

Data Analysis

ACADEMIC BLOCK GROUND FLOOR ELECTRICAL WORKS

1 Specification Code: od249501/2019_2020

od249501/201 SITC of 10KVA UPS with 42Ah SMF battery for 1 hour back-up complete with all 9_2020 : accessories as required.

Code	Description	Unit	Quantity	Rate	Amount
MR	10KVA LIEBERT/EQUIVALENT 240V DC online UPS.	each	1.00000	163000.00	163000.00
	Add Cartage@1.00				1630.00
	total				164630.00
MR2388	12v 42 Ah Battery	each	40.00000	4237.00	169480.00
	Add Cartage@1.00				1694.80
	Add necessary specials@2.00				3389.60
	total				174564.40
Total Cost of Materials					339194.4
1001	Wireman	Day	2.00000	447.00	894.00
1007	Khallasi	Day	2.00000	368.00	736.00
TOTAL					340824.4
Add CPOH @ 15%					51123.66
cost for one each					391948.0
Say					391948.0
Cost index 48.71 %					912.83
Total with Cost index					392860.83
Say					392860.83

2 Specification Code: od253878/2019_2020

od253878/201 SITC of SSB 1 (Kattappana)
Supply, installation , testing and commissioning

9_2020 :

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 - 100A 4P Isolator
Outgoing - 32A 16kA 3P MCCB - 4 no, 40A 16kA 3P MCCB - 1 no, 25A 3P MCB - 4 no, 40A 3P MCB - 1 no, 32A 3P MCB - 1 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 4P Isolator(Make: L&T, Itemcode: SK955710000)	each	1.00000	2821.50	2821.50
	Add Cartage@1.00				28.22
	total				2849.72
MR	40A 3P MCB (Make: L&T, Itemcode: BB30400C)	each	1.00000	12302.25	12302.25
	Add Cartage@1.00				123.02
	total				12425.27

MR731	1.0 sqmm ISI marked FR LS PVC insulated single core copper conductor cable	metre	10.0000 0	7.03	70.30
	Add Cartage@1.00				0.70
	Add Wastage@5.00				3.52
	Add necessary specials@5.00				3.52
	total				78.03
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				5.31
	Add Wastage@5.00				26.57
	Add necessary specials@5.00				26.57
	total				589.90
1104	6.0 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable	metre	30.0000 0	38.87	1166.10
	Add Cartage@1.00				11.66
	Add Wastage@5.00				58.31
	Add necessary specials@5.00				58.31
	total				1294.37
Total Cost of Materials					17370.82
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	5.00000	3272.17	16360.85
2.10.4	Rate as per item number 2.10.4 of SH: MCCB, MCB & DBS	each	5.00000	608.70	3043.50

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	2100.00 000	3.00	6300.00
90.14.7	Rate as per item number 90.14.7 of SH: OD Electrical	Cum cm	450.000 00	5.22	2349.00
90.14.1. 1	Rate as per item number 90.14.1.1 of SH: OD Electrical	sqm	12.0000 0	2220.87	26650.44
90.14.3. 2	Rate as per item number 90.14.3.2 of SH: OD Electrical	metre	18.0000 0	6.09	109.62
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. 1	Rate as per item number 90.14.2.1 of SH: OD Electrical	sqm	0.80000	2566.96	2053.57
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
1004	Fitter, Grade 1	Day	2.00000	447.00	894.00

TOTAL		28458.82
Add CPOH @ 15%		12638.43
cost for one each		96893.0
Say		96893.0
Cost index 48.71 %		5823.77
Total with Cost index		102716.77
Say		102716.77

3 Specification Code: od250270/2019_2020

od250270/201 Supply of 95 sqmm 3.5 core PVC/XLPE insulated armoured cable with aluminium

9_2020 : 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
MR798	95 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	520.00	520.00
	Add Cartage@1.00				5.20
	total				525.20
TOTAL					525.2
Add CPOH @ 15%					78.78
cost for one metre					604.0
Say					604.0
Cost index 48.71 %					.00
Total with Cost index					604.00
Say					604.00

4 Specification Code: od250276/2019_2020

od250276/2019_2020 : 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	262.71	262.71
	Add Cartage@1.00				2.63
	total				265.34

TOTAL	265.34
Add CPOH @ 15%	39.80
cost for one metre	305.0
Say	305.0
Cost index 48.71 %	.00
Total with Cost index	305.00
Say	305.00

Other Engineering Organisations

5 Specification Code: od249537/2019_2020

PRICE

od249537/2019_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	120.00	120.00
	Add Cartage@1.00				1.20
	total				121.20

TOTAL	121.2
Add CPOH @ 15%	18.18
cost for one metre	139.0
Say	139.0

Cost index 48.71 %	.00
Total with Cost index	139.00
Say	139.00

6 Specification Code: od249540/2019_2020

od249540/2019_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				156.55
TOTAL					156.55
Add CPOH @ 15%					23.48
cost for one metre					180.0
Say					180.0
Cost index 48.71 %					.00
Total with Cost index					180.00
Say					180.00

7 Specification Code: od250286/2019_2020

od250286/2019_2020 : Supply of 6 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
MR806	6 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	94.07	94.07
	Add Cartage@1.00				0.94
	Add necessary specials@1.00				0.94
	total				95.95
Other Engineering Organisations TOTAL					95.95
Add CPOH @ 15%					14.39
cost for one metre					110.0
Say					110.0
Cost index 48.71 %					.00
Total with Cost index					110.00
Say					110.00

8 Specification Code: od250352/2019_2020

od250352/2019_2020 : Supplying and laying 25 mm X 3 mm copper strip at 0.50 metre below ground as strip earth
electrode, including connection/ terminating with nut, bolt, spring, washer etc. as required.
(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 0	489.83	9801.50
	Add Cartage@1.00				98.01
	total				9899.51
Total 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
TOTAL					10429.39
Add CPOH @ 15%					1564.41
cost for 30.0 metre					11993.80
cost for one metre					400.0
Other Engineering Organisations Say					400.0
Cost index 48.71 %					10.23
Total with Cost index					410.23
Say					410.23

9 Specification Code: od250250/2019_2020

od250250/2019_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 fixture with 9W LED lamp (Make: crompton)	each	1.00000	450.00	450.00
Total Cost of Materials					450.0

90.3.13	Rate as per item number 90.3.13 of SH: OD Electrical	each	1.00000	71.30	71.30
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				TOTAL	450.0
				Add CPOH @ 15%	78.19
				cost for one each	599.0
				Say	599.0
				Cost index 48.71 %	14.61
				Total with Cost index	613.61
				Say	613.61

10 Specification Code: od250251/2019_2020

od250251/2019_2020 : Supply, installation, testing and commissioning of 5W LED lamp (Make: Luker, Model: LBPC05CL) working on 230V, 50Hz 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	61.15
Total 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
Add CPOH @ 15%					29.65
cost for one each					227.0
Say					227.0
Cost index 48.71 %					51.63
Total with Cost index					278.63

Say	278.63
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11 Specification Code: od249565/2019_2020

od249565/2019_2020 : Supply, installation , testing and commissioning of exhaust fans of size up to 450mm 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.
300/305 mm sweep Light Duty Exhaust fan in metal frame 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
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
Total 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 48.71 %					89.63
Total with Cost index					2237.63
Say					2237.63

12 Specification Code: od249564/2019_2020

od249564/2019_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.
1400mm sweep ceiling fan complete with 300mm down rod , canopies, shackles and blades and resistance type regulator working on 230V/240V single phase A/C

Code	Description	Unit	Quantity	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
Total Cost of Materials					1616.0
90.4.3	Rate as per item number 90.4.3 of SH:OD Electrical	each	1.00000	166.00	166.00
TOTAL					1616.0
Add CPOH @ 15%					267.30
cost for one each					2024.0
Say					2024.0
Cost index 48.71 %					80.86
Total with Cost index					2104.86
Say					2104.86

13 Specification Code: od249566/2019_2020

od249566/201 Supply and laying of one number of 10 SWG Copper wire on wall/ surface/

9_2020 : recessed conduit etc.

