

GOVERNMENT OF ASSAM
IRRIGATION DEPARTMENT



SCHEDULE OF RATES
(ELECTRICAL PART)

2023-24

PREFACE

This is the third time that the Schedule of Rates for Electrical works under Irrigation Department, Assam has been prepared.

The SoR 2023-2024 for Electrical works under this department has been prepared considering the General specification in force in the State departments and on the basis of current practices in State taking into consideration the prevailing local market prices of the materials. For concrete works, stone, bricks, sand etc. the rates have been considered from Departmental SoR for Civil Works for 2023-24. For some items, rates as accepted by APDCL have been taken.

The rates in the schedule will apply to all possible categories of work that may arise in the construction and maintenance of Electrical works undertaken by the Irrigation Department, Assam throughout the State of Assam.

The detailed Analysis of Rates covered by this Schedule of Rates have been carried out on the basis of All India Standard Schedule of Rates & Indian Standard Recommendation for labour rates notified by the Labour Commissioner, Assam vide No.ACL/41/2004/3905-908 Dated April 27, 2023 considering the weekly paid holiday. The brand of materials to be used are appended in the rear and in absence of any mention about the brand, the best quality materials as per IS Specifications and as approved by the Chief Engineer are to be used.

The Chief Engineer, Irrigation Department, Assam is the final deciding authority as to meaning, interpretation and implication of various provisions made in the Schedule of Items, Analysis of Rates and provisions. His decision in writing shall be final, conclusive and binding on all concerned throughout the territory of Assam.

This Schedule of Rates for the year 2023-2024 shall be effective for all divisions for executing works related to Irrigation throughout Assam under this department from the date of publication.

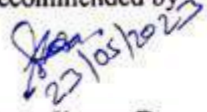
GST is not considered in evaluating the rates of the items of this schedule. While preparing the estimate, the GST as applicable, be added to the total cost of estimate to arrive at the total actual cost of the work.

Forest Royalty is not considered in those items in the SoR where forest materials such as soil, boulder etc will be used. While preparing the estimate, the FR as applicable may be considered, if necessary.

Basic Rate of Materials (without GST) as collected from market and recommended by the Addl. Chief Engineer, Electrical Irrigation, Assam is incorporated in the Analysis Copy. In collecting basic rates of materials, local market rates, rates received from quotations and latest Company Price List have been considered. The Supervision Charge to be paid to APDCL where necessary, have been included in the Rates and is to be paid by the contractor.

This Schedule of Rates covers most frequently encountered items of works to be carried out for providing Power Connection to Irrigation Schemes. In case of PSC and Steel poles, two types of analysis has been done – one considering the standard practice of 6(six) poles that can be carried in a truck for work requiring six or more poles, and the other considering 3(three) poles where the entire work need only that many number of poles. This is done as the requirement of labour remains the same for lifting the poles. Moreover, specification for a few frequently required items for maintenance works in HT part, Substation and LT has also been standardised, analysed and incorporated. The supply and laying of various combination of cables have also been standardised, analysed and included. The rates for Item of Works related to house wiring have not been included in this SoR and these works shall be as per the current Schedule of Rates for APWD (Electrical) or to be done departmentally by procuring necessary materials.

Although due care has been taken to make the Schedule of Rates more realistic and as correct as possible, some errors and omissions cannot be ruled out and might have crept in inadvertently. In case, any such errors or omissions are apparent, these may be brought to the notice of the Department for necessary corrections. Suggestions and feedback for further improvements are always welcome.

Recommended by

23/05/2023
Swapam Kumar Das
Additional Chief Engineer, Electrical
Irrigation Department, Assam

Approved by

K. M. Gopal Sana Rajkumar
Chief Engineer
Irrigation Department, Assam

INDEX FOR SCHEDULE OF RATES (ELECTRICAL) 2023-24

- ITEM1 PANEL BOARD AND ACCESSORIES**
 - 1.1 MAIN LT PANEL BOARD**
 - 1.1.1 For 20 HP Pumpsets
 - 1.1.2 For 40 HP Pumpsets
 - 1.1.3 For 60 HP Pumpsets
 - 1.1.4 For 75 HP Pumpsets
 - 1.2 SUB LT PANEL BOARD with SDF**
 - 1.2.1 For 20 HP Pumpsets
 - 1.2.2 For 40 HP Pumpsets
 - 1.2.3 For 60 HP Pumpsets
 - 1.2.4 For 75 HP Pumpsets
 - 1.3 SUB LT PANEL BOARD with MPCB**
 - 1.3.1 For 20 HP Pumpsets
 - 1.3.2 For 40 HP Pumpsets
 - 1.3.3 For 60 HP Pumpsets
 - 1.3.4 For 75 HP Pumpsets
 - 1.4 MAIN PANEL CABINET**
 - 1.4.1 For 20 HP Pumpsets
 - 1.4.2 For 40 HP Pumpsets
 - 1.4.3 For 60 HP Pumpsets
 - 1.4.4 For 75 HP Pumpsets
 - 1.5 SUB PANEL CABINET**
 - 1.5.1 For 20 HP Pumpsets
 - 1.5.2 For 40 HP Pumpsets
 - 1.5.3 For 60 HP Pumpsets
 - 1.5.4 For 75 HP Pumpsets
- ITEM2 FITTING FIXING OF PANEL BOARD ACCESSORIES**
 - 2.1 MOULDED CASE CIRCUIT BREAKERS(MCCB) - FOUR POLE
 - 2.2 MOULDED CASE CIRCUIT BREAKERS(MCCB) - THREE POLE
 - 2.3 MOTOR PROTECTION CIRCUIT BREAKERS
 - 2.4 THREE POLE MINIATURE CIRCUIT BREAKERS (MCB) C CURVE
 - 2.5 AIR BREAK CONTACTOR - THREE POLE
 - 2.6 MINIATURE CIRCUIT BREAKERS - SINGLE POLE
 - 2.7 MEASURING INSTRUMENTS
 - 2.7(A) VOLTMETER
 - 2.7(B) SELECTOR SWITCH FOR VOLTMETER
 - 2.7(C) AMMETER
 - 2.7(D) SELECTOR SWITCH FOR AMMETER
 - 2.7(E) ANALOG POWER FACTOR METER
 - 2.7(F) ON-OFF SWITCH FOR POWER FACTOR METER
 - 2.7(G) CURRENT TRANSFORMER
 - 2.8 OTHER PANEL BOARD FITTINGS
 - 2.8(A) PILOT INDICATING LAMP
 - 2.8(B) ON AND OFF PUSH BUTTON SWITCH
 - 2.8(C) BUSBAR SUPPORT
 - 2.8(D) ALUMINIUM & COPPER BUSBAR STRIP

- ITEM3 ADDITIONAL ACCESSORIES**
 - 3.1 IRON ANGLE STAND FOR CAPACITOR BANK**
 - 3.2 LT CAPACITOR BANK**
- ITEM4 SWITCHES**
 - 4.1 TP Main Switch (SDFU - Switch Disconnecter Fuse Unit)**
 - 4.2 TPN Main Switch (SDFU - Switch Disconnecter Fuse Unit)**
- ITEM5 WALL MOUNTING ACCESSORIES**
 - 5.1 TPN Main Switch (SDFU - Switch Disconnecter Fuse Unit) Wall Mounting Type**
 - 5.2 TPN Main Switch (SDFU - Switch Disconnecter Fuse Unit) in Rewireable Type**
 - 5.3 Heavy Duty TPN AC Main Switch Double Break**
 - 5.4 On Load Change Over Switch Four Pole**
- ITEM6 HIGH TENSION LINE**
 - 6.1 ALIGNMENT OF HT LINE**
 - 6.2 JUNGLE CUTTING**
 - 6.3 SUPPLYING AND ERECTION OF PSC POLE**
 - 6.4 SUPPLYING AND ERECTION OF STEEL TUBULAR POLE**
 - 6.5 LINE SUPPORT**
 - 6.5.1 M S CHANNEL CROSS ARM**
 - 6.5.2 G I CHANNEL CROSS ARM**
 - 6.5.3 MS ANGLE CROSS ARM**
 - 6.5.4 GI ANGLE CROSS ARM**
 - 6.5.5 T CROSS ARM**
 - 6.5.6 CROSS BRACING**
 - 6.5.7 11 kV HT STAY SET**
 - 6.5.8 LT STAY SET**
 - 6.5.9 STAY WIRE**
 - 6.6 INSULATORS**
 - 6.6.1 LT PIN INSULATOR**
 - 6.6.2 LT SHACKLE INSULATOR**
 - 6.6.3 11 kV PIN INSULATOR**
 - 6.6.4 HARDWARE FITTINGS**
 - 6.6.5 DISC INSULATOR**
 - 6.7 CONDUCTORS**
 - 6.7.1 AAA CONDUCTORS**
 - 6.7.2 ACSR Conductors**
 - 6.8 GUARDING AT ROAD CROSSING/ LINE CROSSING**
- ITEM7 SUBSTATION ITEMS**
 - 7.1 LIGHTNING ARRESTOR**
 - 7.2 11 kV GANG OPERATED SWITCH**
 - 7.3 11 kV Drop Out(DO) Fuse Unit**
 - 7.4 POST TOP INSULATOR**
 - 7.5 FIBRE BARREL WITH METAL PARTS**
 - 7.6 D.O. METAL PARTS**
 - 7.7 G.O. METAL PARTS-MALE-FEMALE**
 - 7.8 G.O. FLEXIBLE TAPE**
 - 7.9 EARTH STATION**
 - 7.9.1 C.I PIPE EARTH STATION**
 - 7.9.2 G I EARTH WIRE**

- 7.9.3 COPPER EARTH WIRE
- 7.9.4 G.I. PIPE EARTH STATION
- 7.9.5 COPPER PLATE EARTH STATION
- 7.9.6 COPPER EARTH CONDUCTOR
- 7.10 HT METERING UNIT
- 7.11 LT FEEDER PANEL
- 7.12 LT WHOLE CURRENT ENERGY METER
- 7.13 LTCT TRIVECTOR ELECTRONIC ENERGY METER
- 7.14 ANTI CLIMBING ARRANGEMENT
- 7.15 TESTING & COMMISSIONING OF HT LINE
- 7.16 SECURITY FENCING AROUND SUBSTATION
- ITEM8 ERECTION OF TRANSFORMER
 - 8.1 ON EXISTING RCC POLE/PAD
 - 8.1.1 Capacity : 25 kVA, 11 kV/0.433 kV (5 Star Dyn) - Al wound
 - 8.1.2 Capacity : 63 kVA, 11 kV/0.433 kV (5 Star Dyn) - Al wound
 - 8.1.3 Capacity : 100 kVA, 11 kV/0.433 kV (5 Star Dyn) - Al wound
 - 8.1.4 Capacity : 150 kVA, 11 kV/0.433 kV, (5 Star Dyn), Al-wound with OLTC
 - 8.1.5 Capacity : 200 kVA, 11 kV/0.433 kV (Dyn) (5 Star) Al-wound with OLTC
 - 8.1.6 Capacity : 250 kVA, 11 kV/0.433 kV (Dyn) (as per CEA Guideline), Al-wound with OLTC
 - 8.1.7 Capacity : 315 kVA, 11 kV/0.433 kV Dyn (as per CEA Guideline) (Cu-wound) with OLTC
 - 8.1.8 Capacity : 500 kVA, 11 kV/0.433 kV(Dyn), (as per CEA Guideline) (Cu-wound) with OLTC
 - 8.2 TESTING & COMMISSIONING OF TRANSFORMER
 - 8.2.1 Capacity : 25 kVA, 11 kV/0.433 kV
 - 8.2.2 Capacity : 63/100 kVA, 11 kV/0.433 kV
 - 8.2.3 Capacity : 150 kVA/ 200 kVA, 11 kV/0.433 kV
 - 8.2.4 Capacity :250/315 kVA, 11 kV/0.433 kV
 - 8.2.5 Capacity : 500 kVA, 11 kV/0.433 kV
 - 8.3 DOCUMENTATION
- ITEM9 LAYING OF LT/HT POWER CABLES
 - 9.1 SUPPLY AND LAYING IN AIR/ OPEN TRENCH
 - 9.1 (A) SINGLE CORE IN 4 LINE
 - 9.1 (B) 3 CORE SINGLE LINE
 - 9.1 (C) 3½ CORE SINGLE LINE
 - 9.2 SUPPLY AND LAYING UNDER GROUND WITHOUT BRICK
 - 9.2 (A) 35 mm² single line to 8 line
 - 9.2 (B) 50 mm² single line to 8 line
 - 9.2 (C) 70 mm² single line to 5 line
 - 9.2 (D) 95 mm² single line to 4 line
 - 9.2 (E) 120 mm² single line to 3 line
 - 9.3 SUPPLY AND LAYING OF UNDER GROUND WITHOUT BRICK PROTECTION (3½ Core Cable)
 - 9.3 (A) 50 mm² single line to double line
 - 9.3 (B) 70 mm² single line to double line
 - 9.3 (C) 95 mm² single line to double line
 - 9.3 (D) 120 mm² single line to double line
 - 9.3 (E) 150 mm² single line to double line
 - 9.3 (F) 185 mm² single line to double line
 - 9.3 (G) 240 mm² single line to double line
 - 9.3 (H) 300 mm² single line to double line

- 9.3 (I) 400 mm² single line to double line
- 9.4 SUPPLY AND LAYING POWER CABLE FOR LIGHTING PURPOSE(2 Core)
- 9.5 LAYING OF LT POWER CABLES (Cable Supplied by Department)

9.5.1 WITH BRICK PROTECTION

- 9.5.1 (A) SIZE OF CABLE : upto 95 mm² Single line to double line
- 9.5.1 (B) SIZE OF CABLE : FROM 120 mm² upto 185 mm² Single line to double line
- 9.5.1 (C) SIZE OF CABLE : FROM 225 mm² upto 400 mm² Single line to double line

9.5.2 WITHOUT BRICK PROTECTION

- 9.5.2 (A)SIZE OF CABLE : upto 95 mm² Single line to double line
- 9.5.2 (B)SIZE OF CABLE : FROM 120 mm² upto 185 mm² Single line to double line
- 9.5.2 (C)SIZE OF CABLE : FROM 225 mm² upto 400 mm² Single line to double line

9.5.3 THROUGH PVC PIPE

- 9.5.3 (A)SIZE OF CABLE : upto 95 mm² Single line to double line
- 9.5.3 (B)SIZE OF CABLE : FROM 120 mm² upto 185 mm² Single line to double line
- 9.5.3 (C)SIZE OF CABLE : FROM 225 mm² upto 400 mm² Single line to double line

9.5.4 THROUGH GI PIPE

- 9.5.4 (A)SIZE OF CABLE : upto 95 mm² Single line to double line
- 9.5.4 (B)SIZE OF CABLE : FROM 120 mm² upto 185 mm² Single line to double line
- 9.5.4 (C)SIZE OF CABLE : FROM 225 mm² upto 400 mm² Single line to double line

9.5.5 IN OPEN TRENCH

- 9.5.5 (A) Size of Cable : upto 95 mm²
- 9.5.5 (B) Size of Cable : from 120 mm² upto 185 mm²
- 9.5.5 (C) Size of Cable : from 225 mm² upto 400 mm²

9.6 LT CABLE END TERMINATION

9.6.1 LT CABLE TERMINATION WITH BRASS COMPRESSION GLANDS AND AL LUGS

9.6.2 LT CABLE TERMINATION WITH HEAT SHRINKABLE CABLE JOINTING KIT

- ITEM10 A. SUPPLY AND ERECTION OF AERIAL BUNCHED CABLE
- B. SUPPLY AND LAYING OF HT POWER CABLES (3.3 kV Grade)

ITEM11 M&R OF TRANSFORMER AND H.T. LINE/ L.T WORKS

- 11.1 (A) FAULT CHECKING OF TRANSFORMER
- 11.1 (B) TRANSFORMER REPAIRING

- a) 25 kVA Al wound
- b) 63 kVA Al wound
- c) 100 kVA Al wound
- d) 150 kVA Al wound
- e) 200 kVA Al wound
- f) 250 kVA Al wound
- g) 315 kVA Cu wound
- h) 500 kVA Cu wound

11.2 M&R OF HT LINE

- (A) Uprooting and re-erection of leaning PSC pole
- (B) Straightening of leaning PSC pole
- (C) Dismantling and re-erection of existing MS Channel Cross Arm/ T Cross Arm
- (D) Dismantling of 11 kV Disc Insulator /Pin Insulator
- (E) Dismantling and re-erection of Conductor in 11 kV line
- (F) Dismantling of 11 kV DO Fuse Unit /GO Set

11.3 M&R OF LT WORKS

- (A) Dismantling of burnt out/ unserviceable Main switch/MCCB etc
- (B) Dismantling of burnt out/ unserviceable Main cable

11.4 Rates for Miscellaneous Supply Items

- (A) Measuring Instruments & Materials for Allied Works
- (B) Internal Wiring & Illumination Items
- (C) Miscellaneous Items

Annexures Approved Brand of Materials

Important IS/IEC Nos.

ITEM 1 PANEL BOARD AND ACCESSORIES

ITEM 1.1 MAIN LT PANEL BOARD

ITEM 1.1.1 for 20 HP Pumpsets

Specification of Panel board :

Supplying, installation, testing & commissioning of indoor type floor mounted, cubicle type compartmental, dust and vermin proof (as per IP-54) main LT Control Panel Board of following capacity combination and of given size, made out of 16 SWG CR Sheet and 40mmx40mmx6mm angle having four nos. of legs 400 mm long at the bottom, with folded and welded construction having dismantling doors at the back, surface chemically treated and Siemen's grey powder coated, containing Al. strip busbar having minimum current density of 1.2 Amp/mm² R-Y-B-N colour coded with heat shrinkable insulating sleeves containing all incoming and outgoing electrical accessories as specified, neatly installed and internally wired with best quality multi-strand, PVC insulated Single core unsheathed, HRFR copper wire (switch gears above 100Amp rating to be connected to busbar through Aluminium strip of suitable size) having cable incoming & outgoing provision at the bottom through gland plates complete including necessary excavation of trench and C C Work as directed

ITEM 1.1.1(A) Main LT Panel Board Suitable for operation of 1 × 20 HP Pumpset

Size : 800 mm(B)× 1000 mm(H)× 400 mm(D)

Electrical accessories :-

1 1 No, FP, 415 V 63 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 35 / 36 KA	1 No
2 TP, 63A, 415V , AC Motor Control Switch(SDF) with 63A HRC Fuse	1 No
3 Air Break Contactor, TP 32 A, 415 V, AC for Capacitor Duty	1 No
4 TP, 415V 32 Amp, MCB for Power Capacitor	1 No
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size 0 - 60 Amps	1 No
8 Ammeter Selector Switch, 4 position, 10/15 Amp	1 No
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No
10 Current Transformers for metering purpose Accuracy Class I CT ratio 60/5	6 Nos.
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.
12 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No
13 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
14 Aluminium Busbar, 25 mm × 5 mm	1 Set
15 On and Off Push Button Switch	1 Set

Per Unit Rate ₹ 81,140.00 Rupees
EightyOne
Thousand One
Hundred Fourty
Only

ITEM 1.1.1(B) Main LT Panel Board Suitable for operation of 2 x 20 HP Pumpset
Size :1200 mm(B)x 1200 mm(H)x 400 mm(D)

Electrical accessories :-

1 FP, 415 V 125 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 35 / 36 kA as main incomer	1 No
2 TP, 63A, 415V , AC Motor Control Switch(SDF) with 63A HRC Fuse	2 Nos.
3 Air Break Contactor, TP 32 A, 415 V, AC for Capacitor Duty	2 Nos.
4 TP, 415V 32 Amp, MCB for Power Capacitor	2 Nos.
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size	
a) 0 - 100 Amps for Incoming Side	1 No
b) 0 - 60 Amps for Outgoing Motor Feeder	2 Nos.
8 Ammeter Selector Switch, 4 position, 10/15 Amp	3 Nos.
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No
10 Current Transformers for metering purpose Accuracy Class I	
a) CT, 100/5 for incoming side	6 Nos.
b) CT, 60/5 for outgoing side	6 Nos.
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.
12 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No
13 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
14 Aluminium Busbar, 25 mm x 5 mm	1 Set
15 On and Off Push Button Switch	2 Set

Per Unit Rate ₹ 144150.00 Rupees One Lakh FourtyFour Thousand One Hundred Fifty Only

ITEM 1.1.1(C) Main LT Panel Board Suitable for operation of 3 x 20 HP Pumpset
Size :1600 mm(B)x 1200 mm(H)x 400 mm(D)

Electrical accessories :-

1 FP, 415 V 160 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 35 / 36 kA as main incomer	1 No
2 TP, 63A, 415V , AC Motor Control Switch(SDF) with 63A HRC Fuse	3 Nos.
3 Air Break Contactor, TP 32 A, 415 V, AC for Capacitor Duty	3 Nos.
4 TP, 415V 32 Amp, MCB for Power Capacitor	3 Nos.
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size	
a) 0 - 200 Amps for Incoming Side	1 No
b) 0 - 60 Amps for Outgoing Motor Feeder	3 Nos.
8 Ammeter Selector Switch, 4 position, 10/15 Amp	4 Nos.
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No
10 Current Transformers for metering purpose Accuracy Class I	
a) CT, 200/5 for incoming side	6 Nos.
b) CT, 60/5 for outgoing side	9 Nos.
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.

12 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No	
13 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.	
14 Aluminium Busbar, 35 mm × 5 mm	1 Set	
15 On and Off Push Button Switch	3 Set	
	Per Unit Rate	₹ 185030.00 Rupees One Lakh EightyFive Thousand Thirty Only

ITEM 1.1.1(D) Main LT Panel Board Suitable for operation of **4 x 20 HP** Pumpset
Size :2000 mm(B)x 1300 mm(H)x 400 mm(D)

Electrical accessories :-

1 FP, 415 V 200 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer	1 No	
2 TP, 63A, 415V , AC Motor Control Switch(SDF) with 63A HRC Fuse	4 Nos.	
3 Air Break Contactor, TP 32 A, 415 V, AC for Capacitor Duty	4 Nos.	
4 TP, 415V 32 Amp, MCB for Power Capacitor	4 Nos.	
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No	
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No	
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size		
a) 0 - 200 Amps for Incoming Side	1 No	
b) 0 - 60 Amps for Outgoing Motor Feeder	4 Nos.	
8 Ammeter Selector Switch, 4 position, 10/15 Amp	5 Nos.	
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No	
10 Current Transformers for metering purpose Accuracy Class I		
a) CT, 200/5 for incoming side	6 Nos.	
b) CT, 60/5 for outgoing side	12 Nos.	
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.	
12 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No	
13 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.	
14 Aluminium Busbar, 35 mm × 5 mm	1 Set	
15 On and Off Push Button Switch	4 Set	
	Per Unit Rate	₹ 227640.00 Rupees Two Lakh TwentySeven Thousand Six Hundred Forty Only

ITEM 1.1.1(E) Main LT Panel Board Suitable for operation of **5 x 20 HP** Pumpset
Size :2400 mm(B)x 1300 mm(H)x 400 mm(D)

1 FP, 415 V 250 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer	1 No
2 TP, 63A, 415V , AC Motor Control Switch(SDF) with 63A HRC Fuse	5 Nos.
3 Air Break Contactor, TP 32 A, 415 V, AC for Capacitor Duty	5 Nos.
4 TP, 415V 32 Amp, MCB for Power Capacitor	5 Nos.
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No

7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size		
a) 0 - 200 Amps for Incoming Side	1 No	
b) 0 - 60 Amps for Outgoing Motor Feeder	5 Nos.	
8 Ammeter Selector Switch, 4 position, 10/15 Amp	6 Nos.	
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No	
10 Current Transformers for metering purpose Accuracy Class I		
a) CT, 200/5 for incoming side	6 Nos.	
b) CT, 60/5 for outgoing side	15 Nos.	
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.	
12 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No	
13 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.	
14 Aluminium Busbar, 40 mm x 5 mm	1 Set	
15 On and Off Push Button Switch	5 Set	
	Per Unit Rate	₹ 270780.00 Rupees Two Lakh Seventy Thousand Seven Hundred Eighty Only

ITEM 1.1.1(F) Main LT Panel Board Suitable for operation of **6 x 20 HP Pumpset**
Size :2800 mm(B)x 1400 mm(H)x 400 mm(D)

Electrical accessories :-

1 FP, 415 V 315 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer	1 No	
2 TP, 63A, 415V , AC Motor Control Switch(SDF) with 63A HRC Fuse	6 Nos.	
3 Air Break Contactor, TP 32 A, 415 V, AC for Capacitor Duty	6 Nos.	
4 TP, 415V 32 Amp, MCB for Power Capacitor	6 Nos.	
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No	
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No	
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size		
a) 0 - 300 Amps for Incoming Side	1 No	
b) 0 - 60 Amps for Outgoing Motor Feeder	6 Nos.	
8 Ammeter Selector Switch, 4 position, 10/15 Amp	7 Nos.	
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No	
10 Current Transformers for metering purpose Accuracy Class I		
a) CT, 200/5 for incoming side	6 Nos.	
b) CT, 60/5 for outgoing side	18 Nos.	
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.	
12 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No	
13 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.	
14 Aluminium Busbar, 35 mm x 5 mm	1 Set	
15 On and Off Push Button Switch	6 Set	
	Per Unit Rate	₹ 319820.00 Rupees Three Lakh Nineteen Thousand Eight Hundred Twenty Only

ITEM 1.1.2 Main LT Control Panel Board for 40 HP Pumpsets

Specification of Panel board :

Supplying, installation, testing & commissioning of indoor type floor mounted, cubicle type compartmental, dust and vermin proof (as per IP-54) main LT Control Panel Board of following capacity and of given size, made out of 16 SWG CR Sheet and 40mmx40mmx6mm angle having four nos. of legs 400 mm long at the bottom, with folded and welded construction having dismantling doors at the back, surface chemically treated and Siemen's grey powder coated, containing Al. strip busbar having minimum current density of 1.2 Amp/mm² R-Y-B-N colour coded with heat shrinkable insulating sleeves containing all incoming and outgoing electrical accessories as specified, neatly installed and internally wired with best quality multi-strand, PVC insulated Single core unsheathed, HRFER copper wire (switch gears above 100Amp rating to be connected to busbar through Aluminium strip of suitable size) having cable incoming & outgoing provision at the bottom through gland plates complete including necessary excavation of trench and C C Work as directed

ITEM 1.1.2(A) Main LT Panel Board Suitable for operation of 1 x 30 HP/ 40 HP Pumpset

Size : 800 mm(B)x 1200 mm(H)x 400 mm(D)

Electrical accessories :-

Incoming side

1 FP, 415 V 100 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 35 / 36 KA	1 No
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No
4 No. M.I. Ammeter 0 - 100 Amp, CT operated, 1% accuracy 96mm x 96mm size	1 No
5 Ammeter Selector Switch, 4 position, 10/15 Amp	1 No
6 Analog Power Factor Meter, 1% accuracy	1 No
7 Current Transformers for metering purpose with CT ratio 100/5	6 Nos.

8 LED type Pilot Indicating Lamp 25 mm	3 Nos.
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.

10 Aluminium Busbar, 25 mm x 5 mm	1 Set
<u>Outgoing side</u>	3 Nos.

11 TP, 100A, 415V , AC Motor Control Switch(SDF) with 63A HRC Fuse	1 No
12 LT Power Capacitor, 3Ø(Single Unit), 415V 6 kVAR, for Power Factor Correction	1 No
13 TP, 415V 32 Amp, MCB for Power Capacitor	1 No
14 Air Break Contactor, TP 32 A, 415 V, AC for Capacitor Duty	1 No
15 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No
16 On and Off Push Button switch	1 Set

Per Unit Rate	₹	98210.00	Rupees
			NinetyEight
			Thousand Two
			Hundred Ten
			Only

ITEM 1.1.2(B) **Main LT Panel Board** Suitable for operation of **2 x 40 HP** Pumpset
Size :1200 mm(B)x 1300 mm(H)x 400 mm(D)

Electrical accessories :-

1 FP, 415 V 200 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer	1 No
2 TP, 100A, 415V , AC Motor Control Switch(SDF) with 100A HRC Fuse	2 Nos.
3 Air Break Contactor, TP 40 A, 415 V, AC for Capacitor Duty	2 Nos.
4 TP, 415V 40 Amp, MCB for Power Capacitor	2 Nos.
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size	
a) 0 - 200 Amps for Incoming Side	1 No
b) 0 - 100 Amps for Outgoing Motor Feeder	2 Nos.
8 Ammeter Selector Switch, 4 position, 10/15 Amp	3 Nos.
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No
10 Current Transformers for metering purpose Accuracy Class I	
a) CT, 200/5 for incoming side	6 Nos.
b) CT, 100/5 for outgoing side	6 Nos.
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.
12 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
13 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No
14 Aluminium Busbar, 40 mm x 5 mm	1 Set
15 On and Off Push Button Switch	2 Set

Per Unit Rate ₹ 191860.00 Rupees One
Lakh NinetyOne
Thousand Eight
Hundred Sixty
Only

ITEM 1.1.2(C) **Main LT Panel Board** Suitable for operation of **3 x 40 HP** Pumpset
Size :1600 mm(B)x 1400 mm(H)x 400 mm(D)

Electrical accessories :-

1 FP, 415 V 315 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity50 kA as main incomer	1 No
2 TP, 100A, 415V , AC Motor Control Switch(SDF) with 100A HRC Fuse	3 Nos.
3 Air Break Contactor, TP 40 A, 415 V, AC for Capacitor Duty	3 Nos.
4 TP, 415V 40 Amp, MCB for Power Capacitor	3 Nos.
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size	
a) 0 - 300 Amps for Incoming Side	1 No
b) 0 - 100 Amps for Outgoing Motor Feeder	3 Nos.
8 Ammeter Selector Switch, 4 position, 10/15 Amp	4 Nos.
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No
10 Current Transformers for metering purpose Accuracy Class I	
a) CT, 300/5 for incoming side	6 Nos.
b) CT, 100/5 for outgoing side	9 Nos.
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.
12 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.

