

**Name of work:** Providing Electrical arrangements to Construction of Government Arts and Science College at Jambukulam (Sholinkar) in Ranipettai District.

EMD: Rs. 36500/-			Date of Tender 20.04.22		
Sl. No.	Approximate Quantity	Description of Work	Rate in Figure & in Words	Per	Amount
1	666 Pts (Six hundred and sixty six points)	Wiring with 2x1.5 sqmm (22/0.3) PVC insulated SC unsheathed Cu.Conductor of 1100V grade in suitable PVC rigid pipe concealed in wall and ceiling with PVC accessories in flush with wall with 3mm thick hylum sheet cover with TW switch box and 5A F.T. switch and making good of the concealed portion with suitable colour for PVC concealed light / Fan Point (For electronic regulator) (5 Points Per Coil)		1 Pt (One point)	
2	63 pts (Sixty three points)	Wiring with 2x1.5 sqmm (22/0.3) PVC insulated SC unsheathed Cu.Conductor of 1100V grade in suitable PVC rigid pipe concealed in wall and ceiling with PVC accessories in flush with wall with 3mm thick hylum sheet cover with TW switch box and 5A F.T. switch and making good of the concealed portion with suitable colour for PVC concealed light (6 Points Per Coil) (For Rooms like Bath, Toilet,& Pump room etc..)		1 Pt (One point)	
3	12 pts (Twelve points)	Wiring with 3 x 1.5sqmm(22/0.3) PVC insulated SC unsheathed Cu.Conductor of 1100V grade in suitable PVC rigid pipe concealed in wall and ceiling with PVC accessories in flush with wall with 3mm thick hylem sheet covered TW switch box and 5A F.T. switch (Two way) and making good of the concealed portion with suitable colour for concealed staircase light point.		1 Pt (One point)	

4	83 Nos (Eighty three numbers)	Supply and fixing of single box type 4'18 W LED fitting complete (Higher end)with TW round blocks on wall or ceiling with LED tube with PVC unsheathed Copper leads from terminals to the fitting.		1 No (Each)	
5	183 Nos (One hundred and eighty three numbers)	Supply and fixing of single box type 4'18 W LED fitting complete (Higher end) with conduit pipe suspension from the ceiling with PVC unsheathed Copper leads from terminals to the fitting with LED tube.		1 No (Each)	
6	14 Nos (Fourteen numbers)	Supply and fixing of single box type 4'18 W LED fitting complete with electronic driver (Higher end)with enamel reflector in suitable Al frame on wall with TW round blocks on wall or ceiling with flu tube with PVC unsheathed Copper leads from terminals to the fitting.(Chalk Board fitting)		1 No (Each)	
7	141 Nos (One hundred and forty one numbers)	Supply and fixing of 4' 18 W Twin box type fitting with 4'18 W LED tubes(Higher end) complete with conduit pipe suspension, with PVC unsheathed Copper leads from the terminals to the fittings with LED tubes.		1 No (Each)	
8	10 Nos (Ten numbers)	Supply and fixing of 2x 2 LED 24 W 4000k square type Recessed fitting (Higher end) Complete on wall or ceiling with PVC unsheath leads from terminal to the fitting		1 No (Each)	

9	9 Nos (Nine numbers)	Supply and fixing of 2x 2 LED 4000k square type Recessed fitting (Higher end) Complete with 1.0 meter MS chain arrangements on ceiling with PVC unloaded leads from terminal to the fitting		1 No (Each)	
10	224 Nos (Two hundred and twenty four numbers)	Supply and fixing of 1200 mm (48") AC ceiling fan complete with stepped electronic 300W regulator with 500mm down rod on the existing clamp.(Higher end)		1 No (Each)	
11	16 Nos (Sixteen numbers)	Supply and fixing of 375 mm (15") sweep (light duty) AC exhaust fan complete without wall opening in the wall.		1 No (Each)	
12	16 Nos (Sixteen numbers)	Supply and fixing of louvers shutters arrangements for 375 mm (15") sweep light duty AC Exhaust fan.		1 No (Each)	
13	35 Nos (Thirty five numbers)	Supply and fixing of 9W LED lamp with Battern Holder on wall and Ceiling (Higher end)		1 No (Each)	