Code	Description	Unit	Quantity	Rate	Amount
MR2043	Copper wire 0 to 14 SWG	kg	2.20500	582.00	1283.31
	Add Cartage@1.00				12.83
	Add Wastage@5.00				64.17
	total				1360.31
Total Cost of Materials					1360.31
1001	Wireman	Day	0.15000	447.00	67.05
1085	Solder jointing	each	2.00000	12.00	24.00
TOTAL					1451.36
Add CPOH @ 15%					217.70
cost for 30.0 metre					1669.06
cost for one metre					56.0
Say					56.0
Cost index 48.71 %					1.95
Total with Cost index					57.95
Say					57.95

14 Specification Code: od253345/2019_2020

SITC of MDB : 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 od253345/201 switchgear etc. (all feeder unit Would be
compartmentalized), color coded 9_2020 : PVC sleeved vertical / horizontal Aluminium
busbar of required size of length, (bus-bar distances shall be minimum 32 mm)
insulators, hardware, neoprene gasket , hinged door, interconnecting single core
multi strand lugged copper wire having current density of 2A / sqmm of suitable
capacity & size with lugs from busbar to switchgears / MCCB / MCB or where ever
required, control

wiring with 1 sqmm FRLS cable, ON/OFF, RYB phase indicators, two earthing terminal busbar of size 25 x 5 mm copper with nut & bolts at outside of the panel, rating and name plates for all incoming & outgoing etc. comprising with the followings as per the KEI standard. Switch gears – ABB/Equivalent, Contactors – ABB, L&T/Equivalent. Incomer: - 125A TPN Isolator – 1 No. Outgoing: - 80A 25KA TP MCCB – 3 Nos, 50A 25KA TP 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	125A TPN ISOLATOR (L&T)	no	1.00000	3511.20	3511.20
	Add Cartage@1.00				35.11
	total				3546.31
MR1732	Multifunction meter to read: W, Wh, PF or VA, Vah, PF or VAR, VARh, PF ? 3 ph accuracy class 1	each	1.00000	6101.69	6101.69
	Add Cartage@1.00				61.02
	total				6162.71
MR1784	120/5 A, 5 VA, accuracy class 1, Tape wound Metering CT	each	1.00000	891.53	891.53
	Add Cartage@1.00				8.92
	total				900.45
MR731	1.0 sqmm ISI marked FR LS PVC insulated single core copper conductor cable	metre	25.00000	7.03	175.75
	Add Cartage@1.00				1.76
	Add Wastage@5.00				8.79

	Cable tie,tie mount,tinning the terminations etc@5.00				8.79
	total				195.08
1106	16 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable	metre	5.00000	102.36	511.80
	Add Cartage@1.00				5.12
	Add Wastage@5.00				25.59
	Cable tie,tie mount,tinning the terminations etc@5.00				25.59
	total				568.10
MR733	35 sqmm ISI Marked FR LS PVC insulated single core copper conductor cable	metre	8.00000	244.07	1952.56
	Add Cartage@1.00				19.53
	Add Wastage@5.00				97.63
	Cable tie,tie mount,tinning the terminations etc@5.00				97.63
	total				2167.34
MR	Supply and providing Aluminium bus bars including finger type SMC bus bar size nut & bolt, providing heat shrink sleeves etc. as required	Cum cm	4500.00 000	3.00	13500.00
Total Cost of Materials					27173.52
2.10.1	Rate as per item number 2.10.1 of SH: MCCB, MCB & DBS	each	4.00000	150.43	601.72
90.14.10 .2	Rate as per item number 90.14.10.2 of SH: OD Electrical	no	5.00000	4148.70	20743.50
90.14.11 .13	Rate as per item number 90.14.11.13 of SH: OD Electrical	no	5.00000	1587.83	7939.15
90.14.1. 1	Rate as per item number 90.14.1.1 of SH: OD Electrical	sqm	12.0000 0	2220.87	26650.44

90.14.7	Rate as per item number 90.14.7 of SH: OD Electrical	Cum cm	630.000 00	5.22	3288.60
90.14.2. 1	Rate as per item number 90.14.2.1 of SH: OD Electrical	sqm	0.56000	2566.96	1437.50
90.14.3. 1	Rate as per item number 90.14.3.1 of SH: OD Electrical	metre	36.0000 0	40.00	1440.00
90.14.4	Rate as per item number 90.14.4 of SH: OD Electrical	metre	4.80000	796.52	3823.30
1001	Wireman	Day	3.00000	447.00	1341.00
MR701	Electrician	Day	3.00000	750.00	2250.00
MR720	Khalasi	Day	3.00000	750.00	2250.00

	TOTAL	33014.53
	Add CPOH @ 15%	14840.81
	cost for one each	113778.0
	Say	113778.0
	Cost index 48.71 %	3330.30
	Total with Cost index	117108.30
	Say	117108.30

FRONT GATE WITH SECURITY CABIN M AND E WORKS

1 Specification Code: od249519/2019_2020

Supply, installation , testing and commissioning of Wall fan of 300mm sweep dia od249519/201 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.
300mm 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
Total Cost of Materials					1577.62
1001	Wireman	Day	0.33000	447.00	147.51
MR719	Wireman Helper	Day	0.33000	600.00	198.00

TOTAL	1923.13
Add CPOH @ 15%	288.47
cost for one each	2212.0
Say	2212.0
Cost index 48.71 %	89.63
Total with Cost index	2301.63
Say	2301.63

Other Engineering Organisations

2 Specification Code: od252765/2019_2020

od252765/2019_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				16.95
		total			1711.95
Total Cost of Materials					1711.95
1004	Fitter, Grade 1	Day	0.20000	447.00	89.40
TOTAL					1801.35
Add CPOH @ 15%					270.20

cost for one each	2072.0
Say	2072.0

Cost index 48.71 %	50.17
Total with Cost index	2122.17
Say	2122.17

3 Specification Code: od250774/2019_2020
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od250774/201 Supply and laying of one number of 10 SWG Copper wire including excavation 9_2020 : and refilling as required.

Code	Description	Unit	Quantity	Rate	Amount
MR2043	Copper wire 0 to 14 SWG	kg	2.20500	582.00	1283.31
	Add Cartage@1.00				12.83
	Add Wastage@5.00				64.17
	Other Engineering Organisations total				1360.31
Total Cost of Materials					1360.31
1001	Wireman	Day	0.20000	447.00	89.40
1007	Khallasi	Day	0.20000	368.00	73.60
1085	Solder jointing	each	2.00000	12.00	24.00
TOTAL					1547.31
Add CPOH @ 15%					232.10
cost for 30.0 metre					1779.41
cost for one metre					59.0
Say					59.0
Cost index 48.71 %					3.41
Total with Cost index					62.41
Say					62.41

4 Specification Code: od249537/2019_2020

od249537/2019_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	120.00	120.00
	Add Cartage@1.00				1.20
	total				121.20
TOTAL					121.2
Add CPOH @ 15%					18.18
cost for one metre					139.0
Say					139.0
Cost index 48.71 %					.00
Total with Cost index					139.00
Say					139.00

5 Specification Code: od250793/2019_2020

od250793/2019_2020 : SITC of 3W LED Recessed Spot light pre wired, working on 230V, 50Hz AC, complete with all other accessories as required.

Code	Description	Unit	Quantity	Rate	Amount
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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				2.71
	total				273.71
Total Cost of Materials					273.71
90.3.12	Rate as per item number 90.3.12 of SH: OD Electrical	each	1.00000	53.04	53.04

TOTAL	273.71
Add CPOH @ 15%	49.01
cost for one no	376.0
Say	376.0
Cost index 48.71 %	12.66
Total with Cost index	388.66
Other Engineering Organisations Say	388.66

PRICE

6 Specification Code: od250794/2019_2020

od250794/201 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 48.71 %	17.05
Total with Cost index	1518.05
Say	1518.05

7 Specification Code: od250795/2019_2020

od250795/201 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%					146.51
cost for one no					1123.0
Say					1123.0
Cost index 48.71 %					17.54
Total with Cost index					1140.54

Say	1140.54
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8 Specification Code: od250796/2019_2020

od250796/201 Supply, installation, testing and commissioning of LED 3W Spike light, IP65 with
9_2020 : all other accessories as required.

Code	Description	Unit	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
Total 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
Add CPOH @ 15%					79.39
cost for one no					609.0
Say					609.0
Cost index 48.71 %					18.02
Total with Cost index					627.02
Say					627.02

9 Specification Code: od250251/2019_2020

od250251/201 Supply, installation, testing and commissioning of 5W LED lamp (Make: Luker,
9_2020 : Model: LBPC05CL) working on 230V, 50Hz AC, including giving connections as
required.

Code	Description	Unit	Quantity	Rate	Amount
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MR	5W LED Bulb b22 (Make: Luker, Model: LBPC05CL) 6K	each	1.00000	61.15	61.15
Total 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
Add CPOH @ 15%		29.65
cost for one each		227.0
Say		227.0
Cost index 48.71 %		51.63
Total with Cost index		278.63
Say		278.63

10 Specification Code: od250784/2019_2020

od250784/201

9_2020 :

Supply & Installation of Draw Boxes with termination

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply of 20x15 draw box with termination	each	1.00000	350.00	350.00
	Add Cartage@1.00				3.50
	Add necessary specials@5.00				17.50
	total				371.00
Total Cost of Materials					371.0
MR719	Wireman Helper	Day	0.30000	600.00	180.00
TOTAL					551.0

Add CPOH @ 15%	82.65
cost for one each	634.0
Say	634.0

Cost index 48.71 %	.00
Total with Cost index	634.00
Say	634.00

11 Specification Code: od250785/2019_2020

od250785/2019_2020 : Supply of 4 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
MR805	4 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	93.00	93.00
	Add Cartage@1.00				0.93
	total				93.93
TOTAL					93.93
Add CPOH @ 15%					14.09
cost for one metre					108.0
Say					108.0
Cost index 48.71 %					.00
Total with Cost index					108.00
Say					108.00

EXTERNAL LIGHTING

1 Specification Code: od250785/2019_2020

od250785/2019_2020 : Supply of 4 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
MR805	4 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	93.00	93.00
	Add Cartage@1.00				0.93
	total				93.93
TOTAL					93.93
Add CPOH @ 15%					14.09
cost for one metre					108.0
Say					108.0
Cost index 48.71 %					.00
Total with Cost index					108.00
Say					108.00

2 Specification Code: od249440/2019_2020

od249440/2019_2020 : SITC of 5 metre Hot dipped galvanised Octogonal pole in single section with 70mm top diameter, 130mm bottom diameter, 3mm sheet thickness, base plate dimensions of 200 x 200x 12 mm with 1.0 M long single arm bracket with 36W LED street light complete with all other accessories as required.

