	BOQ				
NAME OF WORK: INTERNAL ELECTRICAL WORK AT NEW BRANCH PREMISES AT MYLLIEM, MEGHALAYA.					
Sl.No.	**Description**	**Unit**	**Qty.**	**Rate (Rs.)**	**Amount in Rs.**
1	Providing & fixing POINT WIRING for lights points (Ceiling/wall lights), Ceiling/Wall/Exhaust fans etc.. The item includes Circuit wiring with PVC insulated 1100V grade FRLS/FRZH copper conductor multistranded wires from DB to the switch board with 3x2.5 Sq.MM for Phase, Neutral & Earth (P+N+E) in appropriate size of 16 SWG MS conduits ISI mark (IS :9537), point wiring to be with 3x1.5 Sq.MM PVC insulated, 1100V grade FRLS/FRZH copper conductor multistranded wires from switch boards to the designated places for light/fans etc. with all necessary accessories, such as saddles etc. on surface or embedded in wall, by chasing on the walls and making the surface neat afterwards. Item includes 6 AMP switch Modular type of Anchor woods /MK benZ/ Legrand Mosaic Range or eqv of approved make with all base plates, covering plate Metal box of same make etc. complete. (EACH Circuit to take NOT MORE than 8-10 points) Flexible conduits & Elbows are not allowed. Only FRLS/FRZH wire to be used or, as instructed by SBIIMS Engineer.				
i)	One light point controlled by one switch	No.s	30		
ii)	Two light points to be controlled by one switch	No.s	7		
iii)	3/4 points to be controlled by one switch (Strickly as per drawing only)	No.s	13		
iv)	5/6 points to be controlled by one switch.	No.s	2		
v)	6A socket to be controlled by one switch at switch board	No.s	5		
vi)	One WALL FAN points with 1x 5-6 pin, 6 Amp socket outlet to be provided at the location of fan	No.s	11		
vii)	One CEILING FAN points to be controlled by one 6 Amp switch, 5-step modular type electronic regulator and ceiling rose to be provided at the location of fan	No.s	4		
viii)	One EXHAUST FAN point to be controlled by one 6 Amp switch, 1x 5-6 pin, 6 Amp socket outlet to be provided at the location of fan	No.s	3		
ix)	**A group of 4-8 points controlled a PIR cum Occupancy sensor and one 16/20A modular switch (BM's Room)**	No.s	1		
2	a. Providing and laying for 6 Amp light plug point with 2x2.5 Sq. mm PVC covered copper conductor with 1x 1.5 Sq. MM PVC covered copper conductor for Earth from DB to designated places. Item Includes 1 NO 5 pin 6 AMP socket and 1 no 6 AMPs switch etc. complete.	No.s	4		
	b. Providing & laying 6 Amp LOOPED from above a) plug point with 3x1.5 sqmm PVC insulated copper conductor from Primery Points , incl. socket and switch (double module) etc. complete. with specifications same as above. (Maximum 3 points i.e. from one primary point, another two points can be looped in a circuit)	No.s	7		
3	Providing and fixing BELL POINTS on wall / partition with 2x1.0 Sq. MM copper conductor in PVC medium guage conduit (IS:9537) with call bell push switch (Push Type) including Anchor make Multi Tune call Bell etc. complete.	No.s	1		

Sl.No.	Description	Unit	Qty.	Rate (Rs.)	Amount in Rs.
4	Computer/ Raw Power point wiring in MS conduit of IS specification of proper size with 3nos 2.5sq.mm single core PVC insulated 1.1 kV grade multi-stranded copper conductor wires with all material supply installation and commissioning complete from CDB/PDB(Raw) .The wiring shall be carried out on surface above false ceiling/ by chiseling on wall/ the existing surface and plastering the same with cement etc. after fixing the MS conduit with all accessories like saddles screws, bends T-joint etc. 2 coats of painting Matching to the surface including supply installing, testing, commissioning of modular plate type switch and socket (Legrands / MK or equivalent) for computer terminal on sheet steel enclosure (cadmium plated),duly fitted with screw to the steel conduit and fixed to the wall partition furniture with all interconnection and proper earthing .All the opening shall be covered with blank plate and be sealed to make the box vermin proof (maximum three points in single circuit)				
i)	With 3 nos 6A, 5-6 pin socket with single 16A switch, one LED indicator for primary.	No.s	4		
ii)	Same as above but loop from the nearest above primary point (i)	No.s	6		
iii)	With 2nos 16A, 5-6 pin socket with individual switch for e-Lobby & others (Both Raw & UPS power).	No.s	7		
iv)	With 1no 16A, 5-6 pin socket with individual switch for primary	No.s	7		
v)	Same as above but loop from the nearest above primary point (iv)	No.s	6		
5	Supply, installation, testing and commissioning by grouting on walls of double door type distribution board made of sheet steel enclosure with the following MCBs (DB, MCB and MCCB and connecting the same to the system.				