14	160 Nos (One hundred and sixty numbers)	Supply and fixing of 3 Nos. 5Amps (3 Pin and 2 Pin) combined flush type wall socket with control switches concealed in suitable TW Box covered with Hylem sheet in flush with wall with earth connection (For Computer Plug Socket)		1 No (Each)	
15	57 Nos (Fifty seven numbers)	Supply and fixing of 5A / 15 A 3 Pin combined flush type wall socket with 15A flush type switch concealed in suitable MS Box in flush with wall and covered with 3 mm thick hylem sheet.		1 No (Each)	
16	28 Nos (Twenty eight numbers)	Supply and fixing of 20Amps DP Plug and Socket in sheet steel enclosure with 32A DP MCB in flush with wall with earth connection (For AC Plug) [Higher end]		1 No (Each)	
17	3 Nos (Three numbers)	Supply and fixing of 63Amps FP sheet steel enclosure with 63A FP MCB in flush with wall with earth connection [Higher end ](UPS I/C main)		1 No (Each)	
18	20 Nos (Twenty numbers)	Supply and fixing of 8 way single pole and neutral MCB sheet steel enclosure Distribution board with IP 42 protection metal Double door type with 1No 32 Amps DP MCB as incoming and 6 Nos 6 Amps to 32 Amps SPMCB outgoing in flush with wall and making good of the concealed portion with earth connection only. The MCB DB and MCB's should be with ISI mark (Higher end)		1 No (Each)	

19	5 Nos (Five numbers)	Supply and fixing of 300mm 12" sweep AC exhaust fan complete without provision of hole in the wall.		1 No (Each)	
20	5 Nos (Five numbers)	Supply and fixing of louvers shutters arrangements for 300 mm (12") sweep AC Exhaust fan.		1 No (Each)	
21	3 Nos (Three numbers)	Supply and fixing of 3 phase 4 way vertical type MCB distribution board in sheet steel enclosure with IP 42 protection metal Double door type with 63A 4 pole MCB 10ka as incoming 3nos. 32A TP MCB10Ka,3nos. 32A SP MCB10Ka .as outgoing in flush with wall and making good of the concealed portion with earth connection. The MCBDB and MCB's should be with the ISI mark(Higher end)		1 No (Each)	
22	1 No (One number)	Supply and fixing of vertical type 4way triple pole neutral MCB DB x3 160 distribution board in sheet steel enclosure with IP 42 protection metal Double door type with 100A 4 pole MCCB 10ka as incoming 4nos. 63A TP MCB16Ka as outgoing in flush with wall and making good of the concealed portion with earth connection. The MCBDB and MCB's should be with the ISI mark(Higher end) Pump room		1 No (Each)	
23	21 Nos (Twenty one numbers)	Supply and fixing of 30W LED street light fitting Crompton with GI pipe (Class 'B') with bend complete on the existing post or wall with PVC unsheathed Copper leads MS clamps and aluminium painting (Higher end)		1 No (Each)	

24	10 Nos (Ten numbers)	Supply and fixing of 12 way single pole and neutral MCB sheet steel enclosure Distribution board with IP 42 protection metal Double door type with 1No 32 Amps DP MCB as incoming and 10 Nos 6 Amps to 32 Amps SPMCB outgoing in flush with wall and making good of the concealed portion with earth connection only. The MCB DB and MCB's should be with ISI mark (Higher end) (For Computer Plug DB)		1 No (Each)	
25	7 Nos (Seven numbers)	Supply and fixing of type 4way 7 segment TPN sheet steel IP 42 protection metal Double door type distribution board with 63A 4 pole MCB 10Ka and 63 A FP ELCB 30 MA as incoming and 3 Nos 63A MCB Isolator as sub incomer 32A sp MCB 12 No.10Kaas outgoing in flush with wall and making good of the concealed portion with earth connection. The MCBDB and MCB's should be with the ISI mark(Higher end)		1 No (Each)	
26	2 Nos (Two numbers)	Supply and fixing of three phase 8 way vertical type MCB distribution board in sheet steel enclosure with IP 42 protection metal Double door type with 125 4 pole MCCB 10ka as incoming 4 nos. 63A TP MCB10Ka,12nos. 32A SP MCB10Ka as outgoing on suitable AI frame work with MS cable entry boxes with earth connection. The MCCBDB MCCB and MCB's should be with the ISI mark(Higher end)(I & II Floor main DB)		1 No (Each)	
27	668 mts (Six hundred and sixty eight metres)	Supply and run of 2 of 1.5 sqmm (22/0.3) PVC insulated SC unsheathed Cu.Conductor of 1100V Grade in suitable PVC rigid pipe concealed in wall and ceiling with continuous earth wire connection of 14 SWG TC wire and making good of the concealed portion with suitable colour.		1 Mt (One Metre)	