Code	Description	Unit	Quantity	Rate	Amount
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MR2294	1.0 M long single arm bracket suitable for 3M to 10M octogonal poles	each	1.00000	1980.00	1980.00
	Add Cartage@1.00				19.80
	total				1999.80
MR2271	5 metre Hot dipped galvanised Octogonal pole in single section with 70mm top diameter, 130mm bottom diameter, 3mm sheet thickness, base plate dimensions of 200 x 200x 12 mm	each	1.00000	12330.00	12330.00
	Add Cartage@1.00				123.30
	total				12453.30
MR1183	36/40 W, 4000 lumen LED, IP 66 street light fitting with aluminium housing, stove enameled CRCA sheet steel reflector cover, acrylic cover complete with THD <10%, power factor >0.98, RoHS compliant, duly wired up for use on 230 V AC supply.	each	1.00000	3660.71	3660.71
	Add Cartage@1.00				36.61
	total				3697.32
Total Cost of Materials					18150.42
MR701	Electrician	Day	1.00000	750.00	750.00
MR720	Khalasi	Day	1.00000	750.00	750.00
90.3.15	Rate as per item number 90.3.15 of SH: OD Electrical	each	1.00000	74.78	74.78

TOTAL	19650.42
Add CPOH @ 15%	2958.78
cost for one each	22684.0
Say	22684.0
Cost index 48.71 %	18.02
Total with Cost index	22702.02

Say	22702.02
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3 Specification Code: od250832/2019_2020

od250832/2019_2020 : SITC Of Legrand make feeder pillar complete with the following accessories.
 Incomer: 40A, DP Isolator. 40A, DP, RCCB, 100mA. Timer control with contactor. Auto/ Manual switch. Outgoing: 10A, SP MCB - 4 Nos.

Code	Description	Unit	Quantity	Rate	Amount
MR	DB (PLEXO3 CABINET IP65 2ROW 24MOD, Cat no: 601832)	each	1.00000	3694.60	3694.60
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)	each	1.00000	2623.60	2623.60
MR	MCB (DX3 SP C10A AC MCB, Cat no: 408590)	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
Total Cost of Materials					16142.0
MR701	Electrician	Day	1.00000	750.00	750.00
TOTAL					16892.0
Add CPOH @ 15%					2533.80
cost for one each					19426.0
Say					19426.0
Cost index 48.71 %					.00

Total with Cost index	19426.00
Say	19426.00

4 Specification Code: od249470/2019_2020

od249470/2019_2020 : Supply of 16 sqmm 3 core PVC/ XLPE insulated armoured cable with aluminium conductors for working voltages up to and including 1100 volts conforming IS 1584/part I/1988 for PVC IS 7098 part I for XLPE

Code	Description	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	130.00	130.00
	Add Cartage@1.00				1.30
	total				131.30
TOTAL					131.3
Add CPOH @ 15%					19.70
cost for one metre					151.0
Say					151.0
Cost index 48.71 %					.00
Total with Cost index					151.00
Say					151.00

5 Specification Code: od250774/2019_2020

od250774/2019_2020 : Supply and laying of one number of 10 SWG Copper wire including excavation and refilling as required.

Code	Description	Unit	Quantity	Rate	Amount
MR2043	Copper wire 0 to 14 SWG	kg	2.20500	582.00	1283.31
	Add Cartage@1.00				12.83
	Add Wastage@5.00				64.17
	total				1360.31
Total Cost of Materials					1360.31
1001	Wireman	Day	0.20000	447.00	89.40
1007	Khallas	Day	0.20000	368.00	73.60
1085	Solder jointing	each	2.00000	12.00	24.00
TOTAL					1547.31
Add CPOH @ 15%					232.10
cost for 30.0 metre					1779.41
cost for one metre					59.0
Say					59.0
Cost index 48.71 %					3.41
Total with Cost index					62.41
Say					62.41

ACADEMIC BLOCK FIRE PROTECTION WORK

1 Specification Code: od249430/2019_2020

od249430/201
9_2020 : 3 core cable,2.5sq mm,copper. Make:- ISI approved

Code	Description	Unit	Quantity	Rate	Amount
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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	metre	1.00000	143.00	143.00
Total Cost of Materials					143.0
1001	Wireman	Day	0.16000	447.00	71.52
1007	Khallasi	Day	0.16000	368.00	58.88

TOTAL		273.4
Add CPOH @ 15%		41.01
cost for one metre		314.0
Say		314.0
Cost index 48.71 %		73.06
Total with Cost index		387.07
Say		387.07

2 Specification Code: od252708/2019_2020

od252708/2019_2020 : 9.2: Supplying and fixing single headed internal hydrant valve with instantaneous
Gunmetal/Stainless Steel coupling of 63 mm dia with cast iron wheel ISI marked conforming
to 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 Valve	each	1.00000	4559.31	4559.31
	Add Cartage@1.00				45.59
	total				4604.90

MR	(From 2019 Fire DSR & DOR) 4329- Cost of 4 Nos. nuts bolts and washers LS	set	1.00000	64.27	64.27
	Add Cartage@1.00				0.64
	total				64.91
MR	(From 2019 Fire DSR & DOR) 4330- Cost of 1 No. 3 mm thick rubber gasket	each	1.00000	89.98	89.98
	Add Cartage@1.00				0.90
	total				90.88
MR	(From 2019 Fire DSR & DOR) 4331- Cost of 1 No. MS flange as per IS driling 16mm thick LS	set	1.00000	257.08	257.08
	Add Cartage@1.00				2.57
	total				259.65
MR	(From 2019 Fire DSR & DOR) 4332- Cost of welding rod	job	1.00000	51.42	51.42
	Add Cartage@1.00				0.51
	total				51.93
Total Cost of Materials					5072.27
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 & DOR) Helper(1025)	Day	0.50000	717.25	358.63

TOTAL	5654.4
Add CPOH @ 15%	848.16
cost for one each	6503.0
Say	6503.0
Cost index 48.71 %	125.18
Total with Cost index	6628.18
Say	6628.18

3 Specification Code: od252709/2019_2020

od252709/2019_2020 : 7.6 : Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS
3589/IS 1239 including Welding, fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets
etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with
two or more coats of synthetic enamel paint of required shade complete as required :
80 mm dia

Code	Description	Unit	Quantity	Rate	Amount
MR	(2019 Fire DSR & AOR)4249- Cost of 80 mm dia MS Pipe	metre	10.0000 0	545.01	5450.10
	Add Wastage@5.00				272.51
	total				5722.61
MR	(2019 Fire DSR & AOR)Add for necessary brackets, support, saddles, clamps, hangers, vibration-isolator and fitting such as bends, tees, welding material etc. @ 15% 	L.S	0.15000	5722.60	858.39
MR	(2019 Fire DSR & AOR)add cartage @ 1%	L.S	0.01000	6580.99	65.81
Total Cost of Materials					6646.81
1004	Fitter, Grade 1	Day	2.00000	447.00	894.00
1087	Welder	Day	0.50000	447.00	223.50
1006	Painter	Day	0.25000	407.00	101.75
MR	(2019 Fire DSR & AOR) Helper (1025)	Day	2.75000	717.25	1972.44
TOTAL					9838.5
Add CPOH @ 15%					1475.78
cost for 10.0 per metre					11314.27
cost for one per metre					1131.0
Say					1131.0

Cost index 48.71 %	68.19
Total with Cost index	1199.19
Say	1199.19

4 Specification Code: od252710/2019_2020

11.5: Supplying, fixing, testing and commissioning of butterfly valve of PN 1.6 od252710/201 rating with bronze/gunmetal seat duly ISI marked complete with nuts, bolts, washers, gaskets conforming to IS 13095 of following sizes as required :100mm dia

Code	Description	Unit	Quantity	Rate	Amount
MR	(2019 Fire DSR & AOR)4238- Cost of 100 mm dia butterfly valve	each	1.00000	4248.25	4248.25
	Add Cartage@1.00				42.48
	total				4290.73
MR	(2019 Fire DSR & AOR)4341 - Cost of 8 Nos. Nut bolt fastner and packing gaskets	each	1.00000	231.37	231.37
	Add Cartage@1.00				2.31
	total				233.68
MR	(2019 Fire DSR & AOR)4342 (d) Cost of weldign rod LS	each	1.00000	115.69	115.69
	Add Cartage@1.00				1.16
	total				116.85
MR	(2019 Fire DSR & AOR)4343 - Cost of 100 mm dia Flange	each	2.00000	282.79	565.58
	Add Cartage@1.00				5.66
	total				571.24
Total Cost of Materials					5212.5

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)Helper (1025)	Day	0.70000	717.25	502.08

	TOTAL	6027.48
	Add CPOH @ 15%	904.12
	cost for one each	6932.0
	Say	6932.0
	Cost index 48.71 %	175.36
	Total with Cost index	7107.36
	Say	7107.36

5 Specification Code: od252711/2019_2020

od252711/2019_2020 :
7.7: Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS
3589/IS 1239 including Welding, fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets
etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with
two or more coats of synthetic enamel paint of required shade complete as required : 100 mm dia

Code	Description	Unit	Quantity	Rate	Amount
MR	(2019 Fire DSR & AOR) 4250- Cost of 100 mm dia MS Pipe	metre	10.0000 0	814.94	8149.40
	Add Wastage@5.00				407.47
	total				8556.87
MR	(2019 Fire DSR & AOR)Add for necessary brackets, support, saddles, clamps, hangers, vibration-isolator and fitting such as bends, tees, welding material etc. @15% 	L.S	0.15000	8556.91	1283.54
MR	(2019 Fire DSR & AOR)add cartage @ 1%	L.S	0.01000	9840.45	98.40

