



# **BHARAT HEAVY ELECTRICALS LIMITED**

RAMACHANDRAPURAM :: HYDERABAD-32  
TOWNSHIP ADMINISTRATION

## **TENDER DOCUMENTS ( PRICE BID )**

### **ANNUAL ELECTRICAL MAINTENANCE WORKS CONTRACT IN TOWNSHIP (GROUP-1, 2 & 3).**

**Tender Notice : HY/TA/E/OT-03/2017-18, Dt. 26.12.2017**

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1. Schedule - A : Schedule of rates and approximate quantities

NAME & ADDRESS OF TENDERER:

PHONE NO. : \_\_\_\_\_

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SIGN. OF TENDERER

**SCHEDULE - 'A'**  
**ANNUAL ELECTRICAL MAINTENANCE WORKS CONTRACT IN TOWNSHIP (GROUP-1, 2 & 3)**

Sl. No.	SAC Code	Nature of work	Unit	Qty.	Rate	Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
		<b>GROUP-1 (Residential Buildings)</b>				-
		<b>POINT WIRING</b>				-
1	995469	Supply & Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FR PVC insulated multistranded copper conductor single core cable in surface / recessed medium class PVC conduit, with piano type switch, phenolic laminated sheet, suitable size M.S. box, required bends, junction boxes etc. and earthing the point with 1.5 sq.mm. FR PVC insulated multistranded copper conductor single core cable etc as required; complete all as directed by Engineer-in-charge.	Each	100	445.81	44,580.80
2	995469	Supply & Wiring for twin control light point with 1.5 sq.mm FR PVC insulated multistranded copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way piano type switch, phenolic laminated sheet, suitable size MS box, required bends, junction boxes etc. and earthing the point with 1.5 sq.mm. FR PVC insulated multistranded copper conductor single core cable etc as required; complete all as directed by Engineer-in-charge.	Each	15	608.80	9,132.06
3	995469	Supply and fixing 5A PVC batten holder / angle holder / 3-pin ceiling rose (ISI marked) including connection etc. as required; complete all as directed by Engineer-in-charge.	Each	15	33.35	500.19
	-	<b>PLUG POINTS</b>				-
4	995469	Supply and wiring for light plugs (separate socket) with 2 x 1.5 sq.mm + 1 x 1.5 sq.mm (earth wire) of FR PVC insulated multi-stranded copper conductor single core cable in surfaced medium class PVC conduit as required along with Supply and fixing T.W. Box of 4" x 7" (nominal size) on surface with 4" x 7" size of decolam board in front including providing and fixing 3 pin 5/6 amps socket outlet and 5/6 amps piano type switch, connection etc. as required; complete all as directed by Engineer-in-charge.	Each	180	653.94	1,17,708.66
5	995469	Supply and fixing of 6 Amps. piano type switch and 3 pin 6 Amps. socket outlet (common socket) on the existing switch box / cover including connections etc. as required; complete all as directed by Engineer-in-charge.	Each	200	63.83	12,766.00
6(a)	995469	Supply and fixing metal box of 180mm X 100mm X 60mm deep (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including providing and fixing 6 pin 6A/16A amps socket outlet and 16 Amps piano type switch, connection, etc. as required; complete all as directed by Engineer-in-charge. (wiring separate with 2.5 sq.mm run of mains)	Each	10	218.32	2,183.23
6(b)	995469	Supply and fixing wooden box of 180mm X 100mm X 60mm deep (nominal size) on surface with suitable size of phenolic laminated sheet cover in front including providing and fixing 6 pin 6A/16A amps socket outlet and 16 Amps piano type switch, connection, etc. as required; complete all as directed by Engineer-in-charge. (wiring separate with 2.5 sq.mm run of mains)	Each	170	142.59	24,240.30
7(a)	995469	Supply and installation of 20A SP MCB and 20A metal clad socket outlet in single phase MCB box on surface or in recess, with chained cover for the socket outlet and complete with connections, testing and commissioning etc. as required; complete all as directed by Engineer-in-charge. (wiring separate with 4.0 sq.mm run of mains)	Each	65	667.13	43,363.13

