot	al Cost of	Materials	18151.6
2.10.1	Rate as per item number 2.10.1 of SH: MCCB, MCB & DBS	each	3.00000	150.43	451.29
90.14.10	Rate as per item number 90.14.10.2 of SH: OD Electrical	no	4.00000	4148.70	16594.80
90.14.10	Rate as per item number 90.14.10.6 of SH: OD Electrical	no	1.00000	11371.3 0	11371.30
90.14.1.	Rate as per item number 90.14.1.2 of SH: OD Electrical	sqm	13.8600 0	2014.78	27924.85
90.14.7	Rate as per item number 90.14.7 of SHip OD Electrical	Cum cm	600.000	5.22	3132.00
90.14.2.	Rate as per item number 90.14.2.1 of SH: OD Electrical	sqm	0.44100	2566.96	1132.03
90.14.3.	Rate as per item number 90.14.3.1 of SH: OD Electrical	metre	30.4750 0	40.00	1219.00
MR	Supply and providing Aluminium bus bars including finger type SMC bus bar supports in the bus chamber, suitable size nut & bolt, providing heat shrink sleeves etc. as required.	Cum cm	2400.00 000	3.00	7200.00
90.14.4	Rate as per item number 90.14.4 of SH: OD Electrical	metre	4.80000	796.52	3823.30
MR701	Electrician	Day	2.00000	750.00	1500.00
1001	Wireman	Day	2.00000	447.00	894.00
MR720	Khalasi	Day	2.00000	750.00	1500.00

TOTAL	29245.6
Add CPOH @ 15%	14234.13
cost for one each	109127.0
Say	109127.0

Cost index 37.93 %	2039.12
Total with Cost index	111166.12
Say	111166.12

5 Specification Code: od69869/2019 2020

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 compart mentalized), color coded PVC sleeved vertical / horizontal Aluminium busbar of required size of length, (bus-bar distances shall be minimum 32 mm) insulators, od69869/2019 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 & outgoings etc. comprising with the followings as per the KEI standard. Switch gears - ABB/ Equivalent, Contactors – ABB, L&T/Equivalent. Incomer: - 125A TPN Isolator – 1 No. Outgoing: - 40A TP MCB - 4 Nos, 32A TP MCB - 3 Nos, 63A TP MCB - 1 No.

SITC of SSB 1 (Main Building, L&P, Dhanuvachapuram)<br/>
supply, installation,

Code Unit Rate Description Quantity Amount Red, Green, Black, Yellow, Orange MR1885 colours LED indicator, AC/DC, 22.5 mm 3.00000 44.07 132.21 each cut out dia Add Cartage@1.00 1.32 133.53 total

2020 :

	1	T	T	T	
MR	125A TPN Isolator (Make: ABB, cat no. OT125F4N2)	each	1.00000	5084.75	5084.75
	Add Cartage@1.00				50.85
	total				5135.60
MR	40A, 10kA, 3P MCB (Make: L&T, Cat no: BB30400C)	each	1.00000	1313.56	1313.56
	Add Cartage@1.00				13.14
	total				1326.70
MR	50A, 10kA, 3P MCB (Make: L&T, Cat no: BB30500C)	each	4.00000	1313.56	5254.24
	Add Cartage@1.00	0			52.54
	total	M	1		5306.78
MR	63A, 10kA, 3P MCB (Make: L&T, Cat no: BB30630C)	each	1.00000	1313.56	1313.56
	Add Cartage@1.00				13.14
	total	ens.			1326.70
MR731	1.0 sqmm ISI marked FR LS PVC insulated single core copper conductor cable	Organ metre	36.0000 0	7.03	253.08
	Add Cartage@1.00				2.53
	Add Wastage@5.00				12.65
	total				268.26
1106	16 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable	metre	9.00000	102.36	921.24
	Add Cartage@1.00				9.21
	Add Wastage@5.00				46.06
	total				976.51
MR732	25 sqmm ISI Marked FR LS PVC insulated single core copper conductor cable	metre	5.40000	177.12	956.45

	Add Cartage@1.00				9.56
	Add Wastage@5.00				47.82
	total				1013.83
		Tot	al Cost of	Materials	15487.91
2.10.1	Rate as per item number 2.10.1 of SH: MCCB, MCB & DBS	each	3.00000	150.43	451.29
2.10.4	Rate as per item number 2.10.4 of SH: MCCB, MCB & DBS	each	2.00000	608.70	1217.40
90.14.1. 2	Rate as per item number 90.14.1.2 of SH: OD Electrical	sqm	16.5100 0	2014.78	33264.02
90.14.7	Rate as per item number 90.14.7 of SH: OD Electrical	Cum cm	690.000 00	5.22	3601.80
90.14.2. 1	Rate as per item number 90.14.2.1 of SH: OD Electrical	sqm	0.63000	2566.96	1617.18
90.14.3. 1	Rate as per item number 90.14.3.1 of SH: OD Electrical	metre	35.5350 0	40.00	1421.40
90.14.4	Rate as per item number 90.14.4 of SHip OD Electrical	Organ	4.80000	796.52	3823.30
MR701	Electrician	Day	2.00000	750.00	1500.00
MR720	Khalasi	Day	2.00000	750.00	1500.00
1001	Wireman	Day	2.00000	447.00	894.00
MR	Supply and providing Aluminium bus bars including finger type SMC bus bar supports in the bus chamber, suitable size nut & bolt, providing heat shrink sleeves etc. as required.	Cum cm	1740.00 000	3.00	5220.00

TOTAL	24601.91
Add CPOH @ 15%	10499.75
cost for one each	80498.0
Say	80498.0
Cost index 37.93 %	3100.78

Total with Cost index	83598.78
Say	83598.78

6 Specification Code: od69870/2019\_2020

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, od69870/2019 neoprene gasket, hinged door, interconnecting single core multi strand lugged

SITC of SSB (OAMT, Dhanuvachapuram)<br/>
supply, installation, testing and

2020:

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 & outgoings etc. comprising with the followings as per the KEI standard. Switch gears - ABB/ Equivalent, Contactors -ABB, L&T/Equivalent.<br/>
- 125A TPN Isolator – 1 No. Outgoing: - 63A 3P MCCB - 3 No., 32A 3P MCCB - 3 No.

Code	Description	Unit	Quantity	Rate	Amount
MR1885	Red, Green, Black, Yellow, Orange colours LED indicator, AC/DC, 22.5 mm cut out dia	each	3.00000	44.07	132.21
	Add Cartage@1.00				1.32
	total				133.53
MR	100A TPN Isolator (Make: ABB, Cat no: OT100F4N2)	each	1.00000	4915.25	4915.25
	Add Cartage@1.00				49.15
	total				4964.40

MR1586	Rotary handle (including BUC handle with door inter-lock defeat and pad lock facility) Up to 250A extended type	each	6.00000	1355.93	8135.58
	Add Cartage@1.00				81.36
	total				8216.94
MR731	1.0 sqmm ISI marked FR LS PVC insulated single core copper conductor cable	metre	30.0000	7.03	210.90
	Add Cartage@1.00				2.11
	Add Wastage@5.00	\			10.55
	total	5.0			223.55
MR732	25 sqmm ISI Marked FR LS PVC insulated single core copper conductor cable	metre	5.40000	177.12	956.45
	Add Cartage@1.00				9.56
	Add Wastage@5.00	PENPK			47.82
	Other Enginedotals	Organ	isations		1013.83
1106	16 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable	metre	5.40000	102.36	552.74
	Add Cartage@1.00				5.53
	Add Wastage@5.00				27.64
	total				585.91
		Tot	al Cost of	Materials	15138.16
2.10.1	Rate as per item number 2.10.1 of SH: MCCB, MCB & DBS	each	3.00000	150.43	451.29
90.14.10 .1	Rate as per item number 90.14.10.1 of SH: OD Electrical	no	6.00000	3272.17	19633.02
90.14.1. 2	Rate as per item number 90.14.1.2 of SH: OD Electrical	sqm	13.8600 0	2014.78	27924.85

90.14.7	Rate as per item number 90.14.7 of SH: OD Electrical	Cum cm	626.000 00	5.22	3267.72
90.14.2.	Rate as per item number 90.14.2.1 of SH: OD Electrical	sqm	0.44100	2566.96	1132.03
90.14.3.	Rate as per item number 90.14.3.1 of SH: OD Electrical	metre	27.2550 0	40.00	1090.20
MR	Supply and providing Aluminium bus bars including finger type SMC bus bar supports in the bus chamber, suitable size nut & bolt, providing heat shrink sleeves etc. as required.	Cum cm	1392.00 000	3.00	4176.00
90.14.4	Rate as per item number 90.14.4 of SH: OD Electrical	metre	4.80000	796.52	3823.30
MR701	Electrician	Day	2.00000	750.00	1500.00
MR720	Khalasi	Day	2.00000	750.00	1500.00
1001	Wireman	Day	2.00000	447.00	894.00

Other Engineering Organisations TOTAL	23208.16
Add CPOH @ 15%	12079.59
cost for one each	92608.0
Say	92608.0
Cost index 37.93 %	2318.28
Total with Cost index	94926.28
Say	94926.28

7 Specification Code: od21335/2019\_2020

\_2020:

od21335/2019 Supply of 50 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

Code Description	Unit	Quantity	Rate	Amount
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MR796	50 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	metre	1.00000	310.00	310.00
	Add Cartage@1.00				3.10
	total				313.10

TOTAL	313.1
Add CPOH @ 15%	46.97
cost for one metre	360.0
Say	360.0
Cost index 37.93 %	.00
Total with Cost index	360.00
Say	360.00

# Other Engineering Organisations

8 Specification Code: od21338/2019\_2020

od21338/2019 \_2020 :

Supply of 3.5C X 150 Sq.mm AYFY Cable

Code	Description	Unit	Quantity	Rate	Amount
MR800	150 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	metre	1.00000	770.00	770.00
	Add Cartage@1.00				7.70
	total				777.70
	TOTAL 777.7				

Add CPOH @ 15%	116.66
cost for one metre	894.0
Say	894.0

Cost index 37.93 %	.00
Total with Cost index	894.00
Say	894.00

**9** Specification Code: od21342/2019\_2020

od21342/2019
\_2020:
Supply of 185 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

Code	Description	Unit	Quantity	Rate	Amount
MR801	185 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	Organ metre	isations	964.00	964.00
	Add Cartage@1.00				9.64
	total				973.64
				TOTAL	973.64
	Add CPOH @ 15%				
			cost for o	ne metre	1120.0
				Say	1120.0
Cost index <b>37.93</b> %					.00
Total with Cost index					1120.00
				Say	1120.00

**10** Specification Code: od21345/2019\_2020

od21345/2019 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

Code	Description	Unit	Quantity	Rate	Amount	
MR795	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	metre	1.00000	240.00		240.00
	Add Cartage@1.00	12	21			2.40
	total	54	الماليل			242.40
	TOTAL					
	Add CPOH @ 15%					
	Other Engineering	Organ	cost for o	ne metre	279.0	
	PRI		H'	Say	279.0	
Cost index 37.93 %					.00	
Total with Cost index					279.00	
				Say	279.00	

11	Specification	Code:	od21348/2019	9 2020

2020:

od21348/2019 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

Code	Description	Unit	Quantity	Rate	Amount
	<u> </u>				

MR809	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	metre	1.00000	205.00	205.00
	Add Cartage@1.00				2.05
	total				207.05

TOTAL	207.05
Add CPOH @ 15%	31.06
cost for one metre	238.0
Say	238.0
Cost index 37.93 %	.00
Total with Cost index	238.00
Say	238.00

## Other Engineering Organisations

**12** Specification Code: od21350/2019\_2020

\_2020:

od21350/2019 Supply of 16 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

Code	Description	Unit	Quantity	Rate	Amount
MR808	16 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	metre	1.00000	155.00	155.00
	Add Cartage@1.00				1.55
	total				156.55

TOTAL	156.55
Add CPOH @ 15%	23.48
cost for one metre	180.0
Say	180.0

Cost index 37.93 %	.00
Total with Cost index	180.00
Say	180.00

**13** Specification Code: od21372/2019\_2020

od21372/2019 \_2020 :

Code	Description Other Engineering	Organ Unit	Quantity	Rate	Amount	
2860	6 mm dia rivet/ stud/ bolts and nuts	each	4.00000	3.00	12.00	
	Add Cartage@1.00				0.12	
	total				12.12	
MR1198	300/305 mm sweep Light Duty Exhaust fan in metal frame working on 230 V A/C	each	1.00000	1495.00	1495.00	
	Add Cartage@1.00				14.95	
	total				1509.95	
		Tot	al Cost of	Materials	1522.07	
1001	Wireman	Day	0.33000	447.00	147.51	
MR719	Wireman Helper	Day	0.33000	600.00	198.00	
				TOTAL	1867.58	
	Add CPOH @ 15% 280.14					

cost for one each	2148.0
Say	2148.0

Cost index 37.93 %	69.79
Total with Cost index	2217.79
Say	2217.79

**14** Specification Code: od21374/2019\_2020

od21374/2019 2020 :

Supply, conveyance, installation, testing and commissioning of ceiling fans of the following sizes using standard accessories excluding resistance type regulator, wiring the down rod with 16/0.20mm PVC insulated and PVC sheathed 650/1100V grade 3 core round copper conductor flex wire or with extended original wiring etc. as required.<br/>
<a href="https://docume.com/br/>br>1400mm</a> sweep ceiling fan complete with 300mm down rod , canopies, shackeles and blades and resistance type regulator working on 230V/240V single phase A/C

Code	Description Other Engineering	Unitgan	QuantityS	Rate	Amount
MR1186	1400 mm Sweep Ceiling fan, complete with 300mm down rod, canopies, shackles and blades and resistance type regulator working on 230/240V single phase A/C	each	1.00000	1600.00	1600.00
	Add Cartage@1.00				16.00
	total				1616.00
	1616.0				
90.4.3	Rate as per item number90.4.3of SH:OD Electrical	each	1.00000	166.00	166.00
	1616.0				
	267.30				
	2024.0				
	2024.0				

Cost index 37.93 %	62.96
Total with Cost index	2086.96
Say	2086.96

**15** Specification Code: od69726/2019\_2020

od69726/2019 Supply, installation, testing and commissioning of 5W LED wall light working on \_2020: 230V, 50 Hz AC, including giving connections as required.