Total Cost of Materials					9938.81
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)Helper (1025)	Day	3.00000	717.25	2151.75

TOTAL					13421.56
Add CPOH @ 15%					2013.23
cost for 10.0 per metre					15434.79
cost for one per metre					1543.0
Say					1543.0
Cost index 48.71 %					74.53
Total with Cost index					1617.53
Say					1617.53

6 Specification Code: od252712/2019_2020
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od252712/2019_2020 : Providing & fixing 25mm Air release valve as per IS:14845 ISI Marked

Code	Description	Unit	Quantity	Rate	Amount
MR	(2019 Fire DSR & AOR)25mm Air release valve as per IS:14845 ISI Marked (4290)	each	1.00000	1735.29	1735.29
	Add Cartage@1.00				17.35
	total				1752.64
Total Cost of Materials					1752.64
1004	Fitter, Grade 1	Day	0.10000	447.00	44.70
TOTAL					1797.34
Add CPOH @ 15%					269.60

cost for one each	2067.0
Say	2067.0

Cost index 48.71 %	24.84
Total with Cost index	2091.84
Say	2091.84

7 Specification Code: od252713/2019_2020

od252713/201 Providing & fixing of pressure switch in M.S. pipe line including connection etc. as 9_2020 : required. and making the necessary wiring upto control panel

Code	Description	Unit	Quantity	Rate	Amount
MR	(2019 Fire DSR & AOR) 4318 - Cost of water flow switch	each	1.00000	1267.40	1267.40
	Add Cartage@1.00				12.67
	total				1280.07
Total Cost of Materials					1280.07
1087	Welder	Day	0.06200	447.00	27.71
1004	Fitter, Grade 1	Day	0.06200	447.00	27.71
MR	(2019 Fire DSR & AOR)Helper (1025)	Day	0.12500	717.25	89.66
1001	Wireman	Day	0.50000	447.00	223.50
TOTAL					1648.65
Add CPOH @ 15%					247.30
cost for one each					1896.0
Say					1896.0
Cost index 48.71 %					156.36
Total with Cost index					2052.36
Say					2052.36

8 Specification Code: od252714/2019_2020

19.1 : Supplying and fixing of fire brigade connection of cast iron body with gun
od252714/201 metal male
instantaneous inlet couplings complete with cap and chain as
9_2020 : reqd. for suitable dia MS pipe
connection conforming to IS 904 as required
:
2 way-100 mm dia M.S. Pipe

Code	Description	Unit	Quantity	Rate	Amount
MR	(2019 Fire DSR & AOR) 4205- Cost of two way gunmetal FBC connection	each	1.00000	5144.17	5144.17
	Add Cartage@1.00				51.44
	total				5195.61
MR	(2019 Fire DSR & AOR) 4329- Cost of 4 Nos. nuts bolts and washers LS 	set	1.00000	64.27	64.27
	Add Cartage@1.00				0.64
	total				64.91
MR	(2019 Fire DSR & AOR) 4330-Cost of 1 No. 3mm thick rubber gasket	each	1.00000	89.98	89.98
	Add Cartage@1.00				0.90
	total				90.88
MR	(2019 Fire DSR & AOR) 4331- Cost of 1 No. MS flange as per IS drilling 16mm thick LS	set	1.00000	257.08	257.08
	Add Cartage@1.00				2.57
	total				259.65
MR	(2019 Fire DSR & AOR) 4332- Cost of welding rod	job	1.00000	51.42	51.42
	Add Cartage@1.00				0.51
	total				51.93
Total Cost of Materials					5662.98

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)Helper (1025)	Day	0.50000	717.25	358.63

	TOTAL	6245.11
	Add CPOH @ 15%	936.77
	cost for one each	7182.0
	Say	7182.0
	Cost index 48.71 %	125.18
	Total with Cost index	7307.18
	Say	7307.18

9 Specification Code: od252715/2019_2020

od252715/2019_2020 :

17.1 : Supplying and fixing first-aid Hose Reel with MS construction spray painted in post office
red, conforming to IS 884 complete with the following as required.
20 mm nominal internal dia water hose thermoplastic (Textile reinforced) type -2 as per IS:
12585
20 mm nominal internal dia gun metal globe valve & nozzle.
Drum and brackets for fixing the equipments on wall.
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)Cost of swinging type hose reel complete with 19mm x 30m Thermolplastic hose (4210)	each	1.00000	2626.07	2626.07
	Add Cartage@1.00				26.26
	total				2652.33
MR	(2019 Fire DSR & AOR)4212- Hose reel drum	each	1.00000	3020.69	3020.69
	Add Cartage@1.00				30.21

		total				3050.90
MR	(2019 Fire DSR & AOR)4213- Cost of 25mm dia gunmetal gate valve	each	1.00000	888.21		888.21
	Add Cartage@1.00					8.88
		total				897.09
MR	(2019 Fire DSR & AOR)4355- Cost of 25mm dia socket, union, nipples (Lumpsum)	each	1.00000	269.93		269.93
	Add Cartage@1.00					2.70
		total				272.63
Total Cost of Materials						6872.95
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)Helper (1025)	Day	1.00000	717.25		717.25

	TOTAL	7925.45
	Add CPOH @ 15%	1188.82
	cost for one each	9114.0
	Say	9114.0
	Cost index 48.71 %	187.53
	Total with Cost index	9301.53
	Say	9301.53

10 Specification Code: od249465/2019_2020

od249465/2019_2020 : Providing 63mm (2½)" dia 15 m long canvas hose pipe complete with stainless steel male & female coupling stainless steel wire wound with the pipe The pipe shall confirm to IS. 4927. Make: ISI Approved.

Code	Description	Unit	Quantity	Rate	Amount
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MR	Canvas Hose 15m hose with instantaneous coupling	each	1.00000	5097.60	5097.60
Total Cost of Materials					5097.6
MR	Fabricator	each	0.40000	454.51	181.80
MR	Man Mazdoor	each	0.40000	372.97	149.19

TOTAL		5428.59
Add CPOH @ 15%		814.29
cost for one each		6243.0
Say		6243.0
Cost index 48.71 %		.00
Total with Cost index		6243.00
Say		6243.00

11 Specification Code: od249490/2019_2020

Other Engineering Organisations

od249490/201 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	Providing and fixing Fire Man axe as required with Test Certificate of 20,000 volts	each	1.00000	1524.00	1524.00
TOTAL					1524.0
cost for one each					1524.0
Say					1524.0
Cost index 48.71 %					.00
Total with Cost index					1524.00
Say					1524.00

12 Specification Code: od249493/2019_2020

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

Code	Description	Unit	Quantity	Rate	Amount
MR	Providing and fixing FIRE DUCT Signage	each	1.00000	510.00	510.00
TOTAL					510.0
cost for one each					510.0
Say					510.0
Cost index 48.71 %					.00
Total with Cost index					510.00
Say					510.00

Other Engineering Organisations

13 Specification Code: od249503/2019_2020

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

Code	Description	Unit	Quantity	Rate	Amount
MR	Providing and fixing FIRE EXIT Signage	each	1.00000	510.00	510.00
TOTAL					510.0
cost for one each					510.0
Say					510.0
Cost index 48.71 %					.00
Total with Cost index					510.00

Say	510.00
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14 Specification Code: od249515/2019_2020

od249515/2019_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.

Code	Description	Unit	Quantity	Rate	Amount
MR	Mild Steel 14 MS Sheet	kg	23.0000 0	77.40	1780.20
MR	Glass with Rubber Gaskets	sqm	1.20000	629.00	754.80
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
Total Cost of Materials					3556.0
1004	Fitter, Grade 1	Day	1.00000	447.00	447.00
1087	Welder	Day	2.00000	447.00	894.00
TOTAL					4897.0
Add CPOH @ 15%					734.55
cost for one each					5632.0
Say					5632.0
Cost index 48.71 %					751.60
Total with Cost index					6383.60
Say					6383.60

15 Specification Code: od252763/2019_2020

od252763/201 14.5 : Providing, installation, testing and commissioning of non-return valve of
 9_2020 : following sizes
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)Cost of 100 mm dia Non Return Valve (4268)	each	1.00000	8492.64	8492.64
	Add Cartage@1.00				84.93
	total				8577.57
MR	(2019 Fire DSR & AOR)Cost of 100 mm dia flange (4343)	each	2.00000	282.79	565.58
	Add Cartage@1.00				5.66
	total				571.24
MR	(2019 Fire DSR & AOR)Cost of 8 Nos. Nut Bolt fastner & packing gaskets (4341)	each	1.00000	281.37	281.37
	Add Cartage@1.00				2.81
	total				284.18
MR	(2019 Fire DSR & AOR)(2019 Fire DSR & AOR)Cost of welding rod (4332)	job	1.00000	115.69	115.69
	Add Cartage@1.00				1.16
	total				116.85
Total Cost of Materials					9549.84
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)Helper (1025)	Day	0.70000	717.25	502.08
TOTAL					10364.82
Add CPOH @ 15%					1554.72
cost for one each					11920.0
Say					11920.0

