

BHEL::HYDERABAD
M&S-(P&C) DEPARTMENT
TENDER No.M&S/P&C/2019/39 DT.27/07/2019
NAME OF WORK: ELECTRICAL MAINTENANCE IN ADMINISTRATIVE BUILDING,
COMPUTER BLDG, TELEPHONE EXCHANGE, 79 BLDG.
SCOPE OF WORK

S.No	DESCRIPTION	Unit	QTY
	I - MAINTENANCE OF LIGHTING, POWER POINTS		
1 a)	Replacement of 5A/10A,250V Ivory colour flush type piano/ thumblor/Roma switches/bell pushes on existing board for fans and lights including. checking of loose connections.	Nos.	180
b)	Replacement of 15 A/20A,250V Ivory colour flush type piano/tumbler/Roma switches on existing board for power points control including checking of loose connections.	Nos.	90
2.a)	Replacement of 5A/10A, 250V, Ivory colour flush mounting piano/Roma type switch cum socket/plug top on existing board.	Nos.	117
b)	Same as for above of 15/20A 250V 3/5 pin plug tops	Nos.	45
c)	Same as above for 5/15A,250V switch cum sockets including checking of loose connection	Nos.	45
d)	Same as above for 5/15A, 10/20A, 250V Sockets including checking of loose connection	Nos.	68
3	Replacement of ceiling rose 5A,250V, 3 pin including checking of loose connection.	Nos.	27
4	Replacement of Buzzer/Call bell 5A,250V on existing board including checking of loose	Nos.	7
5	Supply & fixing of T.W Board with decolam top cover wherever required.		
a)	4"x4"	Nos.	5
b)	7"x4"	Nos.	9
c)	8"x10"	Nos.	27
d)	10"x12"	Nos.	14
6	Supply and fixing of 3mm thick Hylam cut sheet on existing MS boxes including fixing of old accessories on it & screws, washers etc	sq mtrs	5
7	Laying of 1.5/2.5/4 sq.mm PVC insulated PVC sheathed single core multistranded Alluminium /copper conductor cable run on existing pipe/reaper for light and power points.	Mtrs	1170
8	Supply and fixing of PVC reaper of 3/4"/1" size run on wall/ partitions with screws etc, for drawl copper / Al. conductor cable.	Mtrs	63
9	Replacement of 32 A, 240V sheet steel double pole switches.	Nos.	23
10	Fixing of fuse distribution boards/MCBs wherever required.		
a)	6 way 15A three phase	Nos.	2
b)	8 way 15A three phase	Nos.	2
11	Rectification & replacement of tube light fittings of 2x80,1x80,4x20, 1x20, 2x40 & 1x40W capacity		

