### **Data Analysis**

#### MAIN BUILDING GROUND FLOOR ELECTRICAL WORKS

1 Specification Code: od134264/2019\_2020

od134264/201 9\_2020 : Supply of 240 sqmm 3.5 core PVC/XLPE insulated armoured cable with aluminium conductors for working voltages up to and including 1100 volts conforming IS 1584/part I/1988 for PVC IS 7098 part I for XLPE

Code	Description	Unit	Quantity	Rate	Amount
MR802	240 sqmm 3.5 core PVC/XLPE insulated armoured cable with aluminium conductors for working voltages up to and including 1100 volts conforming IS 1584/part I/1988 for PVC IS 7098 part I for XLPE	metre	1.00000	1050.85	1050.85
	Add Cartage@1.00	MI	Bil		10.51
	total				1061.36
	Bolin 1	21.22.7 1018		TOTAL	1061.36
	Other Engineering	g Organ	Add CPOF	H @ 15%	159.20
	DDI		cost for o	ne metre	1221.0
	1 1/1			Say	1221.0
Cost index 32.04 %					.00
Total with Cost index					1221.00
				Say	1221.00

**2** Specification Code: od134265/2019\_2020

od134265/201 9\_2020 :

Supply of 120 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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MR799	120 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	550.85	550.85
	Add Cartage@1.00				5.51
	total				556.36

TOTAL	556.36
Add CPOH @ 15%	83.45
cost for one metre	640.0
Say	640.0
Cost index 32.04 %	.00
Total with Cost index	640.00
Say	640.00

## Other Engineering Organisations

**3** Specification Code: od134266/2019\_2020

od134266/201 9\_2020 :

Supply of 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

Code	Description	Unit	Quantity	Rate	Amount
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	1.00000	355.93	355.93
	Add Cartage@1.00				3.56
	total				359.49

TOTAL	359.49
Add CPOH @ 15%	53.92
cost for one metre	413.0
Say	413.0

Cost index 32.04 %	.00
Total with Cost index	413.00
Say	413.00

#### 4 Specification Code: od134267/2019\_2020

od134267/201 9\_2020 :

Supply of 25 sqmm 4 core PVC/XLPE insulated armoured cable with aluminium conductors for working voltages up to and including 1100 volts conforming IS 1584/part I/1988 for PVC IS 7098 part I for XLPE

Code	Description	Unit	Quantity	Rate	Amount	
MR809	25 sqmm 4 core PVC/XLPE insulated 2 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	1.00000	173.73		173.73
	Add Cartage@1.00					1.74
	total					175.47
				TOTAL	175.47	
		A	Add CPOH	l @ 15%	26.32	
			cost for o	ne metre	202.0	
				Say	202.0	
		Co	st index	32.04 %	.00	
Total with Cost index						
				Say	202.00	

**5** Specification Code: od134268/2019\_2020

od134268/201 9\_2020 : Supply of 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

Code	Description	Unit	Quantity	Rate	Amount	
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	1.00000	101.69		101.69
	Add Cartage@1.00		301			1.02
	total					102.71
	Paris Name			TOTAL	102.71	
	Other Engineering	g Organ	Add CPOF	∄ @ 15%	15.41	
	DDI		cost for o	ne metre	118.0	
				Say	118.0	
Cost index <b>32.04</b> %					.00	
Total with Cost index					118.00	
	Say					

6 Specification Code: od134401/2019\_2020

od134401/201 Providing and fixing 25 mm X 3 mm copper strip on surface or in recess for 9\_2020: connections etc. as required.

Code	Description	Unit	Quantity	Rate	Amount
2906	Copper saddle	each	17.0000 0	26.25	446.25

	Add Cartage@1.00				4.46
	total				450.71
2851	Al. Alloy/ cadmium plated iron screws, 20 mm	each	34.0000 0	0.40	13.60
	Add Cartage@1.00				0.14
	total				13.74
2857	PVC fastener 40mm long	each	17.0000 0	0.28	4.76
	Add Cartage@1.00				0.05
	total				4.81
MR2041	Copper Strip all sizes	kg	6.67000	489.83	3267.17
	Add Cartage@1.00	M	11		32.67
	total		18		3299.84
Total Cost of Materials				3769.1	
1001	Wireman	Day	0.50000	447.00	223.50
1010	Mason, Grade 20ther Engineering	ODayan	0.25000	407.00	101.75
1007	Khallasi	Day	0.75000	368.00	276.00

TOTAL	4370.35
Add CPOH @ 15%	655.55
cost for 10.0 metre	5025.90
cost for one metre	503.0
Say	503.0
Cost index 32.04 %	39.73
Total with Cost index	542.73
Say	542.73

7	Specification	Code:	od134402/2019_	2020
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Supplying and laying 25 mm X 3 mm copper strip at 0.50 metre below ground as od134402/201 strip earth<br/>
br>electrode, including connection/ terminating with nut, bolt, spring, washer etc. as required.<br/>
br>(Jointing shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50mm)

Code	Description	Unit	Quantity	Rate	Amount
MR2041	Copper Strip all sizes	kg	20.0100	489.83	9801.50
	Add Cartage@1.00				98.01
	total	\			9899.51
		To	tal Cost of	Materials	9899.51
1085	Solder jointing	each	5.00000	12.00	60.00
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
	Other Engineering	Organ	isations	TOTAL	10429.39
			Add CPOH	H @ 15%	1564.41
	PRI		cost for 30	0.0 metre	11993.80
	400.0				
	400.0				
	6.73				
Total with Cost index					406.73
				Say	406.73

8 Specification Code: od133961/2019\_2020

od133961/201 SITC of 100 KVA DG set with standard control panel complete with all other 9\_2020: accessories as required.

Code Description Unit	Quantity	Rate	Amount
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MR2413	100 KVA DG set with standard control panel	each	1.00000	623000. 00	623000.00
	Add Cartage@1.00				6230.00
	total				629230.00
	Total Cost of Materials				629230.0
MR2435	Charges for Crane	Day	0.50000	3000.00	1500.00
MR701	Electrician	Day	1.00000	750.00	750.00
MR720	Khalasi	Day	1.00000	750.00	750.00

TOTAL	632230.0
Add CPOH @ 15%	94834.50
cost for one each	727065.0
Say	727065.0
Cost index 32.04 %	.00
Total with Cost index	727065.00
Other Engineering Organisations Say	727065.00

# 9 Specification Code: od163325/2019\_2020

od163325/201 9 2020 :

SITC of Rust resistant and weather proof Bulk-head light fixture with 9W LED lamp, IP 65 Protection complete with all other accessories as required. (Make: crompton)

Code	Description	Unit	Quantity	Rate	Amount
MR	Bulkhead light fixtire with 9W LED lamp (Make: crompton)	each	1.00000	450.00	450.00
	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
				TOTAL	450.0

Add CPOH @ 15%	78.19
cost for one each	599.0
Say	599.0

Cost index 32.04 %	<b>6</b> 9.61
Total with Cost inde	ex 608.61
Sa	ay 608.61

**10** Specification Code: od163326/2019\_2020

od163326/201 9\_2020 :

Supply, installation, testing and commissioning of 5W LED lamp (Make: Luker, Model: LBPC05CL) working on 230V, 50Hx AC, including giving connections as required.

Code	Description	Unit	Quantity	Rate	Amount
MR	5W LED Bulb b22 (Make: Luker, Model: LBPC05CL) 6K Other Engineering	each Organ	1.00000 isations	61.15	61.15
		To	tal Cost of	Materials	61.15
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	61.15
		ı	Add CPOH	H @ 15%	29.65
			cost for	one each	227.0
Say					227.0
Cost index 32.04 %					33.96
Total with Cost index					260.96
				Say	260.96

**11** Specification Code: od168074/2019\_2020

SITC of MSB new (Kannur)<br>
stallation , 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,

9 2020:

od168074/201 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.<br/>
- Incomer: 630A, 4P Isolator, Busbar: 630A, Aluminium TP&N busbar, Outgoing: 200A, 36kA, 4P MCCB - 2 Nos.

Code	Description Other Engineering	Organ	Sations Quantity	Rate	Amount
MR731	1.0 sqmm ISI marked FR LS PVC insulated single core copper conductor cable	metre	20.0000	7.03	140.60
	Add Cartage@1.00				1.41
	Add Wastage@5.00				7.03
	Cable tie,tie mount,tinning the terminations etc@15.00				21.09
	total				170.13
MR	630A 4P ISOLATOR (MAKE:L&T, Itemcode: SK956110000)	each	1.00000	13121.4 0	13121.40
	Add Cartage@1.00				131.21
	total				13252.61
1624	4 pole MCCB,200A,36KA	each	2.00000	11176.0 0	22352.00

	Add Cartage@1.00				223.52
	total				22575.52
		Tot	al Cost of	Materials	35998.26
90.14.11	Rate as per item number 90.14.11.13 of SH: OD Electrical	no	2.00000	1587.83	3175.66
90.14.1. 1	Rate as per item number 90.14.1.1 of SH: OD Electrical	sqm	10.0000 0	2220.87	22208.70
90.14.3. 1	Rate as per item number 90.14.3.1 of SH: OD Electrical	metre	15.0000 0	40.00	600.00
90.14.7	Rate as per item number 90.14.7 of SH: OD Electrical	Cum cm	450.000 00	5.22	2349.00
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	8250.00 000	3.00	24750.00
90.14.4	Rate as per item number 90.14.4 of SH: OD Electrical Other Engineering	<b>metre</b> Organ	5.00000	796.52	3982.60
90.14.2. 1	Rate as per item number 90.14.2.1 of SH: OD Electrical	sqm	0.70000	2566.96	1796.87
MR701	Electrician	Day	3.00000	750.00	2250.00
MR720	Khalasi	Day	3.00000	750.00	2250.00
1001	Wireman	Day	3.00000	447.00	1341.00

TOTAL	66589.26
Add CPOH @ 15%	15105.31
cost for one each	115807.0
Say	115807.0
Cost index 32.04 %	9781.17
Total with Cost index	125588.17
Say	125588.17

12 Specification Code: od168082/2019\_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, 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.<br/>
lncomer: 200A, 36kA, 4P MCCB - 1 No, 250A, 4P Isolator - 1 No<br/>
br>200A 4P Contactor & 150A, 4P Contactor<br/>
br>AMF relay with electrical interlock<br/>br>200A Al bubar for 3 phase and neutral.<br/>dr>Outgoing:

125A, 25kA, 3P, MCCB - 1No<br/>
br>100A, 25kA, 3P MCCB - 3 No.<br/>
br>160A, TPN

SITC of MAIN PANEL (Kannur)<br>Supply, installation, testing and

od168082/201 9 2020 :

Code	Description	Unit	Quantity	Rate	Amount
MR1885	Red, Green, Black, Yellow, Orange colours LED indicator, AC/DC, 22.5 mm cut out dia	each	24.0000 0	44.07	1057.68
	Add Cartage@1.00				10.58
	total				1068.26
MR1832	250/5 A, 5 VA, accuracy class 1, Resin Cast Metering CT	each	3.00000	806.78	2420.34
	Add Cartage@1.00				24.20
	total				2444.54
MR1828	150/5 A, 5 VA, accuracy class 1, Resin Cast Metering CT	each	3.00000	677.97	2033.91