13 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No	
14 Aluminium Busbar, 40 mm × 5 mm	1 Set	
15 On and Off Push Button Switch	3 Set	
	Per Unit Rate	₹ 235700.00 Rupees Two Lakh ThirtyFive Thousand Seven Hundred Only

ITEM 1.1.2(D) Main LT Panel Board Suitable for operation of **4 x 40 HP** Pumpset
Size :2000 mm(B)x 1400 mm(H)x 400 mm(D)

Electrical accessories :-

1 FP, 415 V 400 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer	1 No	
2 TP, 100A, 415V , AC Motor Control Switch(SDF) with 100A HRC Fuse	4 Nos.	
3 Air Break Contactor, TP 40 A, 415 V, AC for Capacitor Duty	4 Nos.	
4 TP, 415V 40 Amp, MCB for Power Capacitor	4 Nos.	
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No	
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No	
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size		
a) 0 - 400 Amps for Incoming Side	1 No	
b) 0 - 100 Amps for Outgoing Motor Feeder	4 Nos.	
8 Ammeter Selector Switch, 4 position, 10/15 Amp	5 Nos.	
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No	
10 Current Transformers for metering purpose Accuracy Class I		
a) CT, 400/5 for incoming side	6 Nos.	
b) CT, 100/5 for outgoing side	12 Nos.	
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.	
12 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.	
13 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No	
14 Aluminium Busbar, 40 mm × 10 mm	1 Set	
15 On and Off Push Button Switch	4 Set	
	Per Unit Rate	₹ 281020.00 Rupees Two Lakh EightyOne Thousand Twenty Only

ITEM 1.1.2(E) Main LT Panel Board Suitable for operation of **5 x 40 HP** Pumpset
Size :2400 mm(B)x 1400 mm(H)x 400 mm(D)

Electrical accessories :-

1 1 No, FP, 415 V 500 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA	1 No	
2 TP, 100A, 415V , AC Motor Control Switch(SDF) with 100A HRC Fuse	5 Nos.	
3 Air Break Contactor, TP 40 A, 415 V, AC for Capacitor Duty	5 Nos.	
4 TP, 415V 40 Amp, MCB for Power Capacitor	5 Nos.	
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No	
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No	
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size		

a) 0 - 500 Amps for Incoming Side	1 No	
b) 0 - 100 Amps for Outgoing Motor Feeder	5 Nos.	
8 Ammeter Selector Switch, 4 position, 10/15 Amp	6 Nos.	
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No	
10 Current Transformers for metering purpose Accuracy Class I		
a) CT, 500/5 for incoming side	6 Nos.	
b) CT, 100/5 for outgoing side	15 Nos.	
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.	
12 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.	
13 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No	
14 Aluminium Busbar, 40 mm x 10 mm	1 Set	
15 On and Off Push Button Switch	5 Set	
	Per Unit Rate	₹ 341980.00 Rupees Three Lakh FourtyOne Thousand Nine Hundred Eighty Only

ITEM 1.1.2(F) Main LT Panel Board Suitable for operation of **6 x 40 HP** Pumpset
Size :2800 mm(B)x 1400 mm(H)x 400 mm(D)

Electrical accessories :-

1 FP, 415 V 630 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer	1 No
2 TP, 100A, 415V , AC Motor Control Switch(SDF) with 100A HRC Fuse	6 Nos.
3 Air Break Contactor, TP 40 A, 415 V, AC for Capacitor Duty	6 Nos.
4 TP, 415V 40 Amp, MCB for Power Capacitor	6 Nos.
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size	
a) 0 - 600 Amps for Incoming Side	1 No
b) 0 - 100 Amps for Outgoing Motor Feeder	6 Nos.
8 Ammeter Selector Switch, 4 position, 10/15 Amp	7 Nos.
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No
10 Current Transformers for metering purpose Accuracy Class I	
a) CT, 600/5 for incoming side	6 Nos.
b) CT, 100/5 for outgoing side	18 Nos.
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.
12 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
13 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No
14 Aluminium Busbar, 40 mm x 10 mm	1 Set
15 On and Off Push Button Switch	6 Set

Per Unit Rate ₹ 383230.00 Rupees Three
Lakh
EightyThree
Thousand Two
Hundred Thirty
Only

ITEM 1.1.3 Main LT Control Panel Board for 60 HP Pumpsets

Specification of Panel board :

Supplying, installation, testing & commissioning of indoor type floor mounted, cubicle type compartmental, dust and vermin proof (as per IP-54) main LT Control Panel Board of following capacity and given size, made out of 16 SWG CR Sheet and 40mmx40mmx6mm angle having four nos. of legs 400 mm long at the bottom, with folded and welded construction having dismantling doors at the back, surface chemically treated and Siemen's grey powder coated, containing Al. strip busbar having minimum current density of 1.2 Amp/mm² R-Y-B-N colour coded with heat shrinkable insulating sleeves containing all incoming and outgoing electrical accessories as specified, neatly installed and internally wired with best quality multi-strand, PVC insulated Single core unsheathed, HRFR copper wire (switch gears above 100Amp rating to be connected to busbar through Aluminium strip of suitable size) having cable incoming & outgoing provision at the bottom through gland plates complete including necessary excavation of trench and C C Work as directed

ITEM 1.1.3(A) Main LT Panel Board Suitable for operation of 2 x 60 HP Pumpset

Size :1200 mm(B)x 1500 mm(H)x 400 mm(D)

Electrical accessories :-

1 FP, 415 V 315 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer	1 No
2 TP, 200A, 415V , AC Motor Control Switch(SDF) with 200A HRC Fuse	2 Nos.
3 Air Break Contactor, TP 63 A, 415 V, AC for Capacitor Duty	2 Nos.
4 TP, 415V 63 Amp, MCB for Power Capacitor	2 Nos.
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size	
a) 0 - 300 Amps for Incoming Side	1 No
b) 0 - 200 Amps for Outgoing Motor Feeder	2 Nos.
8 Ammeter Selector Switch, 4 position, 10/15 Amp	3 Nos.
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No
10 Current Transformers for metering purpose Accuracy Class I	
a) CT, 300/5 for incoming side	6 Nos.
b) CT, 200/5 for outgoing side	6 Nos.
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.
12 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
13 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No
14 Aluminium Busbar, 40 mm x 5 mm	1 Set
15 On and Off Push Button Switch	2 Set

Per Unit Rate ₹ 206090.00 Rupees Two
Lakh Six
Thousand Ninety
Only

ITEM 1.1.3(B) Main LT Panel Board Suitable for operation of **3 x 60 HP** Pumpset
Size :1600 mm(B)x 1500 mm(H)x 400 mm(D)

Electrical accessories :-

1 FP, 415 V 400 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer	1 No
2 TP, 200A, 415V , AC Motor Control Switch(SDF) with 200A HRC Fuse	3 Nos.
3 Air Break Contactor, TP 63 A, 415 V, AC for Capacitor Duty	3 Nos.
4 TP, 415V 63 Amp, MCB for Power Capacitor	3 Nos.
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size	
a) 0 - 400 Amps for Incoming Side	1 No
b) 0 - 200 Amps for Outgoing Motor Feeder	3 Nos.
8 Ammeter Selector Switch, 4 position, 10/15 Amp	4 Nos.
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No
10 Current Transformers for metering purpose Accuracy Class I	
a) CT, 400/5 for incoming side	6 Nos.
b) CT, 200/5 for outgoing side	9 Nos.
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.
12 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
13 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No
14 Aluminium Busbar, 40 mm x 5 mm	1 Set
15 On and Off Push Button Switch	3 Set

Per Unit Rate ₹ 266860.00 Rupees Two
Lakh SixtySix
Thousand Eight
Hundred Sixty
Only

ITEM 1.1.3(C) Main LT Panel Board Suitable for operation of **4 x 60 HP** Pumpset
Size :2000 mm(B)x 1500 mm(H)x 400 mm(D)

Electrical accessories :-

1 FP, 415 V 630 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer	1 No
2 TP, 200A, 415V , AC Motor Control Switch(SDF) with 200A HRC Fuse	4 Nos.
3 Air Break Contactor, TP 63 A, 415 V, AC for Capacitor Duty	4 Nos.
4 TP, 415V 63 Amp, MCB for Power Capacitor	4 Nos.
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size	
a) 0 - 600 Amps for Incoming Side	1 No
b) 0 - 200 Amps for Outgoing Motor Feeder	4 Nos.
8 Ammeter Selector Switch, 4 position, 10/15 Amp	5 Nos.
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No
10 Current Transformers for metering purpose Accuracy Class I	
a) CT, 600/5 for incoming side	6 Nos.

b) CT, 200/5 for outgoing side	12 Nos.	
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.	
12 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.	
13 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No	
14 Aluminium Busbar, 50 mm × 10 mm	1 Set	
15 On and Off Push Button Switch	4 Set	
	Per Unit Rate	₹ 343090.00 Rupees Three Lakh FourtyThree Thousand Ninety Only

ITEM 1.1.3(D) Main LT Panel Board Suitable for operation of **5 x 60 HP** Pumpset
Size :2400 mm(B)x 1500 mm(H)x 400 mm(D)

Electrical accessories :-

1 FP, 415 V 630 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer	1 No	
2 TP, 200A, 415V , AC Motor Control Switch(SDF) with 200A HRC Fuse	5 Nos.	
3 Air Break Contactor, TP 63 A, 415 V, AC for Capacitor Duty	5 Nos.	
4 TP, 415V 63 Amp, MCB for Power Capacitor	5 Nos.	
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No	
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No	
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size		
a) 0 - 600 Amps for Incoming Side	1 No	
b) 0 - 200 Amps for Outgoing Motor Feeder	5 Nos.	
8 Ammeter Selector Switch, 4 position, 10/15 Amp	6 Nos.	
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No	
10 Current Transformers for metering purpose Accuracy Class I		
a) CT, 600/5 for incoming side	6 Nos.	
b) CT, 200/5 for outgoing side	15 Nos.	
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.	
12 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.	
13 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No	
14 Aluminium Busbar, 50 mm × 10 mm	1 Set	
15 On and Off Push Button Switch	5 Set	
	Per Unit Rate	₹ 409210.00 Rupees Four Lakh Nine Thousand Two Hundred Ten Only

ITEM 1.1.4 Main LT Control Panel Board for 75 HP Pumpsets

Specification of Panel board :

Supplying, installation, testing & commissioning of indoor type floor mounted, cubicle type compartmental, dust and vermin proof (as per IP-54) main LT Control Panel Board of following capacity and size, made out of 16 SWG CR Sheet and 40mmx40mmx6mm angle having four nos. of legs 400 mm long at the bottom, with folded and welded construction having dismantling doors at the back, surface chemically treated and Siemen's grey powder coated, containing Al. strip busbar having minimum current density of 1.2 Amp/mm² R-Y-B-N colour coded with heat shrinkable insulating sleeves containing all incoming and outgoing electrical accessories as specified, neatly installed and internally wired with best quality multi-strand, PVC insulated Single core unsheathed, HRFR copper wire (switch gears above 100Amp rating to be connected to busbar through Aluminium strip of suitable size) having cable incoming & outgoing provision at the bottom through gland plates complete including excavation of trench and necessary C C Work as directed

ITEM 1.1.4(A) Main LT Panel Board Suitable for operation of 2 x 75 HP Pumpset Size :1200 mm(B)x 1500 mm(H)x 400 mm(D)

Electrical accessories :-

1 FP, 415 V 315 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer	1 No
2 TP, 250A, 415V , AC Motor Control Switch(SDF) with 250A HRC Fuse	2 Nos.
3 Air Break Contactor, TP 100 A, 415 V, AC for Capacitor Duty	2 Nos.
4 TP, 415V 100 Amp, MCB for Power Capacitor	2 Nos.
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size	
a) 0 - 300 Amps for Incoming Side	1 No
b) 0 - 200 Amps for Outgoing Motor Feeder	2 Nos.
8 Ammeter Selector Switch, 4 position, 10/15 Amp	3 Nos.
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No
10 Current Transformers for metering purpose Accuracy Class I	
a) CT, 300/5 for incoming side	6 Nos.
b) CT, 200/5 for outgoing side	6 Nos.
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.
12 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
13 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No
14 Aluminium Busbar, 40 mm x 5 mm	1 Set
15 On and Off Push Button Switch	2 Set

Per Unit Rate ₹ 238770.00 Rupees Two
Lakh ThirtyEight
Thousand Seven
Hundred
Seventy Only

ITEM 1.1.4(B) Main LT Panel Board Suitable for operation of **3 x 75 HP** Pumpset
Size :1600 mm(B)x 1500 mm(H)x 400 mm(D)

Electrical accessories :-

1 FP, 415 V 400 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer	1 No
2 TP, 250A, 415V , AC Motor Control Switch(SDF) with 250A HRC Fuse	3 Nos.
3 Air Break Contactor, TP 100 A, 415 V, AC for Capacitor Duty	3 Nos.
4 TP, 415V 100 Amp, MCB for Power Capacitor	3 Nos.
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size	
a) 0 - 400 Amps for Incoming Side	1 No
b) 0 - 200 Amps for Outgoing Motor Feeder	3 Nos.
8 Ammeter Selector Switch, 4 position, 10/15 Amp	4 Nos.
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No
10 Current Transformers for metering purpose Accuracy Class I	
a) CT, 400/5 for incoming side	6 Nos.
b) CT, 200/5 for outgoing side	9 Nos.
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.
12 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
13 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No
14 Aluminium Busbar, 40 mm x 5 mm	1 Set
15 On and Off Push Button Switch	3 Set

Per Unit Rate ₹ 318200.00 Rupees Three
Lakh Eighteen
Thousand Two
Hundred Only

ITEM 1.1.4(C) Main LT Panel Board Suitable for operation of **4 x 75 HP** Pumpset
Size :2000 mm(B)x 1500 mm(H)x 400 mm(D)

Electrical accessories :-

1 FP, 415 V 630 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer	1 No
2 TP, 250A, 415V , AC Motor Control Switch(SDF) with 250A HRC Fuse	4 Nos.
3 Air Break Contactor, TP 100 A, 415 V, AC for Capacitor Duty	4 Nos.
4 TP, 415V 100 Amp, MCB for Power Capacitor	4 Nos.
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size	
a) 0 - 600 Amps for Incoming Side	1 No
b) 0 - 200 Amps for Outgoing Motor Feeder	4 Nos.
8 Ammeter Selector Switch, 4 position, 10/15 Amp	5 Nos.
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No
10 Current Transformers for metering purpose Accuracy Class I	
a) CT, 600/5 for incoming side	6 Nos.
b) CT, 200/5 for outgoing side	12 Nos.
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.
12 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.

13 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No	
13 Aluminium Busbar, 50 mm × 10 mm	1 Set	
14 On and Off Push Button Switch	4 Set	
	Per Unit Rate	₹ 408970.00 Rupees Four Lakh Eight Thousand Nine Hundred Seventy Only

ITEM 1.1.4(D) Main LT Panel Board Suitable for operation of **5 x 75 HP** Pumpset
Size :2400 mm(B)x 1500 mm(H)x 400 mm(D)

Electrical accessories :-

1 FP, 415 V 800 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer	1 No	
2 TP, 250A, 415V , AC Motor Control Switch(SDF) with 250A HRC Fuse	5 Nos.	
3 Air Break Contactor, TP 100 A, 415 V, AC for Capacitor Duty	5 Nos.	
4 TP, 415V 100 Amp, MCB for Power Capacitor	5 Nos.	
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No	
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No	
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size		
a) 0 - 600 Amps for Incoming Side	1 No	
b) 0 - 200 Amps for Outgoing Motor Feeder	5 Nos.	
8 Ammeter Selector Switch, 4 position, 10/15 Amp	3 Nos.	
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No	
10 Current Transformers for metering purpose Accuracy Class I		
a) CT, 600/5 for incoming side	6 Nos.	
b) CT, 200/5 for outgoing side	15 Nos.	
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.	
12 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.	
13 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No	
14 Aluminium Busbar, 50 mm × 10 mm	1 Set	
15 On and Off Push Button Switch	5 Set	
	Per Unit Rate	₹ 527400.00 Rupees Five Lakh TwentySeven Thousand Four Hundred Only

ITEM 1.2 SUB LT PANEL BOARD with SDF

ITEM 1.2.1 For 20 HP Pumpsets

Specification of Panel board :

Supplying, installation, testing & commissioning of indoor type floor mounted, cubical type compartmental, dust and vermin proof (as per IP-54) LT Motor Control Sub Panel Board of following capacity and size, made out of 16 SWG CR Sheet and 40mmx40mmx6mm angle having four nos. of legs of 400 mm length at the bottom, with folded and welded construction having dismantling doors at the back, surface chemically treated and Siemen's grey powder coated, containing Motor Control Switches and Ammeters and Voltmeters as specified, neatly installed and internally wired with best quality multi-strand, PVC insulated Single core unsheathed, HRFR copper wire having cable incoming & outgoing provision at the bottom through gland plates complete including fixing on the barge with nuts and bolts as directed.

ITEM 1.2.1(A) Sub LT Panel Board with SDF Suitable for operation of 1 x 20 HP Pumpset Size : 500 mm(B)x 1000 mm(H)x 400 mm(D)

Electrical Components

1 TP, 63A, 415V , AC Motor Control Switch(SDF) with 63A HRC Fuse	1 No
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No
4 M.I. Ammeter 0 - 60 Amp, CT operated, 1% accuracy 96mm x 96mm size	1 No
5 Ammeter Selector Switch, 4 position, 10/15 Amp	1 No
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No
7 Current Transformers for metering purpose with CT ratio 60/5	3 Nos.
8 LED type Pilot Indicating Lamp 25 mm	3 Nos.
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
10 Terminal Strip four connections	1 No

Per Unit Rate ₹ 42420.00 Rupees
FourtyTwo
Thousand Four
Hundred Twenty
Only

ITEM 1.2.1(B) Sub LT Panel Board with SDF Suitable for operation of 2 x 20 HP Pumpset Size :800 mm(B)x 1200 mm(H)x 400 mm(D)

Electrical Components

1 TP, 63A, 415V , AC Motor Control Switch(SDF) with 63A HRC Fuse	2 Nos.
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4 M.I. Ammeter 0 - 60 Amp, CT operated, 1% accuracy 96mm x 96mm size	2 Nos.
5 Ammeter Selector Switch, 4 position, 10/15 Amp	2 Nos.
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7 Current Transformers for metering purpose with CT ratio 60/5	6 Nos.
8 LED type Pilot Indicating Lamp 25 mm	6 Nos.

9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.		
11 Terminal Strip four connections	1 No.		
	Per Unit Rate	₹	80980.00 Rupees Eighty Thousand Nine Hundred Eighty Only

ITEM 1.2.1(C) Sub LT Panel Board with SDF Suitable for operation of **3 x 20 HP** Pumpset
Size :1200 mm(B)x 1200 mm(H)x 400 mm(D)

Electrical Components

1 TP, 63A, 415V , AC Motor Control Switch(SDF) with 63A HRC Fuse	3 Nos.		
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.		
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.		
4 M.I. Ammeter 0 - 60 Amp, CT operated, 1% accuracy 96mm x 96mm size	3 Nos.		
5 Ammeter Selector Switch, 4 position, 10/15 Amp	3 Nos.		
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.		
7 Current Transformers for metering purpose with CT ratio 60/5	9 Nos.		
8 LED type Pilot Indicating Lamp 25 mm	9 Nos.		
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.		
10 Terminal Strip four connections	1 No.		
	Per Unit Rate	₹	105820.00 Rupees One Lakh Five Thousand Eight Hundred Twenty Only

ITEM 1.2.1(D) Sub LT Panel Board with SDF Suitable for operation of **4 x 20 HP** Pumpset
Size :1600 mm(B)x 1200 mm(H)x 400 mm(D)

Electrical Components

1 TP, 63A, 415V , AC Motor Control Switch(SDF) with 63A HRC Fuse	4 Nos.		
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.		
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.		
4 M.I. Ammeter 0 - 60 Amp, CT operated, 1% accuracy 96mm x 96mm size	4 Nos.		
5 Ammeter Selector Switch, 4 position, 10/15 Amp	4 Nos.		
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.		
7 Current Transformers for metering purpose with CT ratio 60/5	12 Nos.		
8 LED type Pilot Indicating Lamp 25 mm	12 Nos.		
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.		
10 Terminal Strip four connections	1 No.		

Per Unit Rate ₹ 135780.00 Rupees One
Lakh ThirtyFive
Thousand Seven
Hundred Eighty
Only

ITEM 1.2.1(E) Sub LT Panel Board with SDF Suitable for operation of **5 x 20 HP** Pumpset
Size :2000 mm(B)x 1200 mm(H)x 400 mm(D)

Electrical Components

1 TP, 63A, 415V , AC Motor Control Switch(SDF) with 63A HRC Fuse	5 Nos.
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4 M.I. Ammeter 0 - 60 Amp, CT operated, 1% accuracy 96mm x 96mm size	5 Nos.
5 Ammeter Selector Switch, 4 position, 10/15 Amp	5 Nos.
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7 Current Transformers for metering purpose with CT ratio 60/5	15 Nos.
8 LED type Pilot Indicating Lamp 25 mm	15 Nos.
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
10 Terminal Strip four connections	1 No.

Per Unit Rate ₹ 163040.00 Rupees One
Lakh SixtyThree
Thousand Fourty
Only

ITEM 1.2.2 Sub LT Panel with SDF for 40 HP Pumpsets

Supplying, installation, testing & commissioning of indoor type floor mounted, cubical type compartmental, dust and vermin proof (as per IP-54) LT Motor Control Sub Panel Board of 40 HP capacity and given size, made out of 16 SWG CR Sheet and 40mmx40mmx6mm angle having four nos. of legs of 400 mm length at the bottom, with folded and welded construction having dismantling doors at the back, surface chemically treated and Siemen's grey powder coated, containing Motor Control Switches and Ammeters and Voltmeters as specified, neatly installed and internally wired with best quality multi-strand, PVC insulated Single core unsheathed, HRFR copper wire having cable incoming & outgoing provision at the bottom through gland plates complete including fixing on the barge with nuts and bolts as directed.

ITEM 1.2.2(A) Sub LT Panel Board with SDF Suitable for operation of **1 x 30 HP/ 40 HP** Pumpset
Size : 500 mm(B)x 1000 mm(H)x 400 mm(D)

Electrical Components

1 TP, 100A, 415V , AC Motor Control Switch(SDF) with 100A HRC Fuse	1 No
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No
4 M.I. Ammeter 0 - 100 Amp, CT operated, 1% accuracy 96mm x 96mm size	1 No
5 Ammeter Selector Switch, 4 position, 10/15 Amp	1 No
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No

7	Current Transformers for metering purpose with CT ratio 100/5	3 Nos.	
8	LED type Pilot Indicating Lamp 25 mm	3 Nos.	
9	SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.	
10	Terminal Strip four connections	1 No	
	Per Unit Rate	₹	46590.00 Rupees FourtySix Thousand Five Hundred Ninety Only

ITEM 1.2.2(B) Sub LT Panel Board with SDF Suitable for operation of **2 x 40 HP** Pumpset
Size :800 mm(B)x 1200 mm(H)x 400 mm(D)

Electrical Components

1	TP, 100A, 415V , AC Motor Control Switch(SDF) with 100A HRC Fuse	2 Nos.	
2	M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.	
3	Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.	
4	M.I. Ammeter 0 - 100 Amp, CT operated, 1% accuracy 96mm x 96mm size	2 Nos.	
5	Ammeter Selector Switch, 4 position, 10/15 Amp	2 Nos.	
6	DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.	
7	Current Transformers for metering purpose with CT ratio 100/5	6 Nos.	
8	LED type Pilot Indicating Lamp 25 mm	6 Nos.	
9	SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.	
10	Terminal Strip four connections	2 No.	
	Per Unit Rate	₹	77970.00 Rupees SeventySeven Thousand Nine Hundred Seventy Only

ITEM 1.2.2(C) Sub LT Panel Board with SDF Suitable for operation of **3 x 40 HP** Pumpset
Size :1200 mm(B)x 1200 mm(H)x 400 mm(D)

Electrical Components

1	TP, 100A, 415V , AC Motor Control Switch(SDF) with 100A HRC Fuse	3 Nos.	
2	M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.	
3	Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.	
4	M.I. Ammeter 0 - 100 Amp, CT operated, 1% accuracy 96mm x 96mm size	3 Nos.	
5	Ammeter Selector Switch, 4 position, 10/15 Amp	3 Nos.	
6	DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.	
7	Current Transformers for metering purpose with CT ratio 100/5	9 Nos.	
8	LED type Pilot Indicating Lamp 25 mm	9 Nos.	
9	SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.	
10	Terminal Strip four connections	1 No.	

Per Unit Rate ₹ 119360.00 Rupees One
Lakh Nineteen
Thousand Three
Hundred Sixty
Only

ITEM 1.2.2(D) Sub LT Panel Board with SDF Suitable for operation of **4 x 40 HP** Pumpset
Size :1600 mm(B)x 1200 mm(H)x 400 mm(D)

Electrical Components	
1 TP, 100A, 415V , AC Motor Control Switch(SDF) with 100A HRC Fuse	4 Nos.
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4 M.I. Ammeter 0 - 100 Amp, CT operated, 1% accuracy 96mm x 96mm size	4 Nos.
5 Ammeter Selector Switch, 4 position, 10/15 Amp	4 Nos.
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7 Current Transformers for metering purpose with CT ratio 100/5	12 Nos.
8 LED type Pilot Indicating Lamp 25 mm	12 Nos.
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
10 Terminal Strip four connections	1 No.

Per Unit Rate ₹ 153840.00 Rupees One
Lakh FiftyThree
Thousand Eight
Hundred Forty
Only

ITEM 1.2.2(E) Sub LT Panel Board with SDF Suitable for operation of **5 x 40 HP** Pumpset
Size :2000 mm(B)x 1200 mm(H)x 400 mm(D)

Electrical Components	
1 TP, 100A, 415V , AC Motor Control Switch(SDF) with 100A HRC Fuse	5 Nos.
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4 M.I. Ammeter 0 - 100 Amp, CT operated, 1% accuracy 96mm x 96mm size	5 Nos.
5 Ammeter Selector Switch, 4 position, 10/15 Amp	5 Nos.
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7 Current Transformers for metering purpose with CT ratio 100/5	15 Nos.
8 LED type Pilot Indicating Lamp 25 mm	15 Nos.
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
10 Terminal Strip four connections	1 No.

Per Unit Rate ₹ 183990.00 Rupees One
Lakh
EightyThree
Thousand Nine
Hundred Ninety
Only

ITEM 1.2.3 Sub LT Panel with SDF for 60 HP Pumpsets

Supplying, installation, testing & commissioning of indoor type floor mounted, cubical type compartmental, dust and vermin proof (as per IP-54) LT Motor Control Sub Panel Board of 60 HP capacity and given size, made out of 16 SWG CR Sheet and 40mmx40mmx6mm angle having four nos. of legs of 400 mm length at the bottom, with folded and welded construction having dismantling doors at the back, surface chemically treated and Siemen's grey powder coated, containing Motor Control Switches and Ammeters and Voltmeters as specified, neatly installed and internally wired with best quality multi-strand, PVC insulated Single core unsheathed, HRFR copper wire having cable incoming & outgoing provision at the bottom through gland plates complete including fixing on the barge with nuts and bolts as directed.

ITEM 1.2.3(A) Sub LT Panel Board with SDF Suitable for operation of 2 x 60 HP Pumpset Size :800 mm(B)x 1400 mm(H)x 400 mm(D)

Electrical Components	
TP, 200A, 415V , AC Motor Control Switch(SDF) with 200A HRC	2 Nos.
1 Fuse	
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4 M.I. Ammeter 0 - 200 Amp, CT operated, 1% accuracy 96mm x 96mm size	2 Nos.
5 Ammeter Selector Switch, 4 position, 10/15 Amp	2 Nos.
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7	6 Nos.
Current Transformers for metering purpose with CT ratio 200/5	
8 LED type Pilot Indicating Lamp 25 mm	6 Nos.
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
10 Terminal Strip four connections	1 No.
Per Unit Rate	₹ 88460.00 Rupees EightyEight Thousand Four Hundred Sixty Only

ITEM 1.2.3(B) Sub LT Panel Board with SDF Suitable for operation of 3 x 60 HP Pumpset Size :1200 mm(B)x 1400 mm(H)x 400 mm(D)

Electrical Components	
1 TP, 200A, 415V , AC Motor Control Switch(SDF) with 200A HRC	3 Nos.
Fuse	
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4 M.I. Ammeter 0 - 200 Amp, CT operated, 1% accuracy 96mm x 96mm size	3 Nos.
5 Ammeter Selector Switch, 4 position, 10/15 Amp	3 Nos.
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7 Current Transformers for metering purpose with CT ratio 200/5	9 Nos.
8 LED type Pilot Indicating Lamp 25 mm	9 Nos.
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
10 Terminal Strip four connections	1 No.

