

**PONDICHERRY UNIVERSITY
ELECTRICAL WING**

SCHEDULE OF WORK

Name of Work: Rewiring, replacing of old UG cables & fittings and Providing Power points to lab equipments at Food Science Department in the Pondicherry University.

S. No.	Description of Item	Qty.	Unit	Rate	Amount
1.	Rewiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FR PVC insulated copper conductor single core cable and 1.5 sq.mm FR PVC insulated copper conductor single core cable as earth wire in existing surface / recessed steel/ PVC conduit, including dismantling as required. Group -C Make: Polycab, Finolex, RR Kable. MK & Legrand.	70Pt.	point		
2.	Supplying and fixing following piano type switch/socket on the existing switch box/ cover including connections etc. as required. Make: Anchor/ Kundan. a. 5/6 amps switch b. 15/16 amp switch c. 3 pin 5/6 amps socket outlet d. 6 pin 15/16 amps socket outlet	160nos. 80nos. 100nos. 80nos.	Each Each Each Each		
3.	Supplying and fixing of following sizes of PVC conduit along with accessories in surface/recess conduit including cutting the wall and making good the same in case of recessed conduit as reqd. a. 20 mm b. 25 mm c. 32 mm	150mtr 100mtr 80mtr	Mtr Mtr Mtr		
4.	Supplying and fixing of following Modular front cover plates in modular computer desk/wall and suitable size of slot cutting in the partition of the modular computer desk etc., as required. Make: (Anchor/Legrand/MK) a. 9 modules. b. 12 modules.	40nos. 10nos.	Each Each		

5.	<p>Supplying and fixing surface type following Modular, PVC box suitable for fixing modular front cover plate, switch and socket. Make: (Anchor/Legrand/MK)</p> <p>a. 9 modules.</p> <p>b. 12 modules.</p>	20nos.	Each		
6.	<p>Supplying and fixing following modular switch/socket on the existing modular plate & switch box/ including connections but excluding modular plate etc. as required. Make: (Anchor/Legrand)</p> <p>a. 5/6 amps modular switch.</p> <p>b. 5/6 amps 3 pin modular socket.</p> <p>c. 15/16amps modular switch.</p> <p>d. 15/16amps 6pin modular socket</p>	100nos.	Each		
		100nos.	Each		
		30nos.	Each		
		30nos.	Each		
7.	<p>Providing and fixing on surface of the following size cable management system including all accessories such as external angle, internal angle, joint and end cap etc., complete as required. Make: (Legrand/MK) Plastic Trunking 50mm x 50mm.</p>	90mtr	Mtr		
8.	<p>Supplying and drawing following sizes of FR PVC insulated copper conductor, single core cable in the existing surface/recessed steel/ PVC conduit as required. make: Polycap/ Finolex/RR kable</p> <p>a. 3 x 1.5 sq mm</p> <p>b. 6 x 1.5 sq mm</p> <p>c. 3 x 2.5 sq mm</p> <p>d. 3 x 4 sq mm</p> <p>e. 6 x 4 sq mm</p> <p>f. 3 x 6 sq mm</p> <p>g. 4 x 10 sq mm + 2 x 6 sq mm</p>	200mtr	Mtr		
		150mtr	Mtr		
		150mtr	Mtr		
		200mtr	Mtr		
		100mtr	Mtr		
		100mtr	Mtr		
		70mtr	mtr		
9.	<p>Supplying and fixing metal box of following sizes (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including painting and suitable slot cutting etc as required.</p> <p>a. 200mm x 150mm x 60mm deep</p> <p>b. 200mm x 300mm 60mm deep</p>	20nos.	Each		
		25nos.	Each		

10	Supplying and fixing 3 pin, 5 amp. ceiling rose on the existing junction box/ wooden block including connection etc as required. Make: Anchor/ Kundan.	30nos.	Each		
11.	Supplying and fixing 20amps, 240 volts, SPN industrial type, socket outlet, with 2 pole and earth, metal enclosed plug top along with 20 amps SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required. (Legrand /Hager) (MDS Cat no. 6078 41).	12nos.	Each		
12.	Supplying and fixing 3mm thick phenolic laminated sheet cover on existing switch box / junction box / adopter box etc as required	7sq. m	Sq. m		
13.	Supply, Installation, testing and commissioning of following prewired fluorescent fittings/ with all accessories and tubes etc. directly on ceiling/ wall, including connections with 1.5 sq.mm PVC insulated, copper conductor FRLS single core cable etc., as reqd. a) 1 X 40 Watts / 36 Watts Box type fluorescent fittings. (Philips Cat No. TMS 021/136 LPF or Crompton Cat No. IGP1414 HSB)	55nos.	Each		
14.	Supply, Installation, testing and commissioning of 1200mm sweep ceiling fan, including wiring the down rod with 1.5 sq PVC insulated, copper conductor FRLS single core cable etc. as reqd.(with resistance type regulator)(Crompton RIVERA/ORIENT SUMMER COOL).	15nos.	Each		
15.	Supply, Installation testing & commissioning of industrial type exhaust fan of 300mm sweep, 1400 RPM with metallic blade and Louver/grill etc., in the existing opening, including making the hole to suit the size of the above fan, making good the damage, connections, testing, commissioning etc. as required (Exhaust fan shall be of Bajaj/USHA/Crompton Only)	7nos.	Each		

