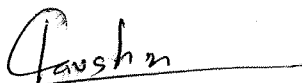


SCHEDULE OF ITEMS, BILL OF QUANTITY FOR INSTALL POWER LINE THROUGH UNDERGROUND FROM UCEP SUBSTATION TO UIST TPDB AND ELECTRIFICATION WORKS FOR NEWLY INSTALLED AIR CONDITION.

Description	Unit	Qty.
POWER LINE INSTALL THROUGH UNDERGROUND FROM UCEP BANGLADESH SUBSTATION TO UIST, DHAKA TPDB AND ELECTRIFICATION WORKS FOR NEWLY INSTALLED AIR CONDITION AT UIST DHAKA.		
<u>SURFACE WIRING (NYY) (THROUGH PVC CONDUIT):</u>		
Surface conduit wiring with the following PVC insulated and sheathed stranded cable (NYY) / XLPE insulated and PVC sheathed stranded cable (2XY) & PVC insulated Green / Yellow bi-colour ECC wire (BYA) through PVC conduit of reputed manufacturer complete with fixing materials, other accessories etc. as required including mending the damages good. All electrical contacts shall be of brass / copper connected through connector or soldering (no twisting shall be allowed) and cables shall be manufactured and tested according to IEC / BS / VDE standards along with relevant BDS standard as per detailed specification mentioned in Annexure- 1. The work shall be carried out as per direction & approval of the Engineer In Charge.		
IC-4x35sqmm (NYY / 2XY) with 16 sqmm (BYA) ECC wire through PVC pipe of minimum inner dia 50 mm having wall thickness of 2.5 mm.	Meter	20
<u>UNDERGROUND WIRING (NYY) (THROUGH PVC PIPE)</u>		
Providing & laying of the following PVC insulated & sheathed cable (NYY) / (XLPE) insulated & PVC sheathed cable (2XY) with PVC insulated Green / Yellow bi-colour ECC wire (BYA) connecting at both ends. through PVC pipe & accessories in the following manner. All electrical contacts shall be of brass / copper connected through connector or soldering (no twisting shall be allowed) and cables shall be manufactured and tested according to IEC / BS / VDE standards along with relevant BDS standard as per detailed specification mentioned in Annexure-1. The work shall be carried out as per direction & approval of the Engineer In Charge. In kutcha ground by cutting 45.70 cm width x 91.40 cm depth trench with necessary brick or tile protection and mending the damages good by refilling trench with proper compaction; In pucca floor through PVC pipe by cutting trench of necessary size and mending the damages good by brick soling, 75 mm (1:2:4) CC work with neat cement finishing etc.		
IC-4x35 sqmm (NYY / 2XY) with 16 sqmm (BYA) ECC wire through PVC pipe of minimum inner dia 50 mm & wall thickness of 2.5 mm		
In pucca floor	Meter	105
<u>SURFACE WIRING (BYA) (THROUGH PVC CONDUIT) :</u>		
Surface conduit wiring with the following PVC insulated cable (BYA) & PVC insulated Green / Yellow bi-colour ECC wire (BYA) through PVC conduit of reputed manufacturer complete with 18 SWG GP sheet pull box with 3mm thick bonite sheet cover, fixing materials, other accessories etc including mending the damages good as required. All electrical contacts shall be of brass copper connected through connector or soldering (no twisting shall be allowed) and cables shall be manufactured and tested according to IEC / BS / VDE standards along with relevant BDS standard as per detailed specification mentioned in Annexure-1. The work shall be carried out as per direction & approval of the Engineer In Charge.		
IC-2x4.0 sqmm (BYA) cable with 4 sqmm (BYA) ECC wire through PVC pipe of minimum inner dia 25 mm having wall thickness of 17 mm	Meter	475


Md. Kausher Ahmed
Instructor (Electrical)
UCEP Institute of Science and Technology
(UIST), Dhaka.

Description	Unit	Qty.
CAPACITY CONTROL CIRCUIT BREAKER FEEDER UNIT		
<p>Supplying of 415V, 3 phase, 50Hz following capacity control circuit breaker feeder unit as per following specification with thermal over current & instantaneous electromagnetic short-circuit release manufactured and tested as per NEMA / IEC / VDE / BS / JIS along with relevant BDS standards (adjustable type above 100A rating) for sub-station L.T panel.</p> <p>Rated operating voltage : 220-690 V. Rated insulation voltage : 690 volt. Rated impulse withstand voltage : 6KV. Utilization category : A or B accepted / approved by the Engineer-in-charge.</p>		
150/160A (25KA) TPMCCB	Each	1
Three Phase Distribution Board (TPDB)		
<p>Providing and fixing three phase distribution board (TPDB) [concealed /surface] having the following components and specifications.</p> <p>1. Steel board : Approximate size 36"x30"x6" MS sheet:18SWG with hinged type door and locking arrangement duly painted with powder coating with epoxy polyester resin on all surfaces of board (gray / off-white) etc. In front side there will be tempered thick fiber glass of minimum 8 mm thickness with rubber gaskets to observe the inside arrangement.</p> <p>2. Copper bar : size 12"x1"x6 mm(4 No's) and 6"x1"x5mm(1No) mounted on insulator at both ends. Capacity : 200-300A.</p> <p>3. 1 no. TPMCCB (main control) and following nos. TPMCCB for feeders. TPMCCB's are Manufactured / Assembled and tested in accordance with IEC / VDE / NEMA / BS / JIS along with relevant BDS IEC standard' Minimum breaking capacity 10-16 KA with thermal overcurrent and instantaneous electromagnetic short circuit release.</p> <p>4. Loop Cable: From phase bar to TPMCCB (circuit & power) Cable Size: As required compatible with circuit breaker with TPMCCBs accepted / approved by the Engineer-in-charge.</p>		
150A TPDB Incoming: 1x150A TPMCCB (16 KA) Outgoing: 8x10-30A TPMCCB (10 KA)	Each	1
SPMCCBs accepted / approved by the Engineer-in-charge.		
6 - 40 Amps DP (minimum 10 KA)	Each	9
BUSBAR		
Providing and fixing 500 V 3-phase busbar system assembled in pre-laid board with porcelain insulators. There will be equal size holes on every bar at 0.5" interval and bar to bar gap shall be 2" -3" .		
200 - 300 Amps . flat bar (5 nos) :4 nos 15"x1"x8mm and 1 no 4"x1"x8mm for earthing mounted on insulator at both ends individually'	Copper Each	4

Pausha

M. Pausha
Institute (IST)
IITR Institute of Science and Technology
(IIST), Dhaka