SI. No.	SAC Code	Nature of work	Unit	Qty.	Rate	Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
7(b)	995469	Supply and fixing wooden box of 100mm X 100mm X 60mm deep (nominal size) on surface with suitable size of phenolic laminated sheet cover in front including providing and fixing 6 pin 6A/16A amps socket outlet to be controlled by 240V, 16/20 Amps single pole MCB fixed on a separate sheet steel SP MCB enclosure including connection, etc. as required; complete all as directed by Engineer-in-charge. (wiring separate with 2.5 sq.mm run of mains).	Each	30	341.44	10,243.20
	-	MAINS WIRING			-	-
8	-	Supply & wiring for circuit / submain wiring alongwith earth wire with the following sizes of FR PVC insulated multistranded copper conductor, single core cable in surface / recessed medium class PVC conduit as required; complete all as directed by Engineer-in-charge.			-	-
a)	995469	2 x 2.5 sq.mm + 1 x 2.5 sq.mm earth wire	Rmt.	2200	127.21	2,79,870.12
b)	995469	2 x 4.0 sq.mm + 1 x 4.0 sq.mm earth wire	Rmt.	1000	156.90	1,56,901.28
c)	995469	2 x 6.0 sq.mm + 1 x 6.0 sq.mm earth wire	Rmt.	20	198.98	3,979.67
d)	995469	4 x 4.0 sq.mm + 2 x 4.0 sq.mm earth wire	Rmt.	30	258.45	7,753.54
	-	ACCESSORIES			-	-
9	-	Supply & fixing following piano type switch / socket on the existing switch box / cover including connections etc. as required; complete all as directed by Engineer-in-charge.			-	-
a)	995469	240V, 6A Switch	Each	60	29.05	1,743.00
b)	995469	250V, 6A 5-pin socket outlet	Each	60	34.78	2,086.80
c)	995469	250V, 16A Switch	Each	35	59.95	2,098.16
d)	995469	250V, 16A 6-pin socket outlet	Each	35	70.95	2,483.34
10	-	Supply & fixing following modular switch / socket on the existing modular plate & switch box including connections etc. as required; complete all as directed by Engineer-in-charge.			-	-
a)	995469	240V, 6A Switch	Each	15	72.86	1,092.94
b)	995469	250V, 6A 3-pin socket outlet	Each	15	92.68	1,390.22
c)	995469	250V, 16A Switch	Each	8	105.40	843.20
d)	995469	250V, 16A 6-pin socket outlet	Each	8	141.77	1,134.15
11	-	Supplying and fixing following Modular base & cover plate on existing modular metal boxes etc. as required; complete all as directed by Engineer-in-charge.			-	-
a)	995469	1 or 2 Module	Each	4	61.37	245.47
b)	995469	3 Module	Each	2	72.86	145.73
c)	995469	4 Module	Each	2	79.08	158.16
d)	995469	6 Module	Each	2	95.35	190.70
e)	995469	8 Module	Each	2	116.89	233.79
12	-	Supply and fixing following accessories with internal connections etc. as required; complete all as directed by Engineer-in-charge.			-	-
a)	995469	230V, 16A, 3-pin plug top	Each	3	57.60	172.80
b)	995469	Ding dong bell	Each	2	113.28	226.56
c)	995469	Electronic Musical bell	Each	2	252.48	504.96
	-	MAINSWITCHES, FUSES & FUSE D.B.			-	-
13	-	Supply & fixing of porcelain rewirable fuse unit of reputed make; complete all as directed by Engineer-in-charge.			-	-
a)	995469	32A, 415V fuse unit	Each	10	135.36	1,353.60
b)	995469	63A, 415V fuse unit	Each	15	211.20	3,168.00
	-	ISOLATORS, MCBs & MCB D.B.			-	-
14	995469	Supplying and fixing of single pole 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.	Each	10	136.01	1,360.13
15	-	Supplying and fixing following rating, double pole, 240 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.			-	-
a)	995469	40 amps	Each	3	235.55	706.65
b)	995469	63 amps	Each	3	291.06	873.17
16	-	Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.			-	-

Sl. No.	SAC Code	Nature of work	Unit	Qty.	Rate	Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
a)	995469	40 amps	Each	2	532.34	1,064.69
b)	995469	63 amps	Each	2	540.95	1,081.90
c)	995469	100 amps	Each	2	680.65	1,361.30
17	995469	Providing earthing confirming to IS:3043 with 40 mm dia G.I. earth pipe and all accessories including excavation of pit, filling with homogenous layers of coke/charcoal & salt and providing masonry enclosure with hinged cover plate having locking arrangement and watering pipe etc.; including cost and conveyance of all materials; complete as directed by Engineer-in-charge.	Set	4	3,281.60	13,126.41
18	995469	Providing and fixing of 4.00 mm dia copper wire on surface / in recess as required; complete all as directed by Engineer-in-charge.	Metre	10	84.40	843.98
	-	SPECIAL ITEMS			-	-
19	995469	supply & fixing of tubular type heating element suitable for 50 Ltrs / 90 Ltrs water heaters 3 hole /triangular disc type / non-threaded type as per samples given as directed by engineer in charge .	Each	5	422.40	2,112.00
20	995469	Supply & fixing of thermostat 30° to 90°C adjustable and suitable for 25Lts to 90Lts water heaters.	Each	2	220.80	441.60
	-	SERVICE CONNECTIONS			-	-
21	-	Supply & fixing of PVC insulated (WPTC)sheathed weather proof AL. Conductor cable of payal/gold model make 1100V grade together run with 7/18 SWG GI bearer wire outside building and concealed /surface in rigid PVC conduit inside the building including necessary clips insulation tape etc., for service tapping as directed by engineer in charge.			-	-
a)	995469	one run of 2x10 Sq.mm (twin core WPTC)	Rmt.	700	52.38	36,666.00
b)	995469	two run of 2x10 Sq.mm (twin core WPTC)	Rmt.	1200	89.24	1,07,088.00
	-	SERVICE CONNECTIONS SUPPORTING MATERIALS			-	-
22	995469	Supply, fabrication and fixing / grouting of eye bolt made of MS rounds 10/12/16mm dia. as directed by Engineer in charge.	Kg.	10	118.34	1,183.40
23	995469	Supply & fixing of guy insulator of 80x50mm. One guy insulators to be fixed at either ends of the GI wire supporting the service connection cable.	Each	20	42.68	853.60
24	995469	Supply & grouting in wall 32mm dia GI pipe (class B) at the building end for entry of service tapping to building. One end of the pipe should have threaded for fixing bends.	Mtr.	5	219.22	1,096.10
25	995469	Supply & grouting in wall 25mm dia GI pipe at the building end for entry of service tapping to building. One end of the pipe should have threaded for fixing bends.	Mtr.	10	161.02	1,610.20
26	995469	Supply & fixing of GI bends 32mm dia for fixing of 25mm/32mm dia GI pipe for arresting entry of rain water into the pipe . Also suitable size of PVC/Rubber bushes should be provided at the entry of the point of pipe/bend.	Each	10	79.54	795.40
27	995469	Supply of 32 mm dia 1.5 mm thick medium class PVC conduit pipe along with accessories in surface / recess including cutting the wall and making good the same with required massonary work etc. as required; complete all as directed by Engineer-in-charge.	Mtr.	75	78.49	5,886.93
28	995469	Supply & fixing of Steel support wire 7/20 SWG with tape and new link clips to the existing weather proof wire only in case of breaking of GI wire.	Mtr.	1000	10.67	10,670.00
29	995469	Supply & fixing of bus bar insulators with necessary screw etc..	Each	50	21.12	1,056.00
30	995469	Supply & fixing of 25mm x 5mm copper strip (1.12 kg/m) on surface or in recess for connections as required; complete all as directed by Engineer-in-charge.	Metre	3	735.01	2,205.03
31	995469	Restringing of old service connections with necessary link clips and tapes for the above item	Each	200	196.00	39,200.00
	-	CABLES LAYING			-	-
32	-	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation (0.6 x 0.9m), sand cushioning, protective covering and refilling the trench etc as required; complete all as directed by Engineer-in-charge. ( cable will be supplied by BHEL )			-	-