Code	Description	Unit	Quantity	Rate	Amount
MR	5W LED lamp, working on 240V, 50Hz AC. (Make: Havells, Model no: LHLDEUEEMK8R005)	each	1.00000	110.17	110.17
	Add Cartage@1.00				1.10
	total				111.27
	111.27				
90.3.13	Rate as per item number 90.3.13 of SH: OD Electrical	each	1.00000	71.30	71.30
1.34	Rate as per item number 1.34 of SH: Wiring	each	1.00000	65.22	65.22
	111.27				
	37.17				
	285.0				
	285.0				
	40.21				
	325.21				
	325.21				

**16** Specification Code: od69727/2019\_2020

od69727/2019 SITC of Rust Resistant and Weather-Proof Bulk head light fixture with 9W LED \_2020 : lamp, IP 65 protection complete with all other accessories as required.

Code	Description	Unit	Quantity	Rate	Amount
MR	9W LED lamp, working on 230V, 50Hz AC. (Make: Havells, Model no: LHLDEUEEMC8R009)	each	1.00000	127.12	127.12
	Add Cartage@1.00				1.27
	total				128.39
MR	Rust Resistant and Weather-Proof Bulk head light fixture IP 65 protection complete with all other accessories as required. (Make: Havells, model no.LHKL01160099)	each	1.00000	322.03	322.03
	Add Cartage@1.00				3.22
	total	E E			325.25
	Other Engineering	Organ	tal Cost of	Materials	453.64
90.3.13	Rate as per item number 90.3.13 of SH: OD Electrical	each	1.00000	71.30	71.30
				TOTAL	453.64
Add CPOH @ 15%					78.74
cost for one no					604.0
Say					604.0
Cost index 37.93 %					11.76
Total with Cost index					615.76
				Say	615.76

MAIN BUILDING FIRE FIGHTING WORKS	
<b>1</b> Specification Code: od24373/2019_2020	

od24373/2019 \_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.<br/>

Code	Description	Unit	Quantity	Rate	Amount
MR	Miscellaneous items (Lock, Standpost etc.)	L.S	1.00000	392.00	392.00
MR	Paints and accessories	L.S	1.00000	629.00	629.00
MR2335	Hose Cabinet- Single	each	1.00000	2542.00	2542.00
	THE 588	Tot	tal Cost of	Materials	3563.0
1004	Fitter, Grade 1	Day	1.00000	447.00	447.00
1087	Welder	Day	2.00000	447.00	894.00
				TOTAL	4904.0
	Out II in the second	Organ	Add CPOH	l @ 15%	735.60
	5640.0				
Say					5640.0
Cost index 37.93 %					585.26
Total with Cost index					6225.26
Say					6225.26

2 Specification Code: od24375/2019\_2020

od24375/2019 2020 :

FIRE HOSE REEL: - Providing and fixing first aid hose reel full swinging type with 30 m length x 20 mm dia rubber lined pipe with ABS plastic shut off nozzle of 6 mm dia. The hose reel shall conform to IS requirements. Rate shall include 25 mm dia pipe connection from riser to hose reel including flexible pipe, sockets, nipples, elbows and 25 mm ball valve. Make: Newage/SRI/Monsher

	Code	Description	Unit	Quantity	Rate	Amount
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MR	Swinging fittings	L.S	1.00000	266.00	266.00
MR	25mm dia GM valve	each	1.00000	401.00	401.00
MR	Connections for Valve	L.S	1.00000	177.00	177.00
MR2338	Hose reel	each	1.00000	6992.00	6992.00
	Add Cartage@1.00				69.92
	total				7061.92
	7905.92				
1004	Fitter, Grade 1	Day	0.50000	447.00	223.50
1016	Mate	Day	0.50000	368.00	184.00

TOTAL	8313.42
Add CPOH @ 15%	1247.01
cost for one each	9560.0
Say	9560.0
Cost index 37.93 %	
Other Engineering Organia With Cost index	9737.51
DD Say	9737.51

**3** Specification Code: od24425/2019\_2020

od24425/2019 \_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

Code	Description	Unit	Quantity	Rate	Amount
MR	Nuts Bolts, Washers, Gasket etc.	L.S	1.00000	533.36	533.36
MR2333	Hydrant Valve - Single	each	1.00000	6186.00	6186.00
	Add Cartage@1.00				61.86

	total				6247.86
		Tot	al Cost of	Materials	6781.22
1004	Fitter, Grade 1	Day	0.30000	447.00	134.10
1016	Mate	Day	0.50000	368.00	184.00

TOTAL	7099.32
Add CPOH @ 15%	1064.90
cost for one each	8164.0
Say	8164.0
Cost index 37.93 %	138.82
Total with Cost index	8302.82
Say	8302.82

### 4 Specification Code: od24427/2019\_2020

\_2020:

od24427/2019 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.

Code	Description	Unit	Quantity	Rate	Amount
MR	Canvas Hose 15m hose with instantaneous coupling	each	1.00000	4320.00	4320.00
Total Cost of Materials					4320.0
1004	Fitter, Grade 1	Day	0.40000	447.00	178.80
1016	Mate	Day	0.40000	368.00	147.20
				TOTAL	4646.0
Add CPOH @ 15%					696.90
cost for one each					5343.0
Say				5343.0	
Cost index 37.93 %				142.24	

Total with C	ost index	5485.24
	Say	5485.24

#### 5 Specification Code: od24659/2019\_2020

Providing and fixing 63 mm dia standard stainless steel short Branch Pipe female od24659/2019 instantaneous inlet, male threaded outlet, complete with hexagonal base nozzle \_2020: as per IS 903 with 20 mm nozzle complete with fixing clamps. Make: Essel/Priyanka/Newage

Code	Description	Unit	Quantity	Rate	Amount	
MR	Branch pipe short size with nozzle	each	1.00000	1900.00	1900.00	
	Total Cost of Materials					
1004	Fitter, Grade 1	Day	0.40000	447.00	178.80	
1016	Mate	Day	0.40000	368.00	147.20	
	Other Engineering Organisations TOTAL					
	DDT		Add CPOF	H @ 15%	333.90	
	PKI		cost for o	one each	2560.0	
Say				2560.0		
Cost index 37.93 %					142.24	
Total with Cost index					2702.24	
				Say	2702.24	

6 Specification Code: od21299/2019\_2020

od21299/2019 \_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)

Code	Description	Unit	Quantity	Rate	Amount
MR	Providing and fabricating 80 mm Dia. pipes including painting with primer and synthetic enamel	metre	10.0000 0	442.50	4425.00
MR	Cost of necessary brackets, supports, saddles, clamps, hangers, vibrationisolator's and fittings such as bends, tees etc. @15%	L.S	1.00000	663.75	663.75
MR	Cartage 5%	L.S	1.00000	221.25	221.25
MR2168	Welding rod	each	41.0000 0	2.19	89.79
	Add Cartage@1.00				0.90
	total	E E			90.69
MR2122	Red oxide primer ther Engineering	<u>Clitre</u> n	1:00000	93.22	93.22
	Add Cartage@1.00				0.93
	total				94.15
MR2218	Synthetic enamel paint	Litre	1.00000	178.81	178.81
	Add Cartage@1.00				1.79
	total				180.60
MR	Other miscellaneous tools	L.S	1.00000	59.00	59.00
		Tot	al Cost of	Materials	5734.44
1004	Fitter, Grade 1	Day	1.50000	447.00	670.50
1087	Welder	Day	1.50000	447.00	670.50
1016	Mate	Day	2.75000	368.00	1012.00
1006	Painter	Day	1.25000	407.00	508.75
TOTAL					8596.19
Add CPOH @ 15%					1289.43

cost for 10.0 metre	9885.62
cost for one metre	989.0
Say	989.0
Cost index 37.93 %	125.17
Total with Cost index	1114.17
Say	1114.17

**7** Specification Code: od24662/2019\_2020

2020 :

od24662/2019 Supply, installing, testing and commissioning of Fire Extinguisher dry chemical powder type ISI mark, 5 kg capacity with initial charger and installation brackets.Make - Safex / Warrior / Intime

Code	Description	Unit	Quantity	Rate	Amount
MR2379	Fire Extinguisher-DCP 5 Kg Type	each	1.00000	1695.00	1695.00
	Add Cartage@1.00ther Engineering	Organ	isations		16.95
	Add necessary specials@5.00				84.75
	total		L		1796.70
		Tot	al Cost of	Materials	1796.7
1004	Fitter, Grade 1	Day	0.20000	447.00	89.40
				TOTAL	1886.1
		ŀ	Add CPOH	H @ 15%	282.92
			cost for o	one each	2169.0
	2169.0				
	39.07				
	2208.07				
				Say	2208.07

8 Specification Code: od21311/2019\_2020

od21311/2019 2020 :

ESCAPE ROUTE SIGNS:- Supply & installing in position self glowing "EXIT" sign board to guide the occupants towards the exits of size 100mm x 300 mm made of luminescent safely, rigid sheet in green colour, photo luminescent rigid sheet with two each hanging chains & necessarry supports to hang it on<br/>
on<br/>
ceiling.

Code	Description	Unit	Quantity	Rate	Amount	
MR	Providing and fixing Escape Route EXIT Signage	each	1.00000	531.00		531.00
	Total Cost of Materials					
1004	Fitter, Grade 1	Day	0.20000	447.00		89.40
	TOTAL					
	Add CPOH @ 15%					
	cost for one each					
Other Engineering Organisations Say						
Cost index 37.93 %						
Total with Cost index						
	Say					

**9** Specification Code: od21315/2019\_2020

FIRE EXIT: Supply & installing in position self glowing "FIRE EXIT" sign board od21315/2019 of size 100mm x 300 mm made of luminescent safely, rigid sheet in green colour, \_2020: photo luminescent rigid sheet with two each hanging chains & necessarry supports to hang it on ceiling.

Code	Description	Unit	Quantity	Rate	Amount	
MR	Providing and fixing FIRE EXIT Signage	each	1.00000	354.00		354.00
Total Cost of Materials						354.0

1004	Fitter, Grade 1	Day	0.20000	447.00	89.	.40	
	TOTAL	443.4					
Add CPOH @ 15%							
cost for one each					510.0		
Say					510.0		
Cost index 37.93 %							
Total with Cost index					549.07		
Say					549.07		

**10** Specification Code: od21319/2019\_2020

od21319/2019 3 core cable,2.5sq mm,copper. Make:- ISI approved

Code	Description	Unit	Quantity	Rate	Amount
MR889	2.5 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 I for XLPE	Organ	1.00000	143.00	143.00
	143.0				
1001	Wireman	Day	0.16000	447.00	71.52
1007	Khallasi	Day	0.16000	368.00	58.88
	273.4				
	41.01				
	314.0				
Say					314.0
Cost index 37.93 %					56.90
		Тс	otal with C	ost index	370.90

Say	370.90
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**11** Specification Code: od21323/2019\_2020

\_2020:

Providing and fixing Two Way Fire Brigade Inlet to Hydrant outside the Building od21323/2019 (Butterfly valve and non<br/><br/>return valve to be paid separately) complete in all respects: Make:- ISI Approved.