i)	Computer/Raw power DB, 8-Way SPN double door with 40A (30mA) DP RCCB as incomer & 6 Nos 10A SP MCB and 0 no 32 A DP MCB as outgoing.	No.s	1		
ii)	DB 4-Way SPN with 32A TPN MCB AT E-LOBBY	No.s	1		
iii)	DB with 2X40A DP MCB.	No.s	2		
iv)	DB with 16A DP MCB.	No.s	1		
v)	Modular type 20/25A 3-pin socket, 25A SP MCB with 20/25A, 3-pin top with all accessories & metalic box for AC	No.s	7		
vi)	VTPN Double Door Distribution Board (Three phase I/P and Three phase O/P) with 100A 4 Pole MCCB (25kA) as incomer and 3 Nos. 32A TPN MCB,at outgoing (For all 3 Cassette AC)	Set	0		
vii)	TPN Double Door Distribution Board (Three phase I/P and Single phase O/P) with 63A 4 Pole MCB (16kA) as incomer and 4 Nos. of 32A SP MCB, 1 No. of 25A SPMCB and 7 nos. 16A SP MCB at outgoing (For power and AC)	Set	1		
viii)	**UPS Room DB:** TPN double door with 63 TPN MCB as incomer & 3 Nos, 10/16A, 3 Nos, 25A SP & 3 Nos, 40A DP MCB as outgoing.	No.s	1		
ix)	**Light DB:** 4-Way TPN double door with 32A (30mA) 4P ELCB & MCB as incomer & 12nos 10/16A SP MCB as outgoing.	No.s	1		
x)	**Power DB:** 4-Way TPN double door with 63A, 4P MCB as incomer & 3 nos 32A SPMCB and 9 nos. 16-25A SP MCB as outgoing (For both AC & PDB).	No.s	1		

Sl.No.	Description	Unit	Qty.	Rate (Rs.)	Amount in Rs.
6	a. Supplying, installing and commissioning of PVC/ XLPE insulated 1.1 kV grade aluminium Armoured cable complete with proper lugs and cable glands and two nos. of 8SWG GI wires alongwith all the other materials required including proper connection in complete as required from main Panel to various DBs & Main power supply .				
i)	With 3.5 core x 35 sq. mm cable	RM	55		
II)	With 3.5 core x 70 sq. mm cable	RM	0		
iii)	With 4 core x 25 sq. mm cable but with 2X12 SWG GI wires for AC & PDB	RM	22		
iv)	With 4 core x 16 sq. mm cable but with 2X12 SWG GI wires	RM	30		
v)	With 4 core x 10 sq. mm cable but with 2X12 SWG GI wires	RM	30		
	b. Cable End Terminations: Supplying of all materials, for the end terminations with copper lugs, Single Compression Brass Cable Glands of required sizes, Tapping, Crimping etc. Complete of the followings.				