Isolator - 1 No.<br/>
- 20 A 25kA 3P MCCB - 2 no

	Add Cartage@1.00				20.34
	total				2054.25
MR1734	multifunction meter to read VA ,PF,KW ,KWh ,KVA,KVAr ,KVARh ,THD ,Phase angle -3ph accuracy class-1 LCD	each	2.00000	6144.07	12288.14
	Add Cartage@1.00				122.88
	total				12411.02
MR731	1.0 sqmm ISI marked FR LS PVC insulated single core copper conductor cable	metre	35.0000 0	7.03	246.05
	Add Cartage@1.00	£			2.46
	Add Wastage@5.00	30	1		12.30
	Cable tie,tie mount,tinning the terminations etc@15.00		12		36.91
	total				297.72
MR732	25 sqmm ISI Marked FR LS PVC insulated single core copper conductor in cable	metren	10.0000 isations	177.12	1771.20
	Add Cartage@1.00		H,		17.71
	Add Wastage@5.00				88.56
	Cable tie,tie mount,tinning the terminations etc@15.00				265.68
	total				2143.15
1624	4 pole MCCB,200A,36KA	each	1.00000	11176.0 0	11176.00
	Add Cartage@1.00				111.76
	total				11287.76
MR	250A TPN Isolator (Make: L&T, Itemcode: SK95683OOO)	each	1.00000	5979.30	5979.30
	Add Cartage@1.00				59.79
	total				6039.09

MR	MCX33 200A 2NO 2NC 240V 4P POWER CONTACTOR (Make: L&T, Itemcode: CS97021BOOO)	each	1.00000	11556.7 5	11556.75
	Add Cartage@1.00				115.57
	total				11672.32
MR	AMF Relay - EC2 C&S Make	each	1.00000	8700.00	8700.00
	Add Cartage@1.00				87.00
	total				8787.00
MR	MCX32 160A 2NO 2NC 240V 4P POWER CONTACTOR (Make: L&T, Itemcode: CS97020BOOO)	each	1.00000	8612.70	8612.70
	Add Cartage@1.00	30			86.13
	total	NAH	21		8698.83
MR	125A 3P MCCB 25kA (Make: SCHNEIDER, CAT REF: LV516302)	each	1.00000	4507.20	4507.20
	Add Cartage@1.00	018			45.07
	Other Engine of the Control of the C	Organ	isations		4552.27
MR	160A TPN ISOLATOR (MAKE: L&T, ITEMCODE: FN160ISO)	each	1.00000	4565.00	4565.00
	Add Cartage@1.00				45.65
	total				4610.65
		Tot	al Cost of	Materials	76066.86
2.10.1	Rate as per item number 2.10.1 of SH: MCCB, MCB & DBS	each	30.0000	150.43	4512.90
90.14.1.	Rate as per item number 90.14.1.1 of SH: OD Electrical	sqm	14.0000 0	2220.87	31092.18
90.14.3.	Rate as per item number 90.14.3.1 of SH: OD Electrical	metre	25.0000 0	40.00	1000.00
90.14.7	Rate as per item number 90.14.7 of SH: OD Electrical	Cum cm	400.000 00	5.22	2088.00

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	3500.00 000	3.00	10500.00
90.14.4	Rate as per item number 90.14.4 of SH: OD Electrical	metre	6.00000	796.52	4779.12
90.14.2.	Rate as per item number 90.14.2.1 of SH: OD Electrical	sqm	0.70000	2566.96	1796.87
90.14.11	Rate as per item number 90.14.11.13 of SH: OD Electrical	no	7.00000	1587.83	11114.81
MR701	Electrician	Day	4.00000	750.00	3000.00
1001	Wireman	Day	4.00000	447.00	1788.00
MR720	Khalasi	Day	4.00000	750.00	3000.00
90.14.10	Rate as per item number 90.14.10.2 of SH: OD Electrical	no	5.00000	4148.70	20743.50

Other Engineering Organisations TOTAL	94354.86
Add CPOH @ 15%	25722.34
cost for one each	197205.0
Say	197205.0
Cost index 32.04 %	7991.74
Total with Cost index	205196.74
Say	205196.74

**13** Specification Code: od168125/2019\_2020

od168125/201 9\_2020 :

SITC of SSB1 - Classroom building (Kannur)<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.<br/>
- Spring and neutral<br/>
- Spring a

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	Edg Share			1.32
	Other Engineering total	Organ	isations		133.53
MR731	1.0 sqmm ISI marked FR LS PVC insulated single core copper conductor cable	metre	25.0000	7.03	175.75
	Add Cartage@1.00				1.76
	Add Wastage@5.00				8.79
	Cable tie,tie mount,tinning the terminations etc@15.00				26.36
	total				212.66
1105	10 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable	metre	6.00000	66.43	398.58
	Add Cartage@1.00				3.99
	Add Wastage@5.00				19.93

	Cable tie,tie mount,tinning the terminations etc@15.00				59.79
	total				482.28
1106	16 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable	metre	25.0000 0	102.36	2559.00
	Add Cartage@1.00				25.59
	Add Wastage@5.00				127.95
	Cable tie,tie mount,tinning the terminations etc@15.00				383.85
	total	50			3096.39
MR	160A TPN Isolator (Make: L&T, Itemcode: FN160ISO)	each	1.00000	4565.00	4565.00
	Add Cartage@1.00		BA		45.65
	total				4610.65
	Paris a	Tot	al Cost of	Materials	8535.51
2.10.1	Rate as per item number 2.10.1 of SH: MCCB, MCB & DBS	Organ each	isations 3.00000	150.43	451.29
90.14.1. 1	Rate as per item number 90.14.1.1 of SH: OD Electrical	sqm	15.0000 0	2220.87	33313.05
90.14.3. 1	Rate as per item number 90.14.3.1 of SH: OD Electrical	metre	25.0000 0	40.00	1000.00
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	800.000 00	3.00	2400.00
90.14.4	Rate as per item number 90.14.4 of SH: OD Electrical	metre	5.00000	796.52	3982.60
90.14.2. 1	Rate as per item number 90.14.2.1 of SH: OD Electrical	sqm	1.00000	2566.96	2566.96

90.14.11	Rate as per item number 90.14.11.13 of SH: OD Electrical	no	7.00000	1587.83	11114.81
MR701	Electrician	Day	3.00000	750.00	2250.00
1001	Wireman	Day	3.00000	447.00	1341.00
MR720	Khalasi	Day	3.00000	750.00	2250.00
90.14.10	Rate as per item number 90.14.10.1 of SH: OD Electrical	no	7.00000	3272.17	22905.19

TOTAL	16776.51
Add CPOH @ 15%	13816.56
cost for one each	105927.0
Say	105927.0
Cost index 32.04 %	3597.13
Total with Cost index	109524.13
Say	109524.13

Other Engineering Organisations

14 Specification Code: od168143/2019\_2020

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.<br/>
Stronger: 150A, TPN Isolator<br/>
Substractors – ABB, L&T/Equivalent.

SITC of SSB 5 - Fifa ground lighting, feeder pillar, gate DB (Kannur)<br>Supply,

od168143/201 9\_2020 :

150A Al for 3 phases and neutral<br/>
-Outgoing: 40A SP MCB 10kA - 3 no<br/>
-3 no<br/>

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
1105	10 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable	metre	8.00000	66.43	531.44
	Add Cartage@1.00	1/2/1	21		5.31
	Add Wastage@5.00	534	J. D.L.		26.57
	Cable tie,tie mount,tinning the terminations etc@15.00				79.72
	Other Engineering	Organ	isations	3	643.04
MR731	1.0 sqmm ISI marked FR LS PVC insulated single core copper conductor cable	metre	20.0000	7.03	140.60
	Add Cartage@1.00				1.41
	Add Wastage@5.00				7.03
	Cable tie,tie mount,tinning the terminations etc@15.00				21.09
	total				170.13
MR732	25 sqmm ISI Marked FR LS PVC insulated single core copper conductor cable	metre	6.00000	177.12	1062.72
	Add Cartage@1.00				10.63
	Add Wastage@5.00				53.14

	I	1			
	Cable tie,tie mount,tinning the terminations etc@15.00				159.41
	total				1285.89
MR	160A TPN Isolator (Make: L&T, Itemcode: FN160ISO)	each	1.00000	4565.00	4565.00
	Add Cartage@1.00				45.65
	total				4610.65
MR1340	40 A to 63 A, TP MCB (C curve), 10 kA breaking capacity	each	1.00000	1302.54	1302.54
	Add Cartage@1.00	\			13.03
	total	53			1315.57
MR	MCB 40A SP C CURVE EXORA L&T	each	3.00000	235.00	705.00
	Add Cartage@1.00	KAY	-21		7.05
	total				712.05
		Tot	al Cost of	Materials	8870.86
2.10.1	Rate as per item number 2.10.1 of SH: MCCB, MCB & DBS	Ceachin	3.00000	150.43	451.29
90.14.1.	Rate as per item number 90.14.1.1 of SH: OD Electrical	sqm	12.0000	2220.87	26650.44
90.14.3.	Rate as per item number 90.14.3.1 of SH: OD Electrical	metre	20.0000	40.00	800.00
90.14.7	Rate as per item number 90.14.7 of SH: OD Electrical	Cum cm	380.000 00	5.22	1983.60
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	800.000 00	3.00	2400.00
90.14.4	Rate as per item number 90.14.4 of SH: OD Electrical	metre	4.50000	796.52	3584.34
90.14.2. 1	Rate as per item number 90.14.2.1 of SH: OD Electrical	sqm	0.70000	2566.96	1796.87

90.14.11	Rate as per item number 90.14.11.13 of SH: OD Electrical	no	2.00000	1587.83	3175.66
MR701	Electrician	Day	3.00000	750.00	2250.00
MR720	Khalasi	Day	3.00000	750.00	2250.00
1001	Wireman	Day	3.00000	447.00	1341.00
90.14.10	Rate as per item number 90.14.10.1 of SH: OD Electrical	no	2.00000	3272.17	6544.34

TOTAL	17111.86
Add CPOH @ 15%	9314.76
cost for one each	71413.0
Say	71413.0
Cost index 32.04 %	2012.43
Total with Cost index	73425.43
Say	73425.43

## Other Engineering Organisations

**15** Specification Code: od168204/2019\_2020

od168204/201 Supply, Installation, Testing and commissioning of 15 KVA UPS with 1 hour 9\_2020: battery back up complete with all accessories as required.