Sl. No.	SAC Code	Nature of work	Unit	Qty.	Rate	Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
a)	995469	Upto 35 sq. mm	Metre	20	162.87	3,257.31
b)	995469	Above 35 sq. mm and upto 95 sq. mm	Metre	20	168.87	3,377.31
33	995479	Providing and laying in position cement concrete of 1:4:8 grade (1 cement : 4 fine sand : 8 graded stone aggregate 40 mm nominal size) excluding the cost of centering and shuttering etc. complete all as directed by Engineer-in-charge.	CuM	1	3,229.99	3,229.99
34	995469	Supply and fixing metal box of 180mm X 100mm X 60mm deep (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including providing and fixing 6 pin 6A/16A amps socket outlet and 16 Amps piano type switch, connection, etc. as required; complete all as directed by Engineer-in-charge. (wiring separate with 2.5 sq.mm run of mains)	Each	100	218.32	21,832.30
35	995469	Supply & wiring for circuit / submain wiring with 2 x 2.5 sq.mm + 1 x 2.5 sq.mm earth wire of FR PVC insulated multistranded copper conductor, single core cable in surface / recessed medium class PVC conduit as required; complete all as directed by Engineer-in-charge.	Rmt.	2000	127.21	2,54,427.38
						-
		<b>GROUP-2 (Non-Residential, Hospital &amp; borewells)</b>				-
						-
	-	POINT WIRING				-
1	995469	Supply & Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FR PVC insulated multistranded copper conductor single core cable in surface / recessed medium class PVC conduit, with piano type switch, phenolic laminated sheet, suitable size M.S. box, required bends, junction boxes etc. and earthing the point with 1.5 sq.mm. FR PVC insulated multistranded copper conductor single core cable etc as required; complete all as directed by Engineer-in-charge.	Each	200	603.07	1,20,614.80
2	995469	Supply & Wiring for twin control light point with 1.5 sq.mm FR PVC insulated multistranded copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way piano type switch, phenolic laminated sheet, suitable size MS box, required bends, junction boxes etc. and earthing the point with 1.5 sq.mm. FR PVC insulated multistranded copper conductor single core cable etc as required; complete all as directed by Engineer-in-charge.	Each	20	608.80	12,176.08
3	995469	Supply and fixing 5A PVC batten holder / angle holder / 3-pin ceiling rose (ISI marked) including connection etc. as required; complete all as directed by Engineer-in-charge.	Each	225	33.35	7,502.85
	-	PLUG POINTS				-
4	995469	Supply and wiring for light plugs (separate socket) with 2 x 1.5 sq.mm + 1 x 1.5 sq.mm (earth wire) of FR PVC insulated multistranded copper conductor single core cable in surface / recessed medium class PVC conduit as required along with Supply and fixing metal box of 150mm X 75mm X 60mm deep (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including providing and fixing 3 pin 5/6 amps socket outlet and 5/6 amps piano type switch, connection etc. as required; complete all as directed by Engineer-in-charge.	Each	55	669.82	36,839.97
5	995469	Supply and fixing of 6 Amps. piano type switch and 3 pin 6 Amps. socket outlet (common socket) on the existing switch box / cover including connections etc. as required; complete all as directed by Engineer-in-charge.	Each	65	63.83	4,148.95
6	995469	Supply and fixing metal box of 180mm X 100mm X 60mm deep (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including providing and fixing 6 pin 6A/16A amps socket outlet and 16 Amps piano type switch, connection, etc. as required; complete all as directed by Engineer-in-charge. (wiring separate with 2.5 sq.mm run of mains)	Each	25	218.32	5,458.08

