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SIRKALI TALUK-609 109, MAYILADUTHURAI DISTRICT, TAMIL NADU
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II. TENDER FORM FOR ELECTRICAL WORKS

Name of the Work: Providing Electrical Work for RGCA's GIFT project at Manikoda Village, Krishna District in Andhra Pradesh.

S No	Description of the items	Quantity	Rate per Unit	Amount
1	Supply and Fixing of 25mm outer dia medium grade (1.8 mm thick) confirms to IS:9537 part 3 FRLS rigid P.V.C. pipe (ISI marked) concealed in wall with all required MS junction boxes and all accessories including masonry work for run of mains including all labour charges etc., complete	900 RM		
2	Supply and Fixing of 25mm outer dia medium grade (1.8 mm thick) confirms to IS:9537 part 3 FRLS rigid Surface P.V.C. pipe (ISI marked) on wall with all required PVC Junction Boxes confirms to IS : 3419 and all accessories for run of mains including all labour charges etc., complete	465 RM		
3	Wiring with 2 runs of 22/0.3mm (1.5 Sq.mm) FRLS / FRLSH / HFFR / ZHFR P.V.C. insulated 1100V grade as per IS : 694 / 1990 specification flexible copper cable (ISI marked) in existing pipe with 6A Modular switch (ISI marked) with cover plate, Ceiling rose/BH/ SBH, including all labour charges etc., complete for Light, Bell, Fan and Exhaust Fan points etc., complete LIGHT POINT WITH MODULAR SWITCH	85 PTS		
4	Supply and Fixing of one module PVC blanking plate (safety dummy plate for empty module) for closing the dummy blank modules in the modular switch board for ensuring safety etc., complete.	25 PTS		
5	Supply and Fixing of 6 Amps modular type (ISI marked) switch, and 6 A 3/2 pin Modular type socket with cover plate on a common switch board including giving all connections and all labour charges etc., complete. MODULAR SOCKET ON COMMON BOARD	17 PTS		
6	Wiring with 2 of 22/0.3mm (1.5 Sq.mm) FRLS / FRLSH / HFFR / ZHFR P.V.C. insulated 1100V grade as per IS : 694 / 1990 specification flexible copper cable (ISI marked) in existing pipe with 6A (ISI marked) modular type switches and 6A, 3/2 pin modular type socket with cover plate fixing on existing, separate modular switch box including all labour charges etc., complete. 6A MODULAR SOCKET ON SEPARATE BOARD WITH WIRING	1 PT		
7	Supply and fixing of 3 No of 6A (ISI marked) modular type switches with 3 No of 6A, 3/2 pin modular type sockets with	13 PTS		

	cover plate on suitable hot dip galvanized 20/18 SWG MS modular metal switch box with earthing terminal including all labour charges, giving all connections etc., complete for LABs & Computer Use. (3 No switches and 3 No sockets) for LABs, UPS, Sockets for BEDS			
8	Supply and fixing of 16A/6A, 2 in one, modular type socket with 16A switch (ISI marked) modular type with cover plate on existing modular metal switch box including all labour charges, giving all connections etc., complete. 16A MODULAR SWITCH ON 16A MODULAR SOCKET	15 Nos		
9	Supply and Fixing of of 20A, modular type power socket outlet with 20A switch (ISI marked) modular type with front cover plate on existing modular metal switch box including all labour charges, giving all connections etc., complete with following configurations (1 No 20A Switch + 1 No 20A Socket) for Computer, LAB and OTs Use	1 No		
10	Supply and run of 1 of 22 /0.3mm (1.5 Sq.mm) FRLS / FRLSH / HFFR / ZHFR P.V.C. insulated 1100V grade as per IS : 694 / 1990 specification flexible copper cable in existing pipe for earth continuity including all labour charges etc., complete	115 RM		
11	Supply and run of 3 of 22 /0.3mm (1.5 Sq.mm) FRLS / FRLSH / HFFR / ZHFR P.V.C. insulated 1100V grade as per IS : 694 / 1990 specification flexible copper cable in existing pipe for mains continuity including all labour charges etc., complete.	210 RM		
12	Supply and run of 3 of 2.5 sq.mm (phase neutral and earth) FRLS / FRLSH / HFFR / ZHFR P.V.C. insulated 1100V grade as per IS : 694 / 1990 specification flexible copper cable in existing MS conduit pipe for individual lighting circuits including labour charges etc., complete as required for switch boards.	420RM		
13	Supply and 3 runs of 4.0 sq mm (phase neutral and earth) FRLS / FRLSH / HFFR / ZHFR P.V.C. insulated 1100V grade as per IS : 694 / 1990 specification flexible copper cable in existing conduit pipe for run of mains including labour charges etc., complete as required including labour charges for 16A sockets.	420 RM		
14	Supply & run of 3 of 6.0 Sqmm (84/0.3mm) (phase neutral and earth) FRLS / FRLSH / HFFR / ZHFR P.V.C. insulated 1100V grade as per IS : 694 / 1990 specification flexible copper cable in existing MS conduit pipe for run of mains including labour charges etc. complete for AC points & SDB's etc as required.	240 RM		
15	Supply and run of 5 of 6 Sq mm (phases, neutral and earth) FRLS / FRLSH / HFFR / ZHFR P.V.C. insulated 1100V grade as per IS : 694 / 1990 specification flexible copper cable in existing MS conduit pipe for circuits including labour charges etc. complete as required for run of mains from Lighting	40 RM		