Code	Description	Unit	Quantity	Rate	Amount
MR	Liebert ITA 2 15KVA UPS	each	1.00000	180000. 00	180000.00
	Add Cartage@1.00				1800.00
	total				181800.00
MR2389	12V 80AH Battery	each	32.0000 0	8051.00	257632.00
	Add Cartage@1.00				2576.32
	Add necessary specials@2.00				5152.64

	total				265360.96
	Total Cost of Materials				447160.96
1001	Wireman	Day	2.00000	447.00	894.00
1007	Khallasi	Day	2.00000	368.00	736.00

TOTAL	448790.96
Add CPOH @ 15%	67318.64
cost for one each	516110.0
Say	516110.0
Cost index 32.04 %	600.75
Total with Cost index	516710.75
Say	516710.75

## FRONT GATE WITH SECURITY CABIN ELECTRICAL WORKS AND COMPOUND WALL LIGHTING

1 Specification Code: od134531/2019\_2020

## Other Engineering Organisations

Supply, installation, testing and commissioning of Wall fan of 300mm sweep dia od134531/201 on wall, fixing necessary anchor bolts / bolt and nuts etc., as required including 9\_2020: giving connections with the supplied wire along with the Wall fan.<br/>sweep wall fan working on 230 V A/C<br/>br>

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	1313.56	1313.56
	Add Cartage@1.00				13.14
	total				1326.70
Total Cost of Materials				1338.82	
1001	Wireman	Day	0.33000	447.00	147.51

MR719	Wireman Helper	Day	0.33000	600.00	198.00
				TOTAL	1684.33
		,	Add CPOH	I @ 15%	252.65
			cost for c	ne each	1937.0
				Say	1937.0
		Со	st index	32.04 %	58.95
		To	otal with Co	ost index	1995.95
	0.0			Say	1995.95

2	Specification	Code:	od134546/2019_	2020

od134546/201 9\_2020 :

Supply of 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

Code	Description Other Engineeri	ng Unit gan	Quantity	Rate	Amount	
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	1.00000	101.69		101.69
	Add Cartage@1.00					1.02
	tota	al				102.71
				TOTAL	102.71	
			Add CPOF	H @ 15%	15.41	
cost for one metre					118.0	
Say					118.0	
		Co	st index	32.04 %	.00	
		To	otal with C	ost index	118.00	

Say 118.00
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3 Specification Code: od163332/2019\_2020

od163332/201 SITC of 3W LED Recessed Spot light pre wired, working on 230V, 50Hz AC, 9\_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	271.00	271.00
	Add Cartage@1.00	KAY	21		2.71
	total	514	J. J. L.		273.71
		To	tal Cost of	Materials	273.71
90.3.12	Rate as per item number 90.3.12 of SH: OD Electrical	Ceachin	1:00000	53.04	53.04
	DRI		F	TOTAL	273.71
	1 1/1		Add CPOH	H @ 15%	49.01
			cost fo	or one no	376.0
Say					376.0
Cost index <b>32.04</b> %					8.33
Total with Cost index					384.33
				Say	384.33

4 Specification Code: od163333/2019\_2020

od163333/201 SITC of 20/25W LED Surface mounting down light, working on 230V, 50Hz AC, 9\_2020: complete with all other accessories as required.

Code	Description	Unit	Quantity	Rate	Amount
MR	24W LED Surface panel light (Make: Havells, Model: LHEAABP71L1W024)	each	1.00000	1220.00	1220.00
	Add Cartage@1.00				12.20
	total				1232.20
Total Cost of Materials				1232.2	
90.3.11	Rate as per item number 90.3.11 of SH: OD Electrical	each	1.00000	73.04	73.04

TOTAL	1232.2
Add CPOH @ 15%	195.79
cost for one no	1501.0
Say	1501.0
Cost index 32.04 %	11.21
Total with Cost index	1512.21
Other Engineering Organisations Say	1512.21

5 Specification Code: od163334/2019\_2020

od163334/201 SITC of weather proof pillar light fittings with 9W LED lamp, IP65 for outdoor 9\_2020: purpose pre wired and complete with all other accessories as required.

Code	Description	Unit	Quantity	Rate	Amount
MR	Crown shaped post top lantern in smoothing moon finish made up of polycarbonate, with 9W LED Bulb. (Make: Havells, Model: LHDC11126099)	each	1.00000	893.00	893.00
	Add Cartage@1.00				8.93
	total				901.93
Total Cost of Materials					901.93

90.3.15	Rate as per item number 90.3.15 of SH: OD Electrical	each	1.00000	74.78	74.	78
				TOTAL	901.93	
Add CPOH @ 15%						
cost for one no						
Say						
Cost index 32.04 %						
Total with Cost index						
Say						

6 Specification Code: od163335/2019\_2020

od163335/201 Supply, installation, testing and commissioning of LED 3W Spike light, IP65 with 9\_2020: all other accessories as required.

Code	Description Other Engineering	Unitgan	Quantity	Rate	Amount	
MR	LED 3W Spike light, IP65	each	1.00000	450.00		450.00
	Add Cartage@1.00					4.50
	total					454.50
		Tot	al Cost of	Materials		454.5
90.3.15	Rate as per item number 90.3.15 of SH: OD Electrical	each	1.00000	74.78		74.78
				TOTAL	454.5	
		A	Add CPOH	H @ 15%	79.39	
			cost fo	or one no	609.0	
	609.0					
Cost index <b>32.04</b> %						
Total with Cost index						
	Say					

**7** Specification Code: od163326/2019\_2020

od163326/201 9\_2020 : Supply, installation, testing and commissioning of 5W LED lamp (Make: Luker, Model: LBPC05CL) working on 230V, 50Hx AC, including giving connections as required.

Code	Description	Unit	Quantity	Rate	Amount	
MR	5W LED Bulb b22 (Make: Luker, Model: LBPC05CL) 6K	each	1.00000	61.15	6	61.15
	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	61.15	
	Other Engineering	Organ	Add CPOF	l @ 15%	29.65	
	Other Engineering	Organi	cost for o	one each	227.0	
P K Say						
Cost index 32.04 %						
Total with Cost index						
	Say					

EXTERNAL LIGHTING
1 Specification Code: od134936/2019_2020

od134936/201 9\_2020 : Supply of 4 sqmm 3 core PVC/ XLPE insulated armoured cable with aluminium conductors for working voltages up to and including 1100 volts conforming IS 1584/part I/1988 for PVC IS 7098 part I for XLPE

				<b>5</b>	
Code	Description	Unit	Quantity	Rate	Amount

MR779	4 sqmm 3 core PVC/ XLPE insulated armoured cable with aluminium conductors for working voltages up to and including 1100 volts conforming IS 1584/part I/1988 for PVC IS 7098 part I for XLPE	metre	1.00000	69.49	69.49
	Add Cartage@1.00				0.69
	total				70.18

TOTAL	70.18
Add CPOH @ 15%	10.53
cost for one metre	81.0
Say	81.0
Cost index 32.04 %	.00
Total with Cost index	81.00
Say	81.00

## Other Engineering Organisations

2 Specification Code: od134937/2019\_2020

od134937/201 9\_2020 :

Supplying and laying 8 SWG Cu wire at 0.50 metre below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required.

Code	Description	Unit	Quantity	Rate	Amount	
MR2043	Copper wire 0 to 14 SWG	kg	3.15000	493.22	1553.64	
	Add Cartage@1.00				15.54	
	Add Wastage@5.00				77.68	
	total				1646.86	
	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	2140.74
Add CPOH @ 15%	321.11
cost for 30.0 metre	2461.85
cost for one metre	82.0
Say	82.0
Cost index 32.04 %	6.09
Total with Cost index	88.09
Say	88.09

**3** Specification Code: od134938/2019\_2020

od134938/201 9\_2020 :

Supply of 16 sqmm 3 core PVC/ XLPE insulated armoured cable with aluminium conductors for working voltages up to and including 1100 volts conforming IS 1584/part I/1988 for PVC IS 7098 part 1 for XLPE

Code	Description I I	Unit	Quantity	Rate	Amount	
MR782	16 sqmm 3 core PVC/ XLPE insulated armoured cable with aluminium conductors for working voltages up to and including 1100 volts conforming IS 1584/part I/1988 for PVC IS 7098 part I for XLPE	metre	1.00000	110.17		110.17
	Add Cartage@1.00					1.10
	total					111.27
				TOTAL	111.27	
Add CPOH @ 15%						
cost for one metre						
	128.0					

Cost index 32.04 %	.00
Total with Cost index	128.00
Say	128.00

#### 4 Specification Code: od163348/2019\_2020

od163348/201 9\_2020 :

SITC Of Legrand make feeder pillar complete with the following accessories. <a href="https://doi.org/10.100/bit/10.100/bi

Code	Description	Unit	Quantity	Rate	Amount	
MR	DB (PLEXO3 CABINET IP65 2ROW 24MOD, Cat no: 601832)	each	1.00000	3694.60 3694.0		
MR	Isolator (DP40A ISOLATOR DX3, Cat no: 406501)	each	1.00000	352.80	352.80	
MR	RCCB (DP 40A 100mA DX3 RCCB, Cat no: 411857)	Ceachin	1:00000	2623.60	2623.60	
MR	MR MCB (DX3 SP C10A AC MCB, Cat no: each 4.00000 191.80		767.20			
MR	Contactor (40A 2 NO CONTACTOR 230V AC, Cat no: 412545)	each	1.00000	2171.40	2171.40	
MR	Time switch (Digital weekly astro time switch, cat no: 412654)	each	1.00000	6316.80	6316.80	
MR	OMP (FORK BUSBAR SP 12 MOD, Cat no: 404911)	each	1.00000	215.60	215.60	
	16142.0					
MR701	Electrician	Day	1.00000	750.00	750.00	
	16892.0					
	Add CPOH @ 15%					
	19426.0					

Say	19426.0
Cost index 32.04 %	.00
Total with Cost index	19426.00

**5** Specification Code: od163349/2019\_2020

od163349/201 9 2020 : Supply installation testing commissioning of 6 meter Octogaonal Pole made of hot dip galvanised GI sheet 70mm top diameter, 130mm bottom diameter thickness 3mm base plate dimensions of 200x200x12mm suitable for wind speed as per IS 875 Part III single arm bracket 0.5mt including connector foundation bolt 4 nos fixed in existing RCC foundation and junctions box etc. with 45W LED street light output greater than 105lumen/W 4000-6000 K with IP 65/66 protection complete with all other accessories as required.

Code	Description	Unit	Quantity	Rate	Amount	
MR	45W LED street light output greaterring Organisat		isations 1.00000	1980.00	1980.00	
		Tot	al Cost of	Materials	1980.0	
90.15.3.	Rate as per item number 90.15.3.3 of SH: OD Electrical	each	1.00000	17778.2 6	17778.26	
1001	Wireman	Day	0.10000	447.00	44.70	
1016	Mate	Day	0.10000	368.00	36.80	
1007	Khallasi	Day	0.10000	368.00	36.80	
				TOTAL	2098.3	
	2981.48					
	22858.0					
	Say					
	273.30					

19426.00

Total with Cost index	23131.30
Say	23131.30

ADMINISTRATIVE BUILDING GROUND FLOOR HVAC SYSTEM WORKS
1 Specification Code: od163371/2019_2020

od163371/201

Supply and fixing of drain pipe for HVAC units

9\_2020 :

Code	Description	Unit	Quantity	Rate	Amount		
MR	Supply and fixing of drain pipe for HVAC units	metre	1.00000	150.00		150.00	
	TOTAL						
	cost for one metre						
		10.52		Say	150.0		
Other Engineering Org Cost index 32.04 %							
Total with Cost index							
	Say						

**2** Specification Code: od163372/2019\_2020

od163372/201 Supply and installation of Refrigerant Copper piping insulated with Nitrile Rubber 9\_2020: Tubular insulation with 13/19mm thickness.