Per Unit Rate ₹ 137570.00 Rupees One
Lakh
ThirtySeven
Thousand Five
Hundred
Seventy Only

ITEM 1.2.3(C) Sub LT Panel Board with SDF Suitable for operation of **4 x 60 HP** Pumpset
Size :1600 mm(B)x 1400 mm(H)x 400 mm(D)

Electrical Components	
1 TP, 200A, 415V , AC Motor Control Switch(SDF) with 200A HRC Fuse	4 Nos.
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4 M.I. Ammeter 0 - 200 Amp, CT operated, 1% accuracy 96mm x 96mm size	4 Nos.
5 Ammeter Selector Switch, 4 position, 10/15 Amp	4 Nos.
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7 Current Transformers for metering purpose with CT ratio 200/5	12 Nos.
8 LED type Pilot Indicating Lamp 25 mm	12 Nos.
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
10 Terminal Strip four connections	1 No.

Per Unit Rate ₹ 173100.00 Rupees One
Lakh
SeventyThree
Thousand One
Hundred Only

ITEM 1.2.3(D) Sub LT Panel Board with SDF Suitable for operation of **5 x 60 HP** Pumpset
Size :2000 mm(B)x 1400 mm(H)x 400 mm(D)

Electrical Components	
1 TP, 200A, 415V , AC Motor Control Switch(SDF) with 200A HRC Fuse	5 Nos.
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4 M.I. Ammeter 0 - 200 Amp, CT operated, 1% accuracy 96mm x 96mm size	5 Nos.
5 Ammeter Selector Switch, 4 position, 10/15 Amp	5 Nos.
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7 Current Transformers for metering purpose with CT ratio 200/5	15 Nos.
8 LED type Pilot Indicating Lamp 25 mm	15 Nos.
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
10 Terminal Strip four connections	1 No.

Per Unit Rate ₹ 215590.00 Rupees Two
Lakh Fifteen
Thousand Five
Hundred Ninety
Only

ITEM 1.2.4 Sub LT Panel with SDF for 75 HP Pumpsets

Supplying, installation, testing & commissioning of indoor type floor mounted, cubicle type compartmental, dust and vermin proof (as per IP-54) LT Motor Control Sub Panel Board of 75 HP capacity and given size, made out of 16 SWG CR Sheet and 40mmx40mmx6mm angle having four nos. of legs of 400 mm length at the bottom, with folded and welded construction having dismantling doors at the back, surface chemically treated and Siemen's grey powder coated, containing Motor Control Switches and Ammeters and Voltmeters as specified, neatly installed and internally wired with best quality multi-strand, PVC insulated Single core unsheathed, HRFR copper wire having cable incoming & outgoing provision at the bottom through gland plates complete including fixing on the barge with nuts and bolts as directed.

ITEM 1.2.4(A) Sub LT Panel Board with SDF Suitable for operation of 2 x 75 HP Pumpset Size :800 mm(B)x 1400 mm(H)x 400 mm(D)

Electrical Components

1 TP, 250A, 415V , AC Motor Control Switch(SDF) with 200A HRC Fuse	2 Nos.
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4 M.I. Ammeter 0 - 200 Amp, CT operated, 1% accuracy 96mm x 96mm size	2 Nos.
5 Ammeter Selector Switch, 4 position, 10/15 Amp	2 Nos.
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7	6 Nos.
Current Transformers for metering purpose with CT ratio 200/5	
8 LED type Pilot Indicating Lamp 25 mm	6 Nos.
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
10 Terminal Strip four connections	1 No.

Per Unit Rate ₹ 104048.07 Rupees One Lakh Four Thousand FourtyEight Paise Seven Only

ITEM 1.2.4(B) Sub LT Panel Board with SDF Suitable for operation of 3 x 75 HP Pumpset Size :1200 mm(B)x 1400 mm(H)x 400 mm(D)

Electrical Components

1 TP, 250A, 415V , AC Motor Control Switch(SDF) with 200A HRC Fuse	3 Nos.
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4 M.I. Ammeter 0 - 200 Amp, CT operated, 1% accuracy 96mm x 96mm size	3 Nos.
5 Ammeter Selector Switch, 4 position, 10/15 Amp	3 Nos.
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7	9 Nos.
Current Transformers for metering purpose with CT ratio 200/5	
8 LED type Pilot Indicating Lamp 25 mm	9 Nos.

9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.		
10 Terminal Strip four connections	1 No.		
	Per Unit Rate	₹ 146850.00	Rupees One Lakh FourtySix Thousand Eight Hundred Fifty Only

ITEM 1.2.4(C) Sub LT Panel Board with SDF Suitable for operation of **4 x 75 HP** Pumpset
Size :1600 mm(B)x 1400 mm(H)x 400 mm(D)

Electrical Components			
1 TP, 250A, 415V , AC Motor Control Switch(SDF) with 200A HRC Fuse	4 Nos.		
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.		
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.		
4 M.I. Ammeter 0 - 200 Amp, CT operated, 1% accuracy 96mm x 96mm size	4 Nos.		
5 Ammeter Selector Switch, 4 position, 10/15 Amp	4 Nos.		
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.		
7	12 Nos.		
Current Transformers for metering purpose with CT ratio 200/5			
8 LED type Pilot Indicating Lamp 25 mm	12 Nos.		
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.		
10 Terminal Strip four connections	1 No.		
	Per Unit Rate	₹ 190320.00	Rupees One Lakh Ninety Thousand Three Hundred Twenty Only

ITEM 1.2.4(D) Sub LT Panel Board with SDF Suitable for operation of **5 x 75 HP** Pumpset
Size :2000 mm(B)x 1400 mm(H)x 400 mm(D)

Electrical Components			
1 TP, 250A, 415V , AC Motor Control Switch(SDF) with 200A HRC Fuse	5 Nos.		
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.		
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.		
4 M.I. Ammeter 0 - 200 Amp, CT operated, 1% accuracy 96mm x 96mm size	5 Nos.		
5 Ammeter Selector Switch, 4 position, 10/15 Amp	5 Nos.		
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.		
7	15 Nos.		
Current Transformers for metering purpose with CT ratio 200/5			
8 LED type Pilot Indicating Lamp 25 mm	15 Nos.		
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.		
10 Terminal Strip four connections	1 No.		
	Per Unit Rate	₹ 231050.00	Rupees Two Lakh ThirtyOne Thousand Fifty Only

ITEM 1.3 SUB LT PANEL BOARD with MPCB

ITEM 1.3.1 For 20 HP Pumpsets

Supplying, installation, testing & commissioning of indoor type floor mounted, cubical type compartmental, dust and vermin proof (as per IP-54) LT Motor Control Sub Panel Board of 20 HP Capacity capacity and given size, made out of 16 SWG CR Sheet and 40mmx40mmx6mm angle having four nos. of legs of 400 mm length at the bottom, with folded and welded construction having dismantling doors at the back, surface chemically treated and Siemen's grey powder coated, containing Motor Protection Circuit Breaker (MPCB) and Ammeters and Voltmeters as specified, neatly installed and internally wired with best quality multi-strand, PVC insulated Single core unsheathed, HRFR copper wire having cable incoming & outgoing provision at the bottom through gland plates complete including fixing on the barge with nuts and bolts as directed.

ITEM 1.3.1(A) Sub LT Panel Board with MPCB Suitable for operation of 1 x 20 HP Pumpset

Size : 500 mm(B)x 1000 mm(H)x 400 mm(D)

Electrical Components

1 Motor Protection Circuit Breaker (MPCB) with adjustable Thermal and Magnetic Setting Three Pole (TP) 415 V AC 50 Hz with Rotary Handle for 20HP Motor	1 No
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No
4 M.I. Ammeter 0 - 60 Amp, CT operated, 1% accuracy 96mm x 96mm size	1 No
5 Ammeter Selector Switch, 4 position, 10/15 Amp	1 No
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No
7 Current Transformers for metering purpose with CT ratio 60/5	3 Nos.
8 LED type Pilot Indicating Lamp 25 mm	3 Nos.
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
10 Terminal Strip four connections	1 No

Per Unit Rate ₹ 52510.00 Rupees FiftyTwo Thousand Five Hundred Ten Only

ITEM 1.3.1(B) Sub LT Panel Board with MPCB Suitable for operation of 2 x 20 HP Pumpset

Size :800 mm(B)x 1200 mm(H)x 400 mm(D)

Electrical accessories :-

1 Motor Protection Circuit Breaker (MPCB) with adjustable Thermal and Magnetic Setting Three Pole (TP) 415 V AC 50 Hz with Rotary Handle for 20HP Motor	2 Nos.
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No
4 M.I. Ammeter 0 - 60 Amp, CT operated, 1% accuracy 96mm x 96mm size	2 Nos.
5 Ammeter Selector Switch, 4 position, 10/15 Amp	2 Nos.
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No

7 Current Transformers for metering purpose with CT ratio 60/5	6 Nos.		
8 LED type Pilot Indicating Lamp 25 mm	6 Nos.		
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.		
10 Terminal Strip four connections	1 No		
	Per Unit Rate	₹ 86410.00	Rupees EightySix Thousand Four Hundred Ten Only

ITEM 1.3.1(C) **Sub LT Panel Board with MPCB** Suitable for operation of 3 x 20 HP Pumpset
Size :1200 mm(B)x 1200 mm(H)x 400 mm(D)

Electrical accessories :-

1 Motor Protection Circuit Breaker (MPCB) with adjustable Thermal and Magnetic Setting Three Pole (TP) 415 V AC 50 Hz with Rotary Handle for 20HP Motor	3 Nos.		
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.		
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.		
4 M.I. Ammeter 0 - 60 Amp, CT operated, 1% accuracy 96mm x 96mm size	3 Nos.		
5 Ammeter Selector Switch, 4 position, 10/15 Amp	3 Nos.		
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.		
7 Current Transformers for metering purpose with CT ratio 60/5	9 Nos.		
8 LED type Pilot Indicating Lamp 25 mm	9 Nos.		
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.		
10 Terminal Strip four connections	1 No.		
	Per Unit Rate	₹ 118310.00	Rupees One Lakh Eighteen Thousand Three Hundred Ten Only

ITEM 1.3.1(D) **Sub LT Panel Board with MPCB** Suitable for operation of 4 x 20 HP Pumpset
Size :1600 mm(B)x 1200 mm(H)x 400 mm(D)

Electrical Components

1 Motor Protection Circuit Breaker (MPCB) with adjustable Thermal and Magnetic Setting Three Pole (TP) 415 V AC 50 Hz with Rotary Handle for 20HP Motor	4 Nos.		
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.		
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.		
4 M.I. Ammeter 0 - 60 Amp, CT operated, 1% accuracy 96mm x 96mm size	4 Nos.		
5 Ammeter Selector Switch, 4 position, 10/15 Amp	4 Nos.		
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.		
7 Current Transformers for metering purpose with CT ratio 60/5	12 Nos.		
8 LED type Pilot Indicating Lamp 25 mm	12 Nos.		
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.		
10 Terminal Strip four connections	1 No.		

Per Unit Rate ₹ 153210.00 Rupees One
Lakh FiftyThree
Thousand Two
Hundred Ten
Only

ITEM 1.3.1(E) **Sub LT Panel Board with MPCB** Suitable for operation of **5 x 20 HP** Pumpset
Size :2000 mm(B)x 1200 mm(H)x 400 mm(D)

Electrical Components

1 Motor Protection Circuit Breaker (MPCB) with adjustable Thermal and Magnetic Setting Three Pole (TP) 415 V AC 50 Hz with Rotary Handle for 20HP Motor	5 Nos.
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4 M.I. Ammeter 0 - 60 Amp, CT operated, 1% accuracy 96mm x 96mm size	5 Nos.
5 Ammeter Selector Switch, 4 position, 10/15 Amp	5 Nos.
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7 Current Transformers for metering purpose with CT ratio 60/5	15 Nos.
8 LED type Pilot Indicating Lamp 25 mm	15 Nos.
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
10 Terminal Strip four connections	1 No.

Per Unit Rate ₹ 186560.00 Rupees One
Lakh EightySix
Thousand Five
Hundred Sixty
Only

ITEM 1.3.2 **Sub LT Panel with SDF for 40 HP Pumpsets**

Supplying, installation, testing & commissioning of indoor type floor mounted, cubical type compartmental, dust and vermin proof (as per IP-54) LT Motor Control Sub Panel Board of 40 HP capacity and given size, made out of 16 SWG CR Sheet and 40mmx40mmx6mm angle having four nos. of legs of 400 mm length at the bottom, with folded and welded construction having dismantling doors at the back, surface chemically treated and Siemen's grey powder coated, containing Motor Protection Circuit Breaker (MPCB) and Ammeters and Voltmeters as specified, neatly installed and internally wired with best quality multi-strand, PVC insulated Single core unsheathed, HRFR copper wire having cable incoming & outgoing provision at the bottom through gland plates complete including fixing on the barge with nuts and bolts as directed.

ITEM 1.3.2(A) **Sub LT Panel Board with MPCB** Suitable for operation of **1 x 30 HP/ 40 HP** Pumpset
Size : 500 mm(B)x 1000 mm(H)x 400 mm(D)

Electrical Components

1 Motor Protection Circuit Breaker (MPCB) with adjustable Thermal and Magnetic Setting Three Pole (TP) 415 V AC 50 Hz with Rotary Handle for 30HP/ 40 HP Motor	1 No
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No
4 M.I. Ammeter 0 - 100 Amp, CT operated, 1% accuracy 96mm x 96mm size	1 No

5 Ammeter Selector Switch, 4 position, 10/15 Amp	1 No		
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No		
7 Current Transformers for metering purpose with CT ratio 100/5	3 Nos.		
8 LED type Pilot Indicating Lamp 25 mm	3 Nos.		
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.		
10 Terminal Strip four connections	1 No		
	Per Unit Rate	₹ 57770.00	Rupees FiftySeven Thousand Seven Hundred Seventy Only

ITEM 1.3.2(B) Sub LT Panel Board with MPCB Suitable for operation of **2 x 40 HP** Pumpset
Size :800 mm(B)x 1200 mm(H)x 400 mm(D)

Electrical Components			
1	Motor Protection Circuit Breaker (MPCB) with adjustable Thermal and Magnetic Setting Three Pole (TP) 415 V AC 50 Hz with Rotary Handle for 40 HP Motor	2 Nos.	
2	M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.	
3	Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.	
4	M.I. Ammeter 0 - 100 Amp, CT operated, 1% accuracy 96mm x 96mm size	2 Nos.	
5	Ammeter Selector Switch, 4 position, 10/15 Amp	2 Nos.	
6	DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.	
7	Current Transformers for metering purpose with CT ratio 100/5	6 Nos.	
8	LED type Pilot Indicating Lamp 25 mm	6 Nos.	
9	SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.	
10	Terminal Strip four connections	2 No.	
	Per Unit Rate	₹	90100.00 Rupees Ninety Thousand One Hundred Only

ITEM 1.3.2(C) Sub LT Panel Board with MPCB Suitable for operation of **3 x 40 HP** Pumpset
Size :1200 mm(B)x 1200 mm(H)x 400 mm(D)

Electrical Components			
1	Motor Protection Circuit Breaker (MPCB) with adjustable Thermal and Magnetic Setting Three Pole (TP) 415 V AC 50 Hz with Rotary Handle for 40 HP Motor	3 Nos.	
2	M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.	
3	Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.	
4	M.I. Ammeter 0 - 100 Amp, CT operated, 1% accuracy 96mm x 96mm size	3 Nos.	
5	Ammeter Selector Switch, 4 position, 10/15 Amp	3 Nos.	
6	DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.	
7	Current Transformers for metering purpose with CT ratio 100/5	9 Nos.	
8	LED type Pilot Indicating Lamp 25 mm	9 Nos.	
9	SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.	
10	Terminal Strip four connections	1 No.	
	Per Unit Rate	₹	139980.00 Rupees One Lakh ThirtyNine Thousand Nine Hundred Eighty Only

ITEM 1.3.2(D) **Sub LT Panel Board with MPCB** Suitable for operation of **4 x 40 HP** Pumpset
Size :1600 mm(B)x 1200 mm(H)x 400 mm(D)

Electrical Components			
1	Motor Protection Circuit Breaker (MPCB) with adjustable Thermal and Magnetic Setting Three Pole (TP) 415 V AC 50 Hz with Rotary Handle for 40 HP Motor	4 Nos.	
2	M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.	
3	Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.	
4	M.I. Ammeter 0 - 100 Amp, CT operated, 1% accuracy 96mm x 96mm size	4 Nos.	
5	Ammeter Selector Switch, 4 position, 10/15 Amp	4 Nos.	
6	DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.	
7	Current Transformers for metering purpose with CT ratio 100/5	12 Nos.	
8	LED type Pilot Indicating Lamp 25 mm	12 Nos.	
9	SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.	
10	Terminal Strip four connections	1 No.	
	Per Unit Rate	₹ 181020.00	Rupees One Lakh EightyOne Thousand Twenty Only

ITEM 1.3.2(E) **Sub LT Panel Board with MPCB** Suitable for operation of **5 x 40 HP** Pumpset
Size :2000 mm(B)x 1200 mm(H)x 400 mm(D)

Electrical Components			
1	Motor Protection Circuit Breaker (MPCB) with adjustable Thermal and Magnetic Setting Three Pole (TP) 415 V AC 50 Hz with Rotary Handle for 40 HP Motor	5 Nos.	
2	M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.	
3	Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.	
4	M.I. Ammeter 0 - 100 Amp, CT operated, 1% accuracy 96mm x 96mm size	5 Nos.	
5	Ammeter Selector Switch, 4 position, 10/15 Amp	5 Nos.	
6	DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.	
7	Current Transformers for metering purpose with CT ratio 100/5	15 Nos.	
8	LED type Pilot Indicating Lamp 25 mm	15 Nos.	
9	SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.	
10	Terminal Strip four connections	1 No.	
	Per Unit Rate	₹ 221760.00	Rupees Two Lakh TwentyOne Thousand Seven Hundred Sixty Only

ITEM 1.3.3 Sub LT Panel with MPCB for 60 HP Pumpsets

Supplying, installation, testing & commissioning of indoor type floor mounted, cubical type compartmental, dust and vermin proof (as per IP-54) LT Motor Control Sub Panel Board of 60 HP capacity and given size, made out of 16 SWG CR Sheet and 40mmx40mmx6mm angle having four nos. of legs of 400 mm length at the bottom, with folded and welded construction having dismantling doors at the back, surface chemically treated and Siemen's grey powder coated, containing Motor Protection Circuit Breaker (MPCB) and Ammeters and Voltmeters as specified, neatly installed and internally wired with best quality multi-strand, PVC insulated Single core unsheathed, HRFR copper wire having cable incoming & outgoing provision at the bottom through gland plates complete including fixing on the barge with nuts and bolts as directed.

ITEM 1.3.3(A) Sub LT Panel Board with MPCB Suitable for operation of 2 x 60 HP Pumpset Size :800 mm(B)x 1400 mm(H)x 400 mm(D)

Electrical Components

1 Motor Protection Circuit Breaker (MPCB) with adjustable Thermal and Magnetic Setting Three Pole (TP) 415 V AC 50 Hz with Rotary Handle for 60 HP Motor	2 Nos.
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4 M.I. Ammeter 0 - 200 Amp, CT operated, 1% accuracy 96mm x 96mm size	2 Nos.
5 Ammeter Selector Switch, 4 position, 10/15 Amp	2 Nos.
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7	6 Nos.
Current Transformers for metering purpose with CT ratio 200/5	
8 LED type Pilot Indicating Lamp 25 mm	6 Nos.
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
10 Terminal Strip four connections	1 No.

Per Unit Rate ₹ 101910.00 Rupees One Lakh One Thousand Nine Hundred Ten Only

ITEM 1.3.3(B) Sub LT Panel Board with MPCB Suitable for operation of 3 x 60 HP Pumpset Size :1200 mm(B)x 1400 mm(H)x 400 mm(D)

Electrical Components

1 Motor Protection Circuit Breaker (MPCB) with adjustable Thermal and Magnetic Setting Three Pole (TP) 415 V AC 50 Hz with Rotary Handle for 60 HP Motor	3 Nos.
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4 M.I. Ammeter 0 - 200 Amp, CT operated, 1% accuracy 96mm x 96mm size	3 Nos.
5 Ammeter Selector Switch, 4 position, 10/15 Amp	3 Nos.
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7 Current Transformers for metering purpose with CT ratio 200/5	9 Nos.
8 LED type Pilot Indicating Lamp 25 mm	9 Nos.
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.

10 Terminal Strip four connections	1 No.	
	Per Unit Rate	₹ 142520.00 Rupees One Lakh FourtyTwo Thousand Five Hundred Twenty Only

ITEM 1.3.3(C) Sub LT Panel Board with MPCB Suitable for operation of **4 x 60 HP** Pumpset
Size :1600 mm(B)x 1400 mm(H)x 400 mm(D)

Electrical Components

1 Motor Protection Circuit Breaker (MPCB) with adjustable Thermal and Magnetic Setting Three Pole (TP) 415 V AC 50 Hz with Rotary Handle for 60 HP Motor	4 Nos.
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4 M.I. Ammeter 0 - 200 Amp, CT operated, 1% accuracy 96mm x 96mm size	4 Nos.
5 Ammeter Selector Switch, 4 position, 10/15 Amp	4 Nos.
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7 Current Transformers for metering purpose with CT ratio 200/5	12 Nos.
8 LED type Pilot Indicating Lamp 25 mm	12 Nos.
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
10 Terminal Strip four connections	1 No.

Per Unit Rate	₹ 184110.00 Rupees One Lakh EightyFour Thousand One Hundred Ten
---------------	---

ITEM 1.3.3(D) Sub LT Panel Board with MPCB Suitable for operation of **5 x 60 HP** Pumpset
Size :2000 mm(B)x 1400 mm(H)x 400 mm(D)

Electrical Components

1 Motor Protection Circuit Breaker (MPCB) with adjustable Thermal and Magnetic Setting Three Pole (TP) 415 V AC 50 Hz with Rotary Handle for 60 HP Motor	5 Nos.
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4 M.I. Ammeter 0 - 200 Amp, CT operated, 1% accuracy 96mm x 96mm size	5 Nos.
5 Ammeter Selector Switch, 4 position, 10/15 Amp	5 Nos.
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7 Current Transformers for metering purpose with CT ratio 200/5	15 Nos.
8 LED type Pilot Indicating Lamp 25 mm	15 Nos.
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
10 Terminal Strip four connections	1 No.

Per Unit Rate	₹ 224700.00 Rupees Two Lakh TwentyFour Thousand Seven Hundred Only
---------------	--

ITEM 1.3.4 Sub LT Panel with MPCB for 75 HP Pumpsets

Supplying, installation, testing & commissioning of indoor type floor mounted, cubical type compartmental, dust and vermin proof (as per IP-54) LT Motor Control Sub Panel Board of 75 HP capacity and given size, made out of 16 SWG CR Sheet and 40mmx40mmx6mm angle having four nos. of legs of 400 mm length at the bottom, with folded and welded construction having dismantling doors at the back, surface chemically treated and Siemen's grey powder coated, containing Motor Protection Circuit Breaker (MPCB) and Ammeters and Voltmeters as specified, neatly installed and internally wired with best quality multi-strand, PVC insulated Single core unsheathed, HRFR copper wire having cable incoming & outgoing provision at the bottom through gland plates complete including fixing on the barge with nuts and bolts as directed.

ITEM 1.3.4(A) Sub LT Panel Board with MPCB Suitable for operation of 2 x 75 HP Pumpset Size :800 mm(B)x 1400 mm(H)x 400 mm(D)

Electrical Components

1 Motor Protection Circuit Breaker (MPCB) with adjustable Thermal and Magnetic Setting Three Pole (TP) 415 V AC 50 Hz with Rotary Handle for 75 HP Motor	2 Nos.
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4 M.I. Ammeter 0 - 200 Amp, CT operated, 1% accuracy 96mm x 96mm size	2 Nos.
5 Ammeter Selector Switch, 4 position, 10/15 Amp	2 Nos.
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7 Current Transformers for metering purpose with CT ratio 200/5	6 Nos.
8 LED type Pilot Indicating Lamp 25 mm	6 Nos.
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
10 Terminal Strip four connections	1 No.

Per Unit Rate ₹ 102280.00 Rupees One Lakh Two Thousand Two Hundred Eighty Only

ITEM 1.3.4(B) Sub LT Panel Board with MPCB Suitable for operation of 3 x 75 HP Pumpset Size :1200 mm(B)x 1400 mm(H)x 400 mm(D)

Electrical Components

1 Motor Protection Circuit Breaker (MPCB) with adjustable Thermal and Magnetic Setting Three Pole (TP) 415 V AC 50 Hz with Rotary Handle for 75 HP Motor	3 Nos.
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4 M.I. Ammeter 0 - 200 Amp, CT operated, 1% accuracy 96mm x 96mm size	3 Nos.
5 Ammeter Selector Switch, 4 position, 10/15 Amp	3 Nos.
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7 Current Transformers for metering purpose with CT ratio 200/5	9 Nos.
8 LED type Pilot Indicating Lamp 25 mm	9 Nos.

9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.		
10 Terminal Strip four connections	1 No.		
	Per Unit Rate	₹ 143070.00	Rupees One Lakh FourtyThree Thousand Seventy Only

ITEM 1.3.4(C) Sub LT Panel Board with MPCB Suitable for operation of **4 x 75 HP** Pumpset
Size :1600 mm(B)x 1400 mm(H)x 400 mm(D)

Electrical Components			
1 Motor Protection Circuit Breaker (MPCB) with adjustable Thermal and Magnetic Setting Three Pole (TP) 415 V AC 50 Hz with Rotary Handle for 75 HP Motor	4 Nos.		
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.		
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.		
4 M.I. Ammeter 0 - 200 Amp, CT operated, 1% accuracy 96mm x 96mm size	4 Nos.		
5 Ammeter Selector Switch, 4 position, 10/15 Amp	4 Nos.		
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.		
7	12 Nos.		
Current Transformers for metering purpose with CT ratio 200/5			
8 LED type Pilot Indicating Lamp 25 mm	12 Nos.		
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.		
10 Terminal Strip four connections	1 No.		
	Per Unit Rate	₹ 184860.00	Rupees One Lakh EightyFour Thousand Eight Hundred Sixty Onlv

ITEM 1.3.4(D) Sub LT Panel Board with MPCB Suitable for operation of **5 x 75 HP** Pumpset
Size :2000 mm(B)x 1400 mm(H)x 400 mm(D)

Electrical Components			
1 Motor Protection Circuit Breaker (MPCB) with adjustable Thermal and Magnetic Setting Three Pole (TP) 415 V AC 50 Hz with Rotary Handle for 75 HP Motor	5 Nos.		
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.		
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.		
4 M.I. Ammeter 0 - 200 Amp, CT operated, 1% accuracy 96mm x 96mm size	5 Nos.		
5 Ammeter Selector Switch, 4 position, 10/15 Amp	5 Nos.		
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.		
7	15 Nos.		
Current Transformers for metering purpose with CT ratio 200/5			
8 LED type Pilot Indicating Lamp 25 mm	12 Nos.		
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.		
10 Terminal Strip four connections	1 No.		