Code	Description	Unit	Quantity	Rate	Amount
MR2355	Fire Brigade Inlet -2Way	each	1.00000	7203.00	7203.00
	Add Cartage@1.00	103			72.03
	Add necessary specials@5.00	M	11		360.15
	total	201	100		7635.18
	Total Cost of Materials				
1005	Fitter, Grade 2	Day	1.00000	407.00	407.00
1087	Welder Other Engineering	Opayan	1.00000	447.00	447.00
	DDI			TOTAL	8489.18
			Add CPOH	H @ 15%	1273.38
			cost fo	or one no	9763.0
	9763.0				
Cost index 37.93 %					372.85
Total with Cost index					10135.85
Say					10135.85

**12** Specification Code: od21329/2019\_2020

od21329/2019 \_2020:

Downcomer panel with starter panel for terrace pump. Make: IS Approved

Code	Description	Unit	Quantity	Rate	Amount
MR1981	Three Phase DOL starters for 0.25 to 7.5 HP motor	each	1.00000	1355.93	1355.93
	Add Cartage@1.00				13.56
	total				1369.49
	1369.49				
1001	Wireman	Day	1.00000	447.00	447.00
1007	Khallasi	Day	1.00000	368.00	368.00

TOTAL	2184.49
Add CPOH @ 15%	327.67
cost for one no	2512.0
Say	2512.0
Cost index 37.93 %	355.40
Total with Cost index	2867.40
Other Engineering Organisations Say	2867.40

13 Specification Code: od24682/2019\_2020

od24682/2019 2020 :

FIRE PUMPS (terrace pump): - "Supplying, installing, testing & commissioning of electric driven pressurization<br/>
- "Supplying, installing, testing & commissioning of electric driven pressurization<br/>
- "pump (terrace pump) suitable for automatic operation and consisting of following: complete in all respect<br/>
- "br> "Horizontal type, multistage, centrifugal pump of cast iron body & bronze impeller with<br/>
- br> stainless steel shaft, mechanical seal to ensure a minimum pressure of 3.5 kg/sq.cm. at highest and<br/>
- br> farthest outlet at specified flow of 900 lpm. Make: - ISI kirloskar (KDS 520)/ IS Approved

Code	Description	Unit	Quantity	Rate	Amount
MR2320	Terrace Pump 7.5HP	each	1.00000	40127.0 0	40127.00
	Add Cartage@1.00				401.27

	Add necessary specials@5.00				2006.35
	total				42534.62
	Total Cost of Materials			42534.62	
MR	Supplying testing and commissioning	no	1.00000	3000.00	3000.00

TOTAL	45534.62
Add CPOH @ 15%	6830.19
cost for one no	52365.0
Say	52365.0
Cost index 37.93 %	.00
Total with Cost index	52365.00
Say	52365.00

14 Specification Code: od24677/2019\_2020

od24677/2019 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)

Code	Description	Unit	Quantity	Rate	Amount
MR	Providing and fabricating 100 mm Dia. pipes including painting with primer and synthetic enamel	metre	10.0000	550.00	5500.00
MR	Cost of necessary brackets, supports, saddles, clamps, hangers, vibration-isolator's and fittings such as bends, tees etc. @15%	L.S	1.00000	825.00	825.00
MR	Cartage 5%	L.S	1.00000	275.00	275.00

MR2168	Welding rod	each	36.0000 0	2.19	78.84
	Add Cartage@1.00				0.79
	total				79.63
MR2122	Red oxide primer	Litre	1.00000	93.22	93.22
	Add Cartage@1.00				0.93
	total				94.15
MR2218	Synthetic enamel paint	Litre	1.00000	178.81	178.81
	Add Cartage@1.00				1.79
	total	1			180.60
MR	Other miscellaneous tools	L.S	1.00000	50.00	50.00
		Tot	tal Cost of	Materials	7004.38
1004	Fitter, Grade 1	Day	2.00000	447.00	894.00
1087	Welder	Day	2.00000	447.00	894.00
1016	Mate	Day	3.00000	368.00	1104.00
1006	Painter Other Engineering	Organ	1.25000 <sup>S</sup>	407.00	508.75

TOTAL	10405.13
Add CPOH @ 15%	1560.77
cost for 10.0 metre	11965.90
cost for one metre	1197.0
Say	1197.0
Cost index 37.93 %	148.31
Total with Cost index	1345.31
Say	1345.31

**15** Specification Code: od24679/2019\_2020

od24679/2019 Below Ground Piping :- Providing, fixing, welding joints and testing of 100 mm

\_2020 :

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)

Code	Description	Unit	Quantity	Rate	Amount
MR	Providing and fabricating 100 mm Dia. pipes including painting with primer and synthetic enamel	metre	10.0000 0	550.00	5500.00
MR	Cost of necessary brackets, supports, saddles, clamps, hangers, vibrationisolator's and fittings such as bends, tees etc. @15%	L.S	1.00000	825.00	825.00
MR	Cartage 5%	L.S	1.00000	275.00	275.00
MR	PYPKOTE	sqm	7.85000	267.00	2095.95
MR	Bitumen paint Other Engineering	Qittean	3.00000	76.00	228.00
MR	Adhesive	L.S	1.00000	100.00	100.00
MR2168	Welding rod	each	36.0000 0	2.19	78.84
	Add Cartage@1.00				0.79
	total				79.63
		Tot	al Cost of	Materials	9103.58
1004	Fitter, Grade 1	Day	2.00000	447.00	894.00
1087	Welder	Day	3.25000	447.00	1452.75
1016	Mate	Day	2.00000	368.00	736.00
1006	Painter	Day	1.00000	407.00	407.00
	12593.33				
Add CPOH @ 15%					1889.00
cost for 10.0 metre					14482.33

cost for one metre	1448.0
Say	1448.0
Cost index 37.93 %	152.10
Total with Cost index	1600.10
Say	1600.10

**16** Specification Code: od21343/2019\_2020

od21343/2019 Providing and fixing 100mm dia. Cast iron Non-Return Valve. Make:- ISI \_2020 : Approved.<br><br>

Code	Description	Unit	Quantity	Rate	Amount
3043	100 mm dia	each	1.00000	2294.25	2294.25
		To	tal Cost of	Materials	2294.25
1004	Fitter, Grade 1	Day	0.50000	447.00	223.50
	Other Engineering	g Organ	isations	TOTAL	2517.75
	PRI		Add CPOH	H @ 15%	377.66
	1 1/ 1		cost for o	one each	2895.0
				Say	2895.0
Cost index 37.93 %					1098.07
Total with Cost index					3993.07
Say					3993.07

**17** Specification Code: od21346/2019\_2020

\_2020:

od21346/2019 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.<br>

Code	Description	Unit	Quantity	Rate	Amount
MR2357	Pressure Guage	each	1.00000	720.00	720.00
	Add Cartage@1.00				7.20
	Add necessary specials@5.00				36.00
	total				763.20
		Tot	tal Cost of	Materials	763.2
1004	Fitter, Grade 1	Day	0.20000	447.00	89.40

TOTAL	852.6
Add CPOH @ 15%	127.89
cost for one each	980.0
Say	980.0
Cost index 37.93 %	38.69
Total with Cost index	1018.69
Say	1018.69

# Other Engineering Organisations

**18** Specification Code: od21349/2019\_2020

od21349/2019 \_2020 :

Providing and fixing 25 mm dia. Air Releasing Valve. Make:- ISI Approved.

Code	Description	Unit	Quantity	Rate	Amount
MR2359	Air Release Valve	each	1.00000	1314.00	1314.00
	Add Cartage@1.00				13.14
	total				1327.14
		Tot	al Cost of	Materials	1327.14
1004	Fitter, Grade 1	Day	0.10000	447.00	44.70
TOTAL					1371.84
Add CPOH @ 15%					205.78

cost for one each	1578.0
Say	1578.0
Cost index 37.93 %	19.72
Total with Cost index	1597.72

**19** Specification Code: od21351/2019\_2020

od21351/2019 Supplying, testing, installation & commissioning of pressure switches for Hydrant, and Standby, including necessary wiring up to control panel & other materials.

Code	Description	Unit	Quantity	Rate	Amount
MR2358	Pressure Switch	each	1.00000	2458.00	2458.00
	Add Cartage@1.00				24.58
	Other Engine of the Control of the C	Organ	isations		2482.58
	DDI	To	tal Cost of	Materials	2482.58
1001	Wireman I I	Day	0.50000	447.00	223.50
1016	Mate	Day	0.50000	368.00	184.00
				TOTAL	2890.08
		,	Add CPOH	H @ 15%	433.51
			cost for	one each	3324.0
	3324.0				
	177.89				
	3501.89				
				Say	3501.89

<b>20</b> Specification Code: od21353/2019_2020

1597.72

Say

od21353/2019 \_2020 :

Providing and fixing 100 mm Dia. cast iron Butterfly valve of the following size complete with S.S. 304 disc, bolts, nuts, washers and neoprene gaskets as per specifications.

Code	Description	Unit	Quantity	Rate	Amount		
3027	3027 100mm dia		1.00000	3465.00	3465.00		
	Total Cost of Materials						
1004	1004 Fitter, Grade 1 Day 0.50000 447.00						
1016	Mate	Day	0.50000	368.00	184.00		
	TOTAL						
	- C-3 &	30	Add CPOH	H @ 15%	580.88		
		WIL	cost for o	one each	4453.0		
	4453.0						
	1689.02						
	6142.02						
	Other Engineering	g Organ	isations	Say	6142.02		

21 Specification Code: od61467/2019\_2020

od61467/2019 \_2020 :

Supply, Installation, Testing and commissioning of Over head tank (Structural Steel) with necessary Accessories (Nuts,Bolt and Support.etc), Approved Make/Materials: - ISI Approved Materials.

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply of Structural Steel (Sheets, Joist, Channels and Plate) with accessories		3920.00 000	60.00	235200.00
	Add Wastage@5.00				11760.00
	total				246960.00
	246960.0				

MR	Fabrication primer coating, Painting, Erection Labour Charge	kg	3920.00 000	40.00	156800.00
MR	Sheet Bending Charges	kg	3920.00 000	30.00	117600.00
MR	Labour charge for Material Lifiting	kg	10.0000	10.00	100.00
MR	Fibre Coating (3 Layer) inside over head tank, Material charge inclusive	per sqm	22.0000	2478.00	54516.00

TOTAL	575976.0
Add CPOH @ 15%	86396.40
cost for one no	662372.0
Say	662372.0
Cost index 37.93 %	.00
Total with Cost index	662372.00
Say	662372.00

## Other Engineering Organisations

SUMP TANK CIVIL WORKS	
1 Specification Code: od21324/2019_2020	

od21324/2019\_2020 :Supply and fixing double sealed Ductile Iron manhole covers of size 800x800 mm with frames (Medium duty)

FOR 1 ITEM

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply double sealed Ductile Iron manhole covers of size 800x800 mm with frames (Medium duty)  1.00000  129		12932.20	12932.20	
0111	Carpender Ist Class	Day	0.60000	487.00	292.20
0114	Beldar Day 0.60000 36		368.00	220.80	
			TOTA	\L 1	3445.20
cost for one each 1344					3445.20

	say			13445.20
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Add Water Charges @ 1.0%	134.4
Add CPOH @ 15.0%	2036.9
Cost index <b>37.93</b> %	226.00
Total with Cost index	15842.6
Say	15842.6

#### FRONT GATE WITH SECURITY CABIN CIVIL WORKS

1 Specification Code: od21356/2019\_2020

od21356/2019\_2020 :Supplying fully finished Pre Hung Door:- Both side HP Laminate vertical grain pattern Flush door with matching PVC <br/>
strapped WPC Jamb with front side Architrave other side Tackers. Door of 35mm thick with 4 side edges painted / Lock Hole Boring (Using mortise lock)/ Hinge Rebate Cutting (4 Nos) ,Jamb width 100 mm. Latch with Lever handles without Keys SS finish - 1 No, Hinges 4" x 3" x 3mm SS finish - 4 Nos .Tower Bolt 6" SS Finish - 1 No.(Jacsons or Approved equivalent)

Code	Descri	ption		Unit	Quantity	Rate	Amount
MR	Supply	у		sqm	1.00000	7085.16	7085.16
MR	Carta	ge		sqm	1.00000	200.00	200.00
					TOTA	AL	7285.16
			cost for	one sqm	of door are	еа	7285.16
		say					7285.16

Add Water Charges @ 1.0%	72.85
Add CPOH @ 15.0%	1103.70
Cost index <b>37.93</b> %	0.00
Total with Cost index	8461.71
Say	8461.71

## FRONT GATE WITH SECURITY CABIN M AND E WORKS

1 Specification Code: od21295/2019\_2020

od21295/2019
\_2020:
Supply of 16 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

Code	Description	Unit	Quantity	Rate	Amount	
MR808	16 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	metre	1.00000	155.00		155.00
	Add Cartage@1.00					1.55
	total	DE TON				156.55
	Other Engineering	Organ	isations	TOTAL	. 156.55	
	DDI		Add CPOF	H @ 15%	23.48	
	cost for one metre				180.0	
				Say	180.0	
Cost index 37.93 %					.00	
Total with Cost index						
				Say	180.00	

2 Specification Code: od21320/2019\_2020

Supply, installation, testing and commissioning of Wall fan of 300mm sweep dia od21320/2019 on wall, fixing necessary anchor bolts / bolt and nuts etc., as required including \_2020: giving connections with the supplied wire along with the Wall fan.<br/>
sweep wall fan working on 230 V A/C

Code	Description	Unit	Quantity	Rate	Amount
2860	6 mm dia rivet/ stud/ bolts and nuts	each	4.00000	3.00	12.00
	Add Cartage@1.00				0.12
	total				12.12
MR1192	300 mm sweep Wall Mounting fan	each	1.00000	1550.00	1550.00
	Add Cartage@1.00				15.50
	total				1565.50
	1577.62				
1001	Wireman	Day	0.33000	447.00	147.51
MR719	Wireman Helper	Day	0.33000	600.00	198.00
		MI	11	TOTAL	1923.13
	JAT DISE		Add CPOF	H @ 15%	288.47
			cost for o	one each	2212.0
	2212.0				
	69.79				
	2281.79				
	1 1/1			Say	2281.79

**3** Specification Code: od69739/2019\_2020

od69739/2019 Supply, installation, testing and commissioning of LED 3W Spike light, IP65 with \_2020 : all other accessories as required.