Code	Description	Unit	Quantity	Rate	Amount		
I MR	Supply and installation of Refrigerant Copper piping insulated with Nitrile Rubber Tubular insulation with 13/19mm thickness.	metre	1.00000	1327.00	1327.00		
	TOTAL 1327.0						

cost for one metre	1327.0
Say	1327.0

Cost index 32.04 %	.00
Total with Cost index	1327.00
Say	1327.00

**3** Specification Code: od163376/2019\_2020

Supply & installation of Modular type outdoor units equipped with minimum 2 Nos of highly efficient compressors with all inverter type compressor(s) only,special od163376/201 acryl pre-coated heat exchanger,low noise condenser fan,auto check function for 9\_2020: connection error,auto address setting,with multiple outdoor units of capacities and quantities as mentioned below.Refrigerant Should be R410A .(4 HP CARRIER 3 PHASE COMPRESSOR)

Code	Description	Harin 1	Unit	Quantity	Rate	Amount
MR	Supply	Other Engineering	Organ each	1.00000	125510. 00	125510.00
		P K I	Tot	tal Cost of	Materials	125510.0
MR	Fixing		each	1.00000	15000.0 0	15000.00
	TOTAL					
				cost for o	one each	140510.0
Say					140510.0	
Cost index 32.04 %						.00
Total with Cost index						140510.00
Say					140510.00	

4	Specification	Code:	od163392/2019	2020
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Supply & installation of High-wall indoor units with compact cooling coil,electronic od163392/201 expansion valve and multi speed fan motor,The blower shall be dynamically 9\_2020: balanced and designed for silent operation ,the filters shall be washable type .Drain Pump is a part of the indoor unit.(1 TR Carrier VRF Indoor Unit )

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply	each	1.00000	22949.0 0	22949.00
		Tot	al Cost of	Materials	22949.0
MR	Fixing	each	1.00000	3500.00	3500.00
	W	100		TOTAL	26449.0
		M	cost for o	one each	26449.0
		KAT	31	Say	26449.0
Cost index 32.04 %					.00
Total with Cost index					26449.00
Other Engineering Organisations Say					26449.00

## 5 Specification Code: od212814/2019\_2020

od212814/201 9\_2020: Supply & installation of 1.00 TR Split A/C with high wall mounted unit . [Mini 3 \* Star rating] Copper Condenser Only ( Make: Carrier HW split AC/ Hitachi/ Bluestar)

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply & installation	each	1.00000	23000.0	23000.00
	TOTAL				
cost for one each					23000.0
Say					23000.0
Cost index 32.04 %					.00

Total with Cost index	23000.00
Say	23000.00

ELV SYSTEM	
1 Specification Code: od134828/2019_2020	_

od134828/201 SITC of PANASONIC KX-TA 824 24 port hybrid analog Telephone systen control 9\_2020: unit intercom with 16 extensions

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply charge	each	1.00000	22881.3 5	22881.35
	Add Cartage@1.00	MI	16		228.81
	total	S)576			23110.16
	The State of the S	To	tal Cost of	Materials	23110.16
MR	Installation chargether Engineering	eachin	1.00000	1000.00	1000.00
	DDI			TOTAL	24110.16
	PKI		cost for	one each	24110.0
				Say	24110.0
	.00				
	24110.00				
	24110.00				

**2** Specification Code: od134829/2019\_2020

od134829/201 9 2020 :

Supply, Installation, Testing and commissioning Of distribution box for CCTV 6Ux600Wx600D With Front Glass Door, Side Openable Panels with Lock & Key, 4Way 5A PDU, 1U Cable Manager, Cooling Fan, H/W Kit10

Code	Description	Unit	Quantity	Rate	Amount

MR	Distribution box for CCTV 6Ux600Wx600D With Front Glass Door,Side Openable Panels with Lock & Key,4Way 5A PDU,1U Cable Manager,Cooling Fan,H/W Kit10	no	1.00000	6136.00	6136.00
		Tot	al Cost of	Materials	6136.0
MR	Labour charges per unit	no	1.00000	1475.00	1475.00

TOTAL	7611.0
cost for one no	7611.0
Say	7611.0
Cost index 32.04 %	.00
Total with Cost index	7611.00
Say	7611.00

#### **3** Specification Code: od134830/2019\_2020

## Other Engineering Organisations

SITC Of 350W RMS MIXER AMPLIFIER, 3 MIC, 2 AUX, 100V/70V AND 4OHMS, BALANCED MIC,FREQUENCY RESPONSE (50 HZ-16000HZ),S/N RATIO-0d134830/201 MIC1,2,3,4:66DB;AUX 1:80 DB,THD-LESS THAN 1% AT 1 KHZ,1/3 RATED 9\_2020: 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	Supply	each	1.00000	25375.0 0	25375.00
	Add Cartage@1.00				253.75
	total				25628.75
	Total Cost of Materials				
MR	Installation charges	each	1.00000	2500.00	2500.00
TOTAL					28128.75

cost for one each	28129.0
Say	28129.0

Cost index 32.04 %	.00
Total with Cost index	28129.00
Say	28129.00

#### 4 Specification Code: od134831/2019\_2020

od134831/201 Supply Installation testing and Commissioning of 10/100/1000 Mbps 24 Port 9\_2020: Network Switch to provide networks and internet on class room etc

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply	each	1.00000	8250.00	8250.00
	Add Cartage@1.00				82.50
	total	Etty.			8332.50
	Other Engineering	g Organ	otal Cost of	Materials	8332.5
MR	Installation charges	each	1.00000	750.00	750.00
	1 1/ 1			TOTAL	. 9082.5
			cost for	one each	9083.0
				Say	9083.0
		C	ost index	32.04 %	.00
Total with Cost index					9083.00
				Say	9083.00

#### **5** Specification Code: od134832/2019\_2020

od134832/201 9\_2020 :

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

#### Terminal)<br>

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)	each	1.00000	5750.00	5750.00
	Add Cartage@1.00				57.50
	total	\			5807.50
		To	tal Cost of	Materials	5807.5
MR	Installation charges	each	1.00000	1850.00	1850.00
		KAT	31	TOTAL	7657.5
	1011400		cost for o	one each	7658.0
Say					7658.0
Other Engineering Organism 32.04 %					.00
Total with Cost index					7658.00
	PKI			Say	7658.00

**6** Specification Code: od134833/2019\_2020

od134833/201 9\_2020 :

Supply and laying of Cat6 outdoor cable including necessary connectors<br/>

Code	Description	Unit	Quantity	Rate	Amount	
MR	Supply and laying of Cat6 outdoor cable including necessary connectors	metre	1.00000	84.00	84.00	
	Add Cartage@1.00				0.84	
	total				84.84	
	TOTAL					

cost for one	metre	85.0
	Say	85.0

Cost index 32.04 %	.00
Total with Cost index	85.00
Say	85.00

**7** Specification Code: od134834/2019\_2020

od134834/201 9 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	each Organ	1.00000 isations	1100.00	1100.00
	Add Cartage@1.00				11.00
	total				1111.00
Total Cost of Materials				1111.0	
MR	Installation charges	each	1.00000	250.00	250.00
				TOTAL	1361.0
			cost for o	one each	1361.0
				Say	1361.0
		Со	st index	32.04 %	.00
Total with Cost index					1361.00
				Say	1361.00

**8** Specification Code: od134835/2019\_2020

od134835/201 Supply, installation, testing and commissioning of 24 Port 10/100/1000 Mbps PoE 9\_2020: Switch.

Code	Description	Unit	Quantity	Rate	Amount
MR	24 Port 10/100/1000 Mbps PoE Switch.	each	1.00000	25625.0 0	25625.00
	Add Cartage@1.00				256.25
	total				25881.25
Total Cost of Materials					25881.25
MR	Installation charges	each	1.00000	1000.00	1000.00
	73 60	40		TOTAL	26881.25
		WAL	cost for o	one each	26881.0
	DAT DE		Bil	Say	26881.0
Cost index 32.04 %					.00
Total with Cost index					26881.00
Other Engineering Organisations Say				26881.00	

**9** Specification Code: od134836/2019\_2020

od134836/201

9\_2020 : Supply, installation, testing and commissioning of LAN socket.

Code	Description	Unit	Quantity	Rate	Amount
MR	LAN Socket	each	1.00000	165.00	165.00
	Add Cartage@1.00				1.65
	total				166.65
		To	tal Cost of	Materials	166.65
1.27.1	Rate as per item number 1.27.1 of SH: Wiring	each	1.00000	152.17	152.17
TOTAL					166.65

cost for one each	319.0
Say	319.0
Cost index 32.04 %	48.70
Total with Cost index	367.70
Say	367.70

**10** Specification Code: od134837/2019\_2020

## od134837/201 Supply, installation, testing and commissioning of 20 PAIR BOX WITH KRONE 9\_2020: MODULES

Code	Description	Unit	Quantity	Rate	Amount
MR	20 PAIR BOX WITH KRONE MODULES	each	1.00000	725.00	725.00
	Add Cartage@1.00	122.0 (18)			7.25
	Other Engineering	Organ	isations		732.25
	DDI	То	tal Cost of	Materials	732.25
MR	Installation charges	each	1.00000	450.00	450.00
				TOTAL	1182.25
			cost for	one each	1182.0
Say					1182.0
Cost index 32.04 %					.00
Total with Cost index					1182.00
_				Say	1182.00

**11** Specification Code: od134838/2019\_2020

od134838/201

9\_2020 : Supply & Installation of telephone cable 10 pair through PVC conduit.

Code	Description	Unit	Quantity	Rate	Amount
MR	Telephone cable 10 pair through PVC conduit	metre	1.00000	46.00	46.00
	Add Cartage@1.00				0.46
	total				46.46
	Total Cost of Materials				
MR	Installation charge	metre	1.00000	20.00	20.00
				TOTAL	66.46
	Jan Jan	1	cost for o	ne metre	66.0
	- C- 2 XX	13	-	Say	66.0
Cost index 32.04 % .0					.00
Total with Cost index					66.00
	Say				66.00

12 Specification Code: od134839/2019\_20201gineering Organisations

od134839/201 9\_2020 :

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	97.50	97.50
	Add Cartage@1.00				0.98
	total				98.48
		Tot	tal Cost of	Materials	98.48
MR	Installation charges	metre	1.00000	25.00	25.00
				TOTAL	123.48
			cost for o	ne metre	123.0
				Say	123.0
		Со	st index	32.04 %	.00

Total with Cost inc	lex	123.00
S	ay	123.00

**13** Specification Code: od134840/2019\_2020

od134840/201 Supply,Installation, Testing & commissioning of Telephone of approved makes 9\_2020: including all other accessories for connection.

Code	Description	Unit	Quantity	Rate	Amount
MR	Telephone of approved makes including all other accessories for connection.	each	1.00000	1080.00	1080.00
	Add Cartage@1.00	M	11		10.80
	total		300		1090.80
	Total Cost of Materials				
MR	Installation charges	each	1.00000	50.00	50.00
	Other Engineering	g Organ	isations	TOTAL	1140.8
	DDI		cost for	one each	1141.0
				Say	1141.0
	.00				
	1141.00				
Say					1141.00

**14** Specification Code: od134841/2019\_2020

od134841/201

9 2020:

Supply, installation, testing and commissioning of Telephone socket.