Cost index 48.71 %	175.36
Total with Cost index	12095.36
Say	12095.36

16 Specification Code: od252764/2019_2020

od252764/2019_2020 :
 Supplying, installation, testing and commissioning of electric driven terrace pump suitable for automatic operation and consisting of following, complete in all respects, as required: (Terrace Pump) Horizontal type, multistage, centrifugal, split casing pump of cast iron body & bronze impeller with stainless steel shaft, mechanical confirming to IS : 1520 Suitable HP squirrel cage induction motor TEFC type suitable for operation on 415 volts, 3 phase, 50 Hz, AC supply with IP55 class of protection for enclosure, horizontal foot mounted type with Class-'F' insulation, conforming to IS-325. M.S.fabricated common base plate, coupling, coupling guard, foundation bolts etc.as required. Suitable cement concrete foundation duly plastered and with anti vibration pads. 450 lpm at 35 m Head

Other Engineering Organisations

Code	Description	Unit	Quantity	Rate	Amount
MR	(2019 Fire DSR & AOR)Cost of Horizontal type, multistage, centrifugal, split casing pump with bronze impeller stainless steel shaft, mechanical seal at a flow of 450 lpm at 35 mtr. Head conforming to IS 1520 Cost of SQ cage induction motor, TEFC, synchronous speed of 1500 RPM having class-'F' insulation and protection class IP 55 as per IS-325. Cost of MS base plate coupling, coupling guard, foundation bolts and anti vibration pads	each	1.00000	75955.57	75955.57
	Add Cartage@1.00				759.56
	total				76715.13

MR	(2019 Fire DSR & AOR)Cost of cement concrete foundation with 35x35x5mm angle frame on edges duly plastered with inertia blocks	cum	0.36000	5784.30	2082.35
	Add Cartage@1.00				20.82
	total				2103.17
Total Cost of Materials					78818.3
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)Helper (1025)	Day	3.00000	717.25	2151.75

TOTAL	82311.05
Add CPOH @ 15%	12346.66
cost for one each	94658.0
Say	94658.0
Cost index 48.71 %	751.11
Total with Cost index	95409.11
Say	95409.11

17 Specification Code: od252765/2019_2020

od252765/2019_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				16.95
	total				1711.95
Total Cost of Materials					1711.95

1004	Fitter, Grade 1	Day	0.20000	447.00	89.40
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TOTAL		1801.35
Add CPOH @ 15%		270.20
cost for one each		2072.0
Say		2072.0
Cost index 48.71 %		50.17
Total with Cost index		2122.17
Say		2122.17

18 Specification Code: od249524/2019_2020

od249524/2019_2020 : Below Ground Piping :- Providing, fixing, welding joints and testing of 100 mm Dia. heavy class MS ERW Black pipes as per relevant IS 1239/3589 with special accessories tees, elbows, flanged joints, rubber insertion, nuts, bolts, washers or welded joint with flange joints on bends, 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	Cost of necessary brackets, supports, saddles, clamps, hangers, vibration-isolator's and fittings such as bends, tees etc. @15%	L.S	0.15000	8149.44	1222.42
MR	Cartage 5%	L.S	0.05000	9371.85	468.59
MR	PYPKOTE	sqm	7.85000	267.00	2095.95
MR	Bitumen paint	Litre	3.00000	76.00	228.00
MR	Adhesive	L.S	1.00000	100.00	100.00
MR	(2019 Fire DSR & AOR)4250-100 MM DIA C CLASS MS PIPE	metre	10.00000	814.94	8149.40

MR	(2019 Fire DSR & AOR) 4342 Welding rod	job	1.00000	115.69	115.69
Total Cost of Materials					12380.05
MR	Fabricator	Day	2.00000	454.51	909.02
1087	Welder	Day	2.00000	447.00	894.00
MR	Man Mazdoor	Day	3.00000	372.97	1118.91
MR	Fuse welder	Day	1.25000	412.23	515.29

TOTAL		15817.27
Add CPOH @ 15%		2372.59
cost for 10.0 metre		18189.86
cost for one metre		1819.0
Say		1819.0
Cost index 48.71 %		50.17
Total with Cost index		1869.17
Other Engineering Organisations Say		1869.17

19 Specification Code: od267537/2019_2020

od267537/2019_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	kg	3920.00 000	60.00	235200.00
	Add Wastage@5.00				11760.00
	total				246960.00
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 Lifting	kg	10.0000 0	10.00	100.00
MR	Fibre Coating (3 Layer) inside over head tank, Material charge inclusive	per sqm	22.0000 0	2478.00	54516.00

TOTAL		575976.0
Add CPOH @ 15%		86396.40
cost for one each		662372.0
Say		662372.0
Cost index 48.71 %		.00
Total with Cost index		662372.00
Say		662372.00

ACADAMIC BUILDING HVAC SYSTEM
1 Specification Code: od252568/2019_2020

od252568/201 Supplying & providing 2.00 TR Split A/C with high wall mounted unit, 3 Star rating, Copper Condensor Only. (Carrier HW Split AC). Drain pipe included.

Code	Description	Unit	Quantity	Rate	Amount
MR	Supplying & providing 2.00 TR Split A/C with high wall mounted unit, 3 Star rating, Copper Condensor Only. (Carrier HW Split AC)	each	1.00000	51000.0 0	51000.00
MR	Drain pipe	metre	12.0000 0	150.00	1800.00
MR	SITC of Ms Channel for erection of outdoor units	set	1.00000	197.00	197.00
TOTAL					52997.0

cost for one each	52997.0
Say	52997.0

Cost index 48.71 %	.00
Total with Cost index	52997.00
Say	52997.00

2 Specification Code: od252569/2019_2020

od252569/201 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
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 48.71 %					.00
Total with Cost index					1327.00
Say					1327.00

DG SET, MSB PANEL WITH CHANGE OVER AND APFC PANEL - ELECTRICAL WORKS

1 Specification Code: od250904/2019_2020

od250904/201 Supply of 120 sqmm 3.5 core PVC/XLPE insulated armoured cable with aluminium conductors for working voltages up to and including 1100 volts
9_2020 : conforming IS 1584/part I/1988 for PVC IS 7098 part I for XLPE

Code	Description	Unit	Quantity	Rate	Amount
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 48.71 %	.00
Total with Cost index	640.00
Say	640.00

2 Specification Code: od250905/2019_2020

od250905/2019_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	metre	1.00000	816.95	816.95
	Add Cartage@1.00				8.17

		total				825.12
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					TOTAL	825.12
					Add CPOH @ 15%	123.77
					cost for one metre	949.0
					Say	949.0
					Cost index 48.71 %	.00
					Total with Cost index	949.00
					Say	949.00

3 Specification Code: od250352/2019_2020

Supplying and laying 25 mm X 3 mm copper strip at 0.50 metre below ground as od250352/201 strip earth
electrode, including connection/ terminating with nut, bolt, spring, washer etc. as required.
(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 0	489.83	9801.50
	Add Cartage@1.00				98.01
	total				9899.51
Total 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
TOTAL					10429.39
Add CPOH @ 15%					1564.41
cost for 30.0 metre					11993.80

cost for one metre	400.0
Say	400.0

Cost index 48.71 %	10.23
Total with Cost index	410.23
Say	410.23

4 Specification Code: od252644/2019_2020
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od252644/2019_2020 : Supply, installation, testing and commissioning of radiator cooled 160KVA 415V 50Hz 3 phase prime (actual) diesel generator set along with powder coated acoustic enclosure, AVM pads including cable end termination box with all associated equipments/ work as per specifications. Alternations shall have class F insulation 415V and p.f 0.8 at site, suitable for outdoor applications.

Code	Description	Unit	Quantity	Rate	Amount
MR2415	160 KVA DG set with standard control panel	each	1.00000	831000.00	831000.00
	Add Cartage@1.00				8310.00
	Add necessary specials@1.00				8310.00
	total				847620.00
Total Cost of Materials					847620.0
MR2435	Charges for Crane	Day	0.40000	3000.00	1200.00
MR701	Electrician	Day	1.00000	750.00	750.00
MR720	Khalasi	Day	2.00000	750.00	1500.00
TOTAL					851070.0
Add CPOH @ 15%					127660.50
cost for one each					978731.0
Say					978731.0
Cost index 48.71 %					.00

Total with Cost index	978731.00
Say	978731.00

5 Specification Code: od253343/2019_2020

SITC of 75KVAR APFC Panel. Supply, installation , testing and commissioning of
totally enclosed compartmentalized dust and vermin proof cubical segregated and
modular in construction M.V. panel board free standing fabricated with14swg and
16swg of CRCA M.S. sheet, powder coated , bus-bar chamber ,outgoing
switchgear etc. (all feeder unit Would be compartmentalized), color coded PVC
sleeved vertical / horizontal Aluminium busbar of required size of length, (bus-bar
distances shall be minimum 32 mm) insulators, hardware, neoprene gasket ,
hinged door, interconnecting single od253343/201 core multi strand lugged copper wire having
current density of 2A / sqmm of suitable capacity & size with lugs from busbar to
switchgears / MCCB / MCB or where ever required, control wiring with 1 sqmm
FRLS cable, ON/OFF, RYB phase indicators, two earthing terminal busbar of size 25 x 5 mm copper with nut & bolts at outside of the panel, rating and name plates
for all incoming & outgoing etc. comprising with the followings as per the KEI
standard. Switch gears – ABB/ Equivalent, Contactors – ABB, L&T/Equivalent.
Incomer: 250A TPN Isolator. Outgoing: 50A 25kA 3P MCCB - 3 nos, 32A 25 kA
3P MCCB - 3 nos. with following capacitors in steps: 15 kVAR - 1 no, 25 kVAR
- 1 nos, 20 kVAR - 1 no, 5 kVAR - 3 nos including
capacitor duty contactors.