28	870 mts (Eight hundred and seventy metres)	Supply and run of 2 of 2.5 sqmm (36/0.3) PVC insulated SC unsheathed Cu.Conductor of 1100V Grade in suitable PVC rigid pipe concealed in wall and ceiling with continuous earth wire connection of 14 SWG TC wire and making good of the concealed portion with suitable colour.		1 Mt (One Metre)	
29	1491 mts (One thousand four hundred and ninety one metres)	Supply and run of 2 of 4 sqmm (56/0.3) PVC insulated SC unsheathed Cu.Conductor of 1100V Grade in suitable PVC rigid pipe concealed in wall and ceiling with continuous earth wire connection of 14 SWG TC wire and making good of the concealed portion with suitable colour.		1 Mt (One Metre)	
30	177 mts (One hundred and seventy seven metres)	Supply and run of 2 of 6 sqmm (65/0.3) PVC insulated SC unsheathed Cu.Conductor of 1100V Grade in suitable PVC rigid pipe concealed in wall and ceiling with continuous earth wire connection of 14 SWG TC wire and making good of the concealed portion with suitable colour (lab, computer room 40A double pole single MCB DB)		1 Mt (One Metre)	
31	84 mts (Eighty four metres)	Supply and run of 4 of 6 sqmm (65/0.3) PVC insulated SC unsheathed Cu.Conductor of 1100V Grade in suitable PVC rigid pipe concealed in wall and ceiling with continuous earth wire connection of 14 SWG TC wire and making good of the concealed portion with suitable colour (lab, computer room 40A double pole single MCB DB)		1 Mt (One Metre)	
32	246 mts (Two hundred and forty six metres)	Supply and run of 4 of 10 sqmm (140/0.3) PVC insulated SC unsheathed Cu.Conductor of 1100V Grade in suitable PVC rigid pipe concealed in wall and ceiling with continuous earth wire connection of 14 SWG TC wire and making good of the concealed portion with suitable colour.		1 Mt (One Metre)	

33	139 mts (One hundred and thirty nine metres)	Supply and run of 4 of 16 sqmm (101/0.45) PVC insulated SC unsheathed Cu.Conductor of 1100V Grade in suitable PVC rigid pipe concealed in wall and ceiling with continuous earth wire connection of 14 SWG TC wire and making good of the concealed portion with suitable colour.		1 Mt (One Metre)	
34	90 mts (Ninety metres)	Supply and laying of 3 1/2 X 240sq.mm PVC armoured LTUG cable in a trench to be excavated at a depth of 0.75 metre putting 0.15 mt. Layer of sand and covering the cable completely with the brickks bricks and sand refilling the earth to make good.		1 Mt (One Metre)	
35	20 mts (Twenty metres)	Supply and clamping of 3 1/2 X 240 sq.mm PVC LTUG armoured LTUG cable on post or on wall with MS Clamps.		1 Mt (One Metre)	
36	10 mts (Ten metres)	Supply and laying of 3 1/2 X 240 sq.mm PVC armoured LTUG cable in GI pipe a trench to be excavated at a depth of 0.75 metre putting 0.15 mt. with sand refilling the earth to make good.		1 Mt (One Metre)	
37	20 mts (Twenty metres)	Supply and clamping of 3 1/2 X 240 sq.mm PVC LTUG armoured LTUG cable in GI pipe on post or on wall with MS Clamps.		1 Mt (One Metre)	



38	6 Nos (Six numbers)	Supply and fixing of brass cable gland for 31/2 x 240 sq.mm PVC armoured LTUG cable with earth connection.		1 No (Each)	
39	6 Nos (Six numbers)	Supply and providing cable end termination of 3 1/2 x 240 sq.mm PVC LTUG Aluminum armoured cable with necessary aluminium cable sockets by crimping etc. with electrical connection complete.		1 Mt (One Metre)	
40	1 No (One number)	Supply and fixing of 400 Amps TPN sheet double break switch with HRC fuse and neutral on suitable angle iron framework with MS cable entry boxes and with earth connection only.		1 No (Each)	
41	1 No (One number)	Supply and fixing of 32 Amps DP Switch of 500 V with metal clad with fuse and neutral (Side Handle) on suitable TW Board , with earth connection only (street light)		1 No (Each)	
42	2 Nos (Two numbers)	Supply and fixing of 63A TPNMC switch on suitable angle iron frame work with MS cable entry box with earth connection only(Pump room)		1 No (Each)	