	a)	Chokes	Nos.	216
	b)	Tubes	Nos.	630
	c)	Starter/Starter Holder	Nos.	360
	d)	Tube light rotary/lock type holders	Nos.	90
	12	Rectification of loose connections in switch boards such as switches, sockets etc.,	Nos.	90
	13	Refixing of loose hanging round blocks/reapers with new gutties, new screws on ceiling.	Gutties	27
	14	Clearing of neutral to earth, phase to earth short circuits & loose connections in wiring in buildings where ever required.	Nos.	72
	15 a)	Cleaning and applying of one coat of Red-oxide paint on switch boards and distribution boards.	sq.mtr	23
	b)	Cleaning and applying of two coats of Admiral grey paint/aluminium paint for above (a).	sq.mtr	23
	16	Cleaning of switch boards including switches/sockets with vim powder (10"x12", 8"x10",7"x4" ect.)	Nos.	108
	17	Cleaning of Switch boards and distribution boards with CTC & applying petroleum jelly for effective electrical contact and smooth operation	Nos.	36
	18	Fixing of new light fittings of various capacities Old light fittings are to be dismantelled & return to stores (if any).	Nos.	45
	19	Cleaning and washing of light fittings of 2x80, 1x80,2x40,1x40,4x20 & 1x20W capacity including metal reflector with soap vim powder.	Nos.	1350
	20	Removal/scratching of existing enamel paint and supply & spray painting of one coat primary and two coats of final with enamel white paint on existing old fittings of 2x80,1x80,2x40&1x40W.	Nos.	68
	21	Supply and fixing of PVC pipe of 19 mm/25mm with suitable clamps,screws etc., to run on wall.	Mtrs	108
	22(a)	Installation of new wiring for Power points of 16/20Amps, 250V for air conditioner/heater/ refrigerator (separate line to be drawn from nearest FBD) with 2.5 Sq.mm single core multi-strand copper conductor cable run through PVC conduit pipe & 14SWG Cu wire and Supply & fixing of suitable metal box of Cd/GI coated with single pole 20 Amps MCB of reputed make and 1 No. of 16A switch cum socket of Anchor make	Points	27
	22(b)	Installation of new wiring for Power points of 16Amps, 250V for PC (separate line to be drawn from nearest FBD) with 2.5 Sq.mm single core multi-strand copper conductor cable run through PVC conduit pipe & 14SWG Cu wire and Supply & fixing of suitable metal box of Cd/GI coated with 2 Nos. of 16A switch cum sockets & 2 Nos. of 6A switch cum sockets of Anchor make	Points	36
	22(c)	Installation of new wiring for lighting/fans with 1.5 Sq.mm single core multi-strand copper conductor cable run through PVC conduit pipe and supply & fixing of 1 No. of 6A switch of Anchor make	Points	45
	22(d)	Installation of new wiring for Power Points of 5A, 250V with 1.5 Sq.mm single core multi-strand copper conductor cable run through PVC conduit pipe and supply & fixing of metal box of Cd/GI coated with 1 No. of 6A switch cum socket of Anchor make	Points	41

MAINTENANCE OF OTHER ITEMS AT ADMINISTRATIVE BUILDING			
23	Checking and attending the different type of FBDs at Admn. Bldg and rectify the defects if any.	Sets	36
24	Checking and attending the MD Boards.Tightening of Busbars, jumpers and cable connections etc., and rectify the defects. (schedule/preventive maintenance)	Sets	9
25	Rectification & Replacement of various light fittings of 125/250/400 Watts for Façade lighting at Admn. Bldg		
a)	Chokes	Nos.	9
b)	Lamps/Bulbs	Nos.	18
c)	Ignitors	Nos.	14
d)	Condensers	Nos.	9
e)	Lamp holders	Nos.	9
26	Operation of Public Address system at ABC Hall for all meetings. The skilled manpower should have experience in maintenance / operation of audio system equipments. The meetings in one day will be one operation. (one operation = 1 SW)	oper ation s	207
27	Dusting & cleaning of two Lifts at Admn. Bldg. Every day cleaning has to be completed within two hours in the morning before general shift. (one operation = 1 USW)	oper ation s	45
SUB TOTAL AMOUNT LIGHTING, POWER POINTS			
II - MAINTENANCE OF VARIOUS FANS			
1	Cleaning of AC ceiling/Exhaust/wall and pedestal fans body and blades with VIM powder by duly bringing down and fixing.	Nos	472
2.(a)	Dismantling and assembly of 1200mm/1400mm sweep ceiling fan complete,ball bearing,condenser lead wire winding, cleaning and greasing of bearings, oiling the bush bearings of fans with SAE 40 lubricating oil.Re-assembling, testing and refixing the same, (complete overhauling and testing). The rate should include the cost of soldering of wire leads to condenser and connecting the same to the winding.(Bearings, Oil seals & capacitors of BHEL free issue has to be replaced wherever required)	Nos	90
(b)	---- Do --- for Pedestal fans of 400mm sweep	Nos	18
(c)	---- Do ----- for Exhaust fans 300/400 mm sweep.	Nos	18
(d)	---- Do ----- for Wall mounting fans of 400mm sweep.	Nos	14
3 (a)	Removal of the existing paint of 1200/1400 mm sweep ceiling fans,cleaning with caustic soda and repainting the same with one coat of primer & two coats of good quality white enamel paint with sprayer to make it good as original finish and letter painting of BHEL serial number with black/white paint. (Asian,Nerolac,Burger Paints only) includes supply of required paints. (Total No. of Ceiling fans - 394 Nos.)	Nos	90
(b)	---- Do --- for Pedestal fans of 400mm sweep. (Total No. of Pedestal fans - 68 Nos.)	Nos	14
(c)	---- Do ----- for Exhaust fans 300/400 mm sweep. (Total No. of Exhaust fans - 34 Nos.)	Nos	18
(d)	---- Do ----- for Wall mounting fans of 400mm sweep. (Total No. of wall mounting fans - 28 Nos.)	Nos	9
4. (a)	Supply & Fixing of SKF ball bearings of the following specifications:- S - 8 bearing -NBC 6201 to 6204 bearings -HMT	Nos	54