Code	Description	Unit	Quantity	Rate	Amount
MR1885	Red, Green, Black, Yellow, Orange colours LED indicator, AC/DC, 22.5 mm cut out dia	each	15.0000 0	44.07	661.05
	Add Cartage@1.00				6.61
	total				667.66
MR1740	Three phase Ammeter accuracy class 0.5	each	1.00000	2527.12	2527.12
	Add Cartage@1.00				25.27

		total			2552.39
MR1775	Ammeter selector switch 6A 3 Pole	each	1.00000	99.15	99.15
	Add Cartage@1.00				0.99
		total			100.14
MR1738	Three phase Voltmeter accuracy class 0.5	each	1.00000	2344.07	2344.07
	Add Cartage@1.00				23.44
		total			2367.51
MR1776	Voltmeter selector switch 6 A 3 Pole	each	1.00000	79.66	79.66
	Add Cartage@1.00				0.80
		total			80.46
MR	250A TPN ISOLATOR(L&T)	no	1.00000	5979.30	5979.30
	Add Cartage@1.00				59.79
		total			6039.09
MR1839	200/5 A, 10 VA, accuracy class 0.5, Resin Cast Metering CT	each	1.00000	855.08	855.08
	Add Cartage@1.00				8.55
		total			863.63
MR1638	3 Pole Capacitor duty contactors for switching capacitor banks 4 - 7 kVAR with AC Coil,	each	3.00000	1016.95	3050.85
	Add Cartage@1.00				30.51
		total			3081.36
MR1640	3 Pole Capacitor duty contactors for switching capacitor banks 11 - 15 kVAR with AC Coil,	each	1.00000	1423.73	1423.73
	Add Cartage@1.00				14.24
		total			1437.97

MR1642	3 Pole Capacitor duty contactors for switching capacitor banks 20 kVAR with AC Coil,	each	1.00000	2296.61	2296.61
	Add Cartage@1.00				22.97
	total				2319.58
MR1642	3 Pole Capacitor duty contactors for switching capacitor banks 20 kVAR with AC Coil,	each	1.00000	2296.61	2296.61
	Add Cartage@1.00				22.97
	total				2319.58
MR1643	3 Pole Capacitor duty contactors for switching capacitor banks 25 kVAR with AC Coil,	each	1.00000	2601.69	2601.69
	Add Cartage@1.00				26.02
	total				2627.71
MR1961	8 stage 440 / 110 V 5A/1A , Intelligent Power Factor Controllers (IPFC)	each	1.00000	8644.07	8644.07
	Add Cartage@1.00				86.44
	total				8730.51
1104	6.0 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable	metre	8.00000	38.87	310.96
	Add Cartage@1.00				3.11
	Add Wastage@5.00				15.55
	Cable tie,tie mount,tinning the terminations etc@5.00				15.55
	total				345.17
1106	16 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable	metre	8.00000	102.36	818.88
	Add Cartage@1.00				8.19

	Add Wastage@5.00				40.94
	Cable tie,tie mount,tying the terminations etc@5.00				40.94
	total				908.96
MR731	1.0 sqmm ISI marked FR LS PVC insulated single core copper conductor cable	metre	45.0000 0	7.03	316.35
	Add Cartage@1.00				3.16
	Add Wastage@5.00				15.82
	Cable tie,tie mount,tying the terminations etc@5.00				15.82
	total				351.15
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. (Observed data: od1155_P750001/2019_2020)	Cum cm	5600.00 000	3.00	16800.00
Total Cost of Materials					51592.87
2.10.1	Rate as per item number 2.10.1 of SH: MCCB, MCB & DBS	each	15.0000 0	150.43	2256.45
90.14.10.2	Rate as per item number 90.14.10.2 of SH: OD Electrical	no	6.00000	4148.70	24892.20
90.14.1.1	Rate as per item number 90.14.1.1 of SH: OD Electrical	sqm	12.0000 0	2220.87	26650.44
90.14.7	Rate as per item number 90.14.7 of SH: OD Electrical	Cum cm	528.000 00	5.22	2756.16
90.14.2.1	Rate as per item number 90.14.2.1 of SH: OD Electrical	sqm	0.31000	2566.96	795.76
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

90.14.4	Rate as per item number 90.14.4 of SH: OD Electrical	metre	4.00000	796.52	3186.08
MR701	Electrician	Day	5.00000	750.00	3750.00
MR720	Khalasi	Day	2.00000	750.00	1500.00
MR719	Wireman Helper	Day	5.00000	600.00	3000.00
90.14.24 .44	Rate as per item number 90.14.24.44 of SH: OD Electrical	each	3.00000	1516.52	4549.56
90.14.24 .49	Rate as per item number 90.14.24.49 of SH: OD Electrical	each	1.00000	4460.00	4460.00
90.14.24 .50	Rate as per item number 90.14.24.50 of SH: OD Electrical	each	1.00000	5906.09	5906.09
90.14.24 .51	Rate as per item number 90.14.24.51 of SH: OD Electrical	each	1.00000	7352.17	7352.17
90.14.11 .13	Rate as per item number 90.14.11.13 of SH: OD Electrical	no	6.00000	1587.83	9526.98

	TOTAL	59842.87
	Add CPOH @ 15%	22976.21
	cost for one each	176149.0
	Say	176149.0
	Cost index 48.71 %	4029.78
	Total with Cost index	180178.78
	Say	180178.78

6 Specification Code: od253872/2019_2020

SITC of MSB with Change Over (Kattappana)
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 od253872/2019_2020 : fabricated with 14swg and 16swg of CRCA M.S. sheet, powder coated , bus-bar chamber ,outgoing switchgear etc. (all feeder unit Would be compartmentalized), color coded PVC sleeved vertical / horizontal Aluminium busbar of required size of

length, (bus-bar distances shall be minimum 32 mm) insulators, hardware, neoprene gasket , hinged door, interconnecting single core multi strand lugged copper wire having current density of 2A / sqmm of suitable capacity & size with lugs from busbar to switchgears / MCCB / MCB or where ever required, control wiring with 1 sqmm FRLS cable, ON/OFF, RYB phase indicators, two earthing terminal busbar of size 25 x 5 mm copper with nut & bolts at outside of the panel, rating and name plates for all incoming & outgoing etc comprising with the followings as per the KEI standard. Switch gears – ABB/ Equivalent, Contactors – ABB, L&T/Equivalent.
Incomer - 400A 50kA 4P MCCB with microprocessor control & 315A 4P Isolator
Outgoing - 160A 36kA 3P MCCB - 3 no, 120A 36kA 3P MCCB - 1 no, 160A 4P Isolator - 1 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	10.0000 0	44.07	440.70
	Add Cartage@1.00				4.41
	Add necessary specials@1.00				4.41
	total				449.51
MR1846	400/5 A, 15 VA, accuracy class 1, Resin Cast Metering CT	each	4.00000	916.10	3664.40
	Add Cartage@1.00				36.64
	total				3701.04
MR1842	300/5 A, 10 VA, accuracy class 1, Resin Cast Metering CT	each	3.00000	866.95	2600.85
	Add Cartage@1.00				26.01
	total				2626.86
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

MR	315A 4P Isolator (Make: L&T, Item code: SK956090000)	each	1.00000	6646.20	6646.20
	Add Cartage@1.00				66.46
	total				6712.66
MR	AMF Relay - EC2 C&S Make	each	1.00000	8700.00	8700.00
	Add Cartage@1.00				87.00
	total				8787.00
MR	550A 4P Contactor (Make: L&T, Item code: CS94193B000)	each	1.00000	36317.55	36317.55
	Add Cartage@1.00				363.18
	total				36680.73
MR731	1.0 sqmm ISI marked FR LS PVC insulated single core copper conductor cable	metre	22.00000	7.03	154.66
	Add Cartage@1.00				1.55
	Add Wastage@5.00				7.73
	Add necessary specials@5.00				7.73
	total				171.67
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
Total Cost of Materials					76151.14
2.10.1	Rate as per item number 2.10.1 of SH: MCCB, MCB & DBS	each	16.00000	150.43	2406.88
90.14.10.17	Rate as per item number 90.14.10.17 of SH: OD Electrical	no	1.00000	25444.35	25444.35
90.14.11.1	Rate as per item number 90.14.11.1 of SH: OD Electrical	no	1.00000	2740.87	2740.87

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
90.14.7	Rate as per item number 90.14.7 of SH: OD Electrical	Cum cm	630.000 00	5.22	3288.60
90.14.10 .7	Rate as per item number 90.14.10.7 of SH: OD Electrical	no	3.00000	15473.9 1	46421.73
90.14.10 .6	Rate as per item number 90.14.10.6 of SH: OD Electrical	no	1.00000	11371.3 0	11371.30
90.14.1. 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. 2	Rate as per item number 90.14.3.2 of SH: OD Electrical	metre	22.0000 0	6.09	133.98
90.14.4	Rate as per item number 90.14.4 of SH: OD Electrical	metre	7.00000	796.52	5575.64
90.14.2. 1	Rate as per item number 90.14.2.1 of SH: OD Electrical	sqm	0.80000	2566.96	2053.57
90.14.11 .13	Rate as per item number 90.14.11.13 of SH: OD Electrical	no	4.00000	1587.83	6351.32
90.14.11 .15	Rate as per item number 90.14.11.15 of SH: OD Electrical	no	1.00000	1844.35	1844.35
MR701	Electrician	Day	3.00000	750.00	2250.00
1001	Wireman	Day	3.00000	447.00	1341.00
1004	Fitter, Grade 1	Day	3.00000	447.00	1341.00
MR720	Khalasi	Day	3.00000	750.00	2250.00