Per Unit Rate ₹ 225630.00 Rupees Two
Lakh TwentyFive
Thousand Six
Hundred Thirty
Only

1.4 MAIN PANEL CABINET

Supplying, fabrication and erection of panel board housing for indoor type floor mounted, cubicle type compartmental, dust and vermin proof (as per IP-54) main LT Control Panel Board of following capacity and size, made out of 16 SWG CR Sheet and 40mmx40mmx6mm angle having four nos. of legs 400 mm long at the bottom, with folded and welded construction having dismantling doors at the back, surface chemically treated and Siemen's grey powder coated, having cable incoming & outgoing provision at the bottom through gland plates without fitting & fixing of electrical components complete including excavation of trench and necessary C C Work as directed

1.4.1 For 20 HP Pumpsets

Main Panel Cabinet Suitable for operation of **1 x 20 HP** Pumpset

Size : 500 mm(B)x 1000 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

Incoming side

- 1 1 No, FP, 415 V 63 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 35 / 36 KA
- 2 1 No, M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size
- 3 1 No. Voltmeter Selector Switch, 4 position, 10/15 Amp
- 4 1 No. M.I. Ammeter 0 - 60 Amp, CT operated, 1% accuracy 96mm x 96mm size
- 5 1 No. Ammeter Selector Switch, 4 position, 10/15 Amp
- 6 1 No. Analog Power Factor Meter, 1% accuracy
- 7 6 Nos. Current Transformers for metering purpose with CT ratio 60/5
- 8 3 Nos. LED type Pilot Indicating Lamp 25 mm
- 9 3 Nos. SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection
- 10 1 Set Aluminium Busbar, 25 mm x 5 mm

Outgoing side

- 11 1 No. TP, 63A, 415V , AC Motor Control Switch(SDF) with 63A HRC Fuse
- 12 1 No LT Power Capacitor, 3 ϕ (Single Unit), 415V 6 kVAR, for Power Factor Correction
- 13 1 No. TP, 415V 32 Amp, MCB
- 14 1 No Air Break Contactor, TP 32 A, 415 V, AC for Capacitor Duty
- 15 1 No. DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose
- 16 1 Set On and Off Push Button switch

Per Unit Rate ₹ 20010.00 Rupees Twenty
Thousand Ten
Only

ITEM 1.4.1(B) **Main Panel Cabinet** Suitable for operation of **2 x 20 HP** Pumpset
Size :1200 mm(B)x 1200 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1 FP, 415 V 125 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 35 / 36 kA as main incomer	1 No		
2 TP, 63A, 415V , AC Motor Control Switch(SDF) with 63A HRC Fuse	2 Nos.		
3 Air Break Contactor, TP 32 A, 415 V, AC for Capacitor Duty	2 Nos.		
4 TP, 415V 32 Amp, MCB for Power Capacitor	2 Nos.		
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No		
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No		
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size			
a) 0 - 100 Amps for Incoming Side	1 No		
b) 0 - 60 Amps for Outgoing Motor Feeder	2 Nos.		
8 Ammeter Selector Switch, 4 position, 10/15 Amp	3 Nos.		
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No		
10 Current Transformers for metering purpose Accuracy Class I			
a) CT ratio 100/5 for incoming side	6 Nos.		
b) CT ratio 60/5 for outgoing side	6 Nos.		
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.		
12 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No		
13 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.		
14 Aluminium Busbar, 25 mm x 5 mm	1 Set		
15 On and Off Push Button Switch	2 Set		
	Per Unit Rate	₹	25730.00 Rupees
			TwentyFive Thousand Seven Hundred Thirty Only

ITEM 1.4.1(C) **Main Panel Cabinet** Suitable for operation of **3 x 20 HP** Pumpset
Size :1600 mm(B)x 1200 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1 FP, 415 V 160 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 35 / 36 kA as main incomer	1 No
2 TP, 63A, 415V , AC Motor Control Switch(SDF) with 63A HRC Fuse	3 Nos.
3 Air Break Contactor, TP 32 A, 415 V, AC for Capacitor Duty	3 Nos.
4 TP, 415V 32 Amp, MCB for Power Capacitor	3 Nos.
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size	
a) 0 - 200 Amps for Incoming Side	1 No
b) 0 - 60 Amps for Outgoing Motor Feeder	3 Nos.
8 Ammeter Selector Switch, 4 position, 10/15 Amp	4 Nos.
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No
10 Current Transformers for metering purpose Accuracy Class I	
a) CT ratio 200/5 for incoming side	6 Nos.
b) CT ratio 60/5 for outgoing side	9 Nos.
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.
12 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No

13 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.	
14 Aluminium Busbar, 35 mm x 5 mm	1 Set	
15 On and Off Push Button Switch	3 Set	
	Per Unit Rate	₹ 29570.00 Rupees TwentyNine Thousand Five Hundred Seventy Only

ITEM 1.4.1(D) Main Panel Cabinet Suitable for operation of **4 x 20 HP** Pumpset
Size :2000 mm(B)x 1300 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1 FP, 415 V 200 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer	1 No	
2 TP, 63A, 415V , AC Motor Control Switch(SDF) with 63A HRC Fuse	4 Nos.	
3 Air Break Contactor, TP 32 A, 415 V, AC for Capacitor Duty	4 Nos.	
4 TP, 415V 32 Amp, MCB for Power Capacitor	4 Nos.	
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No	
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No	
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size		
a) 0 - 200 Amps for Incoming Side	1 No	
b) 0 - 60 Amps for Outgoing Motor Feeder	4 Nos.	
8 Ammeter Selector Switch, 4 position, 10/15 Amp	5 Nos.	
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No	
10 Current Transformers for metering purpose Accuracy Class I		
a) CT ratio 200/5 for incoming side	6 Nos.	
b) CT ratio 60/5 for outgoing side	12 Nos.	
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.	
12 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No	
13 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protector	3 Nos.	
14 Aluminium Busbar, 35 mm x 5 mm	1 Set	
15 On and Off Push Button Switch	4 Set	
	Per Unit Rate	₹ 36920.00 Rupees ThirtySix Thousand Nine Hundred Twenty Only

ITEM 1.4.1(E) Main Panel Cabinet Suitable for operation of **5 x 20 HP** Pumpset
Size :2400 mm(B)x 1300 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1 FP, 415 V 250 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer	1 No	
2 TP, 63A, 415V , AC Motor Control Switch(SDF) with 63A HRC Fuse	5 Nos.	
3 Air Break Contactor, TP 32 A, 415 V, AC for Capacitor Duty	5 Nos.	
4 TP, 415V 32 Amp, MCB for Power Capacitor	5 Nos.	
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No	
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No	
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size		
a) 0 - 200 Amps for Incoming Side	1 No	

b) 0 - 60 Amps for Outgoing Motor Feeder	5 Nos.	
8 Ammeter Selector Switch, 4 position, 10/15 Amp	6 Nos.	
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No	
10 Current Transformers for metering purpose Accuracy Class I		
a) CT ratio 200/5 for incoming side	6 Nos.	
b) CT ratio 60/5 for outgoing side	15 Nos.	
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.	
12 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No	
13 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.	
14 Aluminium Busbar, 40 mm x 5 mm	1 Set	
15 On and Off Push Button Switch	5 Set	
	Per Unit Rate	₹ 42920.00 Rupees
		FourtyTwo Thousand Nine Hundred Twenty Only

ITEM 1.4.1(F) **Specification of Panel board :**

Size :2800 mm(B)x 1400 mm(H)x 400 mm(D)

Main Panel Cabinet Suitable for operation of **6 x 20 HP** Pumpset

Provision for Electrical accessories :-

1 FP, 415 V 315 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer	1 No	
2 TP, 63A, 415V , AC Motor Control Switch(SDF) with 63A HRC Fuse	6 Nos.	
3 Air Break Contactor, TP 32 A, 415 V, AC for Capacitor Duty	6 Nos.	
4 TP, 415V 32 Amp, MCB for Power Capacitor	6 Nos.	
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No	
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No	
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size		
a) 0 - 300 Amps for Incoming Side	1 No	
b) 0 - 60 Amps for Outgoing Motor Feeder	6 Nos.	
8 Ammeter Selector Switch, 4 position, 10/15 Amp	7 Nos.	
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No	
10 Current Transformers for metering purpose Accuracy Class I		
a) CT ratio 200/5 for incoming side	6 Nos.	
b) CT ratio 60/5 for outgoing side	18 Nos.	
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.	
12 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No	
13 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.	
14 Aluminium Busbar, 35 mm x 5 mm	1 Set	
15 On and Off Push Button Switch	6 Set	
	Per Unit Rate	₹ 49770.00 Rupees
		FourtyNine Thousand Seven Hundred Seventy Only

ITEM 1.4.2 Main Panel Cabinet for 40 HP Pumpsets

Supplying, fabrication and erection of panel board housing for indoor type floor mounted, cubicle type compartmental, dust and vermin proof (as per IP-54) main LT Control Panel Board of 40 HP capacity and given size, made out of 16 SWG CR Sheet and 40mmx40mmx6mm angle having four nos. of legs 400 mm long at the bottom, with folded and welded construction having dismantling doors at the back, surface chemically treated and Siemen's grey powder coated, having cable incoming & outgoing provision at the bottom through gland plates without fitting & fixing of electrical components complete including excavation of trench and necessary C C

ITEM 1.4.2(A) **Main Panel Cabinet** Suitable for operation of **1 x 30 HP/ 40 HP** Pumpset
Size : 800 mm(B)x 1200 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

Incoming side

- 1 1 No, FP, 415 V 100 Amp MCCB with Short Circuit & Overload
- 2 1 No, M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size
- 3 1 No. Voltmeter Selector Switch, 4 position, 10/15 Amp
- 4 1 No. M.I. Ammeter 0 - 100 Amp, CT operated, 1% accuracy 96mm x 96mm size
- 5 1 No. Ammeter Selector Switch, 4 position, 10/15 Amp
- 6 1 No. Analog Power Factor Meter, 1% accuracy
- 7 6 Nos. Current Transformers for metering purpose with CT ratio 100/5
- 8 3 Nos. LED type Pilot Indicating Lamp 25 mm
- 9 3 Nos. SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection
- 10 1 Set Aluminium Busbar, 25 mm x 5 mm

Outgoing side

- 11 1 No. TP, 100A, 415V , AC Motor Control Switch(SDF) with 63A HRC Fuse
- 12 1 No LT Power Capacitor, 3Ø(Single Unit), 415V 6 kVAR, for Power Factor Correction
- 13 1 No. TP, 415V 32 Amp, MCB for Power Capacitor
- 14 1 No. DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose
- 15 1 No Air Break Contactor, TP 32 A, 415 V, AC for Capacitor Duty
- 16 1 Set On and Off Push Button switch

Per Unit Rate ₹ 24160.00 Rupees
TwentyFour
Thousand One
Hundred Sixty
Only

ITEM 1.4.2(B) **Main Panel Cabinet** Suitable for operation of **2 x 40 HP** Pumpset
Size :1200 mm(B)x 1300 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

- 1 FP, 415 V 200 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer 1 No
- 2 TP, 100A, 415V , AC Motor Control Switch(SDF) with 100A HRC Fuse 2 Nos.
- 3 Air Break Contactor, TP 40 A, 415 V, AC for Capacitor Duty 2 Nos.
- 4 TP, 415V 40 Amp, MCB for Power Capacitor 2 Nos.
- 5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size 1 No
- 6 Voltmeter Selector Switch, 4 position, 10/15 Amp 1 No
- 7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size
 - a) 0 - 200 Amps for Incoming Side 1 No
 - b) 0 - 100 Amps for Outgoing Motor Feeder 2 Nos.
- 8 Ammeter Selector Switch, 4 position, 10/15 Amp 3 Nos.
- 9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy 1 No

10 Current Transformers for metering purpose Accuracy Class I			
a) CT ratio 200/5 for incoming side	6 Nos.		
b) CT ratio 100/5 for outgoing side	6 Nos.		
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.		
12 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No		
13 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.		
14 Aluminium Busbar, 40 mm x 5 mm	1 Set		
15 On and Off Push Button Switch	2 Set		
	Per Unit Rate	₹	23250.00 Rupees TwentyThree Thousand Two Hundred Fifty Only

ITEM 1.4.2(C) **Main Panel Cabinet** Suitable for operation of **3 x 40 HP** Pumpset
Size :1600 mm(B)x 1400 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1 FP, 415 V 315 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer	1 No		
2 TP, 100A, 415V , AC Motor Control Switch(SDF) with 100A HRC Fuse	3 Nos.		
3 Air Break Contactor, TP 40 A, 415 V, AC for Capacitor Duty	3 Nos.		
4 TP, 415V 40 Amp, MCB for Power Capacitor	3 Nos.		
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No		
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No		
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size			
a) 0 - 300 Amps for Incoming Side	1 No		
b) 0 - 100 Amps for Outgoing Motor Feeder	3 Nos.		
8 Ammeter Selector Switch, 4 position, 10/15 Amp	4 Nos.		
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No		
10 Current Transformers for metering purpose Accuracy Class I			
a) CT ratio 300/5 for incoming side	6 Nos.		
b) CT ratio 100/5 for outgoing side	9 Nos.		
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.		
12 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No		
13 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.		
14 Aluminium Busbar, 40 mm x 5 mm	1 Set		
15 On and Off Push Button Switch	3 Set		
	Per Unit Rate	₹	30310.00 Rupees Thirty Thousand Three Hundred Ten Only

ITEM 1.4.2(D) **Main Panel Cabinet** Suitable for operation of **4 x 40 HP** Pumpset
Size :2000 mm(B)x 1400 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1	FP, 415 V 400 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer	1	No
2	TP, 100A, 415V , AC Motor Control Switch(SDF) with 100A HRC Fuse	4	Nos.
3	Air Break Contactor, TP 40 A, 415 V, AC for Capacitor Duty	4	Nos.
4	TP, 415V 40 Amp, MCB for Power Capacitor	4	Nos.
5	M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1	No
6	Voltmeter Selector Switch, 4 position, 10/15 Amp	1	No
7	M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size		
	a) 0 - 400 Amps for Incoming Side	1	No
	b) 0 - 100 Amps for Outgoing Motor Feeder	4	Nos.
8	Ammeter Selector Switch, 4 position, 10/15 Amp	5	Nos.
9	Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1	No
10	Current Transformers for metering purpose Accuracy Class I		
	a) CT ratio 400/5 for incoming side	6	Nos.
	b) CT ratio 100/5 for outgoing side	12	Nos.
11	LED type Pilot Indicating Lamp 25 mm	3	Nos.
12	DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1	No
13	SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3	Nos.
14	Aluminium Busbar, 40 mm x 10 mm	1	Set
15	On and Off Push Button Switch	4	Set
	Per Unit Rate	₹	36840.00 Rupees ThirtySix Thousand Eight Hundred Forty Only

ITEM 1.4.2(E) **Main Panel Cabinet** Suitable for operation of **5 x 40 HP** Pumpset
Size :2400 mm(B)x 1400 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1	1 No, FP, 415 V 500 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA	1	No
2	TP, 100A, 415V , AC Motor Control Switch(SDF) with 100A HRC Fuse	5	Nos.
3	Air Break Contactor, TP 40 A, 415 V, AC for Capacitor Duty	5	Nos.
4	TP, 415V 40 Amp, MCB for Power Capacitor	5	Nos.
5	M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1	No
6	Voltmeter Selector Switch, 4 position, 10/15 Amp	1	No
7	M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size		
	a) 0 - 500 Amps for Incoming Side	1	No
	b) 0 - 100 Amps for Outgoing Motor Feeder	5	Nos.
8	Ammeter Selector Switch, 4 position, 10/15 Amp	6	Nos.
9	Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1	No
10	Current Transformers for metering purpose Accuracy Class I		
	a) CT ratio 500/5 for incoming side	6	Nos.
	b) CT ratio 100/5 for outgoing side	15	Nos.
11	LED type Pilot Indicating Lamp 25 mm	3	Nos.
12	DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1	No

13 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.	
14 Aluminium Busbar, 40 mm x 10 mm	1 Set	
15 On and Off Push Button Switch	5 Set	
	Per Unit Rate	₹ 44080.00 Rupees FourtyFour Thousand Eighty Only

ITEM 1.4.2(F) Main Panel Cabinet Suitable for operation of 6 x 40 HP Pumpset
Size :2800 mm(B)x 1400 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1 FP, 415 V 630 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer	1 No	
2 TP, 100A, 415V , AC Motor Control Switch(SDF) with 100A HRC Fuse	6 Nos.	
3 Air Break Contactor, TP 40 A, 415 V, AC for Capacitor Duty	6 Nos.	
4 TP, 415V 40 Amp, MCB for Power Capacitor	6 Nos.	
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No	
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No	
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size		
a) 0 - 600 Amps for Incoming Side	1 No	
b) 0 - 100 Amps for Outgoing Motor Feeder	6 Nos.	
8 Ammeter Selector Switch, 4 position, 10/15 Amp	7 Nos.	
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No	
10 Current Transformers for metering purpose Accuracy Class I		
a) CT ratio 600/5 for incoming side	6 Nos.	
b) CT ratio 100/5 for outgoing side	18 Nos.	
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.	
12 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No	
13 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.	
14 Aluminium Busbar, 40 mm x 10 mm	1 Set	
15 On and Off Push Button Switch	6 Set	
	Per Unit Rate	₹ 51800.00 Rupees FiftyOne Thousand Eight Hundred Only

ITEM 1.4.3 Main Panel Cabinet for 60 HP Pumpsets

Supplying, fabrication and erection of panel board housing for indoor type floor mounted, cubicle type compartmental, dust and vermin proof (as per IP-54) main LT Control Panel Board of 60 HP capacity and given size, made out of 16 SWG CR Sheet and 40mmx40mmx6mm angle having four nos. of legs 400 mm long at the bottom, with folded and welded construction having dismantling doors at the back, surface chemically treated and Siemen's grey powder coated, having cable incoming & outgoing provision at the bottom through gland plates without fitting & fixing of electrical components complete including excavation of trench and necessary C C

ITEM 1.4.3(A) Main Panel Cabinet Suitable for operation of 2 x 60 HP Pumpset
Size :1200 mm(B)x 1500 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1 FP, 415 V 315 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer	1 No		
2 TP, 200A, 415V , AC Motor Control Switch(SDF) with 200A HRC Fuse	2 Nos.		
3 Air Break Contactor, TP 63 A, 415 V, AC for Capacitor Duty	2 Nos.		
4 TP, 415V 63 Amp, MCB for Power Capacitor	2 Nos.		
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No		
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No		
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size			
a) 0 - 300 Amps for Incoming Side	1 No		
b) 0 - 200 Amps for Outgoing Motor Feeder	2 Nos.		
8 Ammeter Selector Switch, 4 position, 10/15 Amp	3 Nos.		
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No		
10 Current Transformers for metering purpose Accuracy Class I			
a) CT ratio 300/5 for incoming side	6 Nos.		
b) CT ratio 200/5 for outgoing side	6 Nos.		
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.		
12 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No		
13 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.		
14 Aluminium Busbar, 40 mm x 5 mm	1 Set		
15 On and Off Push Button Switch	2 Set		
	Per Unit Rate	₹	24550.00 Rupees
			TwentyFour Thousand Five Hundred Fifty Only

ITEM 1.4.3(B) Main Panel Cabinet Suitable for operation of **3 x 60 HP** Pumpset
Size :1600 mm(B)x 1500 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1 FP, 415 V 400 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer	1 No
2 TP, 200A, 415V , AC Motor Control Switch(SDF) with 200A HRC Fuse	3 Nos.
3 Air Break Contactor, TP 63 A, 415 V, AC for Capacitor Duty	3 Nos.
4 TP, 415V 63 Amp, MCB for Power Capacitor	3 Nos.
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size	
a) 0 - 400 Amps for Incoming Side	1 No
b) 0 - 200 Amps for Outgoing Motor Feeder	3 Nos.
8 Ammeter Selector Switch, 4 position, 10/15 Amp	4 Nos.
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No
10 Current Transformers for metering purpose Accuracy Class I	
a) CT ratio 400/5 for incoming side	6 Nos.
b) CT ratio 200/5 for outgoing side	9 Nos.
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.
12 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No
13 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
14 Aluminium Busbar, 40 mm x 5 mm	1 Set
15 On and Off Push Button Switch	3 Set

Per Unit Rate ₹ 31250.00 Rupees
ThirtyOne
Thousand Two
Hundred Fifty
Only

ITEM 1.4.3(C) Main Panel Cabinet Suitable for operation of **4 x 60 HP** Pumpset
Size :2000 mm(B)x 1500 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1 FP, 415 V 630 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer	1 No
2 TP, 200A, 415V , AC Motor Control Switch(SDF) with 200A HRC Fuse	4 Nos.
3 Air Break Contactor, TP 63 A, 415 V, AC for Capacitor Duty	4 Nos.
4 TP, 415V 63 Amp, MCB for Power Capacitor	4 Nos.
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size	
a) 0 - 600 Amps for Incoming Side	1 No
b) 0 - 200 Amps for Outgoing Motor Feeder	4 Nos.
8 Ammeter Selector Switch, 4 position, 10/15 Amp	5 Nos.
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No
10 Current Transformers for metering purpose Accuracy Class I	
a) CT ratio 600/5 for incoming side	6 Nos.
b) CT ratio 200/5 for outgoing side	12 Nos.
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.
12 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No
13 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
14 Aluminium Busbar, 50 mm x 10 mm	1 Set
15 On and Off Push Button Switch	4 Set

Per Unit Rate ₹ 38260.00 Rupees
ThirtyEight
Thousand Two
Hundred Sixty
Only

ITEM 1.4.3(D) Main Panel Cabinet Suitable for operation of **5 x 60 HP** Pumpset
Size :2400 mm(B)x 1500 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1 FP, 415 V 630 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer	1 No
2 TP, 200A, 415V , AC Motor Control Switch(SDF) with 200A HRC Fuse	5 Nos.
3 Air Break Contactor, TP 63 A, 415 V, AC for Capacitor Duty	5 Nos.
4 TP, 415V 63 Amp, MCB for Power Capacitor	5 Nos.
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size	
a) 0 - 600 Amps for Incoming Side	1 No
b) 0 - 200 Amps for Outgoing Motor Feeder	5 Nos.
8 Ammeter Selector Switch, 4 position, 10/15 Amp	6 Nos.
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No
10 Current Transformers for metering purpose Accuracy Class I	

a) CT ratio 600/5 for incoming side	6 Nos.		
b) CT ratio 200/5 for outgoing side	15 Nos.		
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.		
12 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No		
13 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.		
14 Aluminium Busbar, 50 mm x 10 mm	1 Set		
15 On and Off Push Button Switch	5 Set		
	Per Unit Rate	₹ 46310.00	Rupees FourtySix Thousand Three Hundred Ten Only

ITEM 1.4.4 Main Panel Cabinet for 75 HP Pumpsets

Supplying, fabrication and erection of panel board housing for indoor type floor mounted, cubicle type compartmental, dust and vermin proof (as per IP-54) main LT Control Panel Board of 60 HP capacity and given size, made out of 16 SWG CR Sheet and 40mmx40mmx6mm angle having four nos. of legs 400 mm long at the bottom, with folded and welded construction having dismantling doors at the back, surface chemically treated and Siemen's grey powder coated, having cable incoming & outgoing provision at the bottom through gland plates without fitting & fixing of electrical components complete including excavation of trench and necessary C C Work as directed

ITEM 1.4.4(A) Main Panel Cabinet Suitable for operation of 2 x 75 HP Pumpset

Size :1200 mm(B)x 1500 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1 FP, 415 V 315 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer	1 No		
2 TP, 250A, 415V , AC Motor Control Switch(SDF) with 250A HRC Fuse	2 Nos.		
3 Air Break Contactor, TP 100 A, 415 V, AC for Capacitor Duty	2 Nos.		
4 TP, 415V 100 Amp, MCB for Power Capacitor	2 Nos.		
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No		
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No		
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size			
a) 0 - 300 Amps for Incoming Side	1 No		
b) 0 - 200 Amps for Outgoing Motor Feeder	2 Nos.		
8 Ammeter Selector Switch, 4 position, 10/15 Amp	3 Nos.		
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No		
10 Current Transformers for metering purpose Accuracy Class I			
a) CT ratio 300/5 for incoming side	6 Nos.		
b) CT ratio 200/5 for outgoing side	6 Nos.		
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.		
12 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No		
13 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.		
14 Aluminium Busbar, 40 mm x 5 mm	1 Set		
15 On and Off Push Button Switch	2 Set		
	Per Unit Rate	₹ 24400.00	Rupees TwentyFour Thousand Four Hundred Only

ITEM 1.4.4(B) **Main Panel Cabinet** Suitable for operation of **3 x 75 HP** Pumpset
Size :1600 mm(B)x 1500 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1 FP, 415 V 400 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer	1 No		
2 TP, 250A, 415V , AC Motor Control Switch(SDF) with 250A HRC Fuse	3 Nos.		
3 Air Break Contactor, TP 100 A, 415 V, AC for Capacitor Duty	3 Nos.		
4 TP, 415V 100 Amp, MCB for Power Capacitor	3 Nos.		
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No		
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No		
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size			
a) 0 - 400 Amps for Incoming Side	1 No		
b) 0 - 200 Amps for Outgoing Motor Feeder	3 Nos.		
8 Ammeter Selector Switch, 4 position, 10/15 Amp	4 Nos.		
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No		
10 Current Transformers for metering purpose Accuracy Class I			
a) CT ratio 400/5 for incoming side	6 Nos.		
b) CT ratio 200/5 for outgoing side	9 Nos.		
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.		
12 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No		
13 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.		
14 Aluminium Busbar, 40 mm x 5 mm	1 Set		
15 On and Off Push Button Switch	3 Set		
	Per Unit Rate	₹	31960.00 Rupees ThirtyOne Thousand Nine Hundred Sixty Only

ITEM 1.4.4(C) **Main Panel Cabinet** Suitable for operation of **4 x 75 HP** Pumpset
Size :2000 mm(B)x 1500 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1 FP, 415 V 630 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer	1 No
2 TP, 250A, 415V , AC Motor Control Switch(SDF) with 250A HRC Fuse	4 Nos.
3 Air Break Contactor, TP 100 A, 415 V, AC for Capacitor Duty	4 Nos.
4 TP, 415V 100 Amp, MCB for Power Capacitor	4 Nos.
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size	
a) 0 - 600 Amps for Incoming Side	1 No
b) 0 - 200 Amps for Outgoing Motor Feeder	4 Nos.
8 Ammeter Selector Switch, 4 position, 10/15 Amp	5 Nos.
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No
10 Current Transformers for metering purpose Accuracy Class I	
a) CT ratio 600/5 for incoming side	6 Nos.
b) CT ratio 200/5 for outgoing side	12 Nos.
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.

12 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No		
13 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.		
14 Aluminium Busbar, 50 mm x 10 mm	1 Set		
15 On and Off Push Button Switch	4 Set		
	Per Unit Rate	₹	38840.00 Rupees ThirtyEight Thousand Eight Hundred Forty Only

ITEM 1.4.4(D) Main Panel Cabinet Suitable for operation of **5 x 75 HP** Pumpset
Size :2400 mm(B)x 1500 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1 FP, 415 V 800 Amp MCCB with Short Circuit & Overload Protection, Breaking Capacity 50 kA as main incomer	1 No		
2 TP, 250A, 415V , AC Motor Control Switch(SDF) with 250A HRC Fuse	5 Nos.		
3 Air Break Contactor, TP 100 A, 415 V, AC for Capacitor Duty	5 Nos.		
4 TP, 415V 100 Amp, MCB for Power Capacitor	5 Nos.		
5 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No		
6 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No		
7 M.I. Ammeter, CT operated, 1% accuracy 96mm x 96mm size			
a) 0 - 600 Amps for Incoming Side	1 No		
b) 0 - 200 Amps for Outgoing Motor Feeder	5 Nos.		
8 Ammeter Selector Switch, 4 position, 10/15 Amp	6 Nos.		
9 Analog Power Factor Meter, 96mm x 96mm size 1% accuracy	1 No		
10 Current Transformers for metering purpose Accuracy Class I			
a) CT ratio 600/5 for incoming side	6 Nos.		
b) CT ratio 200/5 for outgoing side	15 Nos.		
11 LED type Pilot Indicating Lamp 25 mm	3 Nos.		
12 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No		
13 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.		
14 Aluminium Busbar, 50 mm x 10 mm	1 Set		
15 On and Off Push Button Switch	5 Set		
	Per Unit Rate	₹	47220.00 Rupees FourtySeven Thousand Two Hundred Twenty Only

ITEM 1.5 SUB PANEL CABINET

ITEM 1.5.1 For 20 HP Pumpsets

Supplying, fabrication and erection of panel board housing for indoor type floor mounted, cubicle type compartmental, dust and vermin proof (as per IP-54) main LT Motor Control Sub Panel Board of 20 HP capacity and given size, made out of 16 SWG CR Sheet and 40mmx40mmx6mm angle having four nos. of legs 400 mm long at the bottom, with folded and welded construction having dismantling doors at the back, surface chemically treated and Siemen's grey powder coated, having cable incoming & outgoing provision at the bottom through gland plates without fitting & fixing of electrical components complete including fixing on the barge with nuts and bolts as directed.

ITEM 1.5.1(A) **Sub Panel Cabinet** Suitable for operation of **1 x 20 HP** Pumpset
Size : 500 mm(B)x 1000 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1	TP, 63A, 415V , AC Motor Control Switch(SDF) with 63A HRC Fuse	1 No	
2	M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No	
3	Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No	
4	M.I. Ammeter 0 - 60 Amp, CT operated, 1% accuracy 96mm x 96mm size	1 No	
5	Ammeter Selector Switch, 4 position, 10/15 Amp	1 No	
6	DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No	
7	Current Transformers for metering purpose with CT ratio 60/5	3 Nos.	
8	LED type Pilot Indicating Lamp 25 mm	3 Nos.	
9	SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.	
10	Terminal Strip for connections	1 No	
	Per Unit Rate	₹	14680.00 Rupees Fourteen Thousand Six Hundred Eighty Only

ITEM 1.5.1(B) **Sub Panel Cabinet** Suitable for operation of **2 x 20 HP** Pumpset
Size :800 mm(B)x 1200 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1	TP, 63A, 415V , AC Motor Control Switch(SDF) with 63A HRC Fuse	2 Nos.
2	M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3	Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4	M.I. Ammeter 0 - 60 Amp, CT operated, 1% accuracy 96mm x 96mm size	2 Nos.
5	Ammeter Selector Switch, 4 position, 10/15 Amp	2 Nos.
6	DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7	Current Transformers for metering purpose with CT ratio 60/5	6 Nos.
8	LED type Pilot Indicating Lamp 25 mm	6 Nos.
9	SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
10	Terminal Strip for connections	1 No.