Code	Description	Unit	Quantity	Rate	Amount
MR	LED 3W Spike light, IP65 protection, working on 240V, 50Hz AC (Make: LUKER, Model no. LSSPK3W)	each	1.00000	932.20	932.20
	Add Cartage@1.00				9.32
	total				941.52

Total Cost of Materials					941.52
90.3.15	Rate as per item number 90.3.15 of SH: OD Electrical	each	1.00000	74.78	74.78

TOTAL	941.52
Add CPOH @ 15%	152.44
cost for one no	1169.0
Say	1169.0
Cost index 37.93 %	14.03
Total with Cost index	1183.03
Say	1183.03

4 Specification Code: od69740/2019\_2020

od69740/2019 SITC of weather proof pillar light fittings with 9W LED lamp, IP65 for outdoor \_2020 : purpose pre wired and complete with all other accessories as required.

Other Engineering Organisations

Code	Description	Unit	Quantity	Rate	Amount
MR	Weather proof pillar light fitting, IP65 for outdoor purpose (Make: Havells, model no: LHDC11126099)	each	1.00000	995.76	995.76
	Add Cartage@1.00				9.96
	total				1005.72
MR	9W LED lamp working on 230V, 50Hz AC (Make: Havells, Model no. LHLDEUEEML8R009)	each	1.00000	127.12	127.12
	Add Cartage@1.00				1.27
	total				128.39
		Tot	al Cost of	Materials	1134.11
90.3.15	Rate as per item number 90.3.15 of SH: OD Electrical	each	1.00000	74.78	74.78

TOTAL	1134.11
Add CPOH @ 15%	181.33
cost for one no	1390.0
Say	1390.0

Cost index 37.93 %	13.65
Total with Cost index	1403.65
Say	1403.65

## 5 Specification Code: od69741/2019\_2020

od69741/2019 SITC of 20/25W LED Surface mounting down light, working on 230V, 50Hz AC, \_2020 : complete with all other accessories as required.

Code	Description	Unit	Quantity	Rate	Amount
MR	20/25W LED Surface mounting down light working on 230V, 50Hz AC neering (Make:Havells, Model no. LHEAABP7IL1W024)	Organ each	isations 1.00000	2004.24	2004.24
	Add Cartage@1.00				20.04
	total				2024.28
		Tot	al Cost of	Materials	2024.28
90.3.11	Rate as per item number 90.3.11 of SH: OD Electrical	each	1.00000	73.04	73.04
				TOTAL	2024.28
		ŀ	Add CPOF	H @ 15%	314.60
	2412.0				
	2412.0				
	13.28				
		То	tal with Co	ost index	2425.28

г		
ı	<u> </u>	
1	l Sav	12425.28
1	- Cay	120.20

6 Specification Code: od69742/2019\_2020

od69742/2019 SITC of 3W LED Recessed Spot light pre wired, working on 230V, 50Hz AC, \_2020: complete with all other accessories as required.

Code	Description	Unit	Quantity	Rate	Amount
MR	3W LED Recessed Spot light pre wired, working on 230V, 50Hz AC. (Make: Havells, Model no: LHEEBCPBUN1W003)	each	1.00000	372.88	372.88
	Add Cartage@1.00	KAY	21		3.73
	total	514	J. J. L.		376.61
		To	tal Cost of	Materials	376.61
90.3.12	Rate as per item number 90.3.12 of SH: OD Electrical	Ceachin	1:00000	53.04	53.04
	DRI		R	TOTAL	376.61
	1 1/1		Add CPOH	H @ 15%	64.45
			cost fo	or one no	494.0
	494.0				
	9.86				
	503.86				
				Say	503.86

**7** Specification Code: od69726/2019\_2020

od69726/2019 Supply, installation, testing and commissioning of 5W LED wall light working on \_2020: 230V, 50 Hz AC, including giving connections as required.

Code	Description	Unit	Quantity	Rate	Amount
MR	5W LED lamp, working on 240V, 50Hz AC. (Make: Havells, Model no: LHLDEUEEMK8R005)	each	1.00000	110.17	110.17
	Add Cartage@1.00				1.10
	total				111.27
	Total Cost of Materials				
90.3.13	Rate as per item number 90.3.13 of SH: OD Electrical	each	1.00000	71.30	71.30
1.34	Rate as per item number 1.34 of SH: Wiring	each	1.00000	65.22	65.22

TOTAL	111.27
Add CPOH @ 15%	37.17
cost for one each	285.0
Say	285.0
Other Engineering Org cost index 37.93 %	40.21
Total with Cost index	325.21
T T L Say	325.21

**8** Specification Code: od21355/2019\_2020

od21355/2019
\_2020:
Supplying and laying 8 SWG Cu wire at 0.50 metre below ground level for conductor earth<br/>br>electrode, including connection/ termination with GI thimble etc. as required.

Code	Description	Unit	Quantity	Rate	Amount
MR2043	Copper wire 0 to 14 SWG	kg	3.51000	582.00	2042.82
	Add Cartage@1.00				20.43
	total				2063.25
	Total Cost of Materials				

1085	Solder jointing	each	2.00000	12.00	24.00
1001	Wireman	Day	0.12500	447.00	55.88
1007	Khallasi	Day	0.12500	368.00	46.00
1012	Beldar/coolie	Day	1.00000	368.00	368.00

TOTAL	2557.13
Add CPOH @ 15%	383.57
cost for 30.0 metre	2940.70
cost for one metre	98.0
Say	98.0
Cost index 37.93 %	7.21
Total with Cost index	105.21
Say	105.21

#### **9** Specification Code: od21309/2019\_2020

## Other Engineering Organisations

\_2020 :

od21309/2019 Supply, installing, testing and commissioning of Fire Extinguisher dry chemical powder type ISI mark, 5 kg capacity with initial charger and<br/>br>installation brackets.Make - Safex / Warrior / Intime

Code	Description	Unit	Quantity	Rate	Amount
MR2379	Fire Extinguisher-DCP 5 Kg Type	each	1.00000	1695.00	1695.00
	Add Cartage@1.00				16.95
	Add necessary specials@5.00				84.75
	total				1796.70
		Tot	al Cost of	Materials	1796.7
1004	Fitter, Grade 1	Day	0.20000	447.00	89.40
	TOTAI				
Add CPOH @ 15%					282.92
			cost for o	one each	2169.0

	Say	2169.0
Co	ost index 37.93 %	39.07
To	otal with Cost index	2208.07

COMPOUND WALL	
1 Specification Code: od21321/2019 2020	

od21321/2019\_2020 :Supply and install externally 1st quality 30x15x0.8cm brick pattrern ceramic tile for walls cladding, tile shall be laid and fixed to pre plastered walls in patterns, style and forms of grouting and jointing as directed by engineer using approved tile adhesive materials and pointed with approved tile joint filler matching the colour of tiles.

Details of cost for 1 sqm

Code	Description	Unit	Quantity	Rate	Amount
MR	brick pattern Ceramic tile cladding	sqm	1.02500	720.34	738.35
8731	High polymer modified quickset tile adhesive ng	rganikat	1000000	9.00	90.00
MR	Tile joint filler	kg	0.05140	55.08	2.83
0123	Mason (brick layer) Ist class	Day	0.25000	487.00	121.75
0115	Coolie	Day	0.25000	368.00	92.00
9988	Carriage and sundries	L.S	26.91000	1.73	46.55
			TOTA	AL.	1091.48
		cos	st for one sq	m	1091.48
say					1091.48
			_		
	Add Water Charges @ 1.0%				10.91

Add Water Charges @ 1.0%	10.91
Add CPOH @ 15.0%	165.35
Cost index 37.93 %	154.32
Total with Cost index	1422.08
Say	1422.08

2208.07

# MAIN BUILDING 1 HVAC SYSTEM 1 Specification Code: od24683/2019\_2020

od24683/2019 Supply and installation of Refrigerant Copper piping insulated with Nitrile Rubber \_2020: Tubular insulation with 13/19mm thickness.

Code	Description	Unit	Quantity	Rate	Amount	
MR	Supply and installation of Refrigerant Copper piping insulated with Nitrile Rubber Tubular insulation with 13/19mm thickness.	each	1.00000	1507.16	1507.16	
	. 1507.16					
Add CPOH @ 15%					226.07	
	1011400		cost for o	one each	1733.0	
	Say	1733.0				
	.00					
Total with Cost index					1733.00	
	Say					

2 Specification Code: od21285/2019\_2020

od21285/2019 \_2020 :

Supply, installation , testing and commissioning of exhaust fans of size up to 8 Inch(Round type) in the existing opening, fixing necessary anchor bolts / bolt and nuts etc., as required including giving connections with the supplied wire along with the exhaust fan.<br/>
<a href="https://example.com/br/>supplied/br/>supplied/br/>supplied/br/>bolt and nuts etc.">https://example.com/br/>supplied/br/>bolt and nuts etc.</a>, as required including giving connections with the supplied wire along with the exhaust fan.<br/>
<a href="https://example.com/br/>supplied/br/>br/>supplied/br/su

Code	Description	Unit	Quantity	Rate	Amount
2860	6 mm dia rivet/ stud/ bolts and nuts	each	4.00000	3.00	12.00
	Add Cartage@1.00				0.12

	total				12.12
MR	Supply of 8 Inch Round Type Exhaust Fan(600 to 800 CFM) For Toilet Ventilation (Ductable) an,Make :- Havells/Luker/Viyani Fans/ISI Approved	no	1.00000	2497.72	2497.72
	Add Cartage@1.00				24.98
	total				2522.70
		Tot	al Cost of	Materials	2534.82
1001	Wireman	Day	0.33000	447.00	147.51
MR719	Wireman Helper	Day	0.33000	600.00	198.00

TOTAL	2880.33
Add CPOH @ 15%	432.05
cost for one no	3312.0
Say	3312.0
	69.41
Other Engineering Organisations Total with Cost index	3381.41
Say	3381.41

3 Specification Code: od24689/2019\_2020

Supply ,installation,testing and commissioning of Modular type outdoor units equipped with minimum 2 Nos of highly efficient DC twin Rotary compressors with od24689/2019 all inverter type compressor(s) only,special acryl pre-coated heat exchanger,low \_2020: noise condenser fan,auto check function for connection error,auto address setting,with multiple outdoor units of capacities and quantities as mentioned below.Refrigerant Should be R410A .(4-6 HP)

Code	Description	Unit	Quantity	Rate	Amount

MR	Supply of Modular type outdoor units equipped with minimum 2 Nos of highly efficient DC twin Rotary compressors with all inverter type compressor(s) only, special acryl precoated heat exchanger, low noise condenser fan, auto check function for connection error, auto address setting, with multiple outdoor units of capacities and quantities as mentioned below. Refrigerant Should be R410A . (4-6 HP) Make :- Carrier / ISI Equivalent.	each	1.00000	115329. 72	115329.72
		Tot	al Cost of	Materials	115329.72
MR	Installation, Testing and Commissioning of Modular type outdoor units equipped with minimum 2 Nos of highly efficient DC twin Rotary compressors with all inverter type compressor(s) only, special acryl precoated heat exchanger, low noise condenser fan, auto check function for connection error, auto address setting, with multiple outdoor units of capacities and quantities as mentioned below. Refrigerant Should be R410A . (4-6 HP) Make: Carrier / ISI Equivalent.	each	1.00000 isations	6724.00	6724.00

TOTAL	122053.72
Add CPOH @ 15%	18308.06
cost for one each	140362.0
Say	140362.0
Cost index 37.93 %	.00
Total with Cost index	140362.00
Say	140362.00

4 Specification Code: od24693/2019\_2020

od24693/2019 2020 :

Supply,installation,testing and commissioning of High-Wall indoor units with compact cooling coil,electronic expansion valve and multi speed fan motor,The blower shall be dynamically balanced and designed for silent operation ,the filters shall be washable type .Drain Pump is a part of the indoor unit.(2 TR), Make :- Carrier / ISI Equivalent.