TOTAL		91733.14
Add CPOH @ 15%		34568.69
cost for one each		265025.0
Say		265025.0

Cost index 48.71 %	5214.89
Total with Cost index	270239.89
Say	270239.89

ELV SYSTEM
1 Specification Code: od250878/2019_2020

od250878/201 SITC of PANASONIC KX-TA 824 24 port hybrid analog Telephone system control 9_2020 : unit intercom with 16 extensions

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply charge	each	1.00000	22881.35	22881.35
	Add Cartage@1.00				228.81
	total				23110.16
Other Engineering Organisations Total Cost of Materials					23110.16
MR	Installation charge	each	1.00000	1000.00	1000.00
TOTAL					24110.16
cost for one each					24110.0
Say					24110.0
Cost index 48.71 %					.00
Total with Cost index					24110.00
Say					24110.00

2 Specification Code: od250880/2019_2020
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od250880/201 Supply, Installation, testing and commissioning of Cat6 8 Port un loaded Patch 9_2020 : Panel.

Code	Description	Unit	Quantity	Rate	Amount
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MR	Cat6 8 Port un loaded Patch Panel.	each	1.00000	480.00	480.00
	Add Cartage@1.00				4.80
		total			484.80
Total Cost of Materials					484.8
MR	Installation charges	each	1.00000	200.00	200.00

TOTAL					684.8
cost for one each					685.0
Say					685.0
Cost index 48.71 %					.00
Total with Cost index					685.00
Say					685.00

3 Specification Code: od250881/2019_2020

SITC Of 350W RMS MIXER AMPLIFIER, 3 MIC, 2 AUX, 100V/70V AND 4OHMS , BALANCED MIC,FREQUENCY RESPONSE (50 HZ-16000HZ),S/N RATIO-od250881/201 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	25375.00	25375.00
	Add Cartage@1.00				253.75
		total			25628.75
Total Cost of Materials					25628.75
MR	Installation charges	each	1.00000	2500.00	2500.00
TOTAL					28128.75
cost for one each					28129.0

Say	28129.0
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Cost index 48.71 %	.00
Total with Cost index	28129.00
Say	28129.00

4 Specification Code: od250882/2019_2020
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od250882/2019_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	metre	1.00000	84.00	84.00
	Add Cartage@1.00				0.84
	total				84.84
Other Engineering Organisations TOTAL					84.84
cost for one metre					85.0
Say					85.0
Cost index 48.71 %					.00
Total with Cost index					85.00
Say					85.00

5 Specification Code: od250883/2019_2020
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od250883/2019_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
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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					1111.0
MR	Installation charges	each	1.00000	250.00	250.00

TOTAL	1361.0
cost for one each	1361.0
Say	1361.0
Cost index 48.71 %	.00
Total with Cost index	1361.00
Say	1361.00

6 Specification Code: od250884/2019_2020

od250884/201

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
Total Cost of Materials					166.65
MR	Rate as per item number 1.27.1 of SH: Wiring	each	1.00000	152.17	152.17
TOTAL					318.82
cost for one each					319.0

Say	319.0
Cost index 48.71 %	.00
Total with Cost index	319.00
Say	319.00

7 Specification Code: od250885/2019_2020

od250885/2019_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	
Other Engineering Organizations PRICE					Total Cost of Materials	46.46
MR	Installation charge	metre	1.00000	20.00	20.00	
TOTAL					66.46	
cost for one metre					66.0	
Say					66.0	
Cost index 48.71 %					.00	
Total with Cost index					66.00	
Say					66.00	

8 Specification Code: od250887/2019_2020

od250887/2019_2020 : Supply, Installation, Testing & commissioning of Telephone of approved makes 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				10.80
	total				1090.80
Total Cost of Materials					1090.8
MR	Installation charges	each	1.00000	50.00	50.00

TOTAL	1140.8
cost for one each	1141.0
Say	1141.0
Cost index 48.71 %	.00
Total with Cost index	1141.00
Say	1141.00

9 Specification Code: od250889/2019_2020

Network Video Recorder: Providing & fixing Network Video Recorder 32-channel 720P or 24-channel 1080P high definition network video input and od250889/201 storage Support simultaneous HDMI and VGA output, resolution up to 9_2020 : 1920x1080P/60Hz Supports 256Mbps bandwidth throughput handling, Supports 4-channel, 1080P video real-time decoding and synchronous playback Supports 8 SATA hard disk with capacity up to 4TB.

Code	Description	Unit	Quantity	Rate	Amount
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MR	Network Video Recorder 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	1.00000	42450.0 0	42450.00
	Add Cartage@1.00				424.50
	total				42874.50
Total Cost of Materials					42874.5
MR	Installation charges	each	1.00000	7500.00	7500.00

TOTAL	50374.5
cost for one each	50375.0
Say	50375.0
Cost index 48.71 %	.00
Total with Cost index	50375.00
Say	50375.00

10 Specification Code: od252411/2019_2020

od252411/201 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

TOTAL					26881.25
cost for one each					26881.0
Say					26881.0
Cost index 48.71 %					.00
Total with Cost index					26881.00
Say					26881.00

11 Specification Code: od252412/2019_2020

od252412/201 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.	no	1.00000	1350.00	1350.00
Total Cost of Materials					1350.0
MR	Labour charges per unit	no	1.00000	250.00	250.00
TOTAL					1600.0
cost for one no					1600.0
Say					1600.0
Cost index 48.71 %					.00
Total with Cost index					1600.00
Say					1600.00

12 Specification Code: od250927/2019_2020

od250927/201 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				8332.50
Total Cost of Materials					8332.5
MR	Installation charges	each	1.00000	750.00	750.00
TOTAL					9082.5
cost for one each					9083.0
Say					9083.0
Cost index 48.71 %					.00
Total with Cost index					9083.00
Say					9083.00

13 Specification Code: od250892/2019_2020

Other Engineering Organisations

od250892/201 Supply and installation of GI box for modular switch installation including base
9_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					233.64
cost for one no					234.0
Say					234.0
Cost index 48.71 %					.00
Total with Cost index					234.00
Say					234.00

14 Specification Code: od250893/2019_2020

Supply, installation, testing and commissioning of Bio Metric Finger Print scan
od250893/201 attendance system with LCD/LED display & keypad & TCPIP LAN, USB
9_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	6785.00	6785.00
MR	Fixing charges per Unit	no	1.00000	2183.00	2183.00
TOTAL					8968.0
cost for one no					8968.0
Other Engineering Organisations Say					8968.0
Cost index 48.71 %					.00
Total with Cost index					8968.00
Say					8968.00

15 Specification Code: od250894/2019_2020

od250894/201 Supply, installation, testing and commissioning of indoor IR IP dome camera 2 MP
9_2020 :
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
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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	6667.00	6667.00
Total Cost of Materials					6667.0
MR	Labour charges per unit	no	1.00000	295.00	295.00

TOTAL					6962.0
cost for one no					6962.0
Say					6962.0
Cost index 48.71 %					.00
Total with Cost index					6962.00
Say					6962.00

16 Specification Code: od250938/2019_2020

od250938/2019_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.	each	1.00000	9850.00	9850.00
	Add Cartage@1.00				98.50
	total				9948.50
Total Cost of Materials					9948.5
MR	Installation charges	each	1.00000	350.00	350.00
TOTAL					10298.5
cost for one each					10299.0

Say	10299.0
Cost index 48.71 %	.00
Total with Cost index	10299.00
Say	10299.00

17 Specification Code: od250895/2019_2020

od250895/201 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	56.64	56.64
Total Cost of Materials					56.64
MR	Labour charges per meter	no	1.00000	21.24	21.24
TOTAL					77.88
cost for one no					78.0
Say					78.0
Cost index 48.71 %					.00
Total with Cost index					78.00
Say					78.00

18 Specification Code: od250896/2019_2020

od250896/201 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.	no	1.00000	165.00	165.00

Total Cost of Materials					165.0
MR	Electrician	no	1.00000	55.00	55.00

TOTAL					220.0
cost for one no					220.0
Say					220.0
Cost index 48.71 %					.00
Total with Cost index					220.00
Say					220.00

19 Specification Code: od250897/2019_2020

od250897/201
9_2020 : 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
Total Cost of Materials					1875.0
MR	Wireman	no	1.00000	150.00	150.00
TOTAL					2025.0
cost for one no					2025.0
Say					2025.0
Cost index 48.71 %					.00
Total with Cost index					2025.00
Say					2025.00

20 Specification Code: od250898/2019_2020

od250898/201
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					8050.85
cost for one no					8051.0
Say					8051.0
Cost index 48.71 %					.00
Total with Cost index					8051.00
Say					8051.00

21 Specification Code: od250899/2019_2020

od250899/2019_2020 : Supply, installation, testing and commissioning of 8 port PoE switch