SI. No.	SAC Code	Nature of work	Unit	Qty.	Rate	Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
7	995469	Supply and installation of 20A SP MCB and 20A metal clad socket outlet in single phase MCB box on surface or in recess, with chained cover for the socket outlet and complete with connections, testing and commissioning etc. as required; complete all as directed by Engineer-in-charge. (wiring separate with 4.0 sq.mm run of mains)	Each	10	667.13	6,671.25
8	995469	Supply of 25mm dia 1.5 mm thick medium class PVC conduit pipe along with accessories in surface / recess including cutting the wall and making good the same with required massonary work etc. as required; complete all as directed by Engineer-in-charge.	Mtr.	25	63.19	1,579.73
	-	MAINS WIRING			-	-
9	-	Supply & wiring for circuit / submain wiring alongwith earth wire with the following sizes of FR PVC insulated multistranded copper conductor, single core cable in surface / recessed medium class PVC conduit as required; complete all as directed by Engineer-in-charge.			-	-
a)	995469	2 x 2.5 sq.mm + 1 x 2.5 sq.mm earth wire	Rmt	800	127.21	1,01,770.95
b)	995469	2 x 4.0 sq.mm + 1 x 4.0 sq.mm earth wire	Rmt	225	156.90	35,302.79
c)	995469	4 x 4.0 sq.mm + 2 x 4.0 sq.mm earth wire	Rmt	75	258.45	19,383.85
d)	995469	2 x 6.0 sq.mm + 1 x 6.0 sq.mm earth wire	Rmt	60	198.98	11,939.02
e)	995469	4 x 6.0 sq.mm + 2 x 6.0 sq.mm earth wire	Rmt	40	344.59	13,783.44
	-	ACEESSORIES			-	-
10	-	Supply & fixing following piano type switch / socket on the existing switch box / cover including connections etc. as required; complete all as directed by Engineer-in-charge.			-	-
a)	995469	240V, 6A Switch	Each	24	29.05	697.20
b)	995469	250V, 6A 5-pin socket outlet	Each	20	34.78	695.60
c)	995469	250V, 16A Switch	Each	20	59.95	1,198.95
d)	995469	250V, 16A 6-pin socket outlet	Each	18	70.95	1,277.15
11	-	Supply & fixing following modular switch / socket on the existing modular plate & switch box including connections etc. as required; complete all as directed by Engineer-in-charge.			-	-
a)	995469	240V, 6A Switch	Each	5	72.86	364.31
b)	995469	250V, 6A 3-pin socket outlet	Each	5	92.68	463.41
c)	995469	250V, 16A Switch	Each	5	105.40	527.00
d)	995469	250V, 16A 6-pin socket outlet	Each	5	141.77	708.84
12	-	Supplying and fixing following Modular base & cover plate on existing modular metal boxes etc. as required; complete all as directed by Engineer-in-charge.			-	-
a)	995469	1 or 2 Module	Each	5	61.37	306.84
b)	995469	3 Module	Each	5	72.86	364.31
c)	995469	4 Module	Each	5	79.08	395.41
d)	995469	6 Module	Each	5	95.35	476.75
e)	995469	8 Module	Each	5	116.89	584.47
13	-	Supply and fixing following accessories with internal connections etc. as required; complete all as directed by Engineer-in-charge.			-	-
a)	995469	230V, 6A, 3-pin plug top	Each	12	41.28	495.36
b)	995469	230V, 16A, 3-pin plug top	Each	15	57.60	864.00
c)	995469	Buzzer bell	Each	2	67.20	134.40
c)	995469	Ding dong bell	Each	1	113.28	113.28
d)	995469	Electronic Musical bell	Each	1	252.48	252.48
	-	HYLAM SHEET, METAL BOXES & T.W. BOARDS			-	-
14	995469	Supply, cutting and fixing of hylam sheet of 3mm thickness, preferably white on existing metal boxes as required; complete all as directed by Engineer-in-charge.	S.ft.	8	98.88	791.04
15	-	Supplying and fixing metal box of following sizes (nominal size) on surface / in recess with suitable size of phenolic laminated sheet cover in front including painting etc as required; complete all as directed by Engineer-in-charge.			-	-
a)	995469	8" x 10" ( i.e. 200mm x 250mm x 60mm deep )	Each	10	204.20	2,042.03
b)	995469	10" x 12" ( i.e. 250mm x 300mm x 100mm deep )	Each	5	300.00	1,500.00
16	-	Supply & fixing of teak wood boards of following sizes :			-	-
a)	995469	Teak wood round block	Each	20	14.40	288.00
b)	995469	10" x 12" teak wood board	Each	5	45.12	225.60