Code	Description	Unit	Quantity	Rate	Amount	
		Tot	al Cost of	Materials		0.0

1.24.6	Rate as per item number 1.24.6 of SH:	each	1.00000	83.48	83.48
1.27.1	Rate as per item number 1.27.1 of SH: Wiring	each	1.00000	152.17	152.17

TOTAL	0.0
Add CPOH @ 15%	35.35
cost for one each	271.0
Say	271.0
Cost index 32.04 %	86.83
Total with Cost index	357.83
Say	357.83

**15** Specification Code: od134842/2019\_2020

Supply, Installation, Testing and commissioning of Distribution box for PA od134842/201 distribution made out of 16 SWG CRCA sheet with lockable door arrangement 9\_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		1.00000	580.00	580.00
	Add Cartage@1.00				5.80
	total				585.80
		Tot	al Cost of	Materials	585.8
MR	Installation charges	each	1.00000	250.00	250.00

TOTAL	835.8
cost for one each	836.0
Say	836.0
Cost index 32.04 %	.00
Total with Cost index	836.00

16 Specification Code: od134843/2019\_2020

od134843/201 9\_2020 :

Supply, Installation, Testing and commissioning of XLR cables and connectors

Say

836.00

Code	Description	Unit	Quantity	Rate	Amount
MR	XLR cables and connectors	each	1.00000	1875.00	1875.00
	Add Cartage@1.00	print of the second			18.75
	Other Engineering total	Organ	isations		1893.75
	PRI	To	tal Cost of	Materials	1893.75
MR	Installation charges	each	1.00000	150.00	150.00
				TOTAL	2043.75
			cost for	one each	2044.0
	Say				
Cost index 32.04 %					.00
Total with Cost index					2044.00
Say					2044.00

**17** Specification Code: od134844/2019\_2020

od134844/201 Supply & laying of twin twisted 2x1.5 sqmm Cu flexible wire 1.1 kv grade PVC 9\_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	metre	1.00000	48.00	48.00
	Add Cartage@1.00				0.48
	total				48.48
	Total Cost of Materials				48.48
MR	Installation charges	each	1.00000	18.00	18.00
	Cas	V.		TOTAL	66.48
	- J 1980	6.3	cost for o	ne metre	66.0
	Say				
Cost index 32.04 %					.00
Total with Cost index					66.00
				Say	66.00

Other Engineering Organisations

**18** Specification Code: od134845/2019\_2020

od134845/201 9\_2020 : Supply, installation, testing and commissioning of indoor IR IP dome camera 2 MP 2.1mm/4mm/6mm focal length lens capable to 1.0 lux sensitivity, with IR n 480 TV lines.

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.	each	1.00000	5650.00	5650.00
	Add Cartage@1.00				56.50
	total				5706.50
		Tot	tal Cost of	Materials	5706.5
MR	Installation charges	each	1.00000	250.00	250.00

TOTAL	5956.5
cost for one each	5957.0
Say	5957.0

Cost index 32.04 %	.00
Total with Cost index	5957.00
Say	5957.00

**19** Specification Code: od134846/2019\_2020

od134846/201 9\_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 lensering capable to 1.0 lux sensitivity, with IR 480TV lines.	each	130000	9850.00	9850.00
	Add Cartage@1.00				98.50
	total				9948.50
		Tot	tal Cost of	Materials	9948.5
MR	Installation charges	each	1.00000	350.00	350.00
				TOTAL	. 10298.5
			cost for o	one each	10299.0
Say					10299.0
Cost index 32.04 %					.00
Total with Cost index					10299.00
	Say				

**20** Specification Code: od134847/2019\_2020

Network Video Recorder:<br/>
br>Providing & fixing Network Video Recorde 32-channel 720P or 24-channel 1080P high definition network video input and od134847/201 storage Support simultaneous HDMI and VGA output, resolution up to 9\_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.	each Organ	1.00000	42450.0 0	42450.00	
	Add Cartage@1.00		H,		424.50	
	total				42874.50	
		Tot	tal Cost of	Materials	42874.5	
MR	Installation charges	each	1.00000	7500.00	7500.00	
				TOTAL	50374.5	
	cost for one each					
Say					50375.0	
	Cost index <b>32.04</b> % .00					
	Total with Cost index					
				Say	50375.00	

21	Specification	Code:	od134848/2019_2	2020
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od134848/201 Supply, installation, testing and commissioning of 32" Flat Screen VGA Color 9\_2020: Monitor.<br/>

Code	Description	Unit	Quantity	Rate	Amount
MR	32" Flat Screen VGA Color Monitor.	each	1.00000	21500.0 0	21500.00
	Add Cartage@1.00				215.00
	total				21715.00
	@_G	To	tal Cost of	Materials	21715.0
MR	Installation charges	each	1.00000	500.00	500.00
	73	40		TOTAL	22215.0
		WIL	cost for o	one each	22215.0
	22215.0				
Cost index 32.04 %					.00
Total with Cost index					22215.00
Other Engineering Organisations Say					22215.00

22 Specification Code: od134849/2019\_2020

od134849/201

9\_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
	Add Cartage@1.00				0.21
	total				21.21
		Tot	tal Cost of	Materials	21.21
MR	Installation charges	metre	1.00000	18.00	18.00
				TOTAL	39.21

cost for one metre	39.0
Say	39.0
Cost index 32.04 %	.00
Total with Cost index	39.00
Say	39.00

23 Specification Code: od134850/2019\_2020

od134850/201 Supply, Installation, testing and commissioning of Cat6 24 Port un loaded Patch 9\_2020: Panel.

Code	Description	Unit	Quantity	Rate	Amount
MR	Cat6 24 Port un loaded Patch Panel.	each	1.00000	1350.00	1350.00
	Add Cartage@1.00				13.50
	total		, •		1363.50
	Other Engineering	g Organ To	otal Cost of	Materials	1363.5
MR	Installation charges	each	1.00000	250.00	250.00
	1 1 1			TOTAL	. 1613.5
			cost for	one each	1614.0
Say					1614.0
Cost index 32.04 %					.00
Total with Cost index				1614.00	
				Say	1614.00

**24** Specification Code: od134851/2019\_2020

od134851/201 Supply, installation, testing and commissioning of Cat6 I/O for Patch Panel 9\_2020: Shuttered.

Code	Description	Unit	Quantity	Rate	Amount
MR	Cat6 I/O for Patch Panel Shuttered.	each	1.00000	165.00	165.00
	Add Cartage@1.00				1.65
	total				166.65
		To	tal Cost of	Materials	166.65
MR	Installation charges	each	1.00000	55.00	55.00
				TOTAL	221.65
	0.0		cost for o	one each	222.0
	1/1/1/19	1		Say	222.0
	.00				
Total with Cost index					222.00
	Say				

**25** Specification Code: od136286/2019\_2020

Other Engineering Organisations

od136286/201 SITC of D-Link (DIR-878) AC1900 MU-MIMO 1900Mbps Wi-Fi Router (Without 9\_2020: Modem)

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply	each	1.00000	4460.00	4460.00
	Add Cartage@1.00				44.60
	total				4504.60
		Tot	al Cost of	Materials	4504.6
MR	Installation charges	each	1.00000	1000.00	1000.00
				TOTAL	5504.6
cost for one each					5505.0
Say					5505.0
Cost index 32.04 %					.00

Total with Cost index	5505.00
Say	5505.00

NEW SMART CLASS ROOM (ELECTRICAL WORKS - 2 NOS)
1 Specification Code: od134832/2019_2020

Supply, installation, testing and commissioning of Bio Metric Finger Print scan od134832/201 attendance system with LCD/LED display & keypad & TCPIP LAN, USB 9\_2020: Connectivity along with Attendance monitoring & report software (Web based Terminal)<br/>br>

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)	each	1.00000	5750.00	5750.00
	Add Cartage@1.00	Organ			57.50
	total				5807.50
		То	tal Cost of	Materials	5807.5
MR	Installation charges	each	1.00000	1850.00	1850.00
				TOTAL	7657.5
			cost for	one each	7658.0
Say					7658.0
Cost index <b>32.04</b> %					.00
Total with Cost index					7658.00
				Say	7658.00

2 Specification Code: od134834/2019_2020	

od134834/201 9\_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	each	1.00000	1100.00	1100.00	
	Add Cartage@1.00	\			11.00	
	total	5.7			1111.00	
	Ct 500	Tot	tal Cost of	Materials	1111.0	
MR	Installation charges	each	1.00000	250.00	250.00	
	I ST. LL	54	العالية أور	TOTAL	1361.0	
			cost for o	one each	1361.0	
	Say					
	.00					
Total with Cost index					1361.00	
				Say	1361.00	

**3** Specification Code: od134836/2019\_2020

od134836/201 9\_2020 :

Supply, installation, testing and commissioning of LAN socket.

Code	Description	Unit	Quantity	Rate	Amount
MR	LAN Socket	each	1.00000	165.00	165.00
	Add Cartage@1.00				1.65
	total				166.65
	166.65				

1.27.1	Rate as per item number 1.27.1 of SH: Wiring	each	1.00000	152.17		152.17
				TOTAL	166.65	
	cost for one each					
	Say					
Cost index 32.04 %						
Total with Cost index						
				Say	367.70	

4 Specification Code: od134844/2019\_2020

od134844/201 Supply & laying of twin twisted 2x1.5 sqmm Cu flexible wire 1.1 kv grade PVC 9\_2020: insulated through PVC conduit.

Code	Description	Unit	Quantity	Rate	Amount	
MR	2x1.5 sqmm Cu flexible wire 1.1 kv ring grade PVC insulated through PVC conduit	Organ metre	isations	48.00		48.00
	Add Cartage@1.00					0.48
	total					48.48
		Tot	tal Cost of	Materials		48.48
MR	Installation charges	each	1.00000	18.00		18.00
				TOTAL	66.48	
			cost for o	ne metre	66.0	
Say						
Cost index 32.04 %						
Total with Cost index						
				Say	66.00	

#### **5** Specification Code: od134845/2019\_2020

od134845/201 9 2020 : Supply, installation, testing and commissioning of indoor IR IP dome camera 2 MP 2.1mm/4mm/6mm focal length lens capable to 1.0 lux sensitivity, with IR n 480 TV lines.