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply, installation, testing and commissioning of 8 port PoE switch	no	1.00000	6250.00	6250.00
TOTAL					6250.0
cost for one no					6250.0
Say					6250.0
Cost index 48.71 %					.00
Total with Cost index					6250.00
Say					6250.00

22 Specification Code: od250900/2019_2020

od250900/2019_2020 : Supply, Installation, Testing and commissioning Of distribution box for CCTV 6Ux600Wx600D With Front Glass Door,Side Openable Panels with Lock & Key,4Way 5A PDU,1U Cable Manager,Cooling Fan,H/W Kit10

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
Total Cost of Materials					6136.0
MR	Wireman	no	1.00000	1475.00	1475.00
TOTAL					7611.0
cost for one no					7611.0
Say					7611.0
Cost index 48.71 %					.00
Total with Cost index					7611.00
Say					7611.00

23 Specification Code: od250945/2019_2020

Other Engineering Organisations

PRICE

Supply, Installation, Testing and commissioning of Distribution box for PA od250945/201 distribution made out of 16 SWG CRCA sheet with lockable door arrangement 9_2020 : having connectors (10 NOS) suitable for 1.5sqmm wire with facility 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 facility for cable termination of 4cx10 sqmm ALAR. Required at each floor for PA wire termination	each	1.00000	580.00	580.00
	Add Cartage@1.00				5.80

		total			585.80
Total 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 48.71 %					.00
Total with Cost index					836.00
Say					836.00

24 Specification Code: od252449/2019_2020

od252449/201 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
Total 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 48.71 %					.00
Total with Cost index					5505.00
Say					5505.00

EXISTING CLASSROOM CONVERTED TO SMART CLASSROOM - ELECTRICAL AND ELV WORKS

1 Specification Code: od252449/2019_2020

od252449/201 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
Total 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 48.71 %					.00
Total with Cost index					5505.00
Say					5505.00

2 Specification Code: od250880/2019_2020

od250880/201 Supply, Installation, testing and commissioning of Cat6 8 Port un loaded Patch
9_2020 : Panel.

Code	Description	Unit	Quantity	Rate	Amount
MR	Cat6 8 Port un loaded Patch Panel.	each	1.00000	480.00	480.00
	Add Cartage@1.00				4.80
	total				484.80
Total Cost of Materials					484.8
MR	Installation charges	each	1.00000	200.00	200.00

TOTAL	684.8
cost for one each	685.0
Say	685.0

Cost index 48.71 %	.00
Total with Cost index	685.00
Say	685.00

3 Specification Code: od252468/2019_2020
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Supply, installation, testing and commissioning of Bio Metric Finger Print scan od252468/201 attendance system with LCD/LED display & keypad & TCPIP LAN, USB 9_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)	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 48.71 %					.00
Total with Cost index					7658.00
Say					7658.00

4 Specification Code: od250883/2019_2020

od250883/2019_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	each	1.00000	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 one each					1361.0
Say					1361.0
Cost index 48.71 %					.00
Total with Cost index					1361.00
Say					1361.00

5 Specification Code: od250884/2019_2020

od250884/2019_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
Total Cost of Materials						166.65
MR	Rate as per item number 1.27.1 of SH: Wiring	each	1.00000	152.17		152.17

TOTAL						318.82
cost for one each						319.0
Say						319.0
Cost index 48.71 %						.00
Total with Cost index						319.00
Say						319.00

6 Specification Code: od250945/2019_2020

Supply, Installation, Testing and commissioning of Distribution box for PA od250945/201 distribution made out of 16 SWG CRCA sheet with lockable door arrangement 9_2020 : having connectors (10 NOS) suitable for 1.5sqmm wire with facility 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 facility for cable termination of 4cx10 sqmm ALAR. Required at each floor for PA wire termination	each	1.00000	580.00	580.00
	Add Cartage@1.00				5.80
total					585.80
Total 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 48.71 %	.00
Total with Cost index	836.00
Say	836.00

7 Specification Code: od252469/2019_2020

od252469/201
9_2020 : Supply, Installation, Testing and commissioning of XLR cables and connectors

Code	Description	Unit	Quantity	Rate	Amount
MR	XLR cables and connectors	each	1.00000	1875.00	1875.00
	Add Cartage@1.00				18.75
	total				1893.75
Total 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					2044.0
Cost index 48.71 %					.00
Total with Cost index					2044.00
Say					2044.00

8 Specification Code: od252470/2019_2020

od252470/201 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
TOTAL					66.48
cost for one metre					66.0
Say					66.0
Cost index 48.71 %					.00
Total with Cost index					66.00
Say					66.00

Other Engineering Organisations

9 Specification Code: od252471/2019_2020

od252471/2019_2020 : Supply, installation, testing and commissioning of indoor IR IP dome camera 2 MP 2.1mm/4mm/6mm focal length lens capable to 1.0 lux sensitivity, with IR n 480 TV lines.

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					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 48.71 %	.00
Total with Cost index	5957.00
Say	5957.00

10 Specification Code: od252472/2019_2020

od252472/201 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
	Other Engineering Organisations total				166.65
Total Cost of Materials					166.65
MR	Installation charges	each	1.00000	55.00	55.00
TOTAL					221.65
cost for one each					222.0
Say					222.0
Cost index 48.71 %					.00
Total with Cost index					222.00
Say					222.00

11 Specification Code: od252474/2019_2020

od252474/201 Supply Installation testing and Commissioning of 10/100/1000 Mbps 8 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 8 Port Network Switch	no	1.00000	3245.00	3245.00
Total Cost of Materials					3245.0
MR	Labour charges per unit	no	1.00000	885.00	885.00
TOTAL					4130.0
cost for one no					4130.0
Say					4130.0
Cost index 48.71 %					.00
Total with Cost index					4130.00
Say					4130.00

12 Specification Code: od252475/2019_2020

od252475/201 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	23600.0 0	23600.00
MR	Roof mount for LT Projector	no	1.00000	1416.00	1416.00
MR	Installation charges of Projector and roof mount for projector complete with wire and accessories as required	set	1.00000	4000.00	4000.00
TOTAL					29016.0
cost for one set					29016.0
Say					29016.0
Cost index 48.71 %					.00
Total with Cost index					29016.00

Say	29016.00
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13 Specification Code: od252476/2019_2020

od252476/2019_2020 : Supply, installation, testing and commissioning of Promethean Board AB2T78 complete with all other accessories. Active inspire software will be complimentary with Promethean board.

Code	Description	Unit	Quantity	Rate	Amount
MR	Promethean Board AB2T78	no	1.00000	36580.00	36580.00
Total Cost of Materials					36580.0
MR	Installation charges for Promethean Board AB2T78	no	1.00000	3540.00	3540.00
TOTAL					40120.0
cost for one no					40120.0
Say					40120.0
Cost index 48.71 %					.00
Total with Cost index					40120.00
Say					40120.00

14 Specification Code: od250899/2019_2020

od250899/2019_2020 : Supply, installation, testing and commissioning of 8 port PoE switch

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply, installation, testing and commissioning of 8 port PoE switch	no	1.00000	6250.00	6250.00
TOTAL					6250.0

cost for one no	6250.0
Say	6250.0

Cost index 48.71 %	.00
Total with Cost index	6250.00
Say	6250.00

15 Specification Code: od250898/2019_2020

od250898/2019_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					8050.85
cost for one no					8051.0
Say					8051.0
Cost index 48.71 %					.00
Total with Cost index					8051.00
Say					8051.00

16 Specification Code: od252480/2019_2020

od252480/2019_2020 : SITC Of NVR 8 Channel for CCTV

Code	Description	Unit	Quantity	Rate	Amount
MR	SITC OF NVR 8 Channel	no	1.00000	7203.40	7203.40
TOTAL					7203.4

cost for one no	7203.0
Say	7203.0

Cost index 48.71 %	.00
Total with Cost index	7203.00
Say	7203.00

17 Specification Code: od249479/2019_2020

SITC Of 350W RMS MIXER AMPLIFIER, 3 MIC, 2 AUX, 100V/70V AND 4OHMS , BALANCED MIC,FREQUENCY RESPONSE (50 HZ-16000HZ),S/N RATIO- od249479/201 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	350W RMS MIXER AMPLIFIER	no	1.00000	25375.00	25375.00
Total Cost of Materials					25375.0
MR	Electrician	no	1.00000	2950.00	2950.00
TOTAL					28325.0
cost for one no					28325.0
Say					28325.0
Cost index 48.71 %					.00
Total with Cost index					28325.00
Say					28325.00

18 Specification Code: od250882/2019_2020

od250882/201 Supply and laying of Cat6 outdoor cable including necessary connectors

9_2020 :

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					84.84
cost for one metre					85.0
Say					85.0
Cost index 48.71 %					.00
Total with Cost index					85.00
Say					85.00

19 Specification Code: od252483/2019_2020

od252483/2019_2020 : Supply, Installation, Testing and commissioning Of distribution box for CCTV 6Ux600Wx600D With Front Glass Door,Side Openable Panels with Lock & Key,4Way 5A PDU,1U Cable Manager,Cooling Fan,H/W Kit10

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	5200.00	5200.00
Total Cost of Materials					5200.0
MR	Wireman	no	1.00000	1250.00	1250.00
TOTAL					6450.0
cost for one no					6450.0

	Say	6450.0
	Cost index 48.71 %	.00
	Total with Cost index	6450.00
	Say	6450.00



Other Engineering Organisations

PRICE