	panel board to TPN DB'S with pin type lugs and connections. [for LDBs]			
16	Supply & run of 5 of 10.0 Sqmm (phases, neutral and earth) FRLS / FRLSH / HFFR / ZHFR P.V.C. insulated 1100V grade as per IS : 694 / 1990 specification flexible copper cable in the existing conduct pipe for run of mains from Power panel board to TPN DB"s with pin type lugs and connections etc., complete. [for PDBs]	40 RM		
17	DISTRIBUTION BOARDS DB for Air-conditioners (AC Box) Flush Mounting Supply and Fixing of single phase DB in sheet steel enclosure as per IS 8623; IS 13032; IEC 61439-3 with metallic plug and socket with 1 No. 20/32A,10KA 'c' curve SPMCB control including labour charges and giving connections etc., complete concealed in wall.	6 Nos		
18	Supply and fixing of TPN 6 way distribution board with IP-43 protection and as per IS 8623; IS 13032; IEC 61439-3, (8+18 Module) with provision to accommodate the ELCB incomer and suitable for single pole outgoing MCB's in sheet steel enclosure with 40A,10 KA breaking capacity 'c' curve 4 pole MCB as incomer and 18 No of 6 to 32A single pole, 10 KA breaking capacity 'c' curve MCBs as outgoing including making connections etc., complete concealed in wall 6-way TPN Lighting DB (LDB) Flush Mounting	1 No		
19	Supply and fixing of TPN 6 way distribution board with IP-43 protection and as per IS 8623; IS 13032; IEC 61439-3, (8+18 Module) with provision to accommodate the ELCB incomer and suitable for single pole outgoing MCB's in sheet steel enclosure with 63A, 10 KA breaking capacity 'c' curve 4 pole MCB as incomer and 18 No of 6 to 32A single pole, 10 KA breaking capacity 'c' curve MCBs as outgoing including making connections etc., complete concealed in wall. (LIGHTING DB) 6-way TPN Power DB (PDB) Flush Mounting	1 No		
20	Supply and fixing of SPN 12 way distribution board with IP-43 protection and as per IS 8623; IS 13032; IEC 61439-3 suitable for single pole outgoing MCB's in sheet steel enclosure with 40A, 10 KA breaking capacity 'c' curve DP MCB as incomer and 10 No of 6 to 32A single pole, 10 KA breaking capacity 'c' curve MCBs as outgoing including making connections etc., 12-way SPN DB Flush Mounting	2 Nos		
21	Supply and Fixing of 6-32A, 10 KA breaking capacity 'c' curve double pole MCB in sheet steel DP enclosure with IP 20 Protection etc., complete as per IS 8623; IS 13032; IEC 61439-3 including making connections etc., complete on wall. [for UPS Input/Output control etc.,] 6-32A, DP MCB in SS Enclosure (for UPS Input/Output control et	2 Nos		