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.	each	1.00000	5650.00	5650.00
	Add Cartage@1.00	100			56.50
	total	M	11		5706.50
	JA DIG	To	tal Cost of	Materials	5706.5
MR	Installation charges	each	1.00000	250.00	250.00
	PA CHEMIN			TOTAL	5956.5
	Other Engineering	g Organ	i cost for o	ne each	5957.0
	5957.0				
	.00				
Total with Cost index					5957.00
				Say	5957.00

6 Specification Code: od134849/2019\_2020

od134849/201

9 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
	Add Cartage@1.00				0.21

	total				21.21	
		Total Cost of Materials				
MR	Installation charges	metre	1.00000	18.00	18.00	
			-		· · · · · · · · · · · · · · · · · · ·	

TOTAL	39.21
cost for one metre	39.0
Say	39.0
Cost index 32.04 %	.00
Total with Cost index	39.00
Say	39.00

**7** Specification Code: od133837/2019\_2020

od133837/201 9\_2020 :

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

Other Engineering Organisations

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 fo	or one no	34000.0
				Say	34000.0
	.00				
	34000.00				
				Say	34000.00

8 Specification Code: od133834/2019\_2020

od133834/201 Supply, installation, testing, and commissioning of LT Projector and roof mount for 9\_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 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
		M	41	TOTAL	24590.0
		241	cost fo	r one set	24590.0
	7467U.SE			Say	24590.0
	.00				
Other Engineering Organisations of the Cost index					24590.00
	Say				

# SMART CLASS ROOM EXISTING (ELECTRICAL WORKS - 12 NOS) 1 Specification Code: od134832/2019\_2020

Supply, installation, testing and commissioning of Bio Metric Finger Print scan od134832/201 attendance system with LCD/LED display & keypad & TCPIP LAN, USB 9\_2020: Connectivity along with Attendance monitoring & report software (Web based Terminal)<br/>br>

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)	each	1.00000	5750.00	5750.00
	Add Cartage@1.00				57.50
	total				5807.50
	Total Cost of Materials				5807.5
MR	Installation charges	each	1.00000	1850.00	1850.00

TOTAL	7657.5
cost for one each	7658.0
Say	7658.0
Cost index 32.04 %	.00
Total with Cost index	7658.00
Say	7658.00

## Other Engineering Organisations

**2** Specification Code: od134834/2019\_2020

od134834/201 9\_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	each	1.00000	1100.00	1100.00	
	Add Cartage@1.00				11.00	
	total				1111.00	
	Total Cost of Materials					

MR	Installation charges	each	1.00000	250.00	250.00		
	1361.0						
	1361.0						
Say					1361.0		
	.00						
	1361.00						
	1361.00						

#### **3** Specification Code: od134836/2019\_2020

### od134836/201

9\_2020 :

Supply, installation, testing and commissioning of LAN socket.

Code	Description	Unit	Quantity	Rate	Amount	
MR	LAN Socket	each	1.00000	165.00	165.00	
	Add Cartage@1.00 Cther Engineering	Organ	isations		1.65	
	total		H		166.65	
		To	tal Cost of	Materials	166.65	
1.27.1	Rate as per item number 1.27.1 of SH: Wiring	each	1.00000	152.17	152.17	
				TOTAL	166.65	
			cost for o	one each	319.0	
				Say	319.0	
	Cost index 32.04 %					
	367.70					
				Say	367.70	

<b>4</b> Specification Code: od134844/2019_2020
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od134844/201 Supply & laying of twin twisted 2x1.5 sqmm Cu flexible wire 1.1 kv grade PVC 9\_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	metre	1.00000	48.00	48.00			
	Add Cartage@1.00				0.48			
	total				48.48			
	Total Cost of Materials							
MR	Installation charges	each	1.00000	18.00	18.00			
		M	11	TOTAL	66.48			
	JA DIG	201	cost for o	ne metre	66.0			
				Say	66.0			
	.00							
Other Engineering OrgaTotal with Cost index					66.00			
	DD T Say							

**5** Specification Code: od134845/2019\_2020

od134845/201 9\_2020 : Supply, installation, testing and commissioning of indoor IR IP dome camera 2 MP 2.1mm/4mm/6mm focal length lens capable to 1.0 lux sensitivity, with IR n 480 TV lines.

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.	each	1.00000	5650.00	5650.00
	Add Cartage@1.00				56.50
	total				5706.50

		Total Cost of Materials					
MR	Installation charges	each	1.00000	250.00	250.00		
			-				
	TOTAL	5956.5					
	5957.0						
Say					5957.0		
	.00						
Total with Cost index					5957.00		
	Say	5957.00					

6 9	Specification (	Code: od134849/2019	2020
•	opcomodion (	Jouc. ou 10-10-10/2010_	_2020

#### od134849/201

9\_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.	Organ metre	1.00000	21.00		21.00
	Add Cartage@1.00					0.21
	total					21.21
		Tot	al Cost of	Materials	2	21.21
MR	Installation charges	metre	1.00000	18.00		18.00
				TOTAL	39.21	
			cost for o	ne metre	39.0	
				Say	39.0	
Cost index 32.04 %						
Total with Cost index						
				Say	39.00	

**7** Specification Code: od133837/2019\_2020

od133837/201 9 2020 : 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	
	31000.0					
MR	Installation charges for Promethean Board AB2T78	no	1.00000	3000.00	3000.00	
		MAL	41	TOTAL	34000.0	
	DAT DE	2	cost fo	or one no	34000.0	
	<b>不得</b>			Say	34000.0	
	Cost index <b>32.04</b> %					
	34000.00					
Say					34000.00	
	0-1000.00					

8 Specification Code: od133834/2019\_2020

od133834/201 Supply, installation, testing, and commissioning of LT Projector and roof mount for 9\_2020: LT projector complete with all accessories as required.

Code	Description	Unit	Quantity	Rate	Amount
MR	SITC Of LT Projector		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		1.00000	3390.00	3390.00

TOTAL	24590.0
cost for one set	24590.0
Say	24590.0

Cost index 32.04 %	.00
Total with Cost index	24590.00
Say	24590.00

#### **9** Specification Code: od134996/2019\_2020

od134996/201 Supply, Installation, testing and commissioning of Cat6 16 Port un loaded Patch 9\_2020: Panel.

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply	each	1.00000	950.00	950.00
	Add Cartage@1.00	tilg Charle			9.50
	Other Engineering total	Organ	isations	3	959.50
	PRI		tal Cost of	Materials	959.5
MR	Installation charges	each	1.00000	200.00	200.00
				TOTAL	1159.5
			cost for	one each	1160.0
	1160.0				
	.00				
Total with Cost index					1160.00
				Say	1160.00

#### **10** Specification Code: od134997/2019\_2020

od134997/201 Supply, installation, testing and commissioning of 16 Port 10/100/1000 Mbps PoE 9 2020: Switch.

Code	Description	Unit	Quantity	Rate	Amount
MR	16 Port 10/100/1000 Mbps PoE Switch.	each	1.00000	13220.3 5	13220.35
	Add Cartage@1.00				132.20
	total				13352.55
		Tot	tal Cost of	Materials	13352.55
MR	Installation charges	each	1.00000	1000.00	1000.00
				TOTAL	14352.55
	Jan Jan	1	cost for o	one each	14353.0
		13	-	Say	14353.0
	.00				
Total with Cost index					14353.00
				Say	14353.00

#### 11 Specification Code: od134851/2019\_20201gineering Organisations

od134851/201 Supply, installation, testing and commissioning of Cat6 I/O for Patch Panel 9\_2020: Shuttered.

Code	Description	Unit	Quantity	Rate	Amount
MR	Cat6 I/O for Patch Panel Shuttered.	each	1.00000	165.00	165.00
	Add Cartage@1.00				1.65
	total				166.65
		Tot	al Cost of	Materials	166.65
MR	Installation charges	each	1.00000	55.00	55.00
				TOTAL	221.65
	222.0				
Say					222.0
	.00				

Total with Cost index	222.00
Say	222.00

**12** Specification Code: od135045/2019\_2020

od135045/201 9 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	each	1.00000	7375.00	7375.00	
	Add Cartage@1.00	E E			73.75	
	Other Engineaoialg	Organ	isations		7448.75	
	DDI	To	tal Cost of	Materials	7448.75	
MR	Installation charges	each	1.00000	1250.00	1250.00	
				TOTAL	8698.75	
			cost for o	one each	8699.0	
	8699.0					
Cost index 32.04 %					.00	
	8699.00					
	Say					

**13** Specification Code: od134830/2019\_2020

od134830/201 SITC Of 350W RMS MIXER AMPLIFIER, 3 MIC, 2 AUX, 100V/70V AND 4OHMS 9\_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	Supply	each	1.00000	25375.0 0	25375.00
	Add Cartage@1.00				253.75
	total	\			25628.75
	W	To	tal Cost of	Materials	25628.75
MR	Installation charges	each	1.00000	2500.00	2500.00
		KAT	16	TOTAL	28128.75
	1011400		cost for o	one each	28129.0
				Say	28129.0
	.00				
Total with Cost index					28129.00
	PKI		E	Say	28129.00

**14** Specification Code: od134974/2019\_2020

od134974/201 Supply, installation, testing and commissioning of 10/100/1000 Mbps 16 Port 9\_2020: Network Switch to provide networks and internet on class room etc

Code	Description	Unit	Quantity	Rate	Amount
MR	10/100/1000 Mbps 16 Port Network Switch	each	1.00000	5500.00	5500.00
	Add Cartage@1.00				55.00
	total				5555.00
	Total Cost of Materials				

MR	Installation charges	each	1.00000	750.00	750.00
TOTAL					6305.0
cost for one each					6305.0
Say					6305.0
Cost index 32.04 %					.00
Total with Cost index					6305.00
Say					6305.00

**15** Specification Code: od135048/2019\_2020

od135048/201 9\_2020 :

Supply of 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

Code	Description	Unit	Quantity	Rate	Amount	
MR807	10 sqmm 4 core PVC/XLPE insulated 19 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	1.00000	120.00		120.00
	Add Cartage@1.00					1.20
	total					121.20
				TOTAL	121.2	
		ŀ	Add CPOF	H @ 15%	18.18	
	cost for one metre					
	Say					
Cost index <b>32.04</b> %						
	139.00					
				Say	139.00	

#### **16** Specification Code: od136286/2019\_2020

od136286/201 SITC of D-Link (DIR-878) AC1900 MU-MIMO 1900Mbps Wi-Fi Router (Without 9\_2020: Modem)

Code	Description	Unit	Quantity	Rate	Amount	
MR	Supply	each	1.00000	4460.00	4460.00	
	Add Cartage@1.00				44.60	
	total	\			4504.60	
		То	tal Cost of	Materials	4504.6	
MR	Installation charges	each	1.00000	1000.00	1000.00	
		KAT	31	TOTAL	5504.6	
			cost for o	one each	5505.0	
				Say	5505.0	
	.00					
	5505.00					
	Say					

#### **17** Specification Code: od136298/2019\_2020

od136298/201 9\_2020 :

Supply, installation, testing and commissioning of 24" Monitor for CCTV

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply, installation, testing and commissioning of 24" Monitor for CCTV	no	1.00000	8050.85	8050.85
	TOTAL				
cost for one no				8051.0	
Say					8051.0

Cost index 32.04 %	.00
Total with Cost index	8051.00
Say	8051.00

**18** Specification Code: od136299/2019\_2020

od136299/201

SITC Of NVR 8 Channel for CCTV

9\_2020:

	27 TANKS				
Code	Description	Unit	Quantity	Rate	Amount
MR	SITC OF NVR 8 Channel	no	1.00000	7203.40	7203.40
		1/24	41	TOTAL	7203.4
		24	cost fo	r one no	7203.0
				Say	7203.0
	Herba I		st index		.00
	Other Engineering	g Organ	isations otal with Co	ost index	7203.00
	PRI		H	Say	7203.00
	PRI		<u> </u>	Say	7203.00

Main Building Ground Floor Fire Fighting works

**1** Specification Code: od254856/2019\_2020

od254856/201 9\_2020 : (Kannur) Below Ground Piping: Providing, fixing, welding joints and testing of 100 mm Dia. heavy class MS ERW Black pipes as per relevant IS 1239/3589 with special accessories tees, elbows, flanged joints, rubber insertion, nuts, bolts, washers or welded joint with flange joints on bends, 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) < br