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply of 4 way High-Wall units with compact cooling coil, electronic expansion valve and multi speed fan motor, The blower shall be dynamically balanced and designed for silent operation, the filters shall be washable type. Drain Pump is a part of the indoor unit. (2 TR), Make:-Carrier / ISI Equivalent.	each	1.00000	27541.3 4	27541.34
	27541.34				
MR	Installation and commissioning of CASSETTE unit (2 TR)	Organ each	1.00000	3300.00	3300.00
	1 1/1			TOTAL	30841.34
		ŀ	Add CPOF	H @ 15%	4626.20
			cost for o	one each	35468.0
				Say	35468.0
	.00				
	35468.00				
	35468.00				

5 Specification Code: od21301/2019\_2020

od21301/2019 Supplying & providing 2.00 TR Split A/C<br>with high wall mounted \_2020: unit.<br>Carrier/Hitachi/Voltas/Blue Star.[Mini 5<br>Star rating]Copper

## Condensor Only

Code	Description	Unit	Quantity	Rate	Amount		
MR	Supplying & providing 2.00 TR Split A/C with high wall mounted unit. br>Carrier/Hitachi/Voltas/Blue Star.[Mini 5 br>Star rating]Copper Condensor Only.	each	1.00000	48960.5 6	48960.56		
	TOTAL						
	Cal.		Add CPOH	H @ 15%	7344.08		
		53	cost for	one each	56305.0		
		M	1)	Say	56305.0		
	Cost index 37.93 %						
	Total with Cost index						
	56305.00						

## Other Engineering Organisations

MAIN BUILDING FURNITURE		T	
	K		
1 Specification Code: od21270/2019_2	020		

od21270/2019\_2020 :Supply, deliver and place trademark registered branded (JALARAM make JED 1512) or approved equivalent Executive Desk with side unit and credenza. Desktop mounted on SS tubular legs and specially designed pedestal storage with utility spaces inspired by your needs. Size: (A) Main Desk : W-2000 x D-900 x H-750 mm (B) Side Unit : W-1050 x D-500 x H-750mm (C) Credenza : W-2000 x D-400 x H-I190mm Rate for each

Code	Description		Unit	Quantity	Rat	e	Amount
MR	Supply, deliver and place JALARAM make JED 1512 or MR approved equivalent Executive Desk with side unit and credenza			1.00000	156	6579.49	156579.49
						15	6579.49
cost for one each 1565					6579.49		
	say					15	6579.49

Add Water Charges @ 1.0%		1565.79
Add CPOH @ 15.0%		23721.79
Cost index <b>37.93</b> %		0.00
Total with Cost index		181867.0 8
Say		181867.0 8

2 Specification Code: od21272/2019\_2020

od21272/2019\_2020 :Supply, deliver and place registered branded (JALARAM Make-JEC 2017(D)) or approved equivalent Executive High Back Revolving Chair, Tested by approved BIFMA standard laboratories confirming to ANSI/BIFMA X 5.1- 2002 Cl. No. 5,7,8,12,13,17 on functional requirement. Leatherette Finish, High quality mould foam cushion, Die-Cast Aluminium with buffing pedestal, 5 Position locking system with swivel mechanism, Chrome Finished Armrest, Anti-Shock and Synchro Tilt Mechanism, Adjustable cozy armrest, Overall Size (approx):-H: 117.0 - 126.5 x W:75 x D:75 (cm), Seat Height:- 44-54 (cm) Front Pivot Synchro Mechanism: This mechanism helps you experience the effect of your body angle opening out, for maximum relaxation, while your feet remain firmly on the ground. 5-Position Locking: The backrest can be locked in 5 different positions, giving you firm support for concentrated work. Its anti-shock mechanism prevents the backrest from impacting the user when the lock is released. Moulded Foam: The seat and the backrest are made up of moulded polyurethane foam of the right density and thickness, which not only gives you a soft feeling on first contact but also provides a firm support to ensure hours of comfortable seating, Swivel Mechanism: The swivel mechanism allows for a complete 3600 lateral movement. This prevents you from straining over your shoulders and back to reach out for papers and phones kept on either side of your table, ensuring mobility while working. Twin Wheel Castors: The twin wheel castors facilitates ease of movement.

Rate for each

Code	Descri	ption			Unit	Quantity	Ra	te	Amount
MR	Supply, deliver and place JALARAM Make-JEC 2017(D)  MR or approved equivalent Executive High Back Revolving  Chair			each	1.00000	20	652.54	20652.54	
	TOTAL					2	20652.54		
	cost for one each					2	20652.54		
		say						2	20652.54

Add Water Charges @ 1.0%		206.52
Add CPOH @ 15.0%		3128.85
Cost index <b>37.93</b> %		0.00
Total with Cost index		23987.93
Say		23987.93

3	Specification	Code:	od21276/2019	2020

od21276/2019\_2020 :Supply, deliver and place registered branded (JALARAM Make-JEC 2017(F)) or approved equivalent Executive Visitor Chair, Tested by approved BIFMA standard laboratories confirming to ANSI/BIFMA X 5.1- 2002 CI. No. 5,7,8,12,13,17 on functional requirement. With Leatherette Finish Moulded Foam: The seat and the backrest are made up of moulded polyurethane foam of the right density and thickness.

Rate for each

Code	Descrip	otion	of Engineerin	ng Oigi	Unit	Quantity	Rate	Amount
MR			JALARAM Make-JE ecutive Visitor Chair	C 2017(F)	each	1.00000	15065.60	15065.60
TOTAL						AL 1	15065.60	
cost for one each						ch 1	15065.60	
		say					1	15065.60

Add Water Charges @ 1.0%		150.65
Add CPOH @ 15.0%		2282.43
Cost index <b>37.93</b> %		0.00
Total with Cost index		17498.69
Say		17498.69

4 Specification Code: od21278/2019\_2020

od21278/2019\_2020 :Supply, deliver and place trademark registered branded (JALARAM make- JSF 102 A) or approved equivalent JALARAM Multipurpose storage cabinet with 2 adjustable shelves and 1 full locker. Overall size: H-1980 × W-915 × D-485(mm) (H-78"xW-36"x D-19") Material Specifications: The raw material used in cupboard will be PRIME quality CRCA as per IS 513 (1994,1998) 'D' grade. OEM must enclose Proof of purchase of steel from SAIL/Tata Steel/Essar/ Jindal. The cupboard should have welded construction with MIG welding process. The material used for constructing the cupboard should be prime quality Cold Rolled Close Annealed (CRCA) Steel (for doors and shelves 1.0 mm & other parts as per functional requirements) The doors provided will be full height steel hinged doors The handle provided will be matching, easy to grip, sleek and elegant. The Cupboard will have a 3 way locking Mechanism Minimum 6 levers (With duplicate keys) mechanism with shooting bolt arrangement. Shelving: The shelving will be Height wise Adjustable and Shelf Mounting. The Uniformly Distributed Load (UDL) Capacity per each full shelf will be 40 Kg at least. The cupboard will have 2 numbers of adjustable and 1 fixed full shelves with 1 full locker. All steel parts will be epoxy polyester powder coated to the thickness not less than 50 microns finish after 10 tank anti-rust.

Code	Description	48			Unit	Quantity	Rat	te	Amount
MR	Supply, deliver and JALARAM or approved cabinet with 2 adjusted.	ed equ	ivalent Multipurpose	e storage	an each	ion;00000	15	015.00	15015.00
						тот	٩L	1	5015.00
	cost for one each						1	5015.00	
		say						1	5015.00

Add Water Charges @ 1.0%		150.15
Add CPOH @ 15.0%		2274.77
Cost index <b>37.93</b> %		0.00
Total with Cost index		17439.92
Say		17439.92

**5** Specification Code: od21286/2019\_2020

od21286/2019\_2020 :Supply, deliver and place Trademark registered branded (JALARAM make-JED 200) or approved equivalent Chief Executive Suite with PU coated 36 mm post formed top, Executive Return Unit & 3 Drawer Pedestal Unit,Size of the main Table: W-250 × D-110 × H-75 cm, Size of the Pedestal for Main Table: W-42.5 × D-80 cm, Size of Return Unit: W-127.5 × D-58 cm ,Size of the Pedestal for Return Unit: W-42.5×D-58 cm

Rate for each

Code	Description		Unit	Quantity	Rate	Amount		
MR	Supply, deliver and place JALARAM make-JEI approved equivalent Chief Executive Suite.	each	1.00000	124743.20	124743.20			
	TOTAL							
	cost for one each							
	say	SX	1 1		12	24743.20		

Add Water Charges @ 1.0%	1247.43
Add CPOH @ 15.0%	18898.59
Cost index 37.93 %	0.00
Other Engineering Organisations Total with Cost index	144889.2 3
Say	144889.2 3

6 Specification Code: od21290/2019 2020

od21290/2019\_2020 :Supply, deliver and place registered branded (JALARAM make JED 220) or approved equivalent Executive Desk elegant looking main desk with mobile pedestal and return unit. A real beauty of the blend of wood and steel. Main Desk Size: W-180  $\times$  D-90  $\times$  H-75 (cm) Joining Top (Black Finish) Size: W-105  $\times$  D-120 (cm) Fixed Side Return Desk Size :W-120  $\times$  D-60  $\times$  H-72(cm) Mobile Pedestal Size: W-40.5  $\times$  D-57  $\times$  H-50(cm).

Rate for each

Code	Description	Unit	Quantity	Rate	Amount
			,		

	Supply, deliver and place JALARAM make JED 220) or				
MR	approved equivalent Executive Desk elegant looking main	each	1.00000	63332.45	63332.45
	desk with mobile pedestal and return unit5 compartments.				

			TOTAL	63332.45		
cost for one each						
say				63332.45		

Add Water Charges @ 1.0%	633.32
Add CPOH @ 15.0%	9594.86
Cost index 37.93 %	0.00
Total with Cost index	73560.64
Say	73560.64

7	Specification Code: od21292/2	20	19	9_20	)20						
			П	ne	r 1	-n	onne	erino	110001	1163	11/1

od21292/2019\_2020 :Supply, deliver and place Trademark registered branded (JALARAM Make-JSS 908) or approved equivalent Sofa Set Overall Size of 3 seater: H-762 x W-2134 x D-812 mm
Rate for each

Code	Descrip	otion			Unit	Quantity	Rate		Amount	
MR		v, deliver and place ed equivalent Sofa S	JALARAM Make-JS Set	SS 908 or	each	1.00000	37915	.25	37915.25	
	TOTAL									
					cost	cost for one each			37915.25	
		say						3	7915.25	
		Add Wate	r Charges @ 1.0	%					379.1	
	Add CPOH @ 15.0%			)%					5744.1	
		C	Cost index 37.93	3 %					-0.01	

Total with Cost index		44038.56
Say		44038.56

8 Specification Code: od21305/2019\_2020

od21305/2019\_2020 :Supply, deliver and place Trademark registered branded (JALARAM make-JED 204 (A)) or approved equivalent Executive table, both side storage unit of special size. 2 drawers cum filing drawer & a center drawer, mounted on telescopic channel. Overall Size of curvica top: W-180 x D-90 cm ,Height of table 72.5 (cm) Material Specification: Two pedestals having 2 box drawers and 1 filing drawer with independent locking arrangement (cam lock) for each pedestal. Drawers shall have a clear depth of > 400 mm. One center drawer having ~ 350 mm clear depth with independent locking arrangement. The top should be made of 25 mm thick Pre‐ laminated board(PLB) of TESA with 2 mm thick matching lipping. Under Structure: Two pedestals shall be a combination of processed wood (PLB) and Mild Steel (MS). Pedestal shell to be 0.80 mm thick MS sheet. Drawer tray to be made from 0.6 mm thick M.S sheet. Drawer separator to be made from 0.6 mm thick M.S. sheet. PLB drawer fronts (18 mm thick PLB) to match the top colour. Drawers to be mounted on double extension steel telescopic ball slides to give full access to the drawer. Sleek handles for easy grip. Glides screws for leveling. Stiffeners (1.6 mm thick) is to be provided under the top to give additional strength. Powder coating: Powder coating on all items with dry film thickness not less than 50 microns, Salt Spray test to withstand more than 1000 hours, Pencil scratch hardness more than 2H, Adhesion as per DIN 53152 Standards. The powder coating shall be of good quality (7 process) to ensure good adhesion of life of the coating. Modesty: Shall be made from 1.0 mm thick MS. Panel recessed inside for more leg room. Panel to be styled with cut‐outs (windows) for better physical appearance. Rate for each