22	Supply and fixing of VTPN DB, 8 way vertical type MCCB distribution board with IP-43 protection and as per IS 8623; IS 13032; IEC 61439-3, suitable to accommodate MCCB as incomer and single/three pole MCBs as outgoing with 125A, 4 Pole MCCB adjustable, conforms to IEC 60947-2 and IS 13947-Part 1&2 having Breaking Capacity 25 KA with thermal magnetic release as incomer with 6 No of 40/63A, 10 KA TP MCBs 'c' curve and 6 No, 6-32A, 10 kA SP MCBs 'c' curve as outgoing including making connections and labour charges etc., complete on wall. 8-way Vertical Type MCCB D.B Surface Mounting	1 No		
23	Supply and fixing of Cable adopter/Cable end box with cover suitable for 6-way TPN, IP-43 protection DBs including, masanary work etc., complete for concealed mounting. CABLE ADOPTER BOXES (CABLE END BOXES) FOR DISTRIBUTION BOARDS CONCEALED MOUNTING	2 Nos		
24	Providing independent earthing for Important equipment with 40mm dia 'B' class 2.5m long G.I pipe and 19mm dia 'B' class G.I pipe of 0.3mtr. long connected with reducer providing G.I funnel with mesh enclosed in C.C.Chamber of 400m x 400m x 400mm with R.C.C. Slab cover duly providing staggered holes filling with salt and charcoal from the bottom of the pipe giving earth connection from electrode through G.I strip of 40 x 6mm x 200mm length with all accessories and labour charges complete	1 No		
25	Providing independent earthing for Sophisticated Electronic equipment with 600mm x 600mm x 3.15mm thick copper plate rigidly fixed to 40mm dia G.I Pipe of 2.5 mtr length connected with reducer providing G.I funnel with wire mesh as per National Electric Code including C.C.Chamber of size 400m x 400m x 400mm covered with R.C.C. Slab filling with salt and charcoal giving earth connection from electrode with Copper strip of 25mm x 5mm x 200mm length to be bolted with nut bolts to G.I.pipe including 25mm x 3mm copper strip of 6Mtrs length connected from plate to Copper strip with all accessories and labour charges complete	1 No		
26	Supply and Run of 25mm x 6mm G.I Strip including cost of all accessories and labour charges etc., complete.	30 RM		
27	Supply and Run of 25mm x 3mm copper strip including cost of all accessories and labour charges etc	30 RM		
28	Supply and Fixing of 18W/20W, 1200mm length LED batten light with extruded alluminium housing and polycarbonate cover, input voltage AC 220 - 260 Volts with PF>0.9, Surge protection: 2KV,THD<15%, with inbuilt driver and frosted cover CCT: 3000K - 5700K, minimum CRI>70, .etc., complete including fixing on wall / Ceiling with PVC/TW round blocks with all accessories including giving connections and all labour charges etc., complete.	18 Nos		
29	Supply and Fixing of heavy duty 18 W LED Down lighter, suitable for recessed/surface mounting made of diecast alluminium body with powder coating, acrylic diffuser with	30 Nos		

	Driver as per IS: 15885 (Part 2/ Sec 13) : 2012 , operating voltage range of 150 to 265 Volts AC, P.F > 0.9, Surge protection: 2KV, THD<10% with high power LED's having efficacy of > 100 lumens / watt, CCT: 3000K - 5700K, minimum CRI > 70, luminaire performance complies to IS 10322 (Part 5 / Sec-3) etc., complete including fixing in the ceiling with recessed/surface mounting, cost of all accessories and giving connections etc., complete			
30	Supply, transportation and fixing of 36W Recessed/Surface mounting 2' x 2' (600x 600 mm) LED luminaire made of CRCA sheet housing with powder coated with acrylic diffuser, Constant current Driver as per IS: 15885 (Part 2/ Sec 13) : 2012 , With System lumen output ≥ 3200lm operating voltage range of 150 to 265 Volts AC, P.F > 0.9, Surge protection: 2KV, THD<10%, with high power LED's having efficacy of > 100 lumens / watt, CCT: 3000K - 5700K, minimum CRI>70 etc., complete including fixing in the ceiling with recessed/surface mounting, cost of all accessories and giving connections etc., complete	8 Nos		
31	Supply and Fixing of batten holder/angle holder on existing block with 5W LED Lamp with input voltage 90 to 300V, Colour temperature 3000k - 6500k, Beam angle 170 - 220 degrees, B22 base and all labour charges etc., complete	5 Nos		
32	Supply and Transportation of 48" (1200mm) Sweep 5 star rated Ceiling Fan, with double ball bearings, air delivery more than 200 cubic meter/min but without Regulator.	18 Nos		
33	Supply and fixing of Modular type 2- Module, Electronic fan regulator hum free step type socket size in the existing switch board	18 Nos		
34	Labour charges for fixing of ceiling fan including transportation and giving connections with 3 core wire leads etc complete	18 Nos		
35	Supply and erecting 19/20mm steel tube down rod of one meter length with bolts & nuts duly painted with matching colour of fan complete	18 Nos		
36	Supply and Transportation of 12" (300mm) Light duty exhaust fan with metallic blades and wire guard etc complete.	4 Nos		
37	Supply and Transportation of 12" (300mm) ISI, 900 RPM Heavy duty exhaust fan with metallic blades	1No		
38	Labour charges for fixing of Exhaust fan in wall with necessary connections and masonry work of making hole, finishing etc., complete	5 Nos		
39	Supply and fixing of louver shutter suitable for 12" Exhaust fan including all labour charges etc complete with connections and colouring matching to the wall with enamel paint.	5 Nos		
40	Supply and transportation of following XLPE insulated, 1100V grade armoured alluminium cable 3.5 core, 50 Sq.mm	100 RM		