Code	Description	Unit	Quantity	Rate	Amount
	I'		-,		

MR	(2019 Fire DSR & AOR )4250-100 MM DIA C CLASS MS PIPE	metre	10.0000	723.64	7236.40
MR	Cost of necessary brackets, supports, saddles, clamps, hangers, vibrationisolator's and fittings such as bends, tees etc. @15%	L.S	0.15000	7236.41	1085.46
MR	Cartage 5%	L.S	0.05000	8321.87	416.09
MR	(2019 Fire DSR & AOR ) 4342 Welding rod	job	1.00000	102.73	102.73
MR	Adhesive	L.S	1.00000	100.00	100.00
MR	Bitumen paint	Litre	3.00000	76.00	228.00
MR	PYPKOTE	sqm	7.85000	267.00	2095.95
		Tot	al Cost of	Materials	11264.63
MR	Fabricator	Day	2.00000	454.51	909.02
MR	Man Mazdoor	Day	3.00000	372.97	1118.91
MR	Fuse welder	Day	1.25000	412.23	515.29
1087	Welder Other Engineering	Opayan	2.00000	447.00	894.00

		TOTAL	14701.85
	Add	CPOH @ 15%	2205.28
	cost for	10.0 per metre	16907.13
	cost fo	or one per metre	1691.0
		Say	1691.0
	Cost in	dex <b>32.04</b> %	33.00
	Total v	vith Cost index	1724.00
		Say	1724.00

**2** Specification Code: od254565/2019\_2020

od254565/201 (Kannur)4.1P: Supplying, installation, testing and commissioning of electric driven

9 2020 :

terrace pump suitable<br/>
for automatic operation and consisting of following, complete in all respects, as required:<br/>
for complete in all respects, as required:<br/>
for cast iron body & bronze<br/>
for simpeller with stainless steel shaft, mechanical confirming to IS: 1520<br/>
for Suitable HP squirell cage induction motor TEFC type suitable for operation on 415 volts, 3<br/>
for phase, 50 Hz, AC supply with IP55 class of protection for enclosure, horiziontal foot mounted<br/>
for type with Class-'F' insulation, conforming to IS-325.M.S.fabricated common base plate, coupling, coupling guard, foundation bolts etc.as<br/>
for protection for enclosure, horiziontal foot mounted<br/>
for coupling, coupling guard, foundation bolts etc.as<br/>
for plate in all respects, as required in type, coupling guard, foundation bolts etc.as<br/>
for plate in all respects, as required in all respects to the plate in all respects to the plate

Code	Description	Unit	Quantity	Rate	Amount
MR	(2019 Fire DSR & AOR) 4315 - Cost of Horizontal type, multistage, centrifugal, centrifugal, split casing pump with bronze impeller stainless bronze impeller stainless 	eagh <sub>an</sub>	1.00000 E	80934.8 2	80934.82
	Add Cartage@1.00				809.35
	total				81744.17
MR	(2019 Fire DSR & AOR)4320 Cost of cement concrete foundation with with br>35x35x5mm angle frame on edges duly blocks	cum	0.36000	5136.26	1849.05
	Add Cartage@1.00				18.49
	total				1867.54

	83611.71				
1004	Fitter, Grade 1	Day	1.50000	447.00	670.50
1087	Welder	Day	1.50000	447.00	670.50
MR	(2019 Fire DSR & AOR) 1025 Helper	Day	3.00000	636.90	1910.70

TOTAL	86863.41
Add CPOH @ 15%	13029.51
cost for one each	99893.0
Say	99893.0
Cost index 32.04 %	494.06
Total with Cost index	100387.06
Say	100387.06

**3** Specification Code: od254566/2019\_2020

(Kannur) 7.7 Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS<br/>
br>3589/IS 1239 including Welding, fittings like elbows, od254566/201 tees, flanges, tapers, nuts bolts, gaskets<br/>
br>etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with<br/>
br>two or more coats of synthetic enamel paint of required shade complete as required stronger.

Code	Description	Unit	Quantity	Rate	Amount
MR	(2019 Fire DSR & AOR) 4250 (a) Cost of 100 mm dia MS Pipe	metre	10.0000	723.64	7236.40
	Add Wastage@5.00				361.82
	total				7598.22
MR	(2019 Fire DSR & AOR) Add for necessary brackets, support, saddles, br>clamps, hangers, vibrationisolator and fitting br>such as bends, tees, welding material etc. @15% br>	L.S	0.15000	7598.23	1139.73

MR	(2019 Fire DSR & AOR) Cartage @1%	each	0.01000	8737.96	87.38
		Tot	tal Cost of	Materials	8825.33
1004	Fitter, Grade 1	Day	2.00000	447.00	894.00
1087	Welder	Day	0.75000	447.00	335.25
1006	Painter	Day	0.25000	407.00	101.75
MR	(2019 Fire DSR & AOR)1025 Helper	Day	3.00000	636.90	1910.70

TOTAL	12067.03
Add CPOH @ 15%	1810.05
cost for 10.0 per metre	13877.08
cost for one per metre	1388.0
Say	1388.0
Cost index 32.04 %	49.02
Total with Cost index	1437.02
Say	1437.02

## Other Engineering Organisations

4 Specification Code: od254567/2019\_2020

od254567/201 9\_2020 :

(Kannur(14.5) Providing, installation, testing and commissioning of non-return valve of following sizes<br/>
br>confirming to IS: 5312 complete with rubber gasket, GI bolts, nuts, washers etc.as required: 100mm dia

Code	Description	Unit	Quantity	Rate	Amount
MR	(2019 Fire DSR & AOR) 4264 (a) Cost of 40 mm dia Non Return Valve	each	1.00000	7541.16	7541.16
	Add Cartage@1.00				75.41
	total				7616.57
MR	(2019 Fire DSR & AOR) 4343 (b) Cost of 100 mm dia flange	each	2.00000	251.11	502.22
	Add Cartage@1.00				5.02

	total				507.24
MR	(2019 Fire DSR & AOR) 4341 (c) Cost of 8 Nos. Nut Bolt fastner & packing br>gaskets	each	1.00000	205.45	205.45
	Add Cartage@1.00				2.05
	total				207.50
MR	(2019 Fire DSR & AOR)4332 (d) Cost of welding rod	job	1.00000	102.73	102.73
	Add Cartage@1.00				1.03
	total	\			103.76
	- J W	То	tal Cost of	Materials	8435.07
1004	Fitter, Grade 1	Day	0.50000	447.00	223.50
1087	Welder	Day	0.20000	447.00	89.40
MR	(2019 Fire DSR & AOR) 1025 Helper	Day	0.71000	636.90	452.20

TOTAL	9200.17
Other Engineering Organisations Add CPOH @ 15%	1380.03
cost for one each	10580.0
Say	10580.0
Cost index 32.04 %	115.34
Total with Cost index	10695.34
Say	10695.34

**5** Specification Code: od254568/2019\_2020

(Kannur ) 19.1 : Supplying and fixing of fire brigade connection of cast iron body od254568/201 with gun metal male<br/>
sinstantaneous inlet couplings complete with cap and chain as reqd. for suitable dia MS pipe<br/>
br>connection conforming to IS 904 as required : 2 way-100 mm dia M.S. Pipe<br/>
sinstantaneous inlet couplings complete with cap and chain as reqd. for suitable dia MS pipe<br/>
sinstantaneous inlet couplings complete with cap and grant as required in the coupling complete with cap and grant as required in the coupling complete with cap and grant as required in the coupling complete with cap and grant as required in the coupling complete with cap and grant as required in the coupling complete with cap and grant as required in the coupling complete with cap and grant as required in the coupling complete with cap and grant as required in the coupling complete with cap and grant as required in the coupling complete with cap and grant as

Code   Description   Unit   Quantity   Rate   Amount	Code	Description	Unit	Quantity	Rate	Amount
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	T				
MR	(2019 Fire DSR & AOR) 4205 (a)Cost of two way gunmetal FBC connection	each	1.00000	4567.84	4567.84
	Add Cartage@1.00				45.68
	total				4613.52
MR	(2019 Fire DSR & AOR) 4329 (b) Cost of 4 Nos. nuts bolts and washers LS	set	1.00000	57.07	57.07
	Add Cartage@1.00				0.57
	total				57.64
MR	(2019 Fire DSR & AOR) 4330 (c) Cost of 1 No. 3mm thick rubber gasket	each	1.00000	79.90	79.90
	Add Cartage@1.00	5			0.80
	total	K			80.70
MR	(2019 Fire DSR & AOR) 4331 (d) Cost of 1 No. MS flange as per IS driling driling driling driling driling 	set	1.00000	228.28	228.28
	Add Cartage@1.00	età Eller			2.28
	Other Engine gring	Organ	isations		230.56
MR	(2019 Fire DSR & AOR) 4332 (e) Cost of welding rod	job	1.00000	45.66	45.66
	Add Cartage@1.00				0.46
	total				46.12
		Tot	al Cost of	Materials	5028.54
1004	Fitter, Grade 1	Day	0.25000	447.00	111.75
1087	Welder	Day	0.25000	447.00	111.75
MR	(2019 Fire DSR & AOR) 1025- Helper	Day	0.50000	636.90	318.45

TOTAL	5570.49
Add CPOH @ 15%	835.57
cost for one each	6406.0
Say	6406.0

Cost index 32.04 %	82.34
Total with Cost index	6488.34
Say	6488.34

**6** Specification Code: od254569/2019\_2020

od254569/201

9\_2020 : (Kannur) Providing & fixing 25mm Air release valve as per IS:14845 ISI Marked

Code	Description	Unit	Quantity	Rate	Amount
MR	(2019 Fire DSR & AOR) 4290- Providing & fixing 25mm Air release valve as per IS:14845 ISI Marked	each	1.00000	1540.88	1540.88
	Add Cartage@1.00				15.41
	total	1227			1556.29
	Other Engineering	OrgJe	tal Cost of	Materials	1556.29
1004	Fitter, Grade 1	Day	0.10000	447.00	44.70
	PKI			TOTAL	1600.99
			Add CPO	H @ 15%	240.15
			cost for	one each	1841.0
Say					1841.0
		Co	st index	32.04 %	16.34
Total with Cost index					1857.34
	Say				

**7** Specification Code: od254570/2019\_2020

od254570/201 (Kannur) 22 : Providing & fixing of pressure switch in M.S. pipe line including 9\_2020 : connection etc. as required.