SIGN. OF TENDERER

Sl. No.	SAC Code	Nature of work	Unit	Qty.	Rate	Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
c)	995469	12" x 15" teak wood board	Each	2	69.12	138.24
	-	MAINSWITCHES, FUSES & FUSE D.B.			-	-
17	-	Supply & fixing of porcelain rewirable fuse unit of reputed make; complete all as directed by Engineer-in-charge.			-	-
a)	995469	32A, 415V fuse unit	Each	15	135.36	2,030.40
b)	995469	63A, 415V fuse unit	Each	20	211.20	4,224.00
18	-	Supply, fixing and connecting of following Main Switch; complete as directed by Engineer-in-charge.			-	-
a)	995469	415V, 32A Double Pole Iron Clad Main Switch	Each	4	862.08	3,448.32
b)	995469	415V, 32A Triple Pole Iron Clad Main Switch	Each	2	899.52	1,799.04
c)	995469	415V, 63A Triple Pole Iron Clad Main Switch	Each	2	1,962.24	3,924.48
19	995469	Supply, fixing and connecting of 250V, 16A, 1-phase 8-way porcelain fuses distribution board having metallic sheet steel enclosure; complete as directed by Engineer-in-charge.	Each	8	564.48	4,515.84
	-	ISOLATORS, MCBs & MCB D.B.			-	-
20	995469	Supplying and fixing of single pole 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.	Each	40	136.01	5,440.50
21	-	Supplying and fixing following rating, double pole, 240 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.			-	-
a)	995469	40 amps	Each	3	235.55	706.65
b)	995469	63 amps	Each	3	291.06	873.17
22	-	Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.			-	-
a)	995469	40 amps	Each	6	532.34	3,194.06
b)	995469	63 amps	Each	4	540.95	2,163.80
c)	995469	100 amps	Each	2	680.65	1,361.30
23	-	Supply and fixing following way, single pole & neutral, sheet steel, MCB distribution board on surface / recess complete with tinned copper bus bar, neutral busbar, earth bar, din channel, interconnections, powder painted including earthing etc as required ; complete all as directed by Engineer-in-charge.			-	-
a)	995469	240V, 2 + 4 way, single door including 63A double pole isolator and 5-32A MCBs complete.	Each	3	1,286.40	3,859.20
b)	995469	240V, 2 + 6 way, single door including 63A double pole isolator and 5-32A MCBs complete.	Each	2	1,595.52	3,191.04
24	-	Supply and fixing following way, horizontal type three pole & neutral, sheet steel, MCB distribution board on surface / recess complete with tinned copper bus bar, neutral busbar, earth bar, din channel, interconnections, powder painted including earthing etc as required; complete all as directed by Engineer-in-charge.			-	-
a)	995469	415V, 4 way (4 + 12), double door including 63A four pole isolator and 5-32A MCBs complete.	Each	2	3,752.64	7,505.28
b)	995469	415V, 6 way (4 + 18), double door including 63A four pole isolator and 5-32A MCBs complete.	Each	4	4,942.08	19,768.32
c)	995469	415V, 6 way (4 + 18), single door including 80/100A four pole isolator and 5-32A MCBs complete.	Each	2	4,493.76	8,987.52
d)	995469	415V, 8 way (4 + 24), single door including 80/100A four pole isolator and 5-32A MCBs complete.	Each	3	5,447.04	16,341.12
25	995469	Providing earthing conforming to IS:3043 with 40 mm dia G.I. earth pipe and all accessories including excavation of pit, filling with homogenous layers of coke/charcoal & salt and providing masonry enclosure with hinged cover plate having locking arrangement and watering pipe etc.; including cost and conveyance of all materials; complete as directed by Engineer-in-charge.	Set	6	3,281.60	19,689.62
26	995469	Providing and fixing of 4.00 mm dia copper wire on surface / in recess as required; complete all as directed by Engineer-in-charge.	Mtr.	65	84.40	5,485.90

Sl. No.	SAC Code	Nature of work	Unit	Qty.	Rate	Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	-	M.S. ITEMS			-	-
27	995468	Supply & fixing of angular iron frame in wall with 1/1.6 mm MS sheet on top with hinges & all four sides with screws. Necessary red-oxide / grey painting as directed by engineer in charge.	Kg.	25	107.80	2,695.00
28	995468	Supply, fabrication & fixing of MS sheet cupboards made of sheet 1.6mm thick with single/double shutter and mechanical locking arrangements. The cupboards shall be given 2 coats of red-oxide paint and finished with necessary general purpose quick drying oil paint of suitable shade, etc. complete as directed by engineer in charge.	Kg.	40	177.10	7,084.00
	-	SERVICE CONNECTIONS & MAINS			-	-
29	-	Supply & fixing of PVC insulated (WPTC)sheathed weather proof AL. Conductor cable of payal/gold model make 1100V grade together run with 7/18 SWG GI bearer wire outside building and concealed /surface in rigid PVC conduit inside the building including necessary clips insulation tape etc., for service tapping as directed by engineer in charge.			-	-
a)	995469	one run of 2-core, 10.0 Sq.mm (twin core WPTC)	Mtr.	300	52.38	15,714.00
b)	995469	two run of 2-core, 10.0 Sq.mm (twin core WPTC)	Mtr.	65	89.24	5,800.60
	-	SERVICE OF MAINS SUPPORTING MATERIALS			-	-
30	995469	Supply & fixing of guy insulator of 80x50mm. One guy insulators to be fixed at either ends of the GI wire supporting the service connection cable.	No.	4	42.68	170.72
31	995469	Supply & grouting in wall 32mm dia GI pipe (class B) at the building end for entry of service tapping to building. One end of the pipe should have threaded for fixing bends.	Mtr.	5	219.22	1,096.10
32	995469	Supply & fixing of GI bends 32mm dia for fixing of 25mm/32mm dia GI pipe for arresting entry of rain water into the pipe . Also suitable size of PVC/Rubber bushes should be provided at the entry of the point of pipe/bend.	Each	2	79.54	159.08
33	995469	Supply of 32 mm dia 1.5 mm thick medium class PVC conduit pipe along with accessories in surface / recess including cutting the wall and making good the same with required massonary work etc. as required; complete all as directed by Engineer-in-charge.	Rmt.	6	78.49	470.95
34	995469	Supply & fixing of Steel support wire 7/20 SWG with tape and new link clips to the existing weather proof wire only in case of breaking of GI wire.	Mtr.	20	10.67	213.40
35	995469	Supply & fixing of bus bar insulators with necessary screw etc..	Each	10	22.00	220.00
36	995469	Supply & fixing of 25mm x 5mm copper strip (1.12 kg/m) on surface or in recess for connections as required; complete all as directed by Engineer-in-charge.	Mtr.	1	735.01	735.01
	-	METERS			-	-
37	995469	Supply, fixing and connecting of 3 phase 5Amp/100Amp – 415V C.T meter	Each	1	2,870.40	2,870.40
38	995469	Supply, fixing and connecting of 3 phase 5Amp/100Amp-415V C.T.coil	Each	2	137.28	274.56
	-	LIGHTING			-	-
39	995469	Supply & erection of street light fitting including street light bracket GI pipe 32mm dia and length 1.5 Mtrs. The street light fittings shall be similar to Bajaj make model No BJSLA 240 including all standard accessories and 2 Nos. 4' flourscent tubes and shall be fixed with MS flat clamps and with 15A rewirable porcelain fuse unit. as directed by engineer incharge.	Each	6	2,129.76	12,778.53
40	995469	Supply and fixing of FMS 200/111 , 1xPL s 11 watts (mirror light), switch, starters complete with all accessories inclusive of PF correction capacitor, together with tube light for engg. Hostel philphs make	Each	2	599.04	1,198.08
41	995469	supply and fixing recess mounted luminaire of model no. FBS 450/236 D6 AG HF Philphs make	Each	2	4,811.52	9,623.04
42	995469	Supply & fixing of CFL lamp PL-L 36W only bulbs Philphs make	Each	15	181.44	2,721.60
43	995469	Supply and fixing of decoratvie CFL luminaire for wall mounting FL 800/320 with 20 W bulb philphs make.	Each	3	642.24	1,926.72