i.	3.5 core 35 Sqmm Al Ar.	Set	2		
ii.	4 core 25 Sqmm Al Ar.	Set	2		
iii.	4 core 16 Sqmm Al Ar.	Set	4		
iv.	4 core 10 Sqmm Al Ar.	Set	4		
7	**Sub-main line:-** Wiring in 16 SWG MS conduit of IS specification of proper size with PVC insulated, 1.1 KV grade multi stranded copper conductor FRLS/FRZH wire with supply, installation, commissioning of all the materials required including proper termination, connection in complete as required from main DB to various DBs:-				
i)	with 3nos 4sq.mm (1ECC)	RM	40		
ii)	with 3nos 6sq.mm (1ECC)	RM	70		
iii)	with 4nos, 6sq.mm + 2 X 2.5 sq.mm	RM	30		
8	**a. Main Panel** :- Supplying, Installing, testing and commissioning of factory fabricated 2MM thick CRCA, floor mounted cubicle type distriction Panel Board with 150 MM X 75 MM X 6MM ISMC base channel, suitalbe for 415 V TPN comprising of 150A suitable copper bus bars with color codded heat shrink insulation with the followings: 100A, 4P, 35kA MCCB with overvoltage protection as incommer 63A, 4P ON-LOAD Changeover - 1No R-Y-B LED indicating lamps, Digital multifunction meter of minimum size 150 MM X 150 MM to measure Voltage, Current, PF etc with all excessories Outgoing: 63 Amp TPN MCCB, 35kA for UPS/ ACDB - 2Nos, 40 Amp 4P MCCB, 25kA for Capacitor Panel - 1No, 40 Amp 4P MCCB, 35kA for e-Lobby - 1No, 63 Amp 4P MCB, 10kA for PDB - 1No 32 Amp 4P MCB, 10kA for lighting DB - 1No. All MCCBs & MCBs are strictly as specified above only. All outgoing must be in compartmentalized chamber fully isolated with 2 mm thick CRCA and 3 mm steel channel painted with 2 coats of red oxide primer paint followed by finishing paint with interconnection etc. as required.	Set	1		

Sl.No.	Description	Unit	Qty.	Rate (Rs.)	Amount in Rs.
	b. Capacitor Panel: Supply and installation of 15 KVAR APFC panel, floor/wall mounted front operated totally enclosed vermin proof, indoor non-drawout-cubicle type power panel fabricated out of 16 SWG thick CRCA sheet having gasketed hinged cover on each cubicle fully powder coated with suitable bus bar for connecting the contactors, MCB's, Capacitors, etc with the following acessories A set of R-Y-B LED indicating lamp at incomer 63A, TPN MCCB, 35kA as incomer - 1No 0 No. 40A 3P contactor for 10 KVAR, 2 Nos. 32A 3P contactor for 2X5 KVAR, 2 Nos, 25A, 3P contactor for 2 KVAR and 1 No, 16A, 3P contactor for 1 KVAR 2 Nos. 5 KVAR, 2 Nos. 2 KVAR and 1 No. 1 KVAR. 1 no. 5-step APFC relay of minimum size 150 MM X 150 MM suitable for above arrangement ON/OFF push button for each capacitor ON/OFF LED type indication lamp for each capacitor	No	1		
9	**EARTH STATIONS:**				
a.	**Conventional Type Earth Stations:** Supply, installing and commissioning of earth station including digging and refilling back the pit with black soil and with 3.15mm x300mm size copper plate duly tinned through out the surface of the plate, placed at least 1.5Mtr,below the ground level with 2nos 10sq.mm PVC insulated stranded copper conductor in 20mm GI pipe, fixed to the plate and providing 40mm,2mtr,long GI pipe with reducer and funnel at top for watering pipe with supplying and laying earth continuity wire of 2x10sq.mm copper stranded PVC green color in heavy duty MS conduit on the wall from earth plate to starting point of the line earth connector.	Set	0		
b.	**Maintenance Free Chemical Earth Stations:** The items listed below shall be undertaken directly by Agencies providing Ashlock/ or True Power or, eqivalent of approve Make Chemical earthing, The contractor shall provide the rates of getting the same executed by the agency. The representative of the agency shall measure and submit the test report of the earth directly to the branch and one copy to the Elect. Engr. along with their bill. The agency may also require to test and provide the test report of the earthing measurement if required to the branch and Elect. Engr. for monitoring upto a period of three years.				
i.	Supply and installation of pipe-in-pipe technology Ashlok Earthing / True Power system or equivalent of approve make Model T-19 with outer diameter of 50 mm, length 2000 mm embedded in the soil with masonry inspection pit with cover , which can be easily removed abd placed. complete in all respect. Earth pit installation test certificate to be submitted after measurement of earth resistance as per the provision in IS3043. (UPSs and Panel earthing)	Nos	2		
ii)	Supply and installation of pipe-in-pipe technology Ashlok Earthing/ True Power or equivalent of approve make system, Model T-39 with outer diameter of 80 mm, length 2000 mm embedded in the soil with masonry inspection pit alongwith cover etc. complete in all respect. Earth pit installation test certificate to be submitted after measurement of earth resistance as per the provision in IS3043. (for Main Panel & System)	Nos	2		

Sl.No.	Description	Unit	Qty.	Rate (Rs.)	Amount in Rs.