Per Unit Rate ₹ 25930.00 Rupees
TwentyFive
Thousand Nine
Hundred Thirty
Only

ITEM 1.5.1(C) **Sub Panel Cabinet** Suitable for operation of **3 x 20 HP** Pumpset
Size :1200 mm(B)x 1200 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1	TP, 63A, 415V , AC Motor Control Switch(SDF) with 63A HRC Fuse	3 Nos.
2	M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3	Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4	M.I. Ammeter 0 - 60 Amp, CT operated, 1% accuracy 96mm x 96mm size	3 Nos.
5	Ammeter Selector Switch, 4 position, 10/15 Amp	3 Nos.
6	DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7	Current Transformers for metering purpose with CT ratio 60/5	9 Nos.
8	LED type Pilot Indicating Lamp 25 mm	9 Nos.
9	SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
10	Terminal Strip for connections	1 No.

Per Unit Rate ₹ 33020.00 Rupees
ThirtyThree
Thousand
Twenty Only

ITEM 1.5.1(D) **Sub Panel Cabinet** Suitable for operation of **4 x 20 HP** Pumpset
Size :1600 mm(B)x 1200 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1	TP, 63A, 415V , AC Motor Control Switch(SDF) with 63A HRC Fuse	4 Nos.
2	M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3	Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4	M.I. Ammeter 0 - 60 Amp, CT operated, 1% accuracy 96mm x 96mm size	4 Nos.
5	Ammeter Selector Switch, 4 position, 10/15 Amp	4 Nos.
6	DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7	Current Transformers for metering purpose with CT ratio 60/5	12 Nos.
8	LED type Pilot Indicating Lamp 25 mm	12 Nos.
9	SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
10	Terminal Strip for connections	1 No.

Per Unit Rate ₹ 44390.00 Rupees
FourtyFour
Thousand Three
Hundred Ninety
Only

ITEM 1.5.1(E) **Sub Panel Cabinet** Suitable for operation of **5 x 20 HP** Pumpset
Size :2000 mm(B)x 1200 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1 TP, 63A, 415V , AC Motor Control Switch(SDF) with 63A HRC Fuse	5 Nos.
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4 M.I. Ammeter 0 - 60 Amp, CT operated, 1% accuracy 96mm x 96mm size	5 Nos.
5 Ammeter Selector Switch, 4 position, 10/15 Amp	5 Nos.
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7 Current Transformers for metering purpose with CT ratio 60/5	15 Nos.
8 LED type Pilot Indicating Lamp 25 mm	15 Nos.
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
10 Terminal Strip for connections	1 No.

Per Unit Rate ₹ 53720.00 Rupees
 FiftyThree
 Thousand Seven
 Hundred Twenty
 Only

ITEM 1.5.2 **Sub Panel Cabinet for 40 HP Pumpsets**

Specification of Panel board :

Supplying, fabrication and erection of panel board housing for indoor type floor mounted, cubicle type compartmental, dust and vermin proof (as per IP-54) main LT Motor Control Sub Panel Board of following capacity and given size, made out of 16 SWG CR Sheet and 40mmx40mmx6mm angle having four nos. of legs 400 mm long at the bottom, with folded and welded construction having dismantling doors at the back, surface chemically treated and Siemen's grey powder coated, having cable incoming & outgoing provision at the bottom through gland plates without fitting & fixing of electrical components complete including fixing on the barge with nuts and bolts as directed.

ITEM 1.5.2(A) **Sub Panel Cabinet** Suitable for operation of **1 x 30 HP/ 40 HP** Pumpset
Size : 500 mm(B)x 1000 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1 TP, 100A, 415V , AC Motor Control Switch(SDF) with 100A HRC Fuse	1 No
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No
4 M.I. Ammeter 0 - 100 Amp, CT operated, 1% accuracy 96mm x 96mm size	1 No
5 Ammeter Selector Switch, 4 position, 10/15 Amp	1 No
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No
7 Current Transformers for metering purpose with CT ratio 100/5	3 Nos.
8 LED type Pilot Indicating Lamp 25 mm	3 Nos.
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
10 Terminal Strip for connections	1 No

Per Unit Rate ₹ 15170.00 Rupees Fifteen
Thousand One
Hundred
Seventy Only

ITEM 1.5.2(B) **Sub Panel Cabinet** Suitable for operation of **2 X 40 HP** Pumpset
Size :800 mm(B)x 1200 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1 TP, 100A, 415V , AC Motor Control Switch(SDF) with 100A HRC Fuse	2 Nos.
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4 M.I. Ammeter 0 - 100 Amp, CT operated, 1% accuracy 96mm x 96mm size	2 Nos.
5 Ammeter Selector Switch, 4 position, 10/15 Amp	2 Nos.
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7 Current Transformers for metering purpose with CT ratio 100/5	6 Nos.
8 LED type Pilot Indicating Lamp 25 mm	6 Nos.
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
10 Terminal Strip for connections	2 No.

Per Unit Rate ₹ 27770.00 Rupees
TwentySeven
Thousand Seven
Hundred
Seventy Only

ITEM 1.5.2(C) **Sub Panel Cabinet** Suitable for operation of **3 x 40 HP** Pumpset
Size :1200 mm(B)x 1200 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1 TP, 100A, 415V , AC Motor Control Switch(SDF) with 100A HRC Fuse	3 Nos.
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4 M.I. Ammeter 0 - 100 Amp, CT operated, 1% accuracy 96mm x 96mm size	3 Nos.
5 Ammeter Selector Switch, 4 position, 10/15 Amp	3 Nos.
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7 Current Transformers for metering purpose with CT ratio 100/5	9 Nos.
8 LED type Pilot Indicating Lamp 25 mm	9 Nos.
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
10 Terminal Strip for connections	1 No.

Per Unit Rate ₹ 35960.00 Rupees
ThirtyFive
Thousand Nine
Hundred Sixty
Only

ITEM 1.5.2(D) **Sub Panel Cabinet** Suitable for operation of **4 x 40 HP** Pumpset
Size :1600 mm(B)x 1200 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1 TP, 100A, 415V , AC Motor Control Switch(SDF) with 100A HRC Fuse	4 Nos.		
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.		
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.		
4 M.I. Ammeter 0 - 100 Amp, CT operated, 1% accuracy 96mm x 96mm size	4 Nos.		
5 Ammeter Selector Switch, 4 position, 10/15 Amp	4 Nos.		
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.		
7 Current Transformers for metering purpose with CT ratio 100/5	12 Nos.		
8 LED type Pilot Indicating Lamp 25 mm	12 Nos.		
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.		
10 Terminal Strip for connections	1 No.		
	Per Unit Rate	₹	43290.00 Rupees FourtyThree Thousand Two Hundred Ninety Only

ITEM 1.5.2(E) **Sub Panel Cabinet** Suitable for operation of **5 x 40 HP** Pumpset
Size :2000 mm(B)x 1200 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1 TP, 100A, 415V , AC Motor Control Switch(SDF) with 100A HRC Fuse	5 Nos.		
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.		
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.		
4 M.I. Ammeter 0 - 100 Amp, CT operated, 1% accuracy 96mm x 96mm size	5 Nos.		
5 Ammeter Selector Switch, 4 position, 10/15 Amp	5 Nos.		
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.		
7 Current Transformers for metering purpose with CT ratio 100/5	15 Nos.		
8 LED type Pilot Indicating Lamp 25 mm	15 Nos.		
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.		
10 Terminal Strip for connections	1 No.		
	Per Unit Rate	₹	50810.00 Rupees Fifty Thousand Eight Hundred Ten Only

ITEM 1.5.3 Sub Panel Cabinet for 60 HP Pumpsets

Specification of Panel board :

Supplying, fabrication and erection of panel board housing for indoor type floor mounted, cubicle type compartmental, dust and vermin proof (as per IP-54) main LT Motor Control Sub Panel Board of following capacity and given size, made out of 16 SWG CR Sheet and 40mmx40mmx6mm angle having four nos. of legs 400 mm long at the bottom, with folded and welded construction having dismantling doors at the back, surface chemically treated and Siemen's grey powder coated, having cable incoming & outgoing provision at the bottom through gland plates without fitting & fixing of electrical components complete including fixing on the barge with nuts and bolts as directed.

ITEM 1.5.3(A) **Sub Panel Cabinet** Suitable for operation of **2 x 60 HP** Pumpset

Size :800 mm(B)x 1400 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1 TP, 200A, 415V , AC Motor Control Switch(SDF) with 200A HRC Fuse	2 Nos.
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4 M.I. Ammeter 0 - 200 Amp, CT operated, 1% accuracy 96mm x 96mm size	2 Nos.
5 Ammeter Selector Switch, 4 position, 10/15 Amp	2 Nos.
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7 Current Transformers for metering purpose with CT ratio 200/5	6 Nos.
8 LED type Pilot Indicating Lamp 25 mm	6 Nos.
10 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
11 Terminal Strip for connections	1 No.
Per Unit Rate	₹ 25700.00 Rupees TwentyFive Thousand Seven Hundred Only

ITEM 1.5.3(B) **Sub Panel Cabinet** Suitable for operation of **3 x 60 HP** Pumpset

Size :1200 mm(B)x 1400 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1 TP, 200A, 415V , AC Motor Control Switch(SDF) with 200A HRC Fuse	3 Nos.
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4 M.I. Ammeter 0 - 200 Amp, CT operated, 1% accuracy 96mm x 96mm size	3 Nos.
5 Ammeter Selector Switch, 4 position, 10/15 Amp	3 Nos.
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7 Current Transformers for metering purpose with CT ratio 200/5	9 Nos.
8 LED type Pilot Indicating Lamp 25 mm	9 Nos.
10 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
11 Terminal Strip for connections	1 No.

Per Unit Rate ₹ 37650.00 Rupees
ThirtySeven
Thousand Six
Hundred Fifty
Only

ITEM 1.5.3(C) **Sub Panel Cabinet** Suitable for operation of **4 x 60 HP** Pumpset
Size :1600 mm(B)x 1400 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1 TP, 200A, 415V , AC Motor Control Switch(SDF) with 200A HRC Fuse	4 Nos.
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4 M.I. Ammeter 0 - 200 Amp, CT operated, 1% accuracy 96mm x 96mm size	4 Nos.
5 Ammeter Selector Switch, 4 position, 10/15 Amp	4 Nos.
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7 Current Transformers for metering purpose with CT ratio 200/5	12 Nos.
8 LED type Pilot Indicating Lamp 25 mm	12 Nos.
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
10 Terminal Strip for connections	1 No.

Per Unit Rate ₹ 46610.00 Rupees
FourtySix
Thousand Six
Hundred Ten
Only

ITEM 1.5.3(D) **Sub Panel Cabinet** Suitable for operation of **5 x 60 HP** Pumpset
Size :2000 mm(B)x 1400 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1 TP, 200A, 415V , AC Motor Control Switch(SDF) with 200A HRC Fuse	5 Nos.
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4 M.I. Ammeter 0 - 200 Amp, CT operated, 1% accuracy 96mm x 96mm size	5 Nos.
5 Ammeter Selector Switch, 4 position, 10/15 Amp	5 Nos.
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7 Current Transformers for metering purpose with CT ratio 200/5	15 Nos.
8 LED type Pilot Indicating Lamp 25 mm	15 Nos.
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
10 Terminal Strip for connections	1 No.

Per Unit Rate ₹ 53270.00 Rupees
FiftyThree
Thousand Two
Hundred
Seventy Only

ITEM 1.5.4 For 75 HP Pumpsets

Specification of Panel board :

Supplying, fabrication and erection of panel board housing for indoor type floor mounted, cubicle type compartmental, dust and vermin proof (as per IP-54) main LT Motor Control Sub Panel Board of following capacity and given size, made out of 16 SWG CR Sheet and 40mmx40mmx6mm angle having four nos. of legs 400 mm long at the bottom, with folded and welded construction having dismantling doors at the back, surface chemically treated and Siemen's grey powder coated, having cable incoming & outgoing provision at the bottom through gland plates without fitting & fixing of electrical components complete including fixing on the barge with nuts and bolts as directed.

ITEM 1.5.4(A) Sub Panel Cabinet Suitable for operation of **2 x 75 HP** Pumpset

Size :800 mm(B)x 1400 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1 TP, 250A, 415V , AC Motor Control Switch(SDF) with 200A HRC Fuse	2 Nos.		
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.		
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.		
4 M.I. Ammeter 0 - 200 Amp, CT operated, 1% accuracy 96mm x 96mm size	2 Nos.		
5 Ammeter Selector Switch, 4 position, 10/15 Amp	2 Nos.		
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.		
7 Current Transformers for metering purpose with CT ratio 200/5	6 Nos.		
8 LED type Pilot Indicating Lamp 25 mm	6 Nos.		
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.		
10 Terminal Strip for connections	1 No.		
	Per Unit Rate	₹	24414.39 Rupees
			TwentyFour Thousand Four Hundred Fourteen Paise ThirtyNine Only

ITEM 1.5.4(B) Sub Panel Cabinet Suitable for operation of **3 x 75 HP** Pumpset

Size :1200 mm(B)x 1400 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1 TP, 250A, 415V , AC Motor Control Switch(SDF) with 200A HRC Fuse	3 Nos.
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4 M.I. Ammeter 0 - 200 Amp, CT operated, 1% accuracy 96mm x 96mm size	3 Nos.
5 Ammeter Selector Switch, 4 position, 10/15 Amp	3 Nos.
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7 Current Transformers for metering purpose with CT ratio 200/5	9 Nos.
8 LED type Pilot Indicating Lamp 25 mm	9 Nos.
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
10 Terminal Strip for connections	1 No.

Per Unit Rate ₹ 37650.00 Rupees
ThirtySeven
Thousand Six
Hundred Fifty
Only

ITEM 1.5.4(C) **Sub Panel Cabinet** Suitable for operation of **4 x 75 HP** Pumpset
Size :1600 mm(B)x 1400 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1 TP, 250A, 415V , AC Motor Control Switch(SDF) with 200A HRC Fuse	4 Nos.
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4 M.I. Ammeter 0 - 200 Amp, CT operated, 1% accuracy 96mm x 96mm size	4 Nos.
5 Ammeter Selector Switch, 4 position, 10/15 Amp	4 Nos.
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7 Current Transformers for metering purpose with CT ratio 200/5	12 Nos.
8 LED type Pilot Indicating Lamp 25 mm	12 Nos.
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
10 Terminal Strip for connections	1 No.

Per Unit Rate ₹ 47220.00 Rupees
FourtySeven
Thousand Two
Hundred Twenty
Only

ITEM 1.5.4(D) **Sub Panel Cabinet** Suitable for operation of **5 x 75 HP** Pumpset
Size :2000 mm(B)x 1400 mm(H)x 400 mm(D)

Provision for Electrical accessories :-

1 TP, 250A, 415V , AC Motor Control Switch(SDF) with 200A HRC Fuse	5 Nos.
2 M.I. Voltmeter, 0-500V, 1% accuracy 96mm x 96mm size	1 No.
3 Voltmeter Selector Switch, 4 position, 10/15 Amp	1 No.
4 M.I. Ammeter 0 - 200 Amp, CT operated, 1% accuracy 96mm x 96mm size	5 Nos.
5 Ammeter Selector Switch, 4 position, 10/15 Amp	5 Nos.
6 DP, 250V, 16A, MCB with breaking capacity 10kA for lighting purpose	1 No.
7 Current Transformers for metering purpose with CT ratio 200/5	15 Nos.
8 LED type Pilot Indicating Lamp 25 mm	15 Nos.
9 SP, 250V, 1A, MCB with breaking capacity 10kA for meter protection	3 Nos.
10 Terminal Strip for connections	1 No.

Per Unit Rate ₹ 55720.00 Rupees FiftyFive
Thousand Seven
Hundred Twenty
Only

ITEM 2 FITTING FIXING OF PANEL BOARD ACCESSORIES

ITEM 2.1 MOULDED CASE CIRCUIT BREAKERS - THREE POLE

Supplying including fitting, fixing & connection of three Pole(TP) 415 V, AC MCCB of following current ratings as main incomer in already fabricated LT Control Panel Board Housing along with Lugs, Connecting Cable and all other necessary materials for connections as directed

	Rating in Amp	Unit Rate	
A	63 Amp, Breaking Capacity 35/36 kA	₹ 15442.00	Rupees Fifteen Thousand Four Hundred FourtyTwo Only
B	100 Amp, Breaking Capacity 35/36 kA	₹ 16160.00	Rupees Sixteen Thousand One Hundred Sixty Only
C	125 Amp, Breaking Capacity 35/36 kA	₹ 22340.00	Rupees TwentyTwo Thousand Three Hundred Fourty Only
D	160 Amp, Breaking Capacity 35/36 kA	₹ 29570.00	Rupees TwentyNine Thousand Five Hundred Seventy Only
E	200 Amp, Breaking Capacity 50 kA	₹ 32760.00	Rupees ThirtyTwo Thousand Seven Hundred Sixty Only
F	250 Amp, Breaking Capacity 35/36 kA	₹ 39500.00	Rupees ThirtyNine Thousand Five Hundred Only
G	315 Amp, Breaking Capacity 35/36 kA	₹ 47940.00	Rupees FourtySeven Thousand Nine Hundred Fourty Only
H	400 Amp, Breaking Capacity 35/36 kA	₹ 48350.00	Rupees FourtyEight Thousand Three Hundred Fifty Only
I	500 Amp, Breaking Capacity 35/36 kA	₹ 65360.00	Rupees SixtyFive Thousand Three Hundred Sixty Only
J	630 Amp, Breaking Capacity 35/36 kA	₹ 65880.00	Rupees SixtyFive Thousand Eight Hundred Eighty Only

ITEM 2.2 MOULDED CASE CIRCUIT BREAKERS - FOUR POLE

Supplying including fitting, fixing & connection of Four Pole(FP) 415 V, AC MCCB of following current ratings in already fabricated LT Control Panel Board Housing along with Lugs, Connecting Cable and all other necessary materials for connections as directed

	Rating in Amp	Unit Rate	
A	63 Amp, Breaking Capacity 35/36 kA	₹ 16630.00	Rupees Sixteen Thousand Six Hundred Thirty Only
B	100 Amp, Breaking Capacity 35/36 kA	₹ 19550.00	Rupees Nineteen Thousand Five Hundred Fifty Only
C	125 Amp, Breaking Capacity 35/36 kA	₹ 19550.00	Rupees Nineteen Thousand Five Hundred Fifty Only
D	160 Amp, Breaking Capacity 35/36 kA	₹ 27720.00	Rupees TwentySeven Thousand Seven Hundred Twenty Only
E	200 Amp, Breaking Capacity 50 kA	₹ 35130.00	Rupees ThirtyFive Thousand One Hundred Thirty Only
F	250 Amp, Breaking Capacity 50 kA	₹ 49340.00	Rupees FourtyNine Thousand Three Hundred Fourty Only
G	315 Amp, Breaking Capacity 50 kA	₹ 50550.00	Rupees Fifty Thousand Five Hundred Fifty Only
H	400 Amp, Breaking Capacity 50 kA	₹ 58790.00	Rupees FiftyEight Thousand Seven Hundred Ninety Only
I	500 Amp, Breaking Capacity 35/36 kA	₹ 82750.00	Rupees EightyTwo Thousand Seven Hundred Fifty Only
J	630 Amp, Breaking Capacity 50 kA	₹ 82750.00	Rupees EightyTwo Thousand Seven Hundred Fifty Only

ITEM 2.3 MOTOR PROTECTION CIRCUIT BREAKERS

Supplying including fitting, fixing & connection of Three Pole (TP) 415 V AC 50 Hz **Motor Protection Circuit Breaker (MPCB)** with adjustable Thermal and Magnetic Setting with Rotary Handle of following Current/ HP ratings in already fabricated LT Control Panel Board Housing along with Lugs, Connecting Cable and all other necessary materials for connections as directed

	Rating in Amp	Unit Rate	
A	8 Amp / 5 H.P.	₹ 7660.00	Rupees Seven Thousand Six Hundred Sixty Only
B	17 A / 10 H.P.	₹ 9290.00	Rupees Nine Thousand Two Hundred Ninety Only
C	32 A / 20 H.P.	₹ 15680.00	Rupees Fifteen Thousand Six Hundred Eighty Only
D	40 A / 30 H.P.	₹ 22930.00	Rupees TwentyTwo Thousand Nine Hundred Thirty Only
E	50 A / 40 H.P.	₹ 24490.00	Rupees TwentyFour Thousand Four Hundred Ninety Only
F	63A/75A/90A 50 H.P./ 60 H.P.	₹ 24630.00	Rupees TwentyFour Thousand Six Hundred Thirty Only
G	100 A 75 H.P.	₹ 24860.00	Rupees TwentyFour Thousand Eight Hundred Sixty Only

ITEM 2.4 THREE POLE MINIATURE CIRCUIT BREAKERS (MCB) C CUR

Supplying including fitting, fixing & connection of Three Pole (TP) 415 V AC 50 Hz Miniature Circuit Breaker (MCB) C Curve with breaking capacity of 10 kA and of following current ratings in already fabricated LT Control Panel Board Housing along with Lugs, Connecting Cable and all other necessary materials for connections as directed

Rating in Amp		Unit Rate	
A	16 Amp	₹ 2020.00	Rupees Two Thousand Twenty Only
B	25 Amp	₹ 2020.00	Rupees Two Thousand Twenty Only
C	32 Amp	₹ 2020.00	Rupees Two Thousand Twenty Only
D	40 Amp	₹ 3120.00	Rupees Three Thousand One Hundred Twenty Only
E	63 Amp	₹ 3120.00	Rupees Three Thousand One Hundred Twenty Only
F	100 Amp	₹ 13060.00	Rupees Thirteen Thousand Sixty Only

ITEM 2.5 AIR BREAK CONTACTOR - THREE POLE

Supplying including fitting, fixing & connection of Three Pole (TP) 415 V AC 50 Hz Air Break Contactor (ABC) of following current ratings in already fabricated LT Control Panel Board Housing along with Lugs, Connecting Cable and all other necessary materials for connections as directed

Rating in Amp		Unit Rate	
A	25 Amp	₹ 3134.00	Rupees Three Thousand One Hundred ThirtyFour Only
B	32 Amp	₹ 6432.00	Rupees Six Thousand Four Hundred ThirtyTwo Only
C	40 Amp	₹ 9181.00	Rupees Nine Thousand One Hundred EightyOne Only
D	63 Amp	₹ 18899.00	Rupees Eighteen Thousand Eight Hundred NinetyNine Only
E	100 Amp	₹ 21648.00	Rupees TwentyOne Thousand Six Hundred FourtyEight Only

ITEM 2.6 MINIATURE CIRCUIT BREAKERS - SINGLE POLE

Supplying including fitting, fixing & connection of Miniature Circuit Breaker(MCB) SP 250 V AC 50 Hz in already fabricated LT Control Panel Board Housing along with necessary connecting materials as directed

Rating in Amp		Unit Rate	
A	1 Amp	₹ 722.00	Rupees Seven Hundred TwentyTwo Only
B	6 Amp	₹ 519.00	Rupees Five Hundred Nineteen Only
C	10 Amp	₹ 546.00	Rupees Five Hundred FourtySix Only
D	16 Amp	₹ 573.20	Rupees Five Hundred SeventyThree Paise Twenty Only
E	32 Amp	₹ 614.00	Rupees Six Hundred Fourteen Only

ITEM 2.7 MEASURING INSTRUMENTS

2.7(A) VOLTMETER

Supplying including fitting, fixing & connection of 96 mm × 96 mm M I Voltmeter 0-500 Volt suitable for AC 50 Hz supply Accuracy Class I in already fabricated LT Control Panel Board Housing along with necessary connecting materials as directed		
Rate per Unit	₹ 807.00	Rupees Eight Hundred Seven Only

2.7(B) SELECTOR SWITCH FOR VOLTMETER

Supplying including fitting, fixing & connection of Selector Switch for Voltmeter, 10 Amp 4 positions suitable for AC 50 Hz supply in already fabricated LT Control Panel Board Housing along with necessary connecting materials as directed		
Rate per Unit	₹ 655.00	Rupees Six Hundred FiftyFive Only

2.7(C) AMMETER

Supplying including fitting, fixing & connection of 96 mm × 96 mm CT operated M I Ammeter suitable for AC 50 Hz supply, Accuracy Class I in already fabricated LT Control Panel Board Housing along with necessary connecting materials as directed		
Rate per Unit	₹ 807.00	Rupees Eight Hundred Seven Only

2.7(D) SELECTOR SWITCH FOR AMMETER

Supplying including fitting, fixing & connection of Selector Switch 10 Amp 4 positions 415 Volt (line currents with off)of CT operated M I Ammeter suitable for AC 50 Hz supply Accuracy Class I in already fabricated LT Control Panel Board Housing along with necessary connecting materials as directed		
Rate per Unit	₹ 931.00	Rupees Nine Hundred ThirtyOne Only

2.7(E) ANALOG POWER FACTOR METER

Supplying including fitting, fixing & connection of Analog Power Factor Meter 0.5 lag - 1 - 0.5 lead in already fabricated LT Control Panel Board Housing along with necessary connecting materials as directed		
Rate per Unit	₹ 9369.00	Rupees Nine Thousand Three Hundred SixtyNine Only

2.7(F) ON-OFF SWITCH FOR POWER FACTOR METER

Supplying including fitting, fixing & connection of On-Off Switch for Power Factor Meter suitable for AC 50 Hz supply in already fabricated LT Control Panel Board Housing along with necessary connecting materials as directed		
Rate per Unit	₹ 889.00	Rupees Eight Hundred EightyNine Only

2.7(G) CURRENT TRANSFORMER

Supplying including fitting, fixing & connection of Current Transformer(CT) for

	Rating in Volt-Amperes	Unit Rate	
I	60/5, 5 VA	₹ ₹ 2,184.00	Rupees Two Thousand One Hundred EightyFour Only
II	100/5, 5 VA	₹ ₹ 2,184.00	Rupees Two Thousand One Hundred EightyFour Only
III	200/5, 10 VA	₹ ₹ 2,184.00	Rupees Two Thousand One Hundred EightyFour Only
IV	300/5, 10 VA	₹ ₹ 2,184.00	Rupees Two Thousand One Hundred EightyFour Only
V	400/5, 10 VA	₹ ₹ 2,184.00	Rupees Two Thousand One Hundred EightyFour Only
VI	500/5, 10 VA	₹ ₹ 2,184.00	Rupees Two Thousand One Hundred EightyFour Only
VII	600/5, 10 VA	₹ ₹ 2,184.00	Rupees Two Thousand One Hundred EightyFour Only

ITEM 2.8 OTHER PANEL BOARD FITTINGS

2.8(A) PILOT INDICATING LAMP

Supplying including fitting, fixing & connection of Pilot Indicating Lamp Threaded, LED Type 25 mm in already fabricated LT Control Panel Board Housing along with necessary connecting materials as directed		
Rate per Unit	₹ 392.00	Rupees Three Hundred NinetyTwo Only

2.8(B) ON AND OFF PUSH BUTTON SWITCH

Supplying including fitting, fixing & connection of On and off Push Button switch in already fabricated LT Control Panel Board Housing along with necessary connecting materials as directed		
Rate per Unit	₹ 351.00	Rupees Three Hundred FiftyOne Only

2.8(C) BUSBAR SUPPORT

Supplying including fitting & fixing of Epoxy moulded Porcelain Busbar Support in already fabricated LT Control Panel Board Housing along with necessary fixing materials as directed		
Rate per Unit	₹ 409.00	Rupees Four Hundred Nine Only

2.8(D) ALUMINIUM & COPPER BUSBAR STRIP

Supplying including fitting & fixing of Aluminium /Copper Strip Busbar in already fabricated LT Control Panel Board Housing along with necessary fixing materials as directed		
Rate per kg		
I	ALUMINIUM BUSBAR STRIP	₹ 871.71 Rupees Eight Hundred SeventyOne Paise SeventyOne Only
II	COPPER BUSBAR STRIP	₹ 1446.00 Rupees One Thousand Four Hundred FourtySix Only

ITEM 3 ADDITIONAL ACCESSORIES

ITEM 3.1 IRON ANGLE STAND FOR CAPACITOR BANK

Supplying fabrication and erection of Iron Angle Stand for erection of LT Power Capacitor made of M S Angle of size 30 mm x 30 mm x 5 mm with 4 Nos. legs 400 mm high and cross pieces having Bakelite Sheet Horizontal Platform as directed

Rate per Each

(A)	A	Size of the Frame : (300 mm x 300 mm) x 400 mm	₹ 4,170.00	Rupees Four Thousand One Hundred Seventy Only
	B	Size of the Frame : (600 mm x 300 mm) x 400 mm	₹ 5,950.00	Rupees Five Thousand Nine Hundred Fifty Only
	C	Size of the Frame : (900 mm x 300 mm) x 400 mm	₹ 7,720.00	Rupees Seven Thousand Seven Hundred Twenty Only
	D	Size of the Frame : (1200 mm x 300 mm) x 400 mm	₹ 9,500.00	Rupees Nine Thousand Five Hundred Only
	E	Size of the Frame : (1500 mm x 300 mm) x 400 mm	₹ 11,390.00	Rupees Eleven Thousand Three Hundred Ninety Only
	F	Size of the Frame : (1800 mm x 300 mm) x 400 mm	₹ 13,270.00	Rupees Thirteen Thousand Two Hundred Seventy Only

ITEM 3.2 LT CAPACITOR BANK

Supplying fitting fixing of LT Power Capacitor 415 Volt AC 3 φ (Single Unit) of following KVAR Rating and making connection with Busbar in the existing Panel. The Capacitor is to be placed in existing Platform.