16.	Supplying, installation, testing and commissioning of SV lamp on existing outer wall of building. Including supplying and fixing suitable GI pipe bracket made out of 40mm dia "B" class GI pipe 1.2 mtr. length with suitable bracket, bent to required shape and with necessary clamps with bolts and nuts for fixing on wall giving connection with 3x2.5 sq mm wire, testing painting the bracket etc., as reqd. (SV lamp fitting shall be of Philips cat no. SGP401 1xSONT250W.	4nos.	Each		
17.	Supplying, installation, testing and commissioning of surface/ recess mounting, following way, double door vertical type, 415 volts, TPN MCB distribution board of sheet steel, dust protected, duly phosphatized and powder painted, inclusive of 200 amps tinned copper busbar, common neutral link, earth bar, din bar for mounting MCB's, detachable gland/ knock out plate, and interconnections between incomer and busbars of following ways (but without incomer and MCB's) as reqd. (Legrend/Hager). a. 8 way MDS Cat no. 6077 51	5nos.	Each		
18.	Supply and fixing 4 way MCB enclosure metal box.	15nos.	Each		
19.	Supplying and fixing of 4+12 way, pre wired single pole and neutral, sheet steel, MCB consumer unit, 240 volts, on surface / recess, complete with tinned copper busbar, neutral link, earth bar, din bar, hinged front Metalic double door for the MCB knobs, detachable gland plate, interconnections, including painting, earthing etc. as reqd. Make:(Legrend/Hager).	6nos.	Each		
20.	Supplying and fixing following rating, 'C' series, miniature circuit breaker suitable for lighting and other loads in the existing MCB DB complete with connections, testing and commissioning etc. as reqd. (Legrand/Hager). a. 63 amp 3 pole MCB. b. 32amp 2 pole MCB c. 40amp 2 pole MCB d. 40amp single pole MCB e. 6 amp to 32 amp single pole MCB. f. Single pole blanking plate.	8nos. 10nos. 10nos. 5nos. 80nos. 80nos.	Each Each Each Each Each Each		

21.	<p>Fabrication, supply, installation, testing and commissioning of MV compartmentalized cubicle panel board, free standing fabricated out of 2mm thick MS sheet steel, totally enclosed dust and vermin proof, suitable for operation on 3 phase 415 V, 4 wire AC supply system, having suitable cable entry arrangement with detachable gland plate, duly powder coated, including supply and fixing the following switch gear, interconnection with suitable size Aluminium strips/bars connections, suitable base frame earthing labeling etc with cable chamber, Aluminium busbar chamber conforming to section-4 of CPWD specification for Electrical works part IV substation 1982 etc., complete as required. The panel size not less than 1m x 1.9m. Make: L&T.</p> <p><u>A. Incoming.</u></p> <p>a. 250A TPN/415V/50Hz SDFU with DIN type HRC fuses- 1No.</p> <p>b. 0-500V, VAF meter with inbuilt selector switch, CTs and protective fuses etc - 1set.</p> <p>c. Phase indicating lamps with switches.... 1 set.</p> <p>d. 300A 4 strip Aluminium Busbar chamber with necessary interconnections ...1set.</p> <p><u>B. Outgoing.</u></p> <p>a. 125 A TPN/415V/50hz SDFU with DIN type HRC fuses..... 3 Nos.</p> <p>b. 200 A TPN/415V/50hz SDFU with DIN type HRC fuses..... 1 Nos.</p> <p>c. G.I.Earth bus of suitable size with earth studs at both ends 1 No.</p> <p>d. Danger notice plate 1 No.</p>	1job.	Job.		
22.	<p>Supplying and fixing following TPN/415/50HZ Switch Disconnected Fuse Unit with DIN type fuse including enclosure in the existing panel board and supplying fixing suitable size Alu bus linking from bus bar to switch. Make L&T, GE.</p> <p>a. 200A TPN SDFU</p>	1no.	Each		
23.	<p>Supplying and fixing of 125A TPN/415/50HZ Switch Disconnected Fuse Unit with DIN type fuse in the existing panel board and supplying fixing suitable size Alu bus linking from bus bar to switch. Make L&T, GE.</p>	2nos.	Each		

24.	Supply of following size of XLPE insulated, sheathed armoured UG aluminium conductor power cable 1.1 KV grade as required. (make: Polycab, Havells) a. 4 x 50 sq mm. b. 3.5 x 120 sq mm.	300mtr 100mtr	Each Each		
25.	Laying of one number PVC insulated and PVC sheathed / XLPE power cable 1.1 KV grade of size exceeding 25 sq.mm but not exceeding 120sq.mm direct in ground i/c excavation, sand cushioning, protective covering and refilling the trench etc as reqd.	140mtr	Mtr		
26.	Laying of one number PVC insulated and PVC sheathed/XLPE power cable of 1.1 KV grade of size exceeding 25 sq. mm but not exceeding 400sq.mm in the existing RCC/HUME/STONEWEAR/METAL/ON SURFACE/IN SAME TRENCH as required.	260mtr	Mtr		
27.	Supplying and making end termination with brass compression gland and aluminum lugs for following size of PVC insulated and PVC sheathed/XLPE alu conductor cable of 1.1kv grade as required. a. 4 x 50 sq mm. b. 3.5 x120 sq mm.	10nos. 2nos.	Each Each		
28.	Earthing with G.I. earth pipe 4.5 mtr long, 40 mm dia (medium class) including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal and salt as required.	3 set	set		
29.	Providing and fixing 25mm x 5mm copper strip on surface or in recess for connections etc., as required.	12m	mtr		
30.	Providing and fixing 8 SWG dia copper wire on surface or in recess for loop earthing as required.	80m	mtr		
31.	Supplying and making cable route marker with cement concrete 1:2:4(1 cement: 2 coarse sand: 4 Graded stone aggregate 20 mm nominal size)of size 30cm x 30cm x 30cm at the bottom with 35mm x 35mm x 6mm iron angle 60 cm long and 10cm x 10cm x 6mm thick GI plate mark of (PU LT CABLE) fixed in the iron angle as required.	15nos.	Each		
					Total