c.	Supplying and fixing 25x3 mm copper strip, insulated by heat pressurized heavy gauge PVC sleeve, duly jointed by full lap brazing and drawn underground in 40 mm class B GI pipe from the inspection pit to the inside of the branch premises.	RM	50		
d.	Supplying and fixing 25x3 mm copper strip, insulated by heat pressurized heavy gauge PVC sleeve, duly jointed by full lap brazing inside the branch premises.	RM	30		
e.	Supplying and fixing 2X8 SWG dia copper earth wire in PVC conduit on surface or in recess for loop earthing from panel to DB	RM	45		
f.	Supplying and fixing 2X8 SWG dia earth wire in B-class GI pipe on surface or in recess on wall/floor for earth stations (T-19) to panel & UPS I/P DB	RM	40		
10	**LIGHT FIXTURES/FANS etc.:**				
i.	Item includes SITC of following fixtures including all accessories hardwares & extension chords where necessary complete as required. All LED (except down lighters) to be hung from the RCC roof using universal suspension system with quick onsite adjustment in both ceiling and NON False ceiling area. **All LED Fixtures should be covered minimum 3 years onsite replacement Warrany.**				
a.	Supply, installation testing and commissioning of 15W LED recessed type commercial downlighter with external driver. Make - Cate No: - Wipro- LD71-161-SML-65-DD/ GE- GDR015.40L3/ Havels-RISEDLR15WLED840S/ or equivalent of CG/ Bajaj/ Philips/LK/Helonix.	No.s	33		
b.	Supply, installation testing and commissioning of 15W LED surface type commercial downlighter withl driver. Make - Cate No: - Wipro - Moon LED LW 02/ or equivalent of Bajaj/ GE/Philips/Havels	No.s	12		
c.	Supply, installation, testing and commissioning of 36W, 2"X2" recessed type Ultra slim LED luminaire with external driver and universal suspension system. Make - Cate No: - Wipro-LML25-361-XXX-65-G1/ Havells-ENDURASLIMPROPLUS2X236WLED857MOD with dirver/ Crompton-LCPL-36-CDL/ or equivalent of Bajaj/Philips/GE/HPL/LK/Helonix/HPL	No.s	12		
d.	Supply, installation, testing and commissioning of 15W, 1"X1" recessed type Ultra slim LED luminaire with external driver and universal suspension system. Make - Cate No: - Wipro-LML25----XXX-65-G1/ Havells-ENDURASLIMPROPLUS2X215WLED857MOD with dirver/ Crompton-LCPL-15-CDL/ or equivalent of Bajaj/Philips/GE/HPL/LK/Helonix/HPL	Nos	9		
e.	Supply installation testing and commissioning of LED box type Single Tube light fittings with 17W-18W with glare free light distribution wall mounted at ceiling/false ceiling level/. Make :- Bajaj/Havels/Phillips/Wipro/Crompton or equivalent	No.s	9		
f.	LED Box type Cove Light fixtures with connecting terminals				
	i. 300 MM Length	No.s	15		
	ii.600 MM length	No.s	10		
	iii.900 MM length	No.s	5		

Sl.No.	Description	Unit	Qty.	Rate (Rs.)	Amount in Rs.
ii.	Supply, installation, testing and commissioning of 400mm Sweep Wall Mounted of Metallic body and metallic Blade, 1400 rpm Havels FHWV3TFSLB18 or equivalent of crompton/ bajaj/ usha/ orient/ havells make	No.s	11		
iii.	Supply, installation, testing and commissioning of 5 Star rated Ceiling fan 1200 mm Crompton - AURA model with Golden Colour/ or equivalent of Bajaj, Usha, Havels	No.s	4		
iv.	Supply, installation, testing and commissioning of Heavy Duty metallic body & Blades Exhaust Fan with louvers of following size: 250 mm sweep, 1400 RPM of Crompton/ Bajaj/ Usha/ Havells	No.s	5		
v.	Supplying, installation, testing & commissioning of Security ligh with 25W LED lamps with pressure die cast housing with epoxy coated dark graphite grey colour finish and prismatic polycarbonates cover with individual LED lenses, including necessary GI pipe bracket with clamp. Make :- Bajaj/Havels/Phillips/Wipro/Crompton or equivalent	Nos.	2		
				Grand Total	
	Plus GST extra will be extra as applicable.				