Schedule of Work

Name of Work: - RMO Sub station Equipments i/c pump set and compound light for Resdl./ Non Resdl. Buildings at NSTI, Jaipur. (SH: - Electrical Work in Conference hall)

S.No.	Description of Items	Quantity		Rate	Unit	Amount
1	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.					
1.1	Group C	16.00	Point	1440.00	Point	23040.00
2	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required.					
2.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	20.00	Metre	370.00	Metre	7400.00
2.2	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	100.00	Metre	476.00	Metre	47600.00
2.3	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	40.00	Metre	652.00	Metre	26080.00
3	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.					
3.1	25 mm	50.00	Metre	168.00	Metre	8400.00
3.2	32 mm	15.00	Metre	209.00	Metre	3135.00
4	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.					
4.1	6 pin 15/16 amp socket outlet	5.00	Nos.	219.00	Each	1095.00
5	Supplying and fixing following size/ modules, GI box along with modular base & cover plate for modular switches in recess etc as required.					
5.1	1 or 2 Module (75mmX75mm) (AC, Data points, Projector)	6.00	Nos.	354.00	Each	2124.00
6	Supplying and fixing 1 No. 32 amps modular DP switch with indicator in the existing GI box with modular plate and cover in front or in recess including connection, testing, commissioning etc. as required.	4.00	Nos.	1641.00	Each	6564.00
7	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 5/6 & 15/16 amps modular socket outlet and 15/16 amps modular switch, connection etc. as required.	7.00	Nos.	659.00	Each	4613.00
8	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providng and fixing 2 Nos. 3 pin 5/6 A modular socket outlet and 2 Nos. 5/6 A modular switch, connections etc. as required. (For light plugs to be used in non residential buildings).	3.00	Nos.	757.00	Each	2271.00
9	**Brush Less Direct Current (BLDC) Fan without Remote** Supply, Installation, Testing and Commissioning of ceiling fan with Brush Less Direct Current (BLDC) Motor, class of insulation: B, 3 nos. metal(Aluminium alloy) blades, 30 cm long down rod, 2 nos. canopies, shackle kit, safety rope, copper winding, steel/Al body Power Factor not less than 0.9, Service Value (CM/M/W) minimum as below, 350 RPM (tolerance as per IS : 374-2019), THD (Total Harmonic Distortion) less than 10%, suitable for operation with regulator for speed control and all remaining accessories including safety pin, nut bolts, washers, temperature rise=75 degree C (max.), insulation resistance more than 2 mega ohm, suitable for 230 V, 50 Hz, single phase AC Ceiling Fan compliant to IS 374:2019 fan Supply, earthing etc. complete as req.					
9.1	1200mm, service value ≥ 6.0 CM/Min/Watt, air delivery 210 CM/Min (Minimum)	6.00	Nos	2695.00	Each	16170.00