Code	Description	Unit	Quantity	Rate	Amount
MR	(2019 Fire DSR & AOR ) 4318 Cost of water flow switch	each	1.00000	1125.41	1125.41
	Add Cartage@1.00				11.25
	total				1136.66
	1136.66				
1004	Fitter, Grade 1	Day	0.06200	447.00	27.71
1087	Welder	Day	0.06200	447.00	27.71
MR	(2019 Fire DSR & AOR ) 1025- Helper	Day	0.12500	636.90	79.61
		13	-	TOTAL	1271.69
		X	Add CPOF	H @ 15%	190.75
		MAI	cost for o	one each	1462.0
Say					1462.0
Cost index 32.04 %					20.19
Other Engineering OrgaTotal with Cost index					1482.19
Say					1482.19

8 Specification Code: od254571/2019\_2020

(Kannur) 11.5 : Supplying, fixing, testing and commissioning of butterfly valve of od254571/201 PN 1.6 rating with<a href="https://doi.org/10.2012/bit.10.2012">bits: Note: The properties of th

Code	Description	Unit	Quantity	Rate	Amount
MR	(2019 Fire DSR & AOR ) 4238 - Cost of 100 mm dia butterfly valve	each	1.00000	3772.29	3772.29
	Add Cartage@1.00				37.72
	total				3810.01

MR	(2019 Fire DSR & AOR ) 4343- Cost of 100 mm dia Flange	each	2.00000	251.11	502.22
	Add Cartage@1.00				5.02
	total				507.24
MR	(2019 Fire DSR & AOR ) 4341- Cost of 8 Nos. Nut bolt fastner and packing packing gaskets	each	1.00000	205.45	205.45
	Add Cartage@1.00				2.05
	total				207.50
MR	(2019 Fire DSR & AOR ) 4342 - (2019 Fire DSR & AOR )	each	1.00000	102.72	102.72
	Add Cartage@1.00	30	-		1.03
	total	100	12		103.75
	VAT LLESS	To	tal Cost of	Materials	4628.5
1004	Fitter, Grade 1	Day	0.50000	447.00	223.50
1087	Welder	Day	0.20000	447.00	89.40
MR	(2019 Fire DSR & AOR ) 1025- Helper	Organ Day	0.70000	636.90	445.83

T T T TOTAL	5387.23
Add CPOH @ 15%	808.08
cost for one each	6195.0
Say	6195.0
Cost index 32.04 %	115.34
Total with Cost index	6310.34
Say	6310.34

**9** Specification Code: od254572/2019\_2020

od254572/201 (Kannur )9.2: Supplying and fixing single headed internal hydrant valve with 9\_2020: instantaneous<br/>
br>Gunmetal/Stainless Steel coupling of 63 mm dia with cast iron

wheel ISI marked conforming<br/>
sto IS 5290 (Type -A) with blank Gunmetal/Stainless Steel cap and chain as required :Single headed Stainless steel

Code	Description	Unit	Quantity	Rate	Amount
MR	(From 2019 Fire DSR & DOR) 4202 - Cost of Single Head Stainless Steel Hydrant br>Valve	each	1.00000	4048.51	4048.51
	Add Cartage@1.00				40.49
	total	\			4089.00
MR	(From 2019 Fire DSR & AOR) 4329- Cost of 4 Nos. nuts bolts and washers	set	1.00000	57.07	57.07
	Add Cartage@1.00	14	16		0.57
	total	34	J. S. Life		57.64
MR	(From 2019 Fire DSR & AOR) 4330 - Cost of 1 No. 3 mm thick rubber gasket	each	1.00000	79.90	79.90
	Add Cartage@1.00ther Engineering	Organ	isations		0.80
	total		E		80.70
MR	(From 2019 Fire DSR & AOR) 4331- Cost of 1 No. MS flange as per IS driling driling driling 	set	1.00000	228.28	228.28
	Add Cartage@1.00				2.28
	total				230.56
MR	(From 2019 Fire DSR & AOR) 4332- Cost of welding rod	job	1.00000	45.66	45.66
	Add Cartage@1.00				0.46
	total				46.12
		Tot	al Cost of	Materials	4504.02
1004	Fitter, Grade 1	Day	0.25000	447.00	111.75
1087	Welder	Day	0.25000	447.00	111.75

MR	(From 2019 Fire DSR & AOR) 1025- Helper	Day	0.50000	636.90	318.45	
	TOTAL					
	Add CPOH @ 15%					
	cost for one each					
	Say					
	Cost index 32.04 %					
	5885.34					
	Say					

**10** Specification Code: od254573/2019\_2020

od254573/201 9 2020 : (Kannur) 7.1: Supplying and fixing first-aid Hose Reel with MS construction spray painted in post office<br/>
br>red, conforming to IS 884 complete with the following as required.<br/>
br>20 mm nominal internal dia water hose thermoplastic (Textile reinforced) type -2 as per IS:<br/>
br>12585<br/>
br>20 mm nominal internal dia gun metal globe valve & nozzle.<br/>
br>Drum and brackets for fixing the equipmets on wall.<br/>
br>Connections from riser with 25 mm dia stop gun metal valve & M.S. Pipe and socket - 30m

Code	Description	Unit	Quantity	Rate	Amount
MR	(2019 Fire DSR & AOR ) 4210 - Cost of swinging type hose reel complete br>with 19mm x 30m Thermolplastic hose	each	1.00000	2331.86	2331.86
	Add Cartage@1.00				23.32
	total				2355.18
MR	(2019 Fire DSR & AOR ) 4212 - )Hose reel drum	each	1.00000	2682.27	2682.27
	Add Cartage@1.00				26.82
	total				2709.09

MR	(2019 Fire DSR & AOR ) 4213 - Cost of 25mm dia gunmetal gate valve	each	1.00000	788.70	788.70
	Add Cartage@1.00				7.89
	total				796.59
MR	(2019 Fire DSR & AOR ) 4355 - Cost of 25mm dia socket, union, nipples hr>(Lumpsum)	each	1.00000	239.69	239.69
	Add Cartage@1.00				2.40
	total				242.09
	Can	To	tal Cost of	Materials	6102.95
1004	Fitter, Grade 1	Day	0.50000	447.00	223.50
1087	Welder	Day	0.25000	447.00	111.75
MR	(2019 Fire DSR & AOR ) 1025- Helper	Day	1.00000	636.90	636.90

TOTAL	7075.1
Add CPOH @ 15%	
Other Engineering Organisations cost for one each	8136.0
Say	8136.0
Cost index 32.04 %	123.35
Total with Cost index	8259.35
Say	8259.35

**11** Specification Code: od163566/2019\_2020

FIRE DUCT :- Supply & installing in position self glowing "FIRE DUCT " sign od163566/201 board of size 100mm x 300 mm made of luminescent safely, rigid sheet in green 9\_2020: colour, photo luminescent rigid sheet with two each hanging chains / or fixed on wall & necessarry supports to hang it on ceiling / or on wall.

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply&fixing	each	1.00000	510.00	510.00

TOTAL	510.0
cost for one each	510.0
Say	510.0
Cost index <b>32.04</b> %	.00
Total with Cost index	510.00
Say	510.00

**12** Specification Code: od163569/2019\_2020

FIRE EXIT: Supply & installing in position self glowing "FIRE EXIT" sign board od163569/201 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 ceiling.

Code	Description	Unit	Quantity	Rate	Amount	
MR	Supply & fixing Other Engineering	each	1.00000	510.00		510.00
	DDT			TOTAL	510.0	
	cost for one each					
Say						
Cost index 32.04 %						
Total with Cost index						
Say						

**13** Specification Code: od163570/2019\_2020

escape Route signs: Supply & installing in position self glowing "EXIT" od163570/201 sign board to guide the occupants towards the exits of size 100mm x 300 mm 9\_2020: made of luminescent safely, rigid sheet in green colour, photo luminescent rigid sheet with two each hanging chains & necessarry supports to hang it on ceiling.

Code	Description	Unit	Quantity	Rate	Amount	
MR	Supply & fixing	each	1.00000	713.00		713.00
				TOTAL	713.0	
cost for one each				713.0		

<b>14</b> Specification Code: od134479/2019, 2020	S Albh S. Al

od134479/201 9\_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/>

Say 713.0

Say

.00

713.00

713.00

Cost index 32.04 %

Total with Cost index

Code	Description	Unit	Quantity	Rate	Amount	
MR2336	Hose Cabinet- Double	each	1.00000	3305.00	3305.00	
	Add Cartage@1.00				33.05	
	Add necessary specials@5.00				165.25	
	total				3503.30	
		Tot	al Cost of	Materials	3503.3	
1004	Fitter, Grade 1	Day	1.00000	447.00	447.00	
1087	Welder	Day	2.00000	447.00	894.00	
				TOTAL	4844.3	
	Add CPOH @ 15% 726.64					
cost for one each 55						
	Say					

Cost index 32.04 %	494.06
Total with Cost index	6065.06
Say	6065.06

**15** Specification Code: od134482/2019\_2020

od134482/201 9\_2020 :

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@1.00	201	188		16.95	
	total				1711.95	
	PA SHEIR	To	tal Cost of	Materials	1711.95	
1004	Fitter, Grade 1 Other Engineering	Opayan	0.20000	447.00	89.40	
	DD T C TOTAL					
			Add CPOF	H @ 15%	270.20	
			cost for o	one each	2072.0	
	Say					
	33.00					
	2105.00					
				Say	2105.00	

**16** Specification Code: od134483/2019\_2020

od134483/201 9 2020 :

Providing 63mm (2½)" dia 15 m long canvas hose pipe complete with stainless steel male & female coupling stainless steel wire wound with the pipe The pipe shall confirm to IS. 4927. Make: ISI Approved.

Code	Description	Unit	Quantity	Rate	Amount
MR2337	C.P.Hose	each	1.00000	4153.00	4153.00
	Add Cartage@1.00				41.53
	total				4194.53
		To	tal Cost of	Materials	4194.53
1004	Fitter, Grade 1	Day	0.40000	447.00	178.80
MR704	Man Mazdoor	Day	0.40000	675.00	270.00
	4643.33				
Add CPOH @ 15%					696.50
cost for one each				5340.0	
Say					5340.0
	JAT DISK	Co	st index	32.04 %	66.00
Total with Cost index					5406.00
Say				5406.00	

## Other Engineering Organisations

**17** Specification Code: od134487/2019\_2020

od134487/201 9\_2020 :

Providing & fixing pressure gauges of not less than 100mm dia dial of pressure range 0-10 kg/cmsq complete with shut off valve duly calibrated before installation.Make:- ISI Approved.

Code	Description	Unit	Quantity	Rate	Amount
MR2357	Pressure Guage	each	1.00000	720.00	720.00
	Add Cartage@1.00				7.20
	total				727.20
Total Cost of Materials					727.2
1004	Fitter, Grade 1	Day	0.20000	447.00	89.40
				TOTAL	816.6
Add CPOH @ 15%					122.49

cost for one each	939.0
Say	939.0

Cost index 32.04 %	33.00
Total with Cost index	972.00
Say	972.00

**18** Specification Code: od134489/2019\_2020

od134489/201 9\_2020 :

Supply and drawing of 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

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	metren	1:00000s	121.19	121.19	
	Add Cartage@1.00				1.21	
	Add Wastage@5.00				6.06	
	total				128.46	
	Total Cost of Materials					
1001	Wireman	Day	0.16000	447.00	71.52	
1007	Khallasi	Day	0.16000	368.00	58.88	
	TOTAL					
	38.83					
	298.0					
	298.0					
		Co	st index	32.04 %	48.06	

Total with Cost index	346.06
Say	346.06

**19** Specification Code: od133918/2019\_2020

od133918/201 9 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	kg	3920.00 000	60.00	235200.00
	Add Wastage@5.00		THE		11760.00
	total				246960.00
	Ouls an Empire a since a since	Tot	al Cost of	Materials	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
	575976.0				
	86396.40				
	662372.0				
	662372.0				
Cost index 32.04 %					.00
Total with Cost index					662372.00

Sa	662372.00
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20 Specification Code: od254878/2019\_2020

od254878/201 Providing and fixing Fire Man axe as required with Test Certificate of 20,000 9\_2020: volts.Make: - ISI Approved.

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply & fixing	each	1.00000	1524.00	1524.00
	/9039	1		TOTAL	1524.0
	cost for one each				
	Say				
	.00				
Total with Cost index					1524.00
Say					1524.00

Other Engineering Organisations

## PRICE