Code	Descri	ption		Unit	Quantity	Rate		Amount	
MR		y, deliver and place oved equivalent Exe		JED 204 (A)	each	1.00000	21	713.56	21713.56
	TOTAL								
	cost for one each								
		say						2	21713.56
		.0%					217.13		
		5.0%					3289.60		
	Cost index 37.93 %								0.00

Total with Cost index		25220.30
Say		25220.30

9 Specification Code: od21307/2019\_2020

od21307/2019\_2020 :Supply, deliver and place registered branded (JALARAM make JSF 115(6) E) or approved equivalent slotted angle rack (Open type) Overall size: H-78" X W-36" X D-18" Angle: 40 x 40 x 2 mm (4 nos.) Shelves: 36" x 18" (22 swg. 6 nos.) Corner plate: 8 nos. Nuts & bolts: 64 nos. Shoes: 4 nos. The raw material used will be PRIME quality CRCA as per IS 513 (1994,1998) 'D' grade. OEM must enclose Proof of purchase of steel from SAIL/Tata Steel/Essar/ Jindal. Finishing: 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

Rate for each

Code	Descri	ption		in of	Unit	C	Quantity	Rate	Amount
MR	Supply or appr	y, deliver and place oved equivalent slot	JALARAM make JS ted angle rack	F 115(6) E	an each	tion	1500000	4274.60	4274.60
	DDI(						TOTA	\L	4274.60
	cost for one each							ch	4274.60
		say							4274.60

Add Water Charges @ 1.0%		42.74
Add CPOH @ 15.0%		647.60
Cost index <b>37.93</b> %		0.00
Total with Cost index		4964.95
Say		4964.95

**10** Specification Code: od21317/2019\_2020

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.

Rate for each

Code	Description		Unit	Quantity	Rate	Amount
MR	Supply, deliver and place of JALARAM or approved equivalent make table model JMPT 4A		each	1.00000	7093.90	7093.90
		397		TOT	AL	7093.90
	13	(A) F	cost	for one ea	ch	7093.90
	say		14			7093.90
	16 113					
	Add Water Charges @ 1.0	0%	5.00			70.9
	Add CPOH @ 15.	.0%	Spec			1074.7
	Otl Cost index n 37.9	3% Or	ganicati	ons		0.00

Say

Total with Cost index

**11** Specification Code: od21318/2019\_2020

od21318/2019\_2020 :Supply,deliver and place Trademark registered branded (JALARAM Make JEC 501(C))/Equivelent Executive Visitor Net Chair, <br/>
obr>Overall Size (approx): H-98 x W-58 x D-63.5 (cm) <br/>
Height: 48 (cm) <br/>
obr>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. <br/>
obr>Tapestry will be tested quality such as stain test, ultra violet test,glue test <br/>
obr>and color fastening with average weight of 450 grams per square meter <br/>
obr>Cushioning: PU foam having density of 50 kgs/m3 for seat. Average <br/>
obr>thickness of foam not less than 50 mm + 10 mm Polly foam. <br/>
obr>Arm rest material: Polyurethane on Chrome <br/>
obr>Shoes: Nylon Rubber

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply,deliver and place	each	1.00000	11205.00	11205.00

8239.56

8239.56

		TOTAL	11205.00
	СО	st for one each	11205.00
say			11205.00

Add Water Charges @ 1.0%	112.05
Add CPOH @ 15.0%	1697.55
Cost index <b>37.93</b> %	-0.01
Total with Cost index	13014.61
Say	13014.61

12 Specification Code: od21326/2019\_2020

od21326/2019\_2020 :Supply deliver and place Trademark registered branded (JALARAM Make-JSD 601(D))/equilvalent Two Seater Desk Cum Bench fitted on tubular frame with perforated seat and back for Senior Students.<br/>
serior Students.<br/>
brown Curvical 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<br/>
brown Seat & Back frame tube of 32mm, 16swg ERW round tube.<br/>
brown 18swg. Perforated CRCA sheet IS 513.<br/>
brown Brown ERW round tube.<br/>
brown ERW tube.<br/>
brown Brown ERW round tube.<br/>
brown ERW tube.<br/>
brown Brown ERW round tube.<br/>
brown Brown ERW round tube.<br/>
brown Brown ERW round tube.<br/>
brown Br

Code	Descri	ption			Unit	Quantity	Rate	Amount
MR Supply delever and place			each	1.00000	7693.20	7693.20		
	TOTAL					AL	7693.20	
					cost	for one ea	ch	7693.20
		say						7693.20

Add Water Charges @ 1.0%		76.93
Add CPOH @ 15.0%		1165.51

Cost index 37.93 %		0.00
Total with Cost index		8935.65
Say		8935.65

**13** Specification Code: od21328/2019\_2020

od21328/2019\_2020 :Supply and install Jasos brand JC-S 03 Model or approved equivalent auditorium seating chair comprise of seat and back frames made with CR pipes, Back cover with PPCP tray, Up holstory PU molded form of density 52-58 kg/m3, Mechanisms as legs made of CR pipes with PU cup holder arm rest,push back mechanism - box and Nylon cast metal rollers, with spring, height of chair 97cm - 100cm @52cm cetre to centre, 90x8mm with chemical bonding method, All seat and back frames with enamel painting, Legs - powder coated, Mechanism- Laqor paint finished.

Unit

Quantity

Rate

**Amount** 

Rate of each seat

Description

Code

MR	Supply Jasos brand JC-S 03 Model auditorium seating chair	each	1.00000	4000.00	4000.00
9988	Carriage and sundries ther Engineering Organical	ganisstic	127.28000	1.73	47.19
0116	Fitter(grade1)	Day	0.10000	487.00	48.70
0115	Coolie	Day	0.10000	368.00	36.80
			TOTAL	_	4132.69
		cost f	or one each	า	4132.69
	say				4132.69
		<u>'</u>			
	Add Water Charges @ 1.0%				41.32
	Add CPOH @ 15.0%				626.10
	Cost index 37.93 %				58.45
	Total with Cost index				4858.58
	Say				4858.58

**14** Specification Code: od21331/2019\_2020

od21331/2019\_2020 :Supply deliver and place trademark registered branded (JALARAM make JMDX 70) OR Equivalent Library reading cubical with top partition (Double side main unit + Add on unit) <br/>
br>Overall size: 1800W x 1200D x 760H mm <br/>
brop partition: 1750W x 18D x 250H mm <br/>
br>Material Description: <br/>
beading all over <br/>
breading all over <br/>
breading all over <br/>
breading all over deges. <br/>
brop partition & side partition of 18mm thick. Pre-laminated particle board (PLB) of TESA with 0.5mm PVC beading all over edges fitted with U bracket. <br/>
brow Vertical pillar of 1.2mm thick. (18swg) CRCA sheet IS 513. <br/>
brow Cable cover of 0.9mm thick. (20swg) CRCA sheet IS 513. <br/>
bracket. <br/>
brow Good quality adjustable stud. <br/>
brow 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 (in house) & same will be demonstrated to the purchaser during pre-dispatch Inspection.

Code	Description	Unit Quantity Rate			Amount
MR	Supply deliver and place	oly deliver and place each 1.00000 2137		21377.40	21377.40
	TOTAL				
	1670	COS	t for one ea	ch 2	21377.40
	say			2	21377.40

Add Water Charges @ 1.0%	)rganisa	tions	213.77
Add CPOH @ 15.0%			3238.67
Cost index 37.93 %			0.00
Total with Cost index			24829.85
Say			24829.85

15 Specification Code: od21334/2019 2020

od21334/2019\_2020 :Supply, deliver and place trademark registered branded (JALARAM make JSF 125(D)) OR Equivalent multipurpose expandable storage rack (Double Faced main Unit + Add on unit) in knock down design with 5 shelves making 6 compartments.<br/>br>Overall size: H-1980 x W-915 x D-535 mm • 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 (in house) & same will be demonstrated to the purchaser during predispatch Inspection.

Code Description			Unit	Quantity	Rate	Amount		
MR Supply, deliver and place			each	1.00000	28400.90	28400.90		
	TC					TOTA	AL 2	28400.90
					cost	for one ead	ch 2	28400.90
		say					2	28400.90

Add Water Charges @ 1.0%		284.00
Add CPOH @ 15.0%		4302.73
Cost index 37.93 %		0.00
Total with Cost index	3	32987.65
Say	H	32987.65

**16** Specification Code: od21337/2019\_2020

### Other Engineering Organisations

od21337/2019\_2020 :Supply, deliver and place trademark registered branded (JALARAM make JSF 125(S)) OR Equivalent multipurpose expandable storage rack (Single faced main unit + Add on Unit) in knock down design with 5 shelves making 6 compartments. <br/>
Specifications: <br/>
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 (in house) & same will be demonstrated to the purchaser during pre-dispatch Inspection.

Code	Descri	ption			Unit	Quantity	Rate		Amount
MR	Suppl	y, deliver and plac			each	1.00000	192	56.60	19256.60
						TOTA	AL	1	9256.60
					cost	for one ea	ch	1	9256.60
		say						1	9256.60
	-								
		Add Wate	r Charges @ 1.0º	%					192.5
		Δα	Hd CPOH @ 15 0	10/2					2917 3

Cost index 37.93 %		-0.01
Total with Cost index		22366.54
Say		22366.54

**17** Specification Code: od21341/2019\_2020

od21341/2019\_2020 :Supply, deliver and place trademark registered branded (JALARAM Make-JEC 325 (C)) or approved equivalent Executive Low Back Revolving Chair, Tested by approved BIFMA standard laboratories confirming to ANSI/BIFMAX 5.1- 2002 Cl. No. 5,7,8,12,13,17 on functional requirement, advanced synchro til mechanism, back rest height adjustment, 3-D wrap around design, tilt lock mechanism, self regulating tilt tension adjustment, seat depth adjustment, high quality moulded foam, pneumatic height adjustment.Overall Size (approx): H:87-104 x W:70 x D:70(cm) Seat height: 44 to 54 (cm) Frame structure: Seat & back from hot mould plywood of minimum 12 mm thickness of ergonomic design. Seat Height adjustment and ergonomics: With Pneumatic gas lift with 300 N force Stroke length of 12.5 cm. Seat height will be adjustable and optimum Height is 44-54 cm . Under structure facility: Revolving, Tilting and Lateral smooth movement on twin wheel castors fixed on five pronged wide base of 65 cm to 75 cm D. 'Tapestry Minimum average weight required 400 to 490 gms per sq. mtr. Tapestry: Tapestry should be tested quality such as stain test, ultra violet test, glue test and color fastening with average weight of 450 grams per square meter. (All the stitches of seat and back boarder should be covered by plastic beading of black cover for elegant look. Cushioning: PU foam having density of 40 kg for back and 50 kgs/m3 for seat. Average thickness of foam not less than 50 mm + 10 mm Polly foam. Base: Tested High quality virgin material.Arm rest material: single piece round soft virgin quality PU handle reinforced within built steel rib. Rate for each

Code	Descri	ption			Unit	Quantity	Rat	:e	Amount
MR		•	JALARAM Make-JE ecutive Low Back Re	` ,	each	1.00000	114	485.08	11485.08
						ТОТ	AL	1	1485.08
					cost	for one ea	ch	1	1485.08
		say						1	1485.08
		Add Wate	r Charges @ 1.0	%					114.85
		Ad	dd CPOH @ 15.0	)%					1739.98

Cost index <b>37.93</b> %		0.00
Total with Cost index		13339.92
Say		13339.92

**18** Specification Code: od21347/2019\_2020

od21347/2019\_2020 :Supply, deliver and place registered branded (JALARAM make-JDT-706 A) or approved equivalent canteen table for 6 persons Overall Size of the table:L-1600 x W-800 x H-750 mm Material Description: Main top of 30mm thick. Post formed MDF top with 0.6mm lamination & longer edges both side post forming (curvica) & other both side PVC edge band by hot melt glue process for beading with matching colour. Top frame of 25x25x1.2mm (18swg) SS 304 grade square tube. Main vertical legs of 60 to 65mm x 1.6mm (16swg) thick. SS 304 or SS 202 grade round tube. Leg support & Footrest of 30mm x 1.6mm (16swg) thick. SS 304 or SS 202 grade round table. Good quality PVC adjustable stud at table. All SS parts with glossy buffing.Trademark registered branded (JALARAM make) canteen chair. Overall Size of the chair: H-900mm Seat Dia:400mm Seat Height:450mm Material Description: Chair frame of OD-19mm x 16swg SS 304 grade pipe with glossy buffing. Back support of OD-12mm tube SS 304 grade with Glossy buffing. Seat top (400mm Round) of 19mm thick. Wooden (Rubber wood) with melamine coated. Good quality PVC shoes at bottom , All SS parts with glossy buffing.