Rate per Each

A	6 kVAR	₹ 3,311.00	Rupees Three Thousand Three Hundred Eleven Only
B	10 kVAR	₹ 5,130.00	Rupees Five Thousand One Hundred Thirty Only
C	15 kVAR	₹ 7,550.00	Rupees Seven Thousand Five Hundred Fifty Only
D	20 kVAR	₹ 9,890.00	Rupees Nine Thousand Eight Hundred Ninety Only

ITEM 4 SWITCHES

ITEM 4.1 TP Main Switch (SDFU - Switch Disconnecter Fuse Unit)

Supplying including fitting, fixing & connection of TP (Three Pole) Main Switch (SDFU - Switch Disconnecter Fuse Unit) with HRC Fuses, 415 V AC, Open Execution, Panel Mounting Type of following current ratings in already fabricated LT Control Panel Board Housing along with Lugs, Connecting Cable and all other necessary materials for connections as directed

		Rate per Each	
A	32 Amp	₹ 4200.00	Rupees Four Thousand Two Hundred Only
B	63 Amp	₹ 5690.00	Rupees Five Thousand Six Hundred Ninety Only
C	100 Amp	₹ 11120.00	Rupees Eleven Thousand One Hundred Twenty Only
D	125 Amp	₹ 11800.00	Rupees Eleven Thousand Eight Hundred Only
E	160 Amp	₹ 15360.00	Rupees Fifteen Thousand Three Hundred Sixty Only
F	200 Amp	₹ 17920.00	Rupees Seventeen Thousand Nine Hundred Twenty Only
G	250 Amp	₹ 21360.00	Rupees TwentyOne Thousand Three Hundred Sixty Only

ITEM 4.2 TPN Main Switch (SDFU - Switch Disconnecter Fuse Unit)

Supplying including fitting, fixing & connection of TPN Main Switch (SDFU - Switch Disconnecter Fuse Unit) with HRC Fuses, 415 V AC, Open Execution, Panel Mounting Type of following current ratings in already fabricated LT Control Panel Board Housing along with Lugs, Connecting Cable and all other necessary materials for connections as directed

		Rate per Each	
A	32 Amp	₹ 4090.00	Rupees Four Thousand Ninety Only
B	63 Amp	₹ 5180.00	Rupees Five Thousand One Hundred Eighty Only
C	100 Amp	₹ 10580.00	Rupees Ten Thousand Five Hundred Eighty Only
D	125 Amp	₹ 13370.00	Rupees Thirteen Thousand Three Hundred Seventy Only
E	160 Amp	₹ 12600.00	Rupees Twelve Thousand Six Hundred Only
F	200 Amp	₹ 16470.00	Rupees Sixteen Thousand Four Hundred Seventy Only
G	250 Amp	₹ 18830.00	Rupees Eighteen Thousand Eight Hundred Thirty Only
H	315 Amp	₹ 22210.00	Rupees TwentyTwo Thousand Two Hundred Ten Only
I	400 Amp	₹ 26490.00	Rupees TwentySix Thousand Four Hundred Ninety Only
J	630 Amp	₹ 43100.00	Rupees FortyThree Thousand One Hundred Only

ITEM 5 WALL MOUNTING ACCESSORIES

5.1 TPN Main Switch (SDFU - Switch Disconnecter Fuse Unit) Wall Mounting Type

Supplying including fitting, fixing & connection of TPN Main Switch (SDF) with HRC Fuses, 415 V AC, in Sheet-Steel Housing of following current ratings to be fitted in existing Angle Iron Frame/Wall with Clamps, Nuts & Bolts and all other necessary materials as directed including drilling of holes as required

		Rate per Each	
A	63 A	₹ 14730.00	Rupees Fourteen Thousand Seven Hundred Thirty Only
B	100 A	₹ 16580.00	Rupees Sixteen Thousand Five Hundred Eighty Only
C	160 A	₹ 17410.00	Rupees Seventeen Thousand Four Hundred Ten Only
D	200 A	₹ 24710.00	Rupees TwentyFour Thousand Seven Hundred Ten Only
E	250 A	₹ 27120.00	Rupees TwentySeven Thousand One Hundred Twenty Only
F	315 A/ 320 A	₹ 31240.00	Rupees ThirtyOne Thousand Two Hundred Fourty Only
G	400 A	₹ 35110.00	Rupees ThirtyFive Thousand One Hundred Ten Only
H	630 A	₹ 49230.00	Rupees FourtyNine Thousand Two Hundred Thirty Only

5.2 TPN Main Switch (SDFU - Switch Disconnecter Fuse Unit) in Rewireable Type

Supplying including fitting, fixing & connection of TPN Main Switch Fuse Unit (SFU), 415 V AC, Rewireable Type in Sheet-Steel Housing of following current ratings to be fitted in existing Angle Iron Frame/Wall with Clamps, Nuts & Bolts and all other necessary materials as directed including drilling of holes as required

		Rate per Each	
A	16 A	₹ 5050.00	Rupees Five Thousand Fifty Only
B	32 A	₹ 6340.00	Rupees Six Thousand Three Hundred Fourty Only
C	63 A	₹ 11190.00	Rupees Eleven Thousand One Hundred Ninety Only
D	100 A	₹ 20620.00	Rupees Twenty Thousand Six Hundred Twenty Only
E	200 A	₹ 32250.00	Rupees ThirtyTwo Thousand Two Hundred Fifty Only
F	315 A/ 320 A	₹ 44340.00	Rupees FourtyFour Thousand Three Hundred Fourty Only

5.3 Heavy Duty TPN AC Main Switch Double Break

Supplying including fitting, fixing & connection of Heavy Duty TPN 415 V AC Main Switch Double Break, HRC Type with side Handle in Sheet Steel Housing of following current ratings to be fitted in existing Angle Iron Frame/Wall with Clamps, Nuts & Bolts and all other necessary materials as directed including drilling of holes as required

Rate per Each			
A	63 A	₹ 12070.00	Rupees Twelve Thousand Seventy Only
B	100 A	₹ 16030.00	Rupees Sixteen Thousand Thirty Only
C	160 A	₹ 23870.00	Rupees TwentyThree Thousand Eight Hundred Seventy Only
D	200 A	₹ 26910.00	Rupees TwentySix Thousand Nine Hundred Ten Only
E	315 A/ 320 A	₹ 30150.00	Rupees Thirty Thousand One Hundred Fifty Only
F	400 A	₹ 42920.00	Rupees FourtyTwo Thousand Nine Hundred Twenty Only
G	500 A	₹ 60590.00	Rupees Sixty Thousand Five Hundred Ninety Only

5.4 On Load Change Over Switch Four Pole

Supplying including fitting, fixing & connection of On Load Change Over Switch in Sheet Steel Housing FP 415 V AC of following current ratings to be fitted in existing Angle Iron Frame/Wall with Clamps, Nuts & Bolts and all other necessary materials as directed including drilling of holes as required

Rate per Each			
A	63 A	₹ 10210.00	Rupees Ten Thousand Two Hundred Ten Only
B	100 A	₹ 14770.00	Rupees Fourteen Thousand Seven Hundred Seventy Only
C	200 A	₹ 24040.00	Rupees TwentyFour Thousand Fourty Only
D	320 A	₹ 30060.00	Rupees Thirty Thousand Sixty Only
E	400 A	₹ 42440.00	Rupees FourtyTwo Thousand Four Hundred Fourty Only

ITEM 6 HIGH TENSION LINE

6.1 ALIGNMENT OF HT LINE

Surveying and finalising the suitable tapping point in existing nearby 11 kV line in consultation with APDCL and Departmental Officers, marking the alignment of the line considering Right of Way, Feasibility etc. as required and as directed

(A)	For first 500 M	5130.00	Rupees Five Thousand One Hundred Thirtv Onlv
(B)	For every subsequent 100 M beyond 500 M Length	1000.00	Rupees One Thousand Only

6.2 JUNGLE CUTTING

Jungle cutting including cutting of branches of trees and reclining Bamboos along the alignment of the overhead line providing clearance 1.5M either side and above the line as directed. Clearance must be ensured at the time of charging the line

Cost per RM 40.00 Rupees Fourty Only

6.3 SUPPLYING AND ERECTION OF PSC POLE

Supplying & Erection of PSC Pole conforming to IS 1678 of Standard Dimension and of following lengths for overhead Electric Lines including digging of Earth Pit (0.75m × 0.5m) to a depth $\frac{1}{5}$ th of the Pole Length with a PCC Base Plate of size 60 cm × 60 cm × 12 cm at the bottom, refilling as specified with hard ramming as directed

(A) POLE LENGTH 7.5 Metres	Rate per Each
(I) Refilling with Hard Soil	₹ 9,205.00 Rupees Nine Thousand Two Hundred Five Onlv
(II) With Boulder (size 150 mm to 200mm) packing - refilling the voids with Hard Soil	₹ 9,824.00 Rupees Nine Thousand Eight Hundred TwentyFour Onlv
(III) Erected in 1:3:6 CC Foundation (0.45cm × 0.45cm) upto 30cm above GL	₹ 11,280.00 Rupees Eleven Thousand Two Hundred Eightv Onlv
(B) POLE LENGTH 8.5 Metres	Rate per Each
(i) Refilling with Hard Soil (a)for 6 or more poles	₹ 11,820.00 Rupees Eleven Thousand Eight Hundred Twenty Only
(b)for less than 6 poles	₹ 12,860.00 Rupees Twelve Thousand Eight Hundred Sixty Only

(ii) With Boulder (size 150 mm to 200mm) packing - refilling the voids with Hard Soil	Rate per Each
(a)for 6 or more poles	₹ 12,720.00 Rupees Twelve Thousand Seven Hundred Twenty Only
(b)for less than 6 poles	₹ 13,890.00 Rupees Thirteen Thousand Eight Hundred Ninety Only
(III) Erected in 1:3:6 CC Foundation (0.45cm × 0.45cm) upto 30cm above GL	
(a)for 6 or more poles	₹ 14,060.00 Rupees Fourteen Thousand Sixty Only
(b)for less than 6 poles	₹ 15,230.00 Rupees Fifteen Thousand Two Hundred Thirty Only
(C) POLE LENGTH 9.75 Metres	Rate per Each
(I) Refilling with Hard Soil	
(a)for 6 or more poles	₹ 14,300.00 Rupees Fourteen Thousand Three Hundred Only
(b)for less than 6 poles	₹ 15,200.00 Rupees Fifteen Thousand Two Hundred Only
(II) With Boulder (size 150 mm to 200mm) packing - refilling the voids with Hard Soil	
(a)for 6 or more poles	₹ 15,050.00 Rupees Fifteen Thousand Fifty Only
(b)for less than 6 poles	₹ 15,950.00 Rupees Fifteen Thousand Nine Hundred Fifty Only
(III) Erected in 1:3:6 CC Foundation (0.45cm × 0.45cm) upto 30cm above GL	
(a)for 6 or more poles	₹ 16,920.00 Rupees Sixteen Thousand Nine Hundred Twenty Only
(b)for less than 6 poles	₹ 17,830.00 Rupees Seventeen Thousand Eight Hundred Thirtv Only

6.4 SUPPLYING AND ERECTION OF STEEL TUBULAR POLE

Supplying & Erection of Swaged Type Steel Tubular Pole of following lengths and specifications for overhead Electric Lines with necessary Base Plate and Top Cap including digging of Earth Pit to a depth 1/3th of the Pole Length, refilling and necessary CC work (45cm x 45 cm) in 1:3:6 proportion from bottom upto 45 cm above the Ground Level with hard ramming including painting of the pole as directed

	Rate per Each	
A Steel Tubular Pole 410 SP-9, 7.5 m long (IS 2713-Part III 1980)	₹ 23,570.00	Rupees TwentyThree Thousand Five Hundred Seventy Only
B Steel Tubular Pole 410 SP14, 8m long (IS 2713-Part III 1980)	₹ 24,000.00	Rupees TwentyFour Thousand Only
C Steel Tubular Pole 410 SP44, 10m long (IS 2713-Part III 1980)	₹ 35,210.00	Rupees ThirtyFive Thousand Two Hundred Ten Only
D Steel Tubular Pole 410 SP53, 11m long (IS 2713-Part III 1980)	₹ 38,280.00	Rupees ThirtyEight Thousand Two Hundred Eighty Only
E Steel Tubular Pole 410 SP60, 12m long (IS 2713-Part III 1980)	₹ 43,370.00	Rupees FortyThree Thousand Three Hundred Seventy Only
F Steel Tubular Pole 410 SP66, 12m long (IS 2713-Part III 1980)	₹ 62,970.00	Rupees SixtyTwo Thousand Nine Hundred Seventy Only
G Steel Tubular Pole 410 SP76, 14m long (IS 2713-Part III 1980)	₹ 74,690.00	Rupees SeventyFour Thousand Six Hundred Ninety Only

6.5 LINE SUPPORT

6.5.1 M S CHANNEL CROSS ARM

Supplying and erection of MS Channel Cross Arm of following sizes for 11 kV Line on PSC/ Steel Poles along with Clamps, Nuts & Bolts duly painted with Anti Corrosive Primer and Aluminium Paint including drilling of necessary holes as directed

	Rate per Each	
A Of Size 75mm x 40mm x 6mm x 500 mm	₹ 1,353.00	Rupees One Thousand Three Hundred FiftyThree Only
B Of Size 75mm x 40mm x 6mm x 1100 mm	₹ 1,695.00	Rupees One Thousand Six Hundred NinetyFive Only

C Of Size 75mm × 40mm × 6mm × 2200 mm	₹ 2,543.00 Rupees Two Thousand Five Hundred FourtyThree Only
D Of Size 100mm × 50mm × 6mm × 2200 mm	₹ 3,246.00 Rupees Three Thousand Two Hundred FourtySix Only
E Of Size 100mm × 50mm × 6mm × 3200 mm	₹ 4,625.00 Rupees Four Thousand Six Hundred TwentyFive Only

6.5.2 G I CHANNEL CROSS ARM

Supplying and erection of GI Channel Cross Arm of following sizes for 11 kV Line on PSC/ Steel Poles along with GI Clamps, GI Nuts & Bolts including drilling of necessary holes as directed

	Rate per Each
A Of Size 75mm × 40mm × 6mm × 500 mm	₹ 1,066.00 Rupees One Thousand SixtySix Only
B Of Size 75mm × 40mm × 6mm × 1100 mm	₹ 1,721.00 Rupees One Thousand Seven Hundred TwentyOne Only
C Of Size 75mm × 40mm × 6mm × 2200 mm	₹ 2,628.00 Rupees Two Thousand Six Hundred TwentyEight Only
D Of Size 100mm × 50mm × 6mm × 2200 mm	₹ 3,561.00 Rupees Three Thousand Five Hundred SixtyOne Only
E Of Size 100mm × 50mm × 6mm × 3200 mm	₹ 4,641.00 Rupees Four Thousand Six Hundred FourtyOne Only

6.5.3 MS ANGLE CROSS ARM

Supplying and erection of MS Angle Cross Arm on Poles along with Clamps, Nuts & Bolts duly painted with Anti Corrosive Primer and Aluminium Paint including drilling of necessary holes as directed

	Rate per Each
A of Size 50mm × 50mm × 6mm, 600 mm long	₹ 1,208.00 Rupees One Thousand Two Hundred Eight Only
B of Size 50mm × 50mm × 6mm, 1150 mm long	₹ 1,629.00 Rupees One Thousand Six Hundred TwentyNine Only
C of Size 50mm × 50mm × 6mm, 2200 mm long	₹ 2,014.00 Rupees Two Thousand Fourteen Only

D of Size 50mm × 50mm × 6mm, 3200 mm long

₹ 1,913.00 Rupees One
Thousand Nine
Hundred Thirteen
Only

<p>6.5.4 GI ANGLE CROSS ARM</p> <p>Supplying and erection of GI Angle Cross Arm on Poles along with GI Clamps, GI Nuts & Bolts including drilling of necessary holes as directed</p> <p>A of Size 50mm × 50mm × 6mm, 600 mm long</p> <p>B of Size 50mm × 50mm × 6mm, 1150 mm long</p> <p>C of Size 50mm × 50mm × 6mm, 2200 mm long</p> <p>D of Size 50mm × 50mm × 6mm, 3200 mm long</p>	<p>Rate per Each</p> <p>₹ 1,678.00 Rupees One Thousand Six Hundred SeventyEight Only</p> <p>₹ 1,813.00 Rupees One Thousand Eight Hundred Thirteen Only</p> <p>₹ 2,074.00 Rupees Two Thousand SeventyFour Only</p> <p>₹ 2,738.00 Rupees Two Thousand Seven Hundred ThirtyEight Only</p>
<p>6.5.5 T CROSS ARM</p> <p>6.5.5(A) 11 KV MS T CROSS ARM</p> <p>Supplying and erection of MS T Cross Arm for 11 kV Line on PSC Poles along with Clamps, Nuts & Bolts duly painted with Anti Corrosive Primer and Aluminium Paint including drilling of necessary holes as directed</p> <p>6.5.5(B) 11 KV GI T CROSS ARM</p> <p>Supplying and erection of GI T Cross Arm for 11 kV Line on PSC Poles along with Clamps, Nuts & Bolts including drilling of necessary holes as directed</p>	<p>Rate per Each</p> <p>₹ 1,423.00 Rupees One Thousand Four Hundred TwentyThree Only</p> <p>Rate per Each</p> <p>₹ 1,773.00 Rupees One Thousand Seven Hundred SeventyThree Only</p>
<p>6.5.6 CROSS BRACING</p> <p>A Supplying and erection of Cross Bracing Sets for 11 kV Line on DP (Double Pole) Structure comprising of 2(two) Nos. of MS Angle of size 50 mm × 50 mm × 6 mm × 2200 mm fitted horizontally and other 2 Nos. 3200 mm long fitted diagonally along with MS Pole Clamps, Nuts Bolts and washer duly painted with Anti Corrosive Primer and Aluminium Paint including drilling of necessary holes as directed</p>	<p>Rate per Set</p> <p>₹ 8,030.00 Rupees Eight Thousand Thirty Only</p>

<p>B Supplying and erection of Cross Bracing Sets for 11 kV Line on DP (Double Pole) Structure comprising of 2(two) Nos. of G I Angle of size 50 mm × 50 mm × 6 mm × 2200 mm fitted horizontally and other 2 Nos. 3200 mm long fitted diagonally along with G I Pole Clamps, Nuts Bolts and washer duly painted with Anti Corrosive Primer and Aluminium Paint including drilling of necessary holes as directed</p>	<p>₹ 8,580.00 Rupees Eight Thousand Five Hundred Eighty Only</p>
---	--

6.5.7 11 KV HT STAY SET

<p>(A) In Hard Soil with Boulder</p> <p>Supplying and Erection of 11 kV HT Stay Set comprising of 19mm dia × 1.8 m Stay Rod, Anchor Plate, Bow, Thimble etc. including supply and erection of 7/10 SWG G I Stay Wire and 11kV Guy Insulator complete including digging of Earth Pit of size (0.9m × 0.9m) to a depth of 1.4 Metre, placing the Stay Rod with Plate, fixing thimble, bow etc. with Boulder packing (size 150mm to 200mm) and hard ramming to fill up half the pit and filling with hard soil packing upto the Ground Level as directed</p>	<p>Rate per Set</p> <p>₹ 3,136.00 Rupees Three Thousand One Hundred ThirtySix Only</p>
---	--

<p>(B) In 1:3:6 CC Foundation</p> <p>Supplying and Erection of 11 kV HT Stay Set comprising of Stay Rod, Anchor Plate, Thimble etc. in 1:3:6 CC foundation including supply and erection of 7/10 SWG G I Stay Wire and Guy Insulator complete including excavation, refilling with hard soil and hard ramming as directed</p>	<p>Rate per Set</p> <p>₹ 4,695.00 Rupees Four Thousand Six Hundred NinetyFive Only</p>
---	--

6.5.8 LT STAY SET

<p>(A) In Hard Soil with Boulder</p> <p>Supplying and Erection of LT Stay Set comprising of Stay Rod, 19mm dia × 1.8 m Anchor Plate, Bow, Thimble etc. including supply and erection of 7/12 SWG G I Stay Wire and LT Guy Insulator complete including digging of Earth Pit of size (0.9m × 0.9m)to a depth of 1.4 Metre, placing the Stay Rod with Plate, fixing thimble, bow etc. with Boulder packing (size 150mm to 200mm)and hard ramming to fill up half the pit and filling with hard soil packing upto the Ground Level as directed</p>	<p>Rate per Set</p> <p>₹ 2,372.00 Rupees Two Thousand Three Hundred SeventyTwo Only</p>
---	---

<p>(B) In 1:3:6 CC Foundation</p>	<p>Rate per Set</p>
-----------------------------------	---------------------

Supplying and Erection of LT Stay Set comprising of Stay Rod, Anchor Plate, Thimble etc. in 1:3:6 CC foundation including supply and erection of 7/12 SWG G I Stay Wire and Guy Insulator complete including excavation, refilling with hard soil and hard ramming as directed

₹ 4,066.00 Rupees Four
Thousand SixtySix
Only

6.5.9 STAY WIRE	Rate per kg
(A) Supply and erection of G I Stay Wire 7/10 SWG along with 11 kV Guy insulator, binding to existing 11kV Stay Set and the GI Pole Clamp, tightening to required extent as directed.	₹ 248.00 Rupees Two Hundred FourtyEight Only
(B) Supply and erection of G I Stay Wire 7/12 SWG along with LT Guy Insulator, binding to existing LT Stay Set and the GI Pole Clamp, tightening to required extent as directed.	₹ 248.00 Rupees Two Hundred FourtyEight Only
6.6 INSULATORS	
6.6.1 LT PIN INSULATOR	Rate per Each
Supplying and Erection of LT Pin Insulator 5 kN on Cross Arm along with GI Pin, GI Nuts & Bolts with washer including Drilling of Holes as directed	₹ 204.00 Rupees Two Hundred Four Only
6.6.2 LT SHACKLE INSULATOR	Rate per Each
Supplying and Erection of LT Shackle Insulator 5 kN on Cross Arm along with GI Pin, GI Nuts & Bolts with washer including Drilling of Holes as directed	₹ 275.00 Rupees Two Hundred SeventyFive Only
6.6.3 11 kV PIN INSULATOR	
(A) PORCELAIN	Rate per Each
Supplying and Erection of 11 kV Porcelain Pin Insulator 5 kN on Cross Arm along with GI Pin, GI Nuts & Bolts including Drilling of Holes as directed	₹ 528.00 Rupees Five Hundred TwentyEight Only
(B) POLYMERIC	Rate per Each
Supplying and Erection of 11 kV Polymeric Pin Insulator 5 kN on T Cross Arm/ Channel along with GI Pin, GI Nuts & Bolts including Drilling of Holes as directed	₹ 650.00 Rupees Six Hundred Fifty Only
6.6.4 HARDWARE FITTINGS	Rate per Each
Supplying and Erection of Hardware Fittings (3u bolt) on existing MS / GI Channel Cross Arm with GI Nuts and Bolts for mounting 11 kV Disc Insulator 45 kN as directed	₹ 539.00 Rupees Five Hundred ThirtyNine Only
6.6.5 DISC INSULATOR	
(A) PORCELAIN	Rate per Each
Supplying and Erection of 11 kV Porcelain Disc Insulator 45 kN on existing Hardware Fitting on Cross Arm as directed	₹ 452.00 Rupees Four Hundred FiftyTwo Only
(B) POLYMERIC	Rate per Each
Supplying and Erection of 11 kV Polymeric Disc Insulator 45 kN on existing Hardware Fitting on Cross Arm as directed	₹ 672.00 Rupees Six Hundred SeventyTwo Only

6.7 CONDUCTORS

Supplying, Laying and Erection of Conductors of following size and specification for Overhead Line, binding to Insulators and Tensioning with Uniform Standard Sag including Jumpering connection as directed

6.7.1 AAA CONDUCTORS

(A) AAA Squirrel Conductor

Rate per Metre

₹ 47.80 Rupees FourtySeven
Paise Eighty Only

(B) AAA Weasel Conductor

₹ 78.00 Rupees SeventyEight
Only

(C) AAA Rabbit Conductor - 7/3.15 mm

₹ 114.10 Rupees One Hundred
Fourteen Paise Ten
Only

(D) AAA Raccoon Conductor - 7/3.81 mm

₹ 160.60 Rupees One Hundred
Sixty Paise Sixty Only

6.7.2 ACSR Conductors

(A) ACSR Squirrel Conductor

Rate per Metre

₹ 49.00 Rupees FourtyNine
Only

(B) ACSR Weasel Conductor

₹ 72.00 Rupees SeventyTwo
Only

(C) ACSR Rabbit Conductor

₹ 114.10 Rupees One Hundred
Fourteen Paise Ten
Only

(D) ACSR Raccoon Conductor

₹ 160.60 Rupees One Hundred
Sixty Paise Sixty Only

6.8 GUARDING AT ROAD CROSSING/ LINE CROSSING

(A) Supplying and Erection of 8 SWG GI Guarding Wire on existing MS Angle Cross Arm with 2 Nos. of Longitudinal String and Cross Lacing 1.5 m at intervals of 50 cm including tensioning with proper sag as directed

Rate per Metre Route

₹ 174.80 Rupees One Hundred
SeventyFour Paise
Eighty Only

(B) Supplying and Erection of 8 SWG GI Guarding Wire on existing MS Angle Cross Arm with 5 Nos. of Longitudinal String and Cross Lacing 1.5 m at intervals of 50 cm including tensioning with proper sag as directed

₹ 271.46 Rupees Two Hundred
SeventyOne Paise
FourtySix Only

ITEM 7 SUBSTATION ITEMS

7.1 LIGHTNING ARRESTOR

Supplying and Erection of Metal Oxide gapless Lightning Arrestor of following specification on MS Channel with Clamps, Nuts & Bolts including drilling of holes and making of necessary connection with Line Conductors as directed.

		Rate per Each
(A) 9 kV, 5 kA with Porcelain body	₹	2613.00 Rupees Two Thousand Six Hundred Thirteen Only
(B) 9 kV, 5 kA with Polymer body	₹	2958.00 Rupees Two Thousand Nine Hundred FiftyEight Only
(C) 9 kV, 10 kA with Porcelain body	₹	6934.00 Rupees Six Thousand Nine Hundred ThirtyFour Only
(D) 9 kV, 10 kA with Polymer body	₹	7366.00 Rupees Seven Thousand Three Hundred SixtySix Only

7.2 11 kV GANG OPERATED SWITCH

Supplying, Fitting and Erection of 3- ϕ 11 kV Gang Operated (G.O.) Air Break Switch having nominal System Voltage of 12 kV, rated Voltage 11 kV, rated Frequency 60 Hz, and peak current in closed position 46 kA, conforming to IS 2544, IS 5340(Part-III) and IS 9921(Part I to V) suitable to operate in all climatic condition of following current ratings on existing Channels complete with Operating Pipe and Handle including making of necessary Electrical Connections as directed.

		Rate per Set
A 200 Amps	₹	15739.00 Rupees Fifteen Thousand Seven Hundred ThirtyNine Only
B 400 Amps	₹	20043.00 Rupees Twenty Thousand FourtyThree Only

7.3 11 kV Drop Out(DO) Fuse Unit

Supplying and Erection of 3- ϕ 11 kV Drop Out (D.O.) Fuse Unit rated voltage 11 kV R.M.S. To 12 kV R.M.S., highest System Voltage 12 kV, each pole consisting of Polymeric insulator, all current carrying parts made of a highly conductive copper alloy and contact portion are silver plated for corrosion resistance and efficient current flow and the fuse tube made of fibre glass coated with ultraviolet inhibitor on the outer surface and having Arc Quenching bone fibre liner inside conforming to IS 9385/1983 of following current ratings on existing Channels complete with Barrel Fuse and making of necessary Electrical Connections as directed.

	Rate per Set
A 150 Amps	₹ 8867.00 Rupees Eight Thousand Eight Hundred SixtySeven Only
B 400 Amps	₹ 9775.00 Rupees Nine Thousand Seven Hundred SeventyFive Only

7.4 POST TOP INSULATOR

	Rate per Each
A Supplying and Erection of Post Top Insulator for 11 kV Drop Out Fuse Unit including dismantling the existing unserviceable one as directed.	₹ 1532.00 Rupees One Thousand Five Hundred ThirtyTwo Only
B Supplying and Erection of Post Top Insulator for 11 kV Gang Operated Air Break Switch including dismantling the existing unserviceable one as directed.	₹ 1532.00 Rupees One Thousand Five Hundred ThirtyTwo Only

7.5 FIBRE BARREL WITH METAL PARTS

	Rate per Set
Supplying and Erection of Fibre Barrel with Metal Parts for 11 kV D.O. (Drop Out) Fuse Unit including dismantling the existing unserviceable one as directed.	₹ 1352.00 Rupees One Thousand Three Hundred FiftyTwo Only

7.6 D.O. METAL PARTS

	Rate per Set
Supplying and Erection of D.O. Metal Parts for 11 kV D.O. (Drop Out)Fuse Unit including dismantling the existing unserviceable one as directed.	₹ 1538.00 Rupees One Thousand Five Hundred ThirtyEight Only

7.7 G.O. METAL PARTS-MALE-FEMALE

	Rate per Set
Supplying and Erection of G.O. Metal Parts Male - Female for 11 kV Gang Operated Air Break Switch including dismantling the existing unserviceable one as directed.	₹ 2157.00 Rupees Two Thousand One Hundred FiftySeven Only

7.8 G.O. FLEXIBLE TAPE

Supplying and Fitting Fixing of G.O. Flexible Tape in existing 11 kV G.O. (Gang Operated) Air Break Switch including dismantling the existing unserviceable one as directed.