43	1 No (One number)	<p>Fabrication, Errection, Testing and commissioning of pedestal mounted pillar box made out of 16SWG CRCA MS Sheet of size 48"x48"x18" out door Type with double compartment and with angle iron stiffener with front open doors for each compartment with lock and key facilities with sealing (TNEB Type) arrangement with dust and Vermin proof and space for fixing TNEB Electronic type energy meter suitable for 3 phase 415 V 4wire 50 HZ AC supply having 400A Capacity Copper Bus bar on suitable bus insulators and provision for mounting 3 Nos C.T.S of 400/5A for incoming to the energy meter and supply and fixing of 3 Nos.</p> <ol style="list-style-type: none"> <li>1. 400A fuse Units and neutral link on 6mm Thick Hylum sheet and provision for cable entry for both incoming and outgoing cables at the bottom and painting the board with Two coats of anti-corrosive paint of approved colour with earth connection and comprising the following.</li> <li>1. 3 Nos 1" x 1/2" &amp; 1 No. 1" x 1/4" copper bus bar on suitable bus support insulators with 3 Nos. 300/5A CTS in the bus bar compartment.</li> <li>2. 3 Nos. 400A fuse unit and 1 No. 250A neutral link on 6mm thick hylem sheet.</li> <li>3. 2 Nos earth bus of 1"x1/8" Copper flat at rear side.</li> <li>4. Base channel fixed at the bottom of pillar box.</li> <li>5. View glasses fixed with at both compartments.</li> <li>6. Caution / Danger board</li> <li>7. For meter wiring should be made with identification ferules</li> <li>8. The whole arrangements should be errected on suitable masonary pedestal</li> </ol>		1 No (Each)	
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44	1 No (One number)	<p>Supply and Erection of 400A capacity Dust and Vermin Proof Cubical <b>Panel Board</b> made up of 16 SWG CRCA steel with supply and fixing of the following interior mounting fuse switches with HRC fuses arranged in two Horizontal rows with one switch over the other with a central bus bar chamber and two nos of Horizontal cable chambers at the two ends one on each side next to the fuse switch chamber and confirming to IE rules.</p> <p>1. 400A TPN interior mounting disconnecter fuse switch with HRC fuses 2 Nos with interlocking arrangements.</p> <p>2. 200A TPN interior mounting disconnecter fuse switch with HRC fuses 2 nos</p> <p>3. 100A TPN interior mounting disconnecter fuse switch with HRC fuses 5nos</p> <p>4. 63A TPN interior mounting disconnecter fuse switch with HRC fuses - 5 Nos.</p> <p>(All the switches are Higher end make only)</p> <p>The bus bar chamber will consist of 4nos of suitable size of copper flat for phase and neutral buses on epoxy moulded bus insulators at proper and sufficient spacing between the buses as per IE rules. This busbar chamber should be segregated from the adjacent chambers by providing hylem sheet of suitable thickness as partisans suitable size of copper flats should be provided all round the panel for earth bus.</p> <p>The fuse switches should be connected with the phase and neutral buses with suitable size of copper rod or flat and each switch should be connected with earth with 2 runs of No:8 SWG rigid copper rod with suitable lugs switches should be connected to the buses by suitable size of rigid copper rod/flat. Phase and neutral copper buses should be tinned properly.</p>		1 No (Each)	
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45	1 No (One number)	Supply and fixing of Gong Bell 12" on suitable angle iron frame work with necessary connections and push bell suitable for 230V A.C. supply.		1 No (Each)	
46	1 No (One number)	Supply and fixing of 3 Phase 400A aerial fuse unit for 3 Nos 400A fuse units (500V) on suitable MS sheet covered with 6mm thick hylem sheet on suitable angle iron work the tapping pole with necessary clamps.		1 No (Each)	
47	20 Nos (Twenty numbers)	Supply and fixing of cable route indicator with suitable angle with not less than 38mm x 38mm x 6mm and 0.60mtrs long excavation of earth to a depth of 0.60m and concreting the ground level and making good of the ground as directed by the departmental officers.		1 No (Each)	

48	11 Nos (Eleven numbers)	Earthing as per the ISI specification with an earth electrode of 2.1mt class 'B' GI pipe of dia not less than 40mm, with copper earth plate of size 125mm x 50mm x 6mm, with necessary funneling arrangements with necessary masonry work and with 38mm RCC cover slab for the brick masonry .		1 No (Each)		
49	78 mts (Seventy eight metres)	Supply and run of No.8 copper conductor for earth connection		1 Mt (One Metre)		
			TOTAL			
		12%	GST			
			GRAND TOTAL			
		49 Items (Forty nine items)				