Rate for each

Code	Descri	ption			Unit	Quantity	Rate	Amount
MR		y, deliver and place oved equivalent can	•	•	each	1.00000	34734.74	34734.74
						TOT	AL	34734.74
					cost	for one ea	ch	34734.74
	say				34734.74			
		Add Wate	r Charges @ 1.0	%				347.34
		Ad	dd CPOH @ 15.0	0%				5262.31
		C	ost index 37.93	3 %				0.00
		7	Γotal with Cost in	ndex				40344.40

Sa	/			40344.40
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#### MAIN BUILDING - ELV WORKS

1 Specification Code: od23586/2019\_2020

Supply, installation, testing and commissioning of Bio Metric Finger Print scan od23586/2019 attendance system with LCD/LED display & keypad & TCPIP LAN, USB \_2020: Connectivity along with Attendance monitoring & report software (Web based Terminal)

Code	Description	Unit	Quantity	Rate	Amount
MR	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)	no	1.00000	5750.00	5750.00
MR	Wireman/ Electrician University Other Engineering	Organ	1.00000	1850.00	1850.00
	PRI		R	TOTAL	7600.0
	1 1/ 1		cost fo	or one no	7600.0
				Say	7600.0
		Со	st index	37.93 %	.00
		To	tal with C	ost index	7600.00
				Say	7600.00

2 Specification Code: od23595/2019\_2020

od23595/2019 Supply, installation, testing and commissioning of Cat6 I/O for Patch Panel \_2020: Shuttered.

Code	Description	Unit	Quantity	Rate	Amount
Jour	Description	OTIIL	Quantity	itale	Amount

MR	Cat6 I/O for Patch Panel Shuttered.	no	1.00000	165.00	165.00
	Total Cost of Materials				
MR	Electrician	no	1.00000	55.00	55.00

TOTAL	220.0
cost for one no	220.0
Say	220.0
Cost index 37.93 %	.00
Total with Cost index	220.00
Say	220.00

**3** Specification Code: od23599/2019\_2020

od23599/2019 Supply Installation testing and Commissioning of 10/100/1000 Mbps 16 Port \_2020 : Network Switch to provide networks and internet on class room etc.

Code	Description Other Engineering	Organ	Sations Quantity	Rate	Amount
MR	10/100/1000 Mbps 16 Port Network Switch	no	1.00000	5500.00	5500.00
		Tot	al Cost of	Materials	5500.0
MR	Wireman	no	1.00000	750.00	750.00
				TOTAL	6250.0
			cost fo	or one no	6250.0
				Say	6250.0
		Co	st index	37.93 %	.00
		То	tal with C	ost index	6250.00
				Say	6250.00

4 Specification Code: od21281/2019\_2020

od21281/2019 Supply, Installation, testing and commissioning of Cat6 24 Port un loaded Patch \_2020 : Panel.

Code	Description	Unit	Quantity	Rate	Amount
MR	Cat6 24 Port un loaded Patch Panel.	no	1.00000	1593.00	1593.00
		Tot	tal Cost of	Materials	1593.0
MR	Labour charges per unit	no	1.00000	295.00	295.00
	1888.0				
	Ca2	Λ.	cost fo	or one no	1888.0
	598	6.3		Say	1888.0
	.00				
Total with Cost index					1888.00
	Say				

5 Specification Code: od23604/2019\_2020\_ngineering Organisations

od23604/2019

\_2020:

Supply and drawing of CAT6 4 pair cable including all necessary connector.

Code	Description	Unit	Quantity	Rate	Amount	
MR	CAT6 4 pair cable including all necessary connector.	metre	1.00000	21.00		21.00
		To	tal Cost of	Materials		21.0
MR	Wireman	metre	1.00000	18.00		18.00
	39.0					
cost for one metre						
Say						
Cost index 37.93 %					.00	
Total with Cost index						

Jay 153.00		Say 3	39.00
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6 Specification Code: od23606/2019 2020

od23606/2019 \_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

Code	Description	Unit	Quantity	Rate	Amount
MR	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	no	1.00000	7375.00	7375.00
	7375.0				
MR	Wireman	no	1.00000	1250.00	1250.00
	Other Engineering	g Organ	isations	TOTAL	8625.0
	DDI		cost fo	or one no	8625.0
	8625.0				
	.00				
Total with Cost index					8625.00
Say					8625.00

**7** Specification Code: od23612/2019\_2020

Network Video Recorder: <br/>
channel 720P or 24-channel 1080P high definition network video input and od23612/2019 storage Support simultaneous HDMI and VGA output, resolution up to \_2020: 1920×1080P/60Hz Supports 256Mbps bandwidth throughput handling, Supports 4-channe, 1080P video real-time decoding and synchronous playback Supports 8 SATA hard disk with capacity up to 4TB.

Code	Description	Unit	Quantity	Rate	Amount
MR	Network Video Recorde 32-channel 720P or 24-channel 1080P high definition network video input and storage Support simultaneous HDMI and VGA output, resolution up to 19201080P/60Hz Supports 256Mbps bandwidth throughput handling, Supports 4-channe, 1080P video real-time decoding and synchronous playback Supports 8 SATA hard disk with capacity up to 4TB.	no	1.00000	42450.0 0	42450.00
	W	Tot	tal Cost of	Materials	42450.0
MR	Electrician/ Wireman	no	1.00000	7750.00	7750.00
		KAT	18	TOTAL	50200.0
	101400		cost fo	or one no	50200.0
	50200.0				
Other Engineering Org Cost index 37.93 %					.00
Total with Cost index					50200.00
	- $PKI$			Say	50200.00

8 Specification Code: od23878/2019\_2020

od23878/2019
\_2020:
Supply, installation, testing and commissioning of Outdoor IR IP bullet camera 2
MP 2.1mm/4mm/6mm focal length lens capable to 1.0 lux sensitivity, with IR
480TV lines.

Code	Description	Unit	Quantity	Rate	Amount
MR	Outdoor IR IP bullet camera 2 MP 2.1mm/4mm/6mm focal length lens capable to 1.0 lux sensitivity, with IR 480TV lines.	no	1.00000	9850.00	9850.00
	9850.0				

MR	Wireman	no	1.00000	413.00	413.00
					,
	10263.0				
cost for one no					10263.0
Say					10263.0
Cost index 37.93 %					.00
Total with Cost index					10263.00
Say					10263.00

### **9** Specification Code: od23880/2019\_2020

\_2020:

Supply, installation, testing and commissioning of indoor IR IP dome camera 2 MP <br/><br/>2.1mm/4mm/6mm focal length lens capable to 1.0 lux sensitivity, with IR n 480 TV lines.

Code	Description	Unit	Quantity	Rate	Amount	
MR	Indoor IR IP dome camera 2 MPCering 2.1mm/4mm/6mm focal length lens capable to 1.0 lux sensitivity, with IR n 480 TV lines.	Organ	1.00000	5650.00	5650.00	
Total Cost of Materials					5650.0	
MR	Wireman	no	1.00000	295.00	295.00	
				TOTAL	5945.0	
			cost fo	or one no	5945.0	
	Say					
Cost index 37.93 % .00						
Total with Cost index					5945.00	
	Say					

10	Specification	Code:	od23891/2019	2020
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od23891/2019 Supply & laying of twin twisted 2x1.5 sqmm Cu flexible wire 1.1 kv grade PVC insulated through PVC conduit. \_2020 :

Code	Description	Unit	Quantity	Rate	Amount	
MR	2x1.5 sqmm Cu flexible wire 1.1 kv grade PVC insulated through PVC conduit	metre	1.00000	48.00		48.00
		Tot	tal Cost of	Materials		48.0
MR	Wireman	no	1.00000	21.24		21.24
	69.24					
cost for one no						
Say						
Cost index 37.93 %						
Total with Cost index					69.00	
Say						

## Other Engineering Organisations

11 Specification Code: od23892/2019_2020	D		

od23892/2019 Supply, Installation, Testing and commissioning of XLR cables and connectors

Code	Description	Unit	Quantity	Rate	Amount		
MR	XLR cables and connectors	no	1.00000	1875.00	1875.00		
	1875.0						
MR	Wireman	no	1.00000	150.00	150.00		
	TOTAL						
	2025.0						
Say					2025.0		
		Со	st index	37.93 %	.00		

Total with Cost index	2025.00
Say	2025.00

**12** Specification Code: od21314/2019\_2020

Supply, Installation, Testing and commissioning of Distribution box for PA od21314/2019 distribution made out of 16 SWG CRCA sheet with lockable door arrangement \_2020: having connectors (10 NOS) suitable for 1.5sqmm wire with facity for cable termination of 4cx10 sqmm ALAR. Required at each floor for PA wire termination.

Code	Description	Unit	Quantity	Rate	Amount	
MR	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 facity for cable termination of 4cx10 sqmm ALAR. Required at each floor for PA wire termination.	no	1.00000 isations	684.40		684.40
	DDI	Tot	al Cost of	Materials		684.4
MR	Labour charges per unit	no	1.00000	295.00		295.00
				TOTAL	979.4	
cost for one no					979.0	
Say						
Cost index 37.93 %					.00	
Total with Cost index					979.00	
				Say	979.00	

**13** Specification Code: od23894/2019\_2020

od23894/2019 SITC Of 350W RMS MIXER AMPLIFIER, 3 MIC, 2 AUX, 100V/70V AND 4OHMS \_2020 : , 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.

Code	Description	Unit	Quantity	Rate	Amount
MR	350W RMS MIXER AMPLIFIER	no	1.00000	25375.0 0	25375.00
	Total Cost of Materials				
MR	Electrician	no	1.00000	2950.00	2950.00
TOTAL					28325.0
cost for one no					28325.0
Say					28325.0
Cost index 37.93 %					.00
Total with Cost index				28325.00	
	Other Engineering	Organ	isations	Say	28325.00

## 14 Specification Code: od21325/2019\_2020

od21325/2019

Supply, installation, testing and commissioning of Telephone socket.

\_2020:

Code	Description	Unit	Quantity	Rate	Amount	
MR	Telephone socket	no	1.00000	171.70		171.70
Total Cost of Materials					171.7	
MR	Labour charges per unit	no	1.00000	88.50		88.50
TOTAL					260.2	
cost for one no					260.0	
Say					260.0	
Cost index 37.93 %					.00	

Total with Cost index	260.00
Say	260.00

**15** Specification Code: od23898/2019\_2020

od23898/2019 Supply,Installation, Testing & commissioning of Telephone of approved makes \_2020 : including all other accessories for connection.

Code	Description	Unit	Quantity	Rate	Amount
MR	Telephone of approved makes including all other accessories for connection.	no	1.00000	1080.00	1080.00
Total Cost of Materials					1080.0
MR	Labour charges per unit	no	1.00000	50.00	50.00
	1130.0				
cost for one no					1130.0
Other Engineering Organisations Say					1130.0
Cost index 37.93 %					.00
Total with Cost index					1130.00
Say					1130.00

**16** Specification Code: od21332/2019\_2020

od21332/2019

Supply & Installation of telephone cable 10 pair through PVC conduit.