41	Earth work excavation of Trench in hard ground soil, laying of U.G cables upto 50 Sq,mm on sand cushion covering the cable with bricks and back filling of Trench duly providing route indicator embedded in C.C including cost and conveyance of materials and labour charges etc., complete.	50 RM		
42	Labour charges for run of U.G cables upto 50 sq.mm on wall with necessary fixing arrangements such as saddles, clamps etc., as directed by department including cost and conveyance of all materials etc., complete.	20 RM		
43	Labour charges for run of armoured U.G cables upto 50 Sq.mm in existing cable trench/cable duct/ cable tray/hume pipe/G.I. pipe with necessary fixing arrangements such as cable ties etc., as directed by department at site.	25 RM		
44	Supply and making one end termination with heavy duty double compression brass gland as per BS 6121:2005 ,IP 66 complete, SIBG type, heavy duty Alluminium lugs duly crimped with crimping tool, PVC tape etc for following size of Armoured PVC insulated & PVC sheathed/ XLPE aluminium conductor cable of 1100 volt grade as required of size. 3.5 core, 50 Sq.mm	2 SETS		
45	Supply, transportation & installation of following sizes of Hot Dipped Galvanized Iron perforated cable trays without cover, including horizontal and vertical bends, reducers tees,cross members and other accessories as required and duly suspended from the ceiling/Wall with suspenders etc., complete 150mm X 50mm X 1.6mm size	10 RM		
	FOR LAN			
46	Supply, laying, testing and commissioning of 4-pair, Cat-6 Solid (Third party ETL Intertek tested 600 MHZ above) to support 1Gbps with Cross (+) filler pair separator & PVC sheath 23 AWG, UTP Cable , Meets or exceeds ANSI/TIA-568-C.2 and UL Listed &RoHS Compliant in the existing raceways /pvc conduits including making connections to information outlets and patch panels with ferruling at both ends for identification with necessary tools for punching stripping crimping and testing required etc., complete	260 RM		
47	Supply and Fixing installation testing and commissioning of 1no of Cat-6 Toolless built-in crimping mechanism Information Outlet with Dust Cover Exceed ANSI/TIA-568-C.2 and ISO/IEC 11801 standards with 1module face plate for Category 6 component performance & Compatible to T568A,T568B wiring pattern and UL-94V0 Rated Plastic &RoHS Compliant.	13 Nos		
	PUBLIC ADDRESS SYSTEM			
48	Supply and installation testing and commissioning of 15 Watt column speaker (Makes: Philips/eqvt) including cost all taxes etc complete for finished item of work as directed	6 Nos		
49	Supply of wire less Hand Held Microphone with receiver Model No: PVD-57 (H) etc.	1 No		

50	Supply and laying of shielded twin twisted pair 1.0 sqmm cable in existing conduit.	450 RM		
51	Supply, installation, testing and commissioning of 120W amplifiers for public addressing system suitable for operation on 230V, 50 Hz single phase Ac supply including all labour charges etc., complete.,	1No		
52	Supply and Fixing of Focus Wall Speaker - 30 watts including labour charges etc., complete.	4 Nos		
53	Testing and commissioning of the Public Address system	1 job		
	UPS Units & Accessories: INVERTER & UPS SYSTEMS & BATTERIES			
54	Supply installation Testing and commissioning of KVA on line UPS system conforms to IS 16242(Part-I):2014 and IEC 60240-1 : 2008 with IGBT technology pure sine wave out put, double conversion with auto and manual static by pass switch single phase input / Single phase output. 6.0 KVA , 192/240 VDC with Isolation Transformer	1No		
55	Supply and fixing of 12V 42 AH SMF battery with 3 years warranty including wire leads, connections, etc complete.,	16 Nos		
56	Supply and providing of battery rack upto 11 to 20 batteries (42 AH)	1 No		
57	For Projector	1 No		