Rate per Set

₹ 981.00 Rupees Nine Hundred EightyOne Only

7.9 EARTH STATION

7.9.1 SUPPLY & ERECTION OF EARTH PIPE

Rate per Each

A Supply & Erection of C.I. Earth Pipe 100 mm dia × 2.5 Metre long perpendicular to the ground including digging of Earth Pit, putting Salt and Charcoal in alternate layers surrounding the pipe along with fitting of hinged CI top Cover Plate and necessary C.C. work as directed

₹ 5058.00 Rupees Five Thousand FiftyEight Only

B Supply & Erection of C.I. Earth Pipe 100 mm dia x 2.5 Metre long perpendicular to the ground including digging of Earth Pit, putting Salt and Charcoal in alternate layers surrounding the pipe as directed

₹ 3370.00 Rupees Three Thousand Three Hundred Seventy Only

7.9.2 G I EARTH WIRE

Rate per Metre

Supply & Erection of G.I. Earth Wire and Earthing of different Substation Items by connecting the existing Earth Pipes with G. I. Lugs as directed

(A) with 6 SWG G I Wire

₹ 48.20 Rupees FortyEight Paise Twenty Only

(B) with 8 SWG G I Wire

₹ 40.10 Rupees Forty Paise Ten Only

7.9.3 COPPER EARTH WIRE

Rate per Metre

Supply & Erection of 6 SWG Copper Earth Wire and making Earth connection of different Substation Items by connecting the existing Earth Pipes with necessary Lugs as directed

₹ 227.90 Rupees Two Hundred TwentySeven Paise Ninety Only

7.9.4 PIPE EARTH STATION

Supplying & Erection of Pipe Earth Station including supply of all materials with G I Pipe of following size perforated all over the body with 12 mm dia hole at standard spacing with necessary reducing socket, locking arrangement with hinge cover plate, funnel G I Nuts & Bolts etc. with necessary enclosure on the top including excavation and refilling as required and as directed.

Rate per Each

(A) Earth Station with 40 mm dia × 2.5 Metre long G.I Pipe

₹ 7553.00 Rupees Seven Thousand Five Hundred FiftyThree Only

(B) Earth Station with 40 mm dia x 4.5 Metre long G.I Pipe

₹ 8659.00 Rupees Eight Thousand Six Hundred FiftyNine Only

(C) Earth Station with 50 mm dia × 2.5 Metre long G.I Pipe	₹ 7906.00	Rupees Seven Thousand Nine Hundred Six Only
(D) Earth Station with 50 mm dia × 4.5 Metre long G.I Pipe	₹ 9265.00	Rupees Nine Thousand Two Hundred SixtyFive Only

7.9.5 COPPER PLATE EARTH STATION

Erection of Earth Station with Copper Plate of size 600 mm × 600 mm × 3 mm including supply of the Cu plate and other materials like 25mm × 3mm Copper Strip, 20mm dia G I Pipe for watering, funnel G I Nuts & Bolts, Cu Lug etc. including excavation, refilling and necessary masonry work as required and connecting 25mm × 3mm size Cu strip with the plate and the supporting Clamp at Ground Level at the top as directed. The Earth Plate shall be buried vertically at a depth of at least 2.5 Metres from Ground Level and shall be surrounded by salt and charcoal for at least 15 cm on all sides.

Rate per Each

₹ 21903.00	Rupees TwentyOne Thousand Nine Hundred Three Only
------------	---

7.9.6 COPPER EARTH CONDUCTOR

(A) Supply laying and connecting Strip Copper Earth conductor of size 25 mm × 3 mm through 40mm dia GI Pipe including fitting of GI Bend soldering the ends of the Earth Strip as required and as directed.

Rate per Metre

₹ 1988.00	Rupees One Thousand Nine Hundred EightyEight Only
-----------	--

(B) Supply laying and connecting Strip Copper Earth Conductor of size 25 mm × 3 mm on surface including fixing with Copper saddle, soldering the ends of the Earth Strip as required and as directed.

₹ 1336.00	Rupees One Thousand Three Hundred ThirtySix Only
-----------	---

7.10 HT METERING UNIT

Erection & Commissioning of H T metering unit comprising of 11 kV/110V, 3-Ph CT/PT etc., Meter Cabinet, Electronic HT Energy Meter, making connection through Control Copper Cable to be laid through 20 mm dia G.I. Pipe complete including making necessary payment for Meter Security, cost of CT/PT Set etc. to APDCL as required and as directed.

Rate per Job

₹ 143865.00	Rupees One Lakh ForthyThree Thousand Eight Hundred SixtyFive Only
-------------	---

7.11 LT FEEDER PANEL

	Rate per Job	
(A) Supplying including erection of powder coated LT Feeder Panel for 25 kVA DTR (800mm × 1000mm × 400mm) made of 16 SWG CR sheet and 40mm × 40mm × 6mm MS angle having CR sheet roofing containing Cu Busbar and 1 no 63 A 415 V FP MCCB, making necessary connection through copper cable complete as directed.	₹ 41970.00	Rupees FortyOne Thousand Nine Hundred Seventy Only
(B) Supplying including erection of powder coated LT Feeder Panel /Metering Panel for 63 kVA DTR of size (800mm × 1000mm × 400mm) made of 16 SWG CR sheet and 40mm × 40mm × 6mm MS angle having CR sheet roofing containing Cu Busbar and 1 no 125 A 415 V FP MCCB, (35kA) making necessary connection through copper cable complete as directed..	₹ 47835.00	Rupees FortySeven Thousand Eight Hundred ThirtyFive Only
(C) Supplying including erection of powder coated LT Feeder Panel /Metering Panel for 100 kVA DTR of size (800mm × 1200mm × 400mm) made of 16 SWG CR sheet and 40mm × 40mm × 6mm MS angle having CR sheet roofing containing Cu Busbar and 1 no 200 A 415 V FP MCCB, (50kA) making necessary connection through copper cable complete as directed..	₹ 67035.00	Rupees SixtySeven Thousand ThirtyFive Only
(D) Supplying including erection of powder coated LT Feeder Panel /Metering Panel for 150/ 200 kVA DTR of size (800mm × 1200mm × 400mm) made of 16 SWG CR sheet and 40mm×40mm×6mm MS angle having CR sheet roofing containing Cu Busbar and 1 no 315 A 415 V FP MCCB, (50kA) making necessary connection through copper cable complete as directed..	₹ 83610.00	Rupees EightyThree Thousand Six Hundred Ten Only
(E) Supplying including erection of powder coated LT Feeder Panel /Metering Panel for 250 kVA DTR of size (800mm × 1200mm × 400mm) made of 16 SWG CR sheet and 40mm × 40mm × 6mm MS angle having CR sheet roofing containing Cu Busbar and 1 no 400 A FP MCCB, (50kA) making necessary connection through copper cable complete as directed..	₹ 85200.00	Rupees EightyFive Thousand Two Hundred Only
(F) Supplying including erection of powder coated LT Feeder Panel /Metering Panel for 315 kVA DTR of size (800mm × 1200mm × 400mm) made of 16 SWG CR sheet and 40mm × 40mm × 6mm MS angle having CR sheet roofing containing Cu Busbar and 1 no 500 A FP MCCB, (50kA) making necessary connection through copper cable complete as directed..	₹ 87555.00	Rupees EightySeven Thousand Five Hundred FiftyFive Only

(G) Supplying including erection of powder coated LT Feeder Panel /Metering Panel for 500 kVA DTR of size (800mm × 1200mm × 400mm) made of 16 SWG CR sheet and 40mm × 40mm × 6mm MS angle having CR sheet roofing containing Cu Busbar and 1 no 500 A FP MCCB, (50kA) making necessary connection through copper cable complete as directed..

₹ 95355.00 Rupees NinetyFive Thousand Three Hundred FiftyFive Only

7.12 LT WHOLE CURRENT ENERGY METER

Rate per Job

Erection & Commissioning LT Whole Current Electronic Energy Meter including making necessary payment to APDCL for Meter Cabinet, Meter Security etc as reqd and as directed.

₹ 33900.00 Rupees ThirtyThree Thousand Nine Hundred Only

7.13 LTCT TRIVECTOR ELECTRONIC ENERGY METER

Rate per Job

Erection & Commissioning LTCT Trivector electronic energy meter including making necessary payment to APDCL for CTs, meter security etc. as reqd and as directed.

₹ 23445.00 Rupees TwentyThree Thousand Four Hundred FourtyFive Only

7.14 ANTI CLIMBING ARRANGEMENT

Rate Per Pole

Supply & Erection of Anti Climbing Barbed Wire on Poles at a height of about 3 Metres and covering a length of 1.5 Metre as directed

₹ 318.00 Rupees Three Hundred Eighteen Only

7.15 TESTING & COMMISSIONING OF HT LINE

Testing and commissioning of the 11kV line including making payment for necessary Inspection Fee and obtaining charging approval from competent authority (Electrical Inspectorate) as directed

upto 1 kM ₹ 7118.00 Rupees Seven Thousand One Hundred Eighteen Only

for every next 1kM ₹ 7118.00 Rupees Seven Thousand One Hundred Eighteen Only

7.16 SECURITY FENCING AROUND SUBSTATION

Providing Security fencing around the S/S with GI chain link net, woven with 10 SWG wire with mesh 7.5cm × 7.5cm to be erected on GI angle 40 mm × 40mm × 5mm, with necessary C C grouting, with a fencing height of 1.8 mtr, having a hinged door, fabricated with flat GI strip boundary and cross bracing, complete including supply of all materials, excavation refilling etc as reqd and as directed.

Rate Per SqM ₹ 1406.00 Rupees One
Thousand Four
Hundred Six Only

ITEM 8 ERECTION OF TRANSFORMER

8.1	Supply including Erection of 5 Star ON-AN (Oil Natural, air Natural) Cooled Al/ CU-wound Distribution Transformer conforming to IS specifications 2026 (with latest amendments) with all standard accessories erected on double pole structure/ transformer pad including transportation and handling, loading and unloading etc., securing it on existing Channel firmly with necessary clamps, nuts & bolts . as required, and making necessary connections on HV and LV sides as directed (Cost of DP structure /Pad extra)	Cost per job
8.1.1	Capacity : 25 kVA, 11 kV/0.433 kV (5 Star Dyn) - Al wound	
(A)	Cost including Supply of Transformer	₹ 157410.00 Rupees One Lakh FiftySeven Thousand Four Hundred Ten Only
(B)	Cost only for Erection (Transformer procured separately)	₹ 36410.00 Rupees ThirtySix Thousand Four Hundred Ten Only
8.1.2	Capacity : 63 kVA, 11 kV/0.433 kV (5 Star Dyn) - Al wound	
(A)	Cost including Supply of Transformer	₹ 297570.00 Rupees Two Lakh NinetySeven Thousand Five Hundred Seventy Only
(B)	Cost only for Erection (Transformer procured separately)	₹ 52400.00 Rupees FiftyTwo Thousand Four Hundred Only
8.1.3	Capacity : 100 kVA, 11 kV/0.433 kV (5 Star Dyn) - Al wound	
(A)	Cost including Supply of Transformer	₹ 372230.00 Rupees Three Lakh SeventyTwo Thousand Two Hundred Thirty Only
(B)	Cost only for Erection (Transformer procured separately)	₹ 63670.00 Rupees SixtyThree Thousand Six Hundred Seventy Only
8.1.4	Capacity : 160 kVA, 11 kV/0.433 kV, (5 Star Dyn), Al-wound with OLTC	
(A)	Cost including Supply of Transformer	₹ 530190.00 Rupees Five Lakh Thirty Thousand One Hundred Ninety Only
(B)	Cost only for Erection (Transformer procured separately)	₹ 90190.00 Rupees Ninety Thousand One Hundred Ninety Only
8.1.5	Capacity : 200 kVA, 11 kV/0.433 kV (5 Star Dyn) Al-wound with OLTC	
(A)	Cost including Supply of Transformer	₹ 593800.00 Rupees Five Lakh NinetyThree Thousand Eight Hundred Only
(B)	Cost only for Erection (Transformer procured separately)	₹ 98800.00 Rupees NinetyEight Thousand Eight Hundred Only

8.1.6	Capacity : 250 kVA, 11 kV/0.433 kV (Dyn) (as per CEA Guideline), Al-wound with OLTC		
(A)	Cost including Supply of Transformer	₹ 698420.00	Rupees Six Lakh NinetyEight Thousand Four Hundred Twenty Only
(B)	Cost only for Erection (Transformer procured separately)	₹ 115420.00	Rupees One Lakh Fifteen Thousand Four Hundred Twenty Only
8.1.7	Capacity : 315 kVA, 11 kV/0.433 kV Dyn (as per CEA Guideline)(Cu-wound) with OLTC		
(A)	Cost including Supply of Transformer	₹ 1345670.00	Rupees Thirteen Lakh FourtyFive Thousand Six Hundred Seventy Only
(B)	Cost only for Erection (Transformer procured separately)	₹ 193470.00	Rupees One Lakh NinetyThree Thousand Four Hundred Seventy Only
8.1.8	Capacity : 500 kVA, 11 kV/0.433 kV(Dyn), (as per CEA Guideline) (Cu-wound) with OLTC		
(A)	Cost including Supply of Transformer	₹ 1642230.00	Rupees Sixteen Lakh FourtyTwo Thousand Two Hundred Thirty Onlv
(B)	Cost only for Erection (Transformer procured separately)	₹ 238330.00	Rupees Two Lakh ThirtyEight Thousand Three Hundred Thirty Onlv

8.2 TESTING & COMMISSIONING OF TRANSFORMER

Testing and commissioning of the Substation alongwith obtaining necessary approval for charging from competent authority including payment of Inspection Fee, Arranging for Test Report etc. as required and as directed for following kVA Capacity

		Cost per job	
8.2.1	Capacity : 25 kVA, 11 kV/0.433 kV	₹ 15750.00	Rupees Fifteen Thousand Seven Hundred Fifty Only
8.2.2	Capacity : 63/100 kVA, 11 kV/0.433 kV	₹ 20150.00	Rupees Twenty Thousand One Hundred Fiftv Only
8.2.3	Capacity : 160 kVA/ 200 kVA, 11 kV/0.433 kV	₹ 24000.00	Rupees TwentyFour Thousand Only
8.2.4	Capacity :250/315 kVA, 11 kV/0.433 kV	₹ 28400.00	Rupees TwentyEight Thousand Four Hundred Only
8.2.5	Capacity : 500 kVA, 11 kV/0.433 kV	₹ 32800.00	Rupees ThirtyTwo Thousand Eight Hundred Only

8.3 DOCUMENTATION

Liaisoning with APDCL, Forest Department, Electrical Inspectorate etc. right from start till Commissioning of the HT Line/Substation, Preparation of all necessary documents like Agreement and Affidavit required for new Power Connection, obtaining No Objection Certificate from Forest Department where necessary complete all arrangement for charging the Installation as required and as directed.

Cost per job

₹ 11000.00 Rupees Eleven
Thousand Only

ITEM	9 LAYING OF LT/HT POWER CABLES		
9.1 Supply and Laying in Air/ Open Trench			
A	Supply and Laying of Single Core PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor in existing open trench/ in air including fixing with necessary clamps etc. in wall/ pole/ other support including End Termination with Brass Compression Gland and Cable Lug as required and as directed		Rate per Metre
(A)(i)	Size of Cable : 50 Sq mm × 1 core(4 line)	₹ 347.20	Rupees Three Hundred FourtySeven Paise Twenty Only
(A)(ii)	Size of Cable : 70 Sq mm × 1 core(4 line)	₹ 443.00	Rupees Four Hundred FourtyThree Only
(A)(iii)	Size of Cable : 95 Sq mm × 1 core(4 line)	₹ 492.00	Rupees Four Hundred NinetyTwo Only
(A)(iv)	Size of Cable : 120 Sq mm × 1 core(4 line)	₹ 607.00	Rupees Six Hundred Seven Only
(A)(v)	Size of Cable : 150 Sq mm × 1 core(4 line)	₹ 713.00	Rupees Seven Hundred Thirteen Only
(A)(vi)	Size of Cable : 185 Sq mm × 1 core(4 line)	₹ 869.00	Rupees Eight Hundred SixtyNine Only
(A)(vii)	Size of Cable : 240 Sq mm × 1 core(4 line)	₹ 1100.00	Rupees One Thousand One Hundred Only
(A)(viii)	Size of Cable : 300 Sq mm × 1 core(4 line)	₹ 1345.00	Rupees One Thousand Three Hundred FourtyFive Only
(A)(ix)	Size of Cable : 400 Sq mm × 1 core(4 line)	₹ 1695.00	Rupees One Thousand Six Hundred NinetyFive Only
B	Supply and Laying of 3(Three) Core PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor in existing open trench/ in air including fixing with necessary clamps etc. in wall/ pole/ other support including End Termination with Brass Compression Gland and Cable Lug as required and as directed		Rate per Metre
(B)(i)	Size of Cable : 35 mm ² × 3 Core (Single Line)	₹ 591.00	Rupees Five Hundred NinetyOne Only
(B)(ii)	Size of Cable : 50 mm ² × 3 Core (Single Line)	₹ 761.00	Rupees Seven Hundred SixtyOne Only

(B)(iii)	Size of Cable : 70 mm ² × 3 Core (Single Line)	₹ 1002.00	Rupees One Thousand Two Only
(B)(iv)	Size of Cable : 95 mm ² × 3 Core (Single Line)	₹ 1242.00	Rupees One Thousand Two Hundred FourtyTwo Only
(B)(v)	Size of Cable : 120 mm ² × 3 Core (Single Line)	₹ 1547.00	Rupees One Thousand Five Hundred FourtySeven Only
(B)(vi)	Size of Cable : 150 mm ² × 3 Core (Single Line)	₹ 1828.00	Rupees One Thousand Eight Hundred TwentyEight Only
C	Supply and Laying of 3½(Three and half) Core PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor in existing open trench/ in air including fixing with necessary clamps etc. in wall/ pole/ other support including End Termination with Brass Compression Gland and Cable Lug as required and as directed		Rate per Metre
(C)(i)	Size of Cable : 50 mm ² × 3.5 Core (Single Line)	₹ 865.00	Rupees Eight Hundred SixtyFive Only
(C)(ii)	Size of Cable : 70 mm ² × 3.5 Core (Single Line)	₹ 1153.00	Rupees One Thousand One Hundred FiftyThree Only
(C)(iii)	Size of Cable : 95 mm ² × 3.5 Core (Single Line)	₹ 1434.00	Rupees One Thousand Four Hundred ThirtyFour Only
(C)(iv)	Size of Cable : 120 mm ² × 3.5 Core (Single Line)	₹ 1756.00	Rupees One Thousand Seven Hundred FiftySix Only
(C)(v)	Size of Cable : 150 mm ² × 3.5 Core (Single Line)	₹ 2062.00	Rupees Two Thousand SixtyTwo Only
(C)(vi)	Size of Cable : 185 mm ² × 3.5 Core (Single Line)	₹ 2604.00	Rupees Two Thousand Six Hundred Four Only
(C)(vii)	Size of Cable : 240 mm ² × 3.5 Core (Single Line)	₹ 3346.00	Rupees Three Thousand Three Hundred FourtySix Only
(C)(viii)	Size of Cable : 300 mm ² × 3.5 Core (Single Line)	₹ 4074.00	Rupees Four Thousand SeventyFour Only
(C)(ix)	Size of Cable : 400 mm ² × 3.5 Core (Single Line)	₹ 5186.00	Rupees Five Thousand One Hundred EightySix Only

9.2 SUPPLY AND LAYING UNDER GROUND WITHOUT BRICK PROTECTION(3 Core Cable)		Rate per Metre	
(A) 35 Sq mm × 3 core			
(A)(i)	Supply including Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 35 Sq mm × 3 core in single line, Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.3 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5cm + 7.5cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 725.00	Rupees Seven Hundred TwentyFive Only
(A)(ii)	Supply including Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 35 Sq mm × 3 core in double line, Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.3 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5cm + 7.5cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 659.00	Rupees Six Hundred FiftyNine Only
(A)(iii)	Supply including Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 35 Sq mm × 3 core in triple line, Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.4 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5cm + 7.5cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 648.00	Rupees Six Hundred FortyEight Only
(A)(iv)	Supply including Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 35 Sq mm × 3 core in 4(four) lines, Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.6 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5cm + 7.5cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 621.00	Rupees Six Hundred TwentyOne Only
(A)(v)	Supply including Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 35 Sq mm × 3 core in 5(five) lines, Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.75 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5cm + 7.5cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 649.00	Rupees Six Hundred FortyNine Only

(A)(vi)	Supply including Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 35 Sq mm × 3 core in 6(six) lines, Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.9 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5cm + 7.5cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹	644.00	Rupees Six Hundred FourtyFour Only
(A)(vii)	Supply including Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 35 Sq mm × 3 core in 8(eight) lines, Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 1.2 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5cm + 7.5cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹	639.15	Rupees Six Hundred ThirtyNine Paise Fifteen Only
(B)	50 Sq mm × 3 core			
(B)(i)	Supply including Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 50 Sq mm × 3 core in single line, Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.3 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5cm + 7.5cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹	886.00	Rupees Eight Hundred EightySix Only
(B)(ii)	Supply including Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 50 Sq mm × 3 core in double line , Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.3 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5cm + 7.5cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹	824.00	Rupees Eight Hundred TwentyFour Only
(B)(iii)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 50 Sq mm × 3 core in triple line Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.4 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹	812.60	Rupees Eight Hundred Twelve Paise Sixty Only

(B)(iv)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 50 Sq mm × 3 core in 4(Four) line Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.6 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 816.00	Rupees Eight Hundred Sixteen Only
(B)(v)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor size 50 Sq mm × 3 core in 5(Five) line,Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.75 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 813.00	Rupees Eight Hundred Thirteen Only
(B)(vi)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor size 50 Sq mm × 3 core in 6(Six) line ,Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.9 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 808.00	Rupees Eight Hundred Eight Only
(B)(vii)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 50 Sq mm × 3 core in 8(eight) line ,Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 1.2 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 813.00	Rupees Eight Hundred Thirteen Only
(C)	70 Sq mm × 3 core		
(C)(i)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 70 Sq mm x 3 core in single line , Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.3 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 1139.00	Rupees One Thousand One Hundred ThirtyNine Only

(C)(ii)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 70 Sq mm x 3 core in double line , Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.3 Mtr wide x 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹	1067.00	Rupees One Thousand SixtySeven Only
(C)(iii)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 70 Sq mm x 3 core in triple line , Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.4 Mtr wide x 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹	1063.00	Rupees One Thousand SixtyThree Only
(C)(iv)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 70 Sq mm x 3 core in 4(Four) line , Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.6 Mtr wide x 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹	1060.00	Rupees One Thousand Sixty Only
(C)(v)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 70 Sq mm x 3 core in 5 (Five) line , Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.75 Mtr wide x 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹	1057.00	Rupees One Thousand FiftySeven Only
(D)	95 Sq mm x 3 core			
(D)(i)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 95 Sq mm x 3 core in single line , Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.3 Mtr wide x 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹	1380.00	Rupees One Thousand Three Hundred Eighty Only

(D)(ii)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 95 Sq mm x 3 core in double line , Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.3 Mtr wide x 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 1309.00	Rupees One Thousand Three Hundred Nine Only
(D)(iii)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 95 Sq mm x 3 core in triple line , Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.4 Mtr wide x 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 1304.00	Rupees One Thousand Three Hundred Four Only
(D)(iv)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 95 Sq mm x 3 core in 4(Four) line , Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.6 Mtr wide x 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 1384.00	Rupees One Thousand Three Hundred EightyFour Only
(E)	120 Sq mm x 3 core		
(E)(i)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 120 Sq mm x 3 core in single line , Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.3 Mtr wide x 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 1680.00	Rupees One Thousand Six Hundred Eighty Only
(E)(ii)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 120 Sq mm x 3 core in double line Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.3 Mtr wide x 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 1612.00	Rupees One Thousand Six Hundred Twelve Only

	(E)(iii)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 120 Sq mm × 3 core in triple line , Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.4 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 1607.00	Rupees One Thousand Six Hundred Seven Only
9.3		SUPPLY AND LAYING OF UNDER GROUND WITHOUT BRICK PROTECTION (3.5 Core Cable)		
		Rate per Metre		
(A)		50 Sq mm × 3½ core		
	A(i)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 50 mm² × 3.5 Core in Single line ,Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.3 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 1009.00	Rupees One Thousand Nine Only
	(A)(ii)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 50 mm² × 3.5 Core in double line Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.3 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 928.00	Rupees Nine Hundred TwentyEight Only
(B)		70 Sq mm × 3½ core		
	B(i)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 70 mm² × 3.5 Core in single line Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.3 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 1300.00	Rupees One Thousand Three Hundred Only

	(B)(ii)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 70 mm² × 3.5 Core in double line , Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.3 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 1219.00	Rupees One Thousand Two Hundred Nineteen Only
	(C)	95 Sq mm × 3½ core		0
	C(i)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 95 mm² × 3.5 Core in single line , Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.3 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 1581.00	Rupees One Thousand Five Hundred EightyOne Only
	C (ii)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 95 mm² × 3.5 Core in double line , Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.3 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 1500.00	Rupees One Thousand Five Hundred Only
	(D)	120 Sq mm × 3½ core		
	D(i)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 120 mm² × 3.5 Core in single line , Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.3 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 1903.00	Rupees One Thousand Nine Hundred Three Only
	D(ii)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 120 mm² × 3.5 Core in double line , Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.3 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 1822.00	Rupees One Thousand Eight Hundred TwentyTwo Only

	(E)	150 Sq mm × 3½ core		
	E(i)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 150 mm² × 3.5 Core in single line , Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.3 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 2206.00	Rupees Two Thousand Two Hundred Six Only
	E(ii)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 150 mm² × 3.5 Core in double line , Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.3 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 2126.00	Rupees Two Thousand One Hundred TwentySix Only
	(F)	185 Sq mm × 3½ core		
	F(i)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 185 mm² × 3.5 Core in single line , Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.3 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 2744.00	Rupees Two Thousand Seven Hundred FortyFour Only
	F(ii)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 185 mm² × 3.5 Core in double line , Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.3 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 2669.00	Rupees Two Thousand Six Hundred SixtyNine Only
	(G)	240 Sq mm × 3½ core		
	G(i)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 240 mm² × 3.5 Core in single line , Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.3 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 3510.00	Rupees Three Thousand Five Hundred Ten Only

	G(ii)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 240 mm² × 3.5 Core in double line ,Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.3 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 3411.00	Rupees Three Thousand Four Hundred Eleven Only
	(H)	300 Sq mm × 3½ core		
	H(i)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 300 mm² × 3.5 Core in single line ,Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.3 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 4240.00	Rupees Four Thousand Two Hundred Fourty Only
	H(ii)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 300 mm² × 3.5 Core in double line ,Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.3 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 4139.00	Rupees Four Thousand One Hundred ThirtyNine Only
	(I)	400 Sq mm × 3½ core		
	I(i)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 400 mm² × 3.5 Core in single line ,Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.3 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 5360.00	Rupees Five Thousand Three Hundred Sixty Only
	I(ii)	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor of size 400 mm² × 3.5 Core in double line ,Conforming IS 7098(Part I) 1988, direct in ground including digging of trench of 0.3 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed	₹ 5252.00	Rupees Five Thousand Two Hundred FiftyTwo Only

	9.4 SUPPLY AND LAYING POWER CABLE FOR LIGHTING PURPOSE(2 Core)		
	Supply and Laying of PVC/ XLPE Insulated Armoured LT Power Cable 1.1 kV Grade with Al Conductor in existing open trench/ in air including fixing with necessary clamps etc. in wall/ pole/ other support as required and as directed	Rate per Metre	
(A)(i)	Size of Cable : 10 Sq mm x 2 core	₹ 290.00	Rupees Two Hundred Ninety Only
(A)(ii)	Size of Cable : 16 Sq mm x 2 core	₹ 409.00	Rupees Four Hundred Nine Only
9.5 LAYING OF LT POWER CABLES(Cable Supplied by Department)			
	9.5.1 WITH BRICK PROTECTION		
	Laying of PVC/ XLPE Insulated Armoured/ Unarmoured LT Power Cable 1.1 kV Grade with Al Conductor direct in ground including digging of trench 0.3 Mtr wide and 0.75 Metre deep including Sand Cushioning(7.5 Cm +7.5 Cm), Brick Protection every 20 cm apart at the top and refilling etc. as directed	Rate per Metre of trench	
(A) Size of Cable : upto 95 mm²			
(i)	(in single line)	₹ 251.00	Rupees Two Hundred FiftyOne Only
(ii)	(in double line)	₹ 317.00	Rupees Three Hundred Seventeen Only
(B) Size of Cable : from 120 mm² upto 185 mm²			
(i)	(in single line)	₹ 259.00	Rupees Two Hundred FiftyNine Only
(ii)	(in double line)	₹ 341.00	Rupees Three Hundred FourtyOne Only
(C) Size of Cable : from 225 mm² upto 400 mm²			
(i)	(in single line)	₹ 318.00	Rupees Three Hundred Eighteen Only
(ii)	(in double line)	₹ 416.40	Rupees Four Hundred Sixteen Paise Fourty Only