SIGN. OF TENDERER

SI. No.	SAC Code	Nature of work	Unit	Qty.	Rate	Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	-	SPECIAL ITEMS FOR NON-RSDL BLDGS. & GEN. HOSPITAL			-	-
44	995469	supply & fixing of tubular type heating element suitable for 50 Ltrs / 90 Ltrs water heaters 3 hole /triangular disc type / non-threaded type as per samples given as directed by engineer in charge .	Each	15	422.40	6,336.00
45	995469	Supply & fixing of thermostat 30° to 90°C adjustable and suitable for 25Lts to 90Lts water heaters.	Each	10	220.80	2,208.00
46	995479	Removal of MS rod from ceiling and fixing of 4'/5' tube light fitting to down rods with suitable MS clamps to provide ceiling rose on Teakwood round block ( The work includes dismantling of fittings removal of existing gutties, clamps, bolts & nuts.) as directed by engineer in charge	Each	20	182.00	3,640.00
47	995469	Supply & fixing of 12way - 30Amps., 600 V Bakelite with brass terminal connectors as directed by engineer incharge	Each	5	146.30	731.50
48	995469	Supply of emergency lamp dry cell 6 Volts 10 AH rechargable maintenance free battery as directed by engineer in charge.	Each	20	484.50	9,690.00
49	995469	Supply of Kettle element 1.25" dia BPC size with checkout washers 2KW - Power Pack make.	Each	2	459.80	919.60
50	995469	Labour charges for installation & operation of decorative lights/series lights/PA system as required on various occasions at important buildings & surroundings etc. and also removing the items after completion of program and handing over to dept.; complete all as directed by Engr-in-charge. (Installation & removal both together will be accounted as one operation) ( All materials will be in the scope of BHEL )	Operation	12	3,618.00	43,416.00
	-	SPECIAL ITEMS FOR BOREWELLS			-	-
51	995469	supply and fixing of air break contactor 3TA11-11-0 Amps, rated current 22 Amps 1 NO + 1 NC 11 KW, 15HP, 415V (Siemens make) as directed by engineer incharge.	Each	4	2,424.96	9,699.84
52	995469	supply and fixing of spare coils AC 50 cycles suitable for 3TA 76/3TA67/3TA21 & 3TA11 standard 415V as directed by engineer in charge.	Each	3	360.96	1,082.88
53	995469	Supply & fixing of timer switch type TSQ-100 make Larsen & Turbo ltd. as directed by engineer incharge	Each	7	3,505.92	24,541.44
54	995469	Supply and fixing D.O.L /Star delta star push buttons Red /Green colour	Each	5	108.48	542.40
55	995469	Supply & fixing of 100A DIN type HRC Fuses of SIEMENS/ C&T/ GE/ INDO ASIAN/ C\$S/ HAVELLS/ STANDARD make.	Each	5	187.00	935.00
	-	MISC. PAINTING WORKS			-	-
56	995473	Cleaning and applying of two coats of Red-oxide primer paint including cost & conveyanceof all materials etc. as directed by Engineer-in-charge.	Sq.M	50	58.56	2,928.00
57	995473	Cleaning and applying of two coats of Al. base paint for final painting including cost & conveyanceof all materials etc. as directed by Engineer-in-charge.	Sq.M	50	69.12	3,456.00
	-	CABLES LAYING			-	-
58	-	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation (0.6 x 0.9m), sand cushioning, protective covering and refilling the trench etc as required; complete all as directed by Engineer-in-charge. ( cable will be supplied by BHEL )			-	-
a)	995469	Upto 35 sq. mm	Mtr.	185	162.87	30,130.15
b)	995469	Above 35 sq. mm and upto 95 sq. mm	Mtr.	50	168.87	8,443.29
59	-	Supplying and fixing following dia G.I. pipe (medium class) for cable entry including bending the pipe to the required shape complete as required; complete all as directed by Engineer-in-charge.			-	-
a)	995469	50 mm dia G.I. pipe	Mtr.	20	316.93	6,338.67
b)	995469	100 mm dia G.I. pipe	Mtr.	10	715.01	7,150.06
60	995479	Providing and laying in position cement concrete of 1:4:8 grade (1 cement : 4 fine sand : 8 graded stone aggregate 40 mm nominal size) excluding the cost of centering and shuttering etc. complete all as directed by Engineer-in-charge.	Cu.M	2	3,230.23	6,460.46