	(b)	Removal of damaged bush bearing and Supply & fixing of new suitable bush bearing of required size for 1200/1400mm sweep ceiling/exhaust/pedestal/wall mounting fans. Old bush bearing should be returned to our stores.	Nos	54
	(c)	Removal of faulty condenser and Supply & fixing of new condenser 2 MFD or 2.5 MFD,400V,A.C.50HZ. if required (with supports) for 1200/1400mm sweep ceiling/exhaust/pedestal/wall mounting fans,removed faulty condenser should be returned to our stores. (confirm to IS:1709/1984).	Nos	72
	(d)	Supply & fixing of new suitable oil seal, old oil seal should be returned to our stores.	Nos	77
	(e)	Removal of old twin core PVC Insulated lead wire and fixing of suitable length of 16/0.2mm copper conductor twin core, PVC insulated wire piece of superior quality to ceiling fans.	Nos	90
	(f)	Supply and Replacement/Changing of rubber bush for various types of fans.	Nos	45
	(g)	Supply and Changing of split pins (cottor pins) and checking of lock nut of ceiling fans.	Nos	77
	(h)	Supply and Changing of down rod spindle screw for different types of ceiling fans.	Nos	54
	5. (a)	Dismantling of AC ceiling/ Pedestal/exhaust/wall mounting fans from various bldgs & transporting the same to workshop for rewinding/for attending to major repairs/over hauling.	Nos	135
	(b)	Fixing of AC ceiling/exhuast/Pedestal/wall mounting fans in various buildings after rewinding/after major Repairs/over hauling.	Nos	135
	6	Removal of burnt out complete existing winding of 1200/1400mm AC ceiling fans&300/400mm exhaust /pedestal/wall mounting fans and rewinding the same with suitable super enamelled copper wire as per standard practice and testing. Removed winding wire shall be retained by the contractor and suitably credited its value and net value to be quoted. The rate includes cost of winding wire and sundry items required for winding, cost of labour & testing. Six months guarantee must be given against winding defects.	Nos	5
	7	Supply&Fixing of 200mm sweep exhaust fan of model: Cross Air of Crompton Greaves make.	set	4
	8.	Supply & Fixing of MS/GI pipe 15mm dia. 3/3.5mm thick with one side threaded and black painted suitable for ceiling fans.	Mtrs	9
	9.	Rectification of loose conections in fan switches regulators, ceiling rose etc.,	Nos	23
	10	Supply & fixing of ceiling fan speed regulators		
	(a)	Electronic type of Crompton Greaves/Anchor/Orient.	Nos	27
	(b)	Resistance type of Crompton Greaves/Bajaj/Orient.	Nos	36
	11	Supply & fixing of ceiling fan hooks 10mm rod in "S" shape to the ceiling rod including chipping the ceiling with necessary masonry work.	Nos	14
	12	Removal of exisitng and fixing of 1200/1400/400/300mm sweep ceiling/exhuast/Pedestal/wall mounting fans inplace of existing defective fan including new regulator and connecting it to power supply with suitable Cu wire. Old fan with regulator has to be returned to stores.	Nos	32
	13	Carrying of Aluminium step ladder 6'/8'/10' to carry out fan fault rectification and fixing of ceiling fans from site of work and back to electrical stores.	Nos	243