

ELECTRICAL WORKS						
Project: -ULTRA LOW TEMPERATURE LAB						
BOQ						
S.No.	DSR-2014	Item of Work	Qty	Unit	Rate	Total
		<b>Sub Head 1 : Copper Wiring in Steel Conduit</b>				
1		<b>Point wiring in steel conduit, with modular type switch.</b>				
		Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc as required.				
(a)	1.3.3	<b>Group c.</b>	40.0	Point		
2		<b>Circuit/ submain wiring in steel conduit:</b>				
	1.17	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in existing Steel/PVC surface/ recessed steel conduit as required.				
(a)	1.17.3	2 x 1.5 sq. mm + 1 x 1.5 sq mm earth wire	61.2	Meter		
(b)	1.17.21	2 x 4 sq. mm + 1 x 4 sq mm earth wire	425.0	Meter		
3	1.18	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required				
	1.18.2	2 Pair	9.0	Meter		
4	1.7	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required.				
	1.7.11	4 x 16 sq. mm + 2 x 16 sq. mm earth wire	20.0	Meter		
5		Supplying and fixing of following sizes of Steel conduit along with the accessories in surface / recess including cutting the wall and making good the same in case of recessed conduit as required.				
(b)	1.20.2	25 mm	77.0	Meter		
		<b>S/F Power plug Point Modular type accessories:</b>				
6		Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
	1.24.6	Telephone socket outlet	2.0	Each		
7	1.27	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required				
	1.27.1	1 or 2 Module (75mmX75mm)	2.0	Each		
8	1.32	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 15/16 & 5/6 amps modular socket outlet and 15/16 amps modular switch, connection, painting etc. as required.	75.0	Each		
9	2.18	S/f of 20amp, 240V, SPN industrial type socket outlet, with 2 pole and earth, metal enclosure plug top along with 20amp. C curve SP MCB, in sheet steel enclosure, on resses or in surface with chained metal cover for the socket outlet and complete with connection testing and commissioning etc. as required.	8.0	Each		

10	2.20	Supplying and fixing 30 A 415 V TPN industrial type socket outlet with 4 pole and earth metal enclosed plug top along with 30 A, C series TP MCB in sheet steel enclosure in surface or in recess with chained metal cover for the socket outlet and complete with connections testing and commissioning etc. as required.	15.0	Each		
		<b>Sub Head 2 : Fittings</b>				
1	MR(RA-1)	Supply installation testing and commissioning of 1x28W T5 FTL of MAKE PHILIPS/WIPRO/HAVELLS	25.0	Each		
		<b>Sub Head 3 : Sub-Distribution Boards</b>				
1		<b>S/F prewired TPN MCB DB:</b>				
		Supplying and fixing testing following way, three pole and neutral, sheet steel, MCB distribution board, 415 volt, on surface or recess complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, detachable gland plate, interconnections. phosphatized and powder painted including earthing as extra as required but without MCCB/RCCB/ISOLATOR. Similar to LEGRAND CAT REF. 607751 8+24.				
(b)	MR(RA-4)	<b>8 way, Double door, Horizontal type</b>	3.0	Each		
2		Supplying and fixing 5 amps to 32 amps rating, 240 volts, 'B' series miniature circuit breaker suitable for lighting and other loads of following poles in existing MCB DB complete with connections, testing and commissioning etc.				
	2.42.6	<b>Single pole 6/10/16/20/32 amps.</b>	50.0	Each		
3		<b>S/F 'C' Series, 4P MCB :</b>				
	2.10	Supplying and fixing 5 amps to 32 amps rating, 240 volts, 'C' series, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.10.5	THREE POLE AND NEUTRAL	2.0	Each		
4		<b>S/F FP MCB:</b>				
		Supplying and fixing following rating, four pole, 415 volts, three phase and neutral MCB having 10KA breaking capacity in existing MCB DB complete with connections testing and commissioning as required				
(c)	2.13.2	63 amps	2.0	Each		
5	DSR(2.9)	Supply and fixing of flush/surface mounting vertical type TPN MCB distribution boards complete in all respects.				
	DSR(2.9.6)	12 Way Double Door	1.0	Each		
6	2.2	Supply fixing and making connection of following FPMCCBS complete in all respects as per direction and satisfaction of engineer-in-charge.				
	2.2.1	63Amp. 4 Pole MCCB 16KA	2.0	Each		
		<b>Sub Head 4 : Cable Management System &amp; Raceway</b>				
1		<b>Cable Management System</b>				

a	MR	Legrand make cable management system type UPVC trunking of size 150x50mm, double covers 2x65mm, surface mounting type, complete with all accessories including internal angles, external angles, flat angles, junctions, clips, earth links, cover joint, base joint, T-joint, extension couplers, end caps, etc., The central line of the channel would be taken for measurement purposes.	43.0	Each		
		<b>Sub Head 5 : Earthing</b>				
		<b>P/F M.V. danger notice plate</b>				
1	2.21	Providing and fixing MV danger notice plate of 200 mm x 150 mm made of mild steel, at least 2 mm thick, and vitreous enameled white on both sides, and with inscription in single red colour on front side as required.	1.0	Each		
		<b>PF 25 mm x 5 mm GI earth strip in pipe:</b>				
2	5.11	Providing and fixing 25 mm x 5 mm G.I. strip in 40 mm dia G.I. pipe from earth electrode, as required.	20.0	Meter		
		<b>P/F 25 mm x 5 mm GI earth strip in surface/ recess:</b>				
3	5.15	Providing and fixing 25 mm x 5 mm G.I. strip on surface or in recess for connections etc. as required.	40.0	Meter		
		<b>L.T CABLES</b>				
1		Supply and laying of aluminium conductor PVCinsulated armoured served sheathed cables 1100 Volts grade at a depth of 750 mm below ground level over a cushion of 75mm.thick sand all around and protected with burnt bricks on sides and on top. On surface the cable run shall be fixed on M.S. clamps ets. Of suitable size or as directed by the Engineer-incharge, complete in all respect. The armouring of the cable shall be properly connected with the conductor by clamps etc.				
(a)	MR(RA-17)	10sq.mm 4 core	60.0	Meter		
2		Supply and fixing of brass nickle plated compression gland for PVC insulated and armoured served shethed, underground cable including rubber ring etc. complete in all respect. The armouring of the cable shall be properly connected with the earth as per direction of Engineer-Incharge.				
(a)	2132	10sq.mm 4 core	16.0	Each		
		<b>Total</b>				

(Contractor)