SI. No.	SAC Code	Nature of work	Unit	Qty.	Rate	Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
						-
		<b>GROUP-3 (Maintenance of Fans)</b>				-
						-
1	-	Removing, overhauling and re-fixing of following fans from various buildings in township including carrying of ladder, necessary tools & equipments etc.; all complete as directed by Engr-in-charge. (Bearings and bushes will be supplied by BHEL)				-
a)	995469	1200 mm sweep ceiling fan	Each	170	77.00	13,090.00
b)	995469	1400 mm sweep ceiling fan	Each	135	77.00	10,395.00
c)	995469	Wall mounted fan / Pedestal fans	Each	50	77.00	3,850.00
2	-	Removing, overhauling and re-fixing of exhaust fans from various buildings in township including carrying of ladder, necessary tools & equipments etc.; all complete as directed by Engr-in-charge. (Bearings and bushes will be supplied by BHEL)			-	-
a)	995469	Heavy duty exhaust fan	Each	50	127.00	6,350.00
b)	995469	Light duty exhaust fan	Each	50	127.00	6,350.00
3	-	Supply of new suitable bush bearing of required size during overhauling of the following fans:			-	-
a)	995469	1200 mm sweep ceiling fan	Each	50	100.23	5,011.36
b)	995469	1400 mm sweep ceiling fan	Each	50	100.23	5,011.36
c)	995469	Exhaust fan / Wall mounted fan / Pedestal fans	Each	30	100.23	3,006.82
4	995469	Supply of AP3 all purpose grease for ball bearings.	Kg.	10	276.82	2,768.18
5	995469	Supply of engine oil 20/40 grade.	Litre	4	276.82	1,107.27
6	995469	Supply of kerosene oil for overhauling of fans.	Litre	20	76.36	1,527.27
7	995469	Reconditioning of over sized bush bearing housing for suitable ball bearing according to size of the fans 36"/48"/56" ceiling fans/Exhaust fans/Wall mounted fans/Pedestal fan.	Each	50	120.00	6,000.00
8	995469	Supply and fixing of Fan rubber rollers (bush) ring washers complete as directed by engineer incharge	Each	735	42.75	31,421.25
9	995469	Supply and fixing of ceiling fan hooks 12mm to 15mm rod in S shape to the ceiling rod including chipping and cleaning with necessary masonry work.	Each	10	117.00	1,170.00
10	-	Supply of fan blades for the following:				-
a)	995469	Exhaust fan blades - 9" / 12" light duty / heavy duty.	set	8	189.00	1,512.00
b)	995469	Ceiling fan blades - 1200 mm	set	25	320.00	8,000.00
c)	995469	Ceiling fan blades - 1400 mm	set	25	344.00	8,600.00
11	995469	Supply and fixing of MS pipe 15mm dia 3.3/5mm thick with one side threaded suitable for ceiling fans.	mtr	10	115.50	1,155.00
12	995469	Supply and fixing of ceiling fan speed regulators Electronic step type of Crompton Greaves / Orient / any reputable make.	Each	26	157.50	4,095.00
13	-	Removal of burnt out complete existing winding of following sizes of ceiling fan and rewinding with suitable super enamelled copper wire as per standard practice followed by overhauling of the fan and testing. This includes removing and re-fixing of the fan from buildings by carrying ladder, necessary tools & equipments etc. and all incidental charges & sundry items required for winding; all complete as directed by Engineer-in-charge. Removed winding wire shall be retained by the contractor and suitably credited its value and net value to be quoted. Six months guarantee must be given against winding defects. (Bearings and bushes will be supplied by BHEL)			-	-
a)	995469	1200 mm ceiling fan	Each	275	465.00	1,27,875.00
b)	995469	1400 mm ceiling fan	Each	200	465.00	93,000.00
14	-	Removal of burnt out complete existing winding of following sizes of exhaust fan and rewinding with suitable super enamelled copper wire as per standard practice followed by overhauling of the fan and testing. This includes removing and re-fixing of the fan from buildings by carrying ladder, necessary tools & equipments etc. and all incidental charges & sundry items required for winding; all complete as directed by Engineer-in-charge. Removed winding wire shall be retained by the contractor and suitably credited its value and net value to be quoted. Six months guarantee must be given against winding defects. (Bearings and bushes will be supplied by BHEL)			-	-