S.No.	Description of Items	Quantity		Rate	Unit	Amount
10	LED **Panel light 2x2 ft.** (System lumen efficacy ≥105 <120 lm/Watt) Supplying, installation, Testing & Commissioning of Panel light 2x2 ft., of following body material and construction as per IS: 10322 with driver as per the requirement with Driver efficiency >85%, Operating voltage AC 140-270 Volt, freq 50/60 hz, Operating temp range -5 °C to 40 °C centigrade, internal surge protection of 2.5 KV with Short & Open circuit protection, THD < 10% , P. F.≥0.95, IP20, CRI ≥80, UGR (Unified Glare Rating) < 19, Flicker free, (flicker should be below 5 %), life time (LED, Driver & electrical circuitry), of minimum 50000 Burning Hours with, 70% of initial Lumen maintained till life ends as per LM80 extrapolation IES TM-21-11 report, CCT 3000°K / 4000°K/ 5700°K /6500°K (As per ANSI Bin), SDCM (Standard Deviation Colour Matching) <3, Maximum power consumption should not more than the specified rating and Fixture shall be of relevant BIS standard and trade mark certificate (T.C.). Manufactures Word Mark/ Name Engraved/ Embossing/ Screen printing on housing. complete in all respect i/c external connections with 1.5 sq. mm FRLS/HFFR, PVC insulated copper conductor single core cable and earthing etc. as required with Minimum 5 year OEM warranty. System lumen efficacy ≥105 <120 lm/Watt output. LM79 & LM80 Test report and all testing required for LED fixtures as per BIS shall be submitted. Shape size and CCT shall be as approved by Engineer-in-Charge as per requirement. (Thermal management: heat sink of aluminium housing such that LED junction temperature shall not rise above 90°C). Powder Coated CRCA Sheet Body (Thickness > 0.50 mm)					
10.1	36 watt	9.00	Nos	2059.00	Each	18531.00
11	SITC of Surface mounting **LED Bulkhead fitting** of not more than 10 watt, Luminaire having system output >= 900 lm, Luminaire efficacy>=90 lm/W, Colour temperature = 5700K (as required and Approved by E-in-C)), die cast aluminium housing with high efficiancy diffuser, CRI (Ra) > 80, luminaire life >= 25000hrs@ L70, IP 66 or better protection complete in all respect i/c inbuilt BIS approved Electronic driver suitable for operation on 230V, single phase AC supply, having THD < 10%, PF > 0.95, surge protection level >= 2.5 kV, fixing of fixture on ceiling/ wall etc. including connection with 1.5 sqmm. FRLS Copper conductor single core cable i/c earthing etc. as required.	1.00	No.	1632.00	Each	1632.00
	PUBLIC ADDRESS SYSTEM					
12	Supplying, installation, testing & commissioning of 6W recessed speaker complete as required.	4.00	Nos.	1025.00	Each	4100.00
13	Supplying, installation, testing & commissioning of digital audio amplifier 75 Watt, 25V rms operating at 240 Volt AC Supply complete as required.	1.00	Nos.	152368.00	Each	152368.00
14	Supply and fixing of following size Wall Mount Rack having Fixed Structure with 0.8mm CRCA Sheet, completely knocked-down condition (CKD) Shape, Vertical Mounting Rail 1.6 mm with 'U' Marking, Minimum 2 cable entry/exit provision at Top and bottom with rubber protection, Front 5mm Toughened Glass with lock, wall mounting kit, Powder coated Color- RAL- 7035, complied with UL & RoHS, 2 x 6 sockets 16A power distribution units, 3 numbers closed cable organizer, Hardware mounting screws packet of 20 x 1 number, etc. complete as required.					
14.1	15U Rack	1.00	Nos.	13330.00	Each	13330.00
15	Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 volts, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)					
15.1	6 way, Double door	1.00	No.	5299.00	Each	5299.00
16	Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required.					
16.1	63 amps	1.00	No.	3597.00	Each	3597.00
17	Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.					

S.No.	Description of Items	Quantity		Rate	Unit	Amount
17.1	63 amps	1.00	No.	1115.00	Each	1115.00
18	Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.					
18.1	Single pole	18.00	Nos.	285.00	Each	5130.00
19	Supplying of XLPE Insulated and PVC sheathed Al. cond. Armoured power Cable of 1.1 KV grade confirming to IS:7098(Part-I & Part- II) of following sizes etc complete as reqd.					
19.1	3.5X35 Sq mm	60.00	Metre	700.00	Metre	42000.00
20	Suplying and making end termination with brass compression glade and aluminum lugs for following size of PVC insulated and PVC insulated nad PVC sheathed XLPE aluminium conductor cable 1.1 KV grade as reqd .					
20.1	3½ X 35 sq. mm (32mm)	2.00	Nos.	437.00	Each	874.00
21	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on wall surface as required.					
21.1	Upto 35 sq. mm (clamped with 1mm thick saddle)	58.00	Metre	64.00	Metre	3712.00
					Total	400180.00

Assistant Engineer (E)
JCESD-II, CPWD, Jaipur.