\_2020:

Code	Description	Unit	Quantity	Rate	Amount
MR	Telephone cable 10 pair through PVC conduit	metre	1.00000	54.28	54.28
Total Cost of Materials				54.28	
MR	Labour charges per meter	metre	1.00000	23.60	23.60

TOTAL	77.88
cost for one metre	78.0
Say	78.0

Cost index 37.93 %	.00
Total with Cost index	78.00
Say	78.00

**17** Specification Code: od21333/2019\_2020

od21333/2019

Supply & Installation of UG telephone cable jelly filled, 10 pair

Code	Description	Unit	Quantity	Rate	Amount
MR	UG telephone cable jelly filled, 10 pair	metre	1.00000	115.05	115.05
	Roba 1	To	tal Cost of	Materials	115.05
MR	Labour charges per meter	Organ metre	1.00000	29.50	29.50
TOTAL					144.55
cost for one metre					145.0
Say					145.0
Cost index 37.93 %					.00
Total with Cost index					145.00
Say					145.00

**18** Specification Code: od21340/2019\_2020

od21340/2019 Supply, installation, testing and commissioning of 20 PAIR BOX WITH KRONE \_2020: MODULES

Code	Description	Unit	Quantity	Rate	Amount
Jooge	Beschildin	OTHE	Qualitity	rate	/ tilloulit

MR	20 PAIR BOX WITH KRONE MODULES	no	1.00000	855.50	855.50
Total Cost of Materials					855.5
MR	Fixing charges per unit	no	1.00000	531.00	531.00

TOTAL	1386.5
cost for one no	1387.0
Say	1387.0
Cost index 37.93 %	.00
Total with Cost index	1387.00
Say	1387.00

**19** Specification Code: od23896/2019\_2020

od23896/2019 \_2020 :

Supply, installation, testing and commissioning of Telephone system: NEC Digital Key Telephone System Model-SL2100 32 Bit Micro Processor Configured as 08 P&T lines 48 Hybrid Ports EXPANDABLE MODEL UP TO 128 PCM/TDM 100 % Non-Blocking Inbuilt Conference,32 party Auto attendant (single channel) CLI based call routing AND ALL STANDARD FEATURES

Code	Description	Unit	Quantity	Rate	Amount
MR	NEC Digital Key Telephone System Model-SL2100 32 Bit Micro Processor Configured as 08 P&T lines 48 Hybrid Ports EXPANDABLE MODEL UP TO 128 PCM/TDM 100 % Non-Blocking Inbuilt Conference,32 party Auto attendant (single channel) CLI based call routing AND ALL STANDARD FEATURES	no	1.00000	194750. 00	194750.00
		Tot	al Cost of	Materials	194750.0
MR	Labour charges per no	no	1.00000	5900.00	5900.00
TOTAL 20					200650.0

cost for one no	200650.0
Say	200650.0

Cost index 37.93 %	.00
Total with Cost index	200650.00
Say	200650.00

**20** Specification Code: od21282/2019\_2020

od21282/2019

2020:

Supply, installation, testing and commissioning of LAN socket.

Code	Description	Unit	Quantity	Rate	Amount	
MR	LAN Socket	no	1.00000	194.70		194.70
		Tot	tal Cost of	Materials		194.7
MR	Fixing charges per unit	no	1.00000	64.90		64.90
	Other Engine	eering Organ	isations	TOTAL	259.6	
	PR		cost fo	or one no	260.0	
	1 1			Say	260.0	
Cost index 37.93 %						
Total with Cost index					260.00	
				Say	260.00	

**21** Specification Code: od69751/2019\_2020

od69751/2019 Supply, installation, Testing and commissioning of 19" Flat Screen VGA colour \_2020: monitor complete with all other accessories as required.

Code	Description	Unit	Quantity	Rate	Amount
MR	19" Flat Screen VGA colour monitor	each	1.00000	7500.00	7500.00

	Add Cartage@1.00				75.00
	total				7575.00
	Total Cost of Materials				7575.0
MR701	Electrician	Day	0.66700	750.00	500.25

TOTAL	8075.25
Add CPOH @ 15%	1211.29
cost for one each	9287.0
Say	9287.0
Cost index 37.93 %	.00
Total with Cost index	9287.00
Say	9287.00

**22** Specification Code: od21283/2019\_2020

od21283/2019 Supply and installation of Gl box for modular switch installation including base \_2020 : plate and front plate 1/2 M

Code	Description	Unit	Quantity	Rate	Amount	
MR	GI box for modular switch installation including base plate and front plate 1/2 M	no	1.00000	56.64		56.64
MR	Installation charge per unit	no	1.00000	177.00		177.00
TOTAL						
cost for one no						
Say					234.0	
Cost index 37.93 %					.00	
Total with Cost index					234.00	
Say					234.00	

**23** Specification Code: od23900/2019\_2020

od23900/2019 Supply, installation, testing and commissioning of 24 Port 10/100/1000 Mbps PoE \_2020 : Switch.

Code	Description	Unit	Quantity	Rate	Amount
MR	24 Port 10/100/1000 Mbps PoE Switch.	no	1.00000	25625.0 0	25625.00
	25625.0				
MR	Fixing charge	no	1.00000	1180.00	1180.00
TOTAL					26805.0
cost for one no					26805.0
Say					26805.0
Cost index 37.93 %					.00
Total with Cost index					26805.00
Other Engineering Organisations Say					26805.00

# **24** Specification Code: od23901/2019\_2020

od23901/2019
\_\_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

Code	Description	Unit	Quantity	Rate	Amount
MR	6W Wall mount speakers with perforated metal grille with line matching transformer suitable for 4 ohm impedance 200 mm dia LBD 0606/10	no	1.00000	1100.00	1100.00
		Tot	al Cost of	Materials	1100.0
MR	Wireman	no	1.00000	250.00	250.00
				TOTAL	1350.0

cost for one no	1350.0
Say	1350.0

Cost index 37.93 %	.00
Total with Cost index	1350.00
Say	1350.00

**25** Specification Code: od21354/2019\_2020

od21354/2019

2020:

Supply and laying of Cat6 outdoor cable including necessary connectors

Code	Description	Unit	Quantity	Rate	Amount		
MR	Supply and laying of Cat6 outdoor cable including necessary connectors	no	1.00000	84.00		84.00	
	TOTAL						
	Other Engineering Organisation one no						
	DDTCT Say						
	Cost index 37.93 %						
Total with Cost index							
				Say	84.00		

**26** Specification Code: od23906/2019\_2020

\_2020:

od23906/2019 Supply, installation, testing and commissioning of Promethean Board AB2T78 complete with all other accessories. Active inspire software will be complimentary with Promethean board.

Code	Description	Unit	Quantity	Rate	Amount
MR	Promethean Board AB2T78	no	1.00000	31000.0 0	31000.00

		Tot	al Cost of	Materials	31000.0
MR	Installation charges for Promethean Board AB2T78	no	1.00000	3000.00	3000.00

TOTAL	34000.0
cost for one no	34000.0
Say	34000.0
Cost index 37.93 %	.00
Total with Cost index	34000.00
Say	34000.00

27 Specification Code: od23910/2019\_2020

od23910/2019 Supply, installation, testing, and commissioning of LT Projector and roof mount for \_2020 : LT projector complete with all accessories as required.

Code	Description Other Engineering	Unitgan	Quantity	Rate	Amount
MR	SITC Of LT Projector	no	1.00000	20000.0	20000.00
MR	Roof mount for LT Projector	no	1.00000	1200.00	1200.00
MR	Installation charges of Projector and roof mount for projector complete with wire and accessories as required	set	1.00000	3390.00	3390.00
				TOTAL	24590.0
			cost fo	r one set	24590.0
				Say	24590.0
Cost index 37.93 % .00					.00
Total with Cost index					24590.00
				Say	24590.00

NEW SMART CLASSROOM - ELV WORKS

1 Specification Code: od23604/2019\_2020

od23604/2019

Supply and drawing of CAT6 4 pair cable including all necessary connector.

\_2020:

Code	Description	Unit	Quantity	Rate	Amount	
MR	CAT6 4 pair cable including all necessary connector.	metre	1.00000	21.00		21.00
	Cash	Tot	tal Cost of	Materials		21.0
MR	Wireman	metre	1.00000	18.00		18.00
	TOTAL					
		KAY	cost for o	ne metre	39.0	
	(0)			Say	39.0	
Cost index 37.93 %						
Other Engineering Organisations index					39.00	
	Say					

2 Specification Code: od23880/2019\_2020

od23880/2019
\_2020:
Supply, installation, testing and commissioning of indoor IR IP dome camera 2 MP <a href="https://doi.org/10.2012/ncm/4mm/6mm">https://doi.org/10.2012/ncm/4mm/6mm</a> focal length lens capable to 1.0 lux sensitivity, with IR n 480 TV lines.

Code	Description	Unit	Quantity	Rate	Amount
MR	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.	no	1.00000	5650.00	5650.00
	Total Cost of Materials				5650.0
MR	Wireman	no	1.00000	295.00	295.00

TOTAL	5945.0
cost for one no	5945.0
Say	5945.0

Cost index 37.93 %	.00
Total with Cost index	5945.00
Say	5945.00

**3** Specification Code: od23891/2019\_2020

od23891/2019 Supply & laying of twin twisted 2x1.5 sqmm Cu flexible wire 1.1 kv grade PVC \_2020 : insulated through PVC conduit.

Code	Description	Unit	Quantity	Rate	Amount	
MR	2x1.5 sqmm Cu flexible wire 1.1 kv grade PVC insulated through PVC conduit Other Engineering	metre Organ	1.00000 isations	48.00		48.00
	DDT	To	tal Cost of	Materials		48.0
MR	Wireman	no	1.00000	21.24		21.24
				TOTAL	69.24	
			cost fo	or one no	69.0	
				Say	69.0	
		Со	st index	37.93 %	.00	
		To	otal with C	ost index	69.00	
				Say	69.00	

4 Specification Code: od21282/2019\_2020

od21282/2019

Supply, installation, testing and commissioning of LAN socket.

Code	Description	Unit	Quantity	Rate	Amount	
MR	LAN Socket	no	1.00000	194.70		194.70
		Tot	tal Cost of	Materials		194.7
MR	Fixing charges per unit	no	1.00000	64.90		64.90
				TOTAL	259.6	
			cost fo	or one no	260.0	
				Say	260.0	
		Со	st index	37.93 %	.00	
Total with Cost index					260.00	
	- 53 40	15/2		Say	260.00	

### **5** Specification Code: od21283/2019\_2020

Code	Description	Unit	Quantity	Rate	Amount	
MR	GI box for modular switch installation including base plate and front plate 1/2 M	no	1.00000	56.64	56.	.64
MR	Installation charge per unit	no	1.00000	177.00	177.	.00
	TOTAL					
cost for one no						
Say						
Cost index 37.93 %						
Total with Cost index					234.00	
Say					234.00	

6	Specification	Code:	od23586/	2019_	_2020
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Supply, installation, testing and commissioning of Bio Metric Finger Print scan od23586/2019 attendance system with LCD/LED display & keypad & TCPIP LAN, USB Connectivity along with Attendance monitoring & report software (Web based \_2020: Terminal)

Code	Description	Unit	Quantity	Rate	Amount
MR	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)	no	1.00000	5750.00	5750.00
MR	Wireman/ Electrician	no	1.00000	1850.00	1850.00
	7600.0				
	cost for one no				7600.0
	Say				7600.0
Cost index 37.93 %					.00
Other Engineering OrgaTotalwith Cost index					7600.00
Say				7600.00	

7 Specification Code: od23901/2019\_2020

2020:

od23901/2019 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

Code	Description	Unit	Quantity	Rate	Amount
MR	6W Wall mount speakers with perforated metal grille with line matching transformer suitable for 4 ohm impedance 200 mm dia LBD 0606/10	no	1.00000	1100.00	1100.00
Total Cost of Materials					1100.0
MR	Wireman	no	1.00000	250.00	250.00

TOTAL	1350.0
cost for one no	1350.0
Say	1350.0

Cost index 37.93 %	.00
Total with Cost index	1350.00
Say	1350.00

8 Specification Code: od23910/2019\_2020

od23910/2019 Supply, installation, testing, and commissioning of LT Projector and roof mount for \_2020 : LT projector complete with all accessories as required.

Code	Description	Unit	Quantity	Rate	Amount	
MR	SITC Of LT Projector	no	1.00000	20000.0	20000.00	
MR	Roof mount for O'Projector gineering	Ongan	1.00000	1200.00	1200.00	
MR	Installation charges of Projector and roof mount for projector complete with wire and accessories as required	set	1.00000	3390.00	3390.00	
	TOTAL					
			cost fo	r one set	24590.0	
Say					24590.0	
Cost index 37.93 %					.00	
Total with Cost index					24590.00	
Say					24590.00	

**9** Specification Code: od23906/2019\_2020

od23906/2019 Supply, installation, testing and commissioning of Promethean Board AB2T78 \_2020 : complete with all other accessories. Active inspire software will be complimentary

### with Promethean board.

Code	Description	Unit	Quantity	Rate	Amount	
MR	Promethean Board AB2T78	no	1.00000	31000.0 0	31000.00	
		Tot	tal Cost of	Materials	31000.0	
MR	Installation charges for Promethean Board AB2T78	no	1.00000	3000.00	3000.00	
	TOTAL					
	1988	1	cost fo	or one no	34000.0	
	Say					
	.00					
Total with Cost index					34000.00	
Say					34000.00	

Other Engineering Organisations
PRICE