SI. No.	SAC Code	Nature of work	Unit	Qty.	Rate	Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
a)	995469	225 mm light duty exhaust fans	Each	45	466.50	20,992.50
b)	995469	300 mm heavy duty exhaust fans	Each	40	515.00	20,600.00
15	995469	Supply and installation of 225mm (9") light duty exhaust fans of reputable make with metallic blades propeller type with louver shutter type. The fan to be connected with suitable length of 16/0.2mm twin twisted copper wire. The necessary mounting frame together with foundation bolts shall be mounted properly and finished neatly to match the surroundings.	Each	1	1,487.50	1,487.50
16	995469	Supply and installation of heavy duty exhaust fans of 300mm (12") fan of 900RPM of reputable make with metallic blades propeller type with louver shutter type. The fan to be connected with suitable length of 16/0.2mm twin twisted copper wire. The necessary mounting frame together with foundation bolts shall be mounted properly and finished neatly to match the surroundings.	Each	2	2,778.92	5,557.84
17	995469	supply and fixing of 1200mm (48") sweep double ball bearing type fan with all standard accessories Bajaj/ GEC/ Crompton make including fan hooks and clamps and connecting it up to the fan point with suitable length of 16./0.2mm PVC insulated twin twisted copper conductor cable.	Each	2	1,707.73	3,415.45
18	995469	supply and fixing of 1400mm (56") sweep double ball bearing type fan with all standard accessories of Bajaj/ GEC/ Crompton make including fan hooks and clamps and connecting it up to the fan point with suitable length of 16/0.2mm PVC insulated twin twisted copper conductor cable as directed by engineer in charge.	Each	2	1,819.77	3,639.55
19	995469	Painting of B.H.E.L serial number on ceiling fans with black / white paint	Each	330	10.90	3,597.00
20	-	Removal of the existing paint of ceiling fans of the following sizes rubbing with emari paper. cleaning with caustic soda and repainting the same with one coat of primer and two coats of good quality white / maroon colour enamel paint with sprayer to make it good as original finish.			-	-
a)	995469	1200 mm sweep ceiling fan	Each	50	223.50	11,175.00
b)	995469	1400 mm sweep ceiling fan	Each	50	223.50	11,175.00
21	995469	Removal of the existing paint of 9"/12" Exhaust fans rubbing with emari paper and cleaning with caustic soda and repainting the same with one coat of primer and two coats of good quality black/ grey colour enamel paint with sprayer to make it good as original finish.	Each	20	198.75	3,975.00
22	995469	Supply of resistance type fan regulator and replacing of existing fan regulator including connection. Removed fan regulators to be handed over to the Electrical store at TA; all complete as directed by Engineer-in-charge.	Each	160	62.00	9,920.00
23	995469	Supply of 2.5 mfd, 400V condenser and replacing of existing fan condenser including connection. Removed condensers to be handed over to the Electrical store at TA; all complete as directed by Engineer-in-charge.	Each	200	42.75	8,550.00
24	995469	Checking and rectification of loose connections in ceiling rose / switch / fan point.	Each	200	15.00	3,000.00
25	-	cleaning of ceiling fan (of following sizes) body and blades with detergent powder and checking quarter pins, check nuts, and nut bolts etc.; all complete as directed by Engineer-in-charge.			-	-
a)	995469	1200 mm sweep ceiling fan	Each	160	38.00	6,080.00
b)	995469	1400 mm sweep ceiling fan	Each	300	38.00	11,400.00
26	995469	Cleaning of Exhaust fan/ wall mounted fan / Pedestal fan body and blades with detergent powder and checking pins, check nuts etc.; all complete as directed by Engineer-in-charge.	Each	35	77.00	2,695.00
27	995469	Fixing & removal of spare ceiling fan (supplied by BHEL) for temporary period during overhauling / rewinding of the existing ceiling fan, including carriage of fan, ladder, tools & equipments as required etc.; all complete as directed by Engr-in-charge. (Fixing & removing combinely make one operation.)	Operation	100	50.00	5,000.00

SIGN. OF TENDERER

Sl. No.	SAC Code	Nature of work	Unit	Qty.	Rate	Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
					<b>Group - 1 Sub Total</b>	<b>12,49,900.52</b>
					<b>Group - 2 Sub Total</b>	<b>7,44,987.05</b>
					<b>Group - 3 Sub Total</b>	<b>4,73,555.36</b>
		<b>GRAND TOTAL</b> (Group-1 + Group-2 + Group-3) ... ..			( Twenty-four lakhs sixty-eight thousand four hundred forty two & paise ninety-four only)	<b>24,68,442.94</b>

Note:- The tenderers are required to quote their tender value on %age basis at excess / less / on par with estimated value.

Tender %	in words	in figures
Excess		
Less		
Estimate rate only		

**Conditions :**

1	<p><b>Taxes &amp; Duties:</b> The rate quoted by the contractor shall be exclusive of GST.</p> <p>All the terms &amp; conditions of the contract with respect to Taxes &amp; Duties are subject to the new taxation laws introduced from time to time (e.g., GST). The terms &amp; conditions will be modified in accordance with the provisions of new laws (e.g., GST).</p>
2	<p><b>Contract Period &amp; Maintenance Period:</b> Period of contract : One (1) Year from the date of commencement Maintenance period : Six (6) Months from the date of completion</p>
3	<p><b>Penalty:</b> In the event of delay in supply of goods and/or services beyond contractual delivery date, penalty of 0.5% per week or part thereof shall be levied on the full contract value subject to a maximum of 10% of the order value. Penalty amount so determined along with GST if applicable thereon shall be recovered.</p>

Sl. No.	Name of accessories	Recommended Make to be used
1	FR PVC insulated multistranded copper conductor single core cable ( 1.5 / 2.5 / 4.0 / 6.0 sq.mm ) of suitable colour code as directed by Engr-in-charge.	1100 Volt Grade, Flame Retardant Low Smoke Type Only. (FINOLEX / L&T / HAVELLS / ANCHOR)
2	PVC Conduits	Sudhakar / Avonplast / Nandi
3	6A & 16A piano type/ modular type switch & socket, Bell push	Anchor / GM / SSK / MK
4	Lamp Holder, 3-pin ceiling rose	Anchor / GM / SSK / MK
5	Calling Bell	Anchor / GM / SSK / MK
6	Rewirable porcelain fuse unit	Anchor / GM / SSK / MK
7	MCB Dist. Board, MCBs, Isolators	Havells / Legrand / Indoasian / Standard
8	Metallic MCB Distribution Box with Metal Clad Socket + Plug top (for Air Conditioner)	Havells / Legrand / Indoasian / Standard
9	Twin core PVC insulated, sheathed, 1.1 kV grade Al. Conductor cable (Service wire)	Payal / Fincab / Gold / Havells
10	Electronic fan regulator	Anchor / GM / SSK / MK
11	In General, all materials supplied by the Contractor shall be of approved make and ISI certified as agreed by the Engr.-in-Charge.	

SIGN. OF TENDERER