9.5.2 WITHOUT BRICK PROTECTION			
	Laying of PVC/ XLPE Insulated Armoured/ unarmoured LT Power Cable 1.1 kV Grade with Al Conductor direct in ground including digging of trench 0.75 Metre deep including Sand Cushioning(7.5Cm +7.5 Cm) and refilling etc. as directed		
(A)	Size of Cable : upto 95 mm²	Rate per Metre of trench	
(i)	(in single line)	₹ 125.20	Rupees One Hundred TwentyFive Paise Twenty Only
(ii)	(in double line)	₹ 147.00	Rupees One Hundred FourtySeven Only
(B)	Size of Cable : from 120 mm² upto 185 mm²		
(i)	(in single line)	₹ 147.00	Rupees One Hundred FourtySeven Only
(ii)	(in double line)	₹ 158.00	Rupees One Hundred FiftyEight Only
(C)	Size of Cable : from 225 mm² upto 400 mm²		
(i)	(in single line)	₹ 170.30	Rupees One Hundred Seventy Paise Thirty Only
(ii)	(in double line)	₹ 161.10	Rupees One Hundred SixtyOne Paise Ten Only
9.5.3 THROUGH PVC PIPE			
	Laying of PVC/ XLPE Insulated Armoured/ Unarmoured LT Power Cable 1.1 kV Grade with Al Conductor in ground through rigid PVC pipes including digging of trench 0.75 Metre deep including Sand Cushioning(7.5 Cm+7.5 Cm) and refilling etc. as directed		
		Rate per Metre of trench	
(A)	Size of Cable : upto 95 mm²		
(i)	(in single line)through 50mmφ PVC pipe	₹ 407.70	Rupees Four Hundred Seven Paise Seventy Only
(ii)	(in double line)through 50mmφ PVC pipe	₹ 703.00	Rupees Seven Hundred Three Only
(B)	Size of Cable : from 120 mm² upto 185 mm²		
(i)	(in single line)through 75mmφ PVC pipe	₹ 509.60	Rupees Five Hundred Nine Paise Sixty Only
(ii)	(in double line)through 75mmφ PVC pipe	₹ 892.90	Rupees Eight Hundred NinetyTwo Paise Ninety Only

	(C) Size of Cable : from 225 mm² upto 400 mm²	Rate per Metre of trench	
(i)	(in single line)through 100mm ϕ PVC pipe	₹ 655.00	Rupees Six Hundred FiftyFive Only
(ii)	(in double line)through 100mm ϕ PVC pipe	₹ 1124.00	Rupees One Thousand One Hundred TwentyFour Only
9.5.4	THROUGH GI PIPE Laying of PVC/ XLPE Insulated Armoured/ Unarmoured LT Power Cable 1.1 kV Grade with Al Conductor in ground through GI pipes (Medium weight) including digging of trench 0.75 Metre deep including refilling etc. as directed		
	(A) Size of Cable : upto 95 mm²	Rate per Metre of trench	
(i)	(in single line)through 50mm ϕ G.I pipe	₹ 763.00	Rupees Seven Hundred SixtyThree Only
(ii)	(in double line)through 50mm ϕ G.I pipe	₹ 1433.50	Rupees One Thousand Four Hundred ThirtyThree Paise Fifty Only
	(B) Size of Cable : from 120 mm² upto 185 mm²		
(i)	(in single line)through 75mm ϕ G.I pipe	₹ 1112.00	Rupees One Thousand One Hundred Twelve Only
(ii)	(in double line)through 75mm ϕ G.I pipe	₹ 2118.00	Rupees Two Thousand One Hundred Eighteen Only
	(C) Size of Cable : from 225 mm² upto 400 mm²	Rate per Metre of trench	
(i)	(in single line)through 100mm ϕ G.I pipe	₹ 1418.40	Rupees One Thousand Four Hundred Eighteen Paise Fourty Only
(ii)	(in double line)through 100mm ϕ G.I pipe	₹ 2648.70	Rupees Two Thousand Six Hundred FourtyEight Paise Seventy Only
9.5.5	IN OPEN TRENCH Laying of PVC/ XLPE Insulated Armoured/ Unarmoured LT Power Cable 1.1 kV Grade with Al Conductor in existing open trench/ in air including fixing with necessary clamps etc. in wall/ pole/ other support as required and as directed		
	(A) Size of Cable : upto 95 mm²	Rate per Metre of trench	
		₹ 108.50	Rupees One Hundred Eight Paise Fifty Only

(B)	Size of Cable : from 120 mm ² upto 185 mm ²	₹ 120.00	Rupees One Hundred Twenty Only
(C)	Size of Cable : from 225 mm ² upto 400 mm ²	₹ 120.10	Rupees One Hundred Twenty Paise Ten Only

9.6	LT CABLE END TERMINATION		
9.6.1	LT CABLE TERMINATION with brass compression glands and <i>Al.</i> lugs Providing End Termination of PVC/XLPE insulated Al. conductor, armoured LT power cable, 1.1kV grade, of following sizes with brass compression gland and Aluminium lugs along with supply of all materials as required and as directed.		
		Rate per Each	
1	400 mm ² × 3.5 core	₹ 2472.00	Rupees Two Thousand Four Hundred SeventyTwo Only
2	400 mm ² × 1core	₹ 1003.00	Rupees One Thousand Three Only
3	300 mm ² × 3.5 core	₹ 2218.00	Rupees Two Thousand Two Hundred Eighteen Only
4	300 mm ² × 1 core	₹ 763.00	Rupees Seven Hundred SixtyThree Only
5	240 mm ² × 3.5 core	₹ 2027.00	Rupees Two Thousand TwentySeven Only
6	240 mm ² × 1 core	₹ 720.00	Rupees Seven Hundred Twenty Only
7	185 mm ² × 3.5 core	₹ 1126.00	Rupees One Thousand One Hundred TwentySix Only
8	185 mm ² × 1 core	₹ 723.00	Rupees Seven Hundred TwentyThree Only
9	150 mm ² × 3.5 core	₹ 723.00	Rupees Seven Hundred TwentyThree Only
10	150 mm ² × 3 core	₹ 878.00	Rupees Eight Hundred SeventyEight Only
11	150 mm ² × 1 core	₹ 439.00	Rupees Four Hundred ThirtyNine Only
12	120 mm ² × 3.5 core	₹ 716.00	Rupees Seven Hundred Sixteen Only
13	120 mm ² × 3 core	₹ 666.00	Rupees Six Hundred SixtySix Only
14	120 mm ² × 1 core	₹ 340.00	Rupees Three Hundred Fourty Only
15	95mm ² × 3.5 core	₹ 488.00	Rupees Four Hundred EightyEight Only

16	95mm ² × 3 core	₹	471.00	Rupees Four Hundred SeventyOne Only
17	95mm ² × 1 core	₹	232.00	Rupees Two Hundred ThirtyTwo Only
18	70mm ² × 3.5 core	₹	392.00	Rupees Three Hundred NinetyTwo Only
19	70mm ² × 3 core	₹	375.00	Rupees Three Hundred SeventyFive Only
20	70mm ² × 1 core	₹	210.00	Rupees Two Hundred Ten Only
21	50mm ² × 3.5 core	₹	299.00	Rupees Two Hundred NinetyNine Only
22	50mm ² × 3 core	₹	274.00	Rupees Two Hundred SeventyFour Only
23	50mm ² × 1 core	₹	157.00	Rupees One Hundred FiftySeven Only
24	35mm ² × 3.5 core	₹	243.00	Rupees Two Hundred FourtyThree Only
25	35mm ² × 3 core	₹	246.00	Rupees Two Hundred FourtySix Only
26	35mm ² × 1 core	₹	143.00	Rupees One Hundred FourtyThree Only
27	25mm ² × 3.5 core	₹	228.00	Rupees Two Hundred TwentyEight Only
28	25mm ² × 3 core	₹	229.00	Rupees Two Hundred TwentyNine Only
29	25mm ² × 1 core	₹	132.00	Rupees One Hundred ThirtyTwo Only
30	16mm ² × 3 core	₹	193.00	Rupees One Hundred NinetyThree Only
31	10mm ² × 4 core	₹	197.00	Rupees One Hundred NinetySeven Only
32	10mm ² × 3 core	₹	168.00	Rupees One Hundred SixtyEight Only
33	10mm ² × 2 core	₹	148.00	Rupees One Hundred FourtyEight Only
34	6mm ² × 4 core	₹	159.00	Rupees One Hundred FiftyNine Only
35	6mm ² × 3 core	₹	155.00	Rupees One Hundred FiftyFive Only

36	6mm² × 2 core	₹	134.00	Rupees One Hundred ThirtyFour Only
37	4mm² × 4 core	₹	161.00	Rupees One Hundred SixtyOne Only
38	4mm² × 3 core	₹	129.00	Rupees One Hundred TwentyNine Only
39	4mm² × 2 core	₹	125.00	Rupees One Hundred TwentyFive Only

9.6.2	LT CABLE TERMINATION WITH HEAT SHRINKABLE CABLE JOINTING KIT Providing out door Cable End Termination with Heat Shrinkable Cable Jointing Kit and necessary lugs for PVC/XLPE insulated Aluminium Conductor, armoured LT Electric Power Cable, 1.1 kV Grade of following sizes along with supply of all materials as required and as directed.		
1	400 mm ² × 3.5 core	₹ 6018.00	Rupees Six Thousand Eighteen Only
2	400 mm ² × 1core	₹ 3065.00	Rupees Three Thousand SixtyFive Only
3	300 mm ² × 3.5 core	₹ 5325.00	Rupees Five Thousand Three Hundred TwentyFive Only
4	300 mm ² × 1 core	₹ 2822.00	Rupees Two Thousand Eight Hundred TwentyTwo Only
5	240 mm ² × 3.5 core	₹ 5276.00	Rupees Five Thousand Two Hundred SeventySix Only
6	240 mm ² × 1 core	₹ 2797.00	Rupees Two Thousand Seven Hundred NinetySeven Only
7	185 mm ² × 3.5 core	₹ 4153.00	Rupees Four Thousand One Hundred FiftyThree Only
8	185 mm ² × 1 core	₹ 2615.00	Rupees Two Thousand Six Hundred Fifteen Only
9	150 mm ² × 3.5 core	₹ 3152.00	Rupees Three Thousand One Hundred FiftyTwo Only
10	150 mm ² × 3 core	₹ 3082.00	Rupees Three Thousand EightyTwo Only
11	150 mm ² × 1 core	₹ 2572.00	Rupees Two Thousand Five Hundred SeventyTwo Only
12	120 mm ² × 3.5 core	₹ 3004.00	Rupees Three Thousand Four Only
13	120 mm ² × 3 core	₹ 2954.00	Rupees Two Thousand Nine Hundred FiftyFour Only

14	120 mm² × 1 core	₹ 2258.00	Rupees Two Thousand Two Hundred FiftyEight Only
15	95mm² × 3.5 core	₹ 2748.00	Rupees Two Thousand Seven Hundred FortyEight Only
16	95mm² × 3 core	₹ 2731.00	Rupees Two Thousand Seven Hundred ThirtyOne Only
17	95mm² × 1 core	₹ 2179.00	Rupees Two Thousand One Hundred SeventyNine Only
18	70mm² × 3.5 core	₹ 2744.00	Rupees Two Thousand Seven Hundred FortyFour Only
19	70mm² × 3 core	₹ 2557.00	Rupees Two Thousand Five Hundred FiftySeven Only
20	70mm² × 1 core	₹ 1940.00	Rupees One Thousand Nine Hundred Forty Only
21	50mm² × 3.5 core	₹ 2532.00	Rupees Two Thousand Five Hundred ThirtyTwo Only
22	50mm² × 3 core	₹ 2472.00	Rupees Two Thousand Four Hundred SeventyTwo Only
23	50mm² × 1 core	₹ 1928.00	Rupees One Thousand Nine Hundred TwentyEight Only
24	25/35mm² × 3.5 core	₹ 2493.00	Rupees Two Thousand Four Hundred NinetyThree Only
25	35mm² × 3 core	₹ 2486.00	Rupees Two Thousand Four Hundred EightySix Only
26	35mm² × 1 core	₹ 1921.00	Rupees One Thousand Nine Hundred TwentyOne Only
27	16/25mm² × 3 core	₹ 2194.00	Rupees Two Thousand One Hundred NinetyFour Only

ITEM	10 SUPPLY AND ERECTION OF AERIAL BUNCHED AND H.T. CABLE			
	A SUPPLY AND ERECTION OF AERIAL BUNCHED CABLE			
	Supply and Erection of 11 kV Grade Aero Bunched Cable with 3(three) Power core, Stranded compacted, Circular Aluminium Conductor screened with black extruded semi conducting compound natural colour XLPE insulated core screened with black extruded semi conducting compound and one layer of copper tape and covered with black extruded PVC and one Bare messenger wire shall be stranded non-compacted circular aluminium alloy conductor. the cable should conform to IS:8130-1984, IS:398(Part-IV) 1994, IS:7098(Part-II) 2011 & IS:5831-1984 with up to date amendments. The job includes necessary Cable Joint, End Terminations, Anchor Clamp, Suspension Clamps, Eye Hooks etc as directed by department			
		Sizes of Cable	Unit	Rate per Mtr
	a	3 × 50 Sqmm(P) + 1 × 35 Sqmm(M)	Mtr	₹ 1,050.00 Rupees One Thousand Fifty Only
b	3 × 70 Sqmm(P) + 1 × 50 Sqmm(M)	Mtr	₹ 1,310.00 Rupees One Thousand Three Hundred Ten Only	
c	3 × 95 Sqmm(P) + 1 × 70 Sqmm(M)	Mtr	₹ 1,479.00 Rupees One Thousand Four Hundred SeventyNine Only	
B SUPPLY AND LAYING OF H.T. CABLE				
Supply and Laying of H.T 3(Three) Core × 150 Sq mm Power Cable 33 kV Grade, Stranded Compact Circular Aluminium Conductor screened with Extruded Semi Conducting Compound XLPE Insulated, insulation screening with extruded semi conducting compound in combination with Copper Tape, Cores Laid Up, Innersheath of PVC, Galvanised Steel Flat Strip Armoured and overall PVC Sheathed Cable conforming to IS 7098(Part I) 1985 with latest amendments, direct in ground including digging of trench of 0.3 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Aluminium Cable Lug etc. as directed of 0.3 Mtr wide × 0.75 Metre deep including Sand Cushioning (7.5 cm + 7.5 cm) and refilling alongwith fitting, fixing of Brass Compression Gland and Copper Cable Lug etc. as directed				
	Size of Cable : 150 Sq mm × 3 Core (in Single line)	₹ 2,248.00	Rate per Mtr Rupees Two Thousand Two Hundred FourtyEight Only	

ITEM	11 M&R OF TRANSFORMER AND H.T.LINE		
	11.1(A)	FAULT DETECTING IN TRANSFORMER (ALL RATINGS)	
	Checking continual performance of distribution transformer by measuring of Earth Resistance, existence of short circuit path between coils etc. and thereby the fault rendering the transformer inoperational by a group of skilled personnels		
	For All Rating of Transformers		Job ₹ 4,680.00
	11.1(B) TRANSFORMER REPAIRING		
	11.1(B).1	Disconnecting the transformer from the 11 kV line of APDCL lifting it from the pad/pole by labourers/ crane and loading it on carriage vehicle and carrying the same to workshop upto a distance of 35 KM and unloading it by manual labour/crane as required and as directed.	
		i) For First 35(Thirty Five) KM	
	a)	25 kVA Al	Job ₹ 7,160.00
	b)	63 kVA Al	Job ₹ 7,160.00
	c)	100 kVA Al	Job ₹ 8,810.00
	d)	150/160 kVA Al	Job ₹ 8,810.00
	e)	200 kVA Al	Job ₹ 8,810.00
	f)	250 kVA Al	Job ₹ 17,580.00
	g)	315 kVA Cu	Job ₹ 17,580.00
	h)	500 kVA Cu	Job ₹ 18,700.00
		ii) For every Subsequent 10(Ten) KM	
	a)	25 kVA Al	Job ₹ 600.00
	b)	63 kVA Al	Job ₹ 600.00
	c)	100 kVA Al	Job ₹ 600.00
	d)	150/160 kVA Al	Job ₹ 800.00
	e)	200 kVA Al	Job ₹ 800.00
	f)	250 kVA Al	Job ₹ 800.00
	g)	315 kVA Cu	Job ₹ 1,000.00
	h)	500 kVA Cu	Job ₹ 1,000.00
	11.1(B).2	Opening, Preliminary checking and lifting of Core Coil assembly	
	a)	25 kVA Al	Job ₹ 2,000.00
	b)	63 kVA Al	Job ₹ 2,500.00
	c)	100 kVA Al	Job ₹ 3,000.00
	d)	150/160 kVA Al	Job ₹ 3,500.00
	e)	200 kVA Al	Job ₹ 4,000.00
	f)	250 kVA Al	Job ₹ 4,500.00
	g)	315 kVA Cu	Job ₹ 5,000.00
	h)	500 kVA Cu	Job ₹ 5,500.00

11.1(B).3	Supply & fitting of new HV coils conforming to original gauge, shape & size and deducting the salvage value of scraps.			
	a)	25 kVA Al	Each ₹ 1,500.00	
	b)	63 kVA Al	Each ₹ 2,000.00	
	c)	100 kVA Al	Each ₹ 2,500.00	
	d)	150/160 kVA Al	Each ₹ 3,000.00	
	e)	200 kVA Al	Each ₹ 3,500.00	
	f)	250 kVA Al	Each ₹ 4,000.00	
	g)	315 kVA Cu	Each ₹ 4,500.00	
	h)	500 kVA Cu	Each ₹ 5,000.00	
	11.1(B).4	Supply & fitting of new LV coils conforming to original gauge, shape & size and deducting the salvage value of scraps.		
		a)	25 kVA Al	Each ₹ 3,000.00
		b)	63 kVA Al	Each ₹ 3,500.00
		c)	100 kVA Al	Each ₹ 4,000.00
		d)	150/160 kVA Al	Each ₹ 4,500.00
		e)	200 kVA Al	Each ₹ 5,000.00
		f)	250 kVA Al	Each ₹ 5,500.00
		g)	315 kVA Cu	Each ₹ 20,000.00
		h)	500 kVA Cu	Each ₹ 25,000.00
	11.1(B).5	Supply & fitting of new ratio switch deducting the salvage value of scraps.		
		a)	25 kVA Al	Each NA
		b)	63 kVA Al	Each NA
		c)	100 kVA Al	Each NA
		d)	150/160 kVA Al	Each NA
		e)	200 kVA Al	Each ₹ 7,500.00
		f)	250 kVA Al	Each ₹ 9,500.00
		g)	315 kVA Cu	Each ₹ 15,000.00
h)		500 kVA Cu	Each ₹ 18,000.00	
11.1(B).6	Making of core coil assembly, varnishing & heating of core coil assembly in vacuum heat chamber till requisite insulation level is attained			
	a)	25 kVA Al	Job ₹ 2,500.00	
	b)	63 kVA Al	Job ₹ 3,000.00	
	c)	100 kVA Al	Job ₹ 3,500.00	
	d)	150/160 kVA Al	Job ₹ 4,000.00	
	e)	200 kVA Al	Job ₹ 4,500.00	
	f)	250 kVA Al	Job ₹ 5,500.00	
	g)	315 kVA Cu	Job ₹ 10,000.00	
	h)	500 kVA Cu	Job ₹ 12,000.00	

	11.1(B).7	Cleaning the transformer tank, removing dust, dirt, rust etc completely then painting outside & vernishing the inside of tank with approved quality & colour of paints as directed		
	a)	25 kVA Al	Job	₹ 2,000.00
	b)	63 kVA Al	Job	₹ 3,000.00
	c)	100 kVA Al	Job	₹ 3,500.00
	d)	150/160 kVA Al	Job	₹ 4,000.00
	e)	200 kVA Al	Job	₹ 4,500.00
	f)	250 kVA Al	Job	₹ 5,500.00
	g)	315 kVA Cu	Job	₹ 5,500.00
	h)	500 kVA Cu	Job	₹ 6,000.00
	11.1(B).8	Supply & fitting of new porcelain HV bushing		
	a)	25 kVA Al	Each	₹ 500.00
	b)	63 kVA Al	Each	₹ 500.00
	c)	100 kVA Al	Each	₹ 600.00
	d)	150/160 kVA Al	Each	₹ 600.00
	e)	200 kVA Al	Each	₹ 600.00
	f)	250 kVA Al	Each	₹ 650.00
	g)	315 kVA Cu	Each	₹ 700.00
	h)	500 kVA Cu	Each	₹ 700.00
	11.1(B).9	Supply & fitting of new porcelain LV bushing		
	a)	25 kVA Al	Each	₹ 500.00
	b)	63 kVA Al	Each	₹ 500.00
	c)	100 kVA Al	Each	₹ 500.00
	d)	150/160 kVA Al	Each	₹ 600.00
	e)	200 kVA Al	Each	₹ 700.00
	f)	250 kVA Al	Each	₹ 700.00
	g)	315 kVA Cu	Each	₹ 800.00
	h)	500 kVA Cu	Each	₹ 900.00
	11.1(B).10	Supply & fitting of new HV stud		
	a)	25 kVA Al	Each	₹ 500.00
	b)	63 kVA Al	Each	₹ 500.00
	c)	100 kVA Al	Each	₹ 500.00
	d)	150/160 kVA Al	Each	₹ 600.00
	e)	200 kVA Al	Each	₹ 700.00
f)	250 kVA Al	Each	₹ 800.00	
g)	315 kVA Cu	Each	₹ 900.00	
h)	500 kVA Cu	Each	₹ 900.00	
11.1(B).11	Supply & fitting of new LV stud			
a)	25 kVA Al	Each	₹ 500.00	
b)	63 kVA Al	Each	₹ 500.00	
c)	100 kVA Al	Each	₹ 500.00	
d)	150/160 kVA Al	Each	₹ 600.00	
e)	200 kVA Al	Each	₹ 700.00	
f)	250 kVA Al	Each	₹ 800.00	
g)	315 kVA Cu	Each	₹ 900.00	
h)	500 kVA Cu	Each	₹ 900.00	

	11.1(B).12	Tanking of the core coil assembly, making all necessary connections with HV/LV studs/OLTC etc as required	
	a)	25 kVA Al	Job ₹ 3,000.00
	b)	63 kVA Al	Job ₹ 3,000.00
	c)	100 kVA Al	Job ₹ 3,000.00
	d)	150/160 kVA Al	Job ₹ 4,500.00
	e)	200 kVA Al	Job ₹ 4,500.00
	f)	250 kVA Al	Job ₹ 4,500.00
	g)	315 kVA Cu	Job ₹ 6,500.00
	h)	500 kVA Cu	Job ₹ 6,500.00
	11.1(B).13	Supply & filling fresh transformer oil conforming to ISS 353/1993 including necessary filtering	
	a)	25 kVA Al	Litre ₹ 320.00
	b)	63 kVA Al	Litre ₹ 320.00
	c)	100 kVA Al	Litre ₹ 320.00
	d)	150/160 kVA Al	Litre ₹ 320.00
	e)	200 kVA Al	Litre ₹ 320.00
	f)	250 kVA Al	Litre ₹ 320.00
	g)	315 kVA Cu	Litre ₹ 320.00
	h)	500 kVA Cu	Litre ₹ 320.00
	11.1(B).14	Supply & fitting of new silica breather	
	a)	25 kVA Al	Each ₹ 750.00
	b)	63 kVA Al	Each ₹ 750.00
	c)	100 kVA Al	Each ₹ 1,000.00
	d)	150/160 kVA Al	Each ₹ 1,000.00
	e)	200 kVA Al	Each ₹ 1,300.00
	f)	250 kVA Al	Each ₹ 1,300.00
	g)	315 kVA Cu	Each ₹ 1,900.00
	h)	500 kVA Cu	Each ₹ 1,900.00
	11.1(B).15	Supply & fitting of fresh silica gel in breather	
a)	25 kVA Al	kg ₹ 150.00	
b)	63 kVA Al	kg ₹ 150.00	
c)	100 kVA Al	kg ₹ 150.00	
d)	150/160 kVA Al	kg ₹ 150.00	
e)	200 kVA Al	kg ₹ 150.00	
f)	250 kVA Al	kg ₹ 150.00	
g)	315 kVA Cu	kg ₹ 150.00	
h)	500 kVA Cu	kg ₹ 150.00	
11.1(B).16	Testing of the transformer at workshop after repairing under the supervision of departmental staff		
a)	25 kVA Al	Job ₹ 1,500.00	
b)	63 kVA Al	Job ₹ 1,800.00	
c)	100 kVA Al	Job ₹ 1,800.00	
d)	150/160 kVA Al	Job ₹ 2,500.00	
e)	200 kVA Al	Job ₹ 2,500.00	
f)	250 kVA Al	Job ₹ 3,200.00	
g)	315 kVA Cu	Job ₹ 3,200.00	
h)	500 kVA Cu	Job ₹ 3,800.00	

11.1(B).17	Carriage of the repaired transformer from workshop to site, reinstallation on pole structure/ pad at substation and complete connection on HV and LV side by skilled labourer under supervision of Electrical Supervisor having trade licence and, testing of the whole installation, then reconnection of power as directed by the department.		
	A For First 35(Thirty Five) KM		
	a)	25 kVA Al wound	Job ₹ 7,700.00
	b)	63 kVA Al wound	Job ₹ 7,700.00
	c)	100 kVA Al wound	Job ₹ 8,400.00
	d)	150/160 kVA Al	Job ₹ 8,400.00
	e)	200 kVA Al wound	Job ₹ 8,400.00
	f)	250 kVA Al wound	Job ₹ 18,500.00
	g)	315 kVA Cu wound	Job ₹ 18,500.00
	h)	500 kVA Cu wound	Job ₹ 19,700.00
	B For Every Subsequent 10(Ten) KM		
	a)	25 kVA Al wound	Job ₹ 600.00
	b)	63 kVA Al wound	Job ₹ 600.00
	c)	100 kVA Al wound	Job ₹ 600.00
	d)	150/160 kVA Al	Job ₹ 800.00
	e)	200 kVA Al wound	Job ₹ 800.00
	f)	250 kVA Al wound	Job ₹ 800.00
	g)	315 kVA Cu wound	Job ₹ 1,000.00
h)	500 kVA Cu wound	Job ₹ 1,000.00	
11.2	M&R OF HT LINE		Rate Per Pole
A)	Uprooting and re-erection of leaning PSC pole perpendicular to the ground including digging of earth pit, refilling with boulder of size 150mm to 200 mm and earth and hard ramming as directed.	Per Pole	₹ 4,335.00
B)	Straightening of leaning PSC pole perpendicular to the ground including digging of earth pit, refilling with boulder and hard ramming as directed.	Per Pole	₹ 963.00
C)	Dismantling and re-erection of existing MS channel cross arm with new clamps,bolts nuts etc including removing of rust layers, thorough cleaning and painting with two coats of red oxide primer and two coats of aluminium paint as directed.size : 75mm × 40mm × 6mm × 2200mm) / (100mm × 50mm × 6mm × 2200mm	No	₹ 415.00
D)	Dismantling of existing faulty Disc/ Pin insulator in 11 kV line after disconnecting from the line conductor as directed.	No	₹ 127.00

11.2	E)	Dismantling of existing ACSR / AAA Raccoon/ Rabbit/ Weasel/ Squirrel conductor in 11 kV line and re erecting the same, binding to insulator with necessary tensioning to have proper sag complete with jumper connection as directed	Per Metre	₹ 15.00
	F)	Dismantling of damaged/unserviceable 3 Ph 11 kV DO/G O Air break switch from Channel cross arm of substation / 11 kV line after disconnection of the line conductors as directed.	Job	₹ 390.00
11.3	M&R OF LT WORKS			
	(A)	Dismantling of burnt out/ unserviceable TPN/TP Main Switch/MCCB from existing panel after disconnecting the two ends including arrangement for shutdown of power as reqd and as directed.	No	₹ 284.00
	B)	Dismantling of burnt out/ unserviceable underground cable after disconnecting the two ends including arrangement for shutdown of power as reqd and as directed.	Per Metre	₹ 118.00

Specification Of items of (Group A) of 2023-24

Supply of Measuring Instruments and Materials for Other Allied Works

SI No.	Specification of Items	Unit	Rate/Unit
1	2	3	5
1	CT operated Analogue moving coil Ammeter 1.5 % accuracy confirming to IS specification suitable KV 230 volt, 50 Htz AC supply of Rishav/Schneider/AR/C&S make		
	(i) 96mm x 96mm, 0-60 Amp	Each	1699.50
	(ii) 96mm x 96mm, 0-100 Amp	Each	1707.00
	(iii) 96mm x 96mm, 0-200 Amp	Each	1653.00
	(iv) 96mm x 96mm, 0-400 Amp	Each	1707.00
	(v) 96mm x 96mm, 0-600 Amp	Each	1707.00
	(vi) 96mm x 96mm, 0-800 Amp	Each	1699.50
	(vii) 144mm x 144 mm, 0-60 Amp	Each	2665.50
	(viii) 144mm x 144 mm, 0-100 Amp	Each	2665.50
	(ix) 144mm x 144 mm, 0-200 Amp	Each	2586.00
	(x) 144mm x 144 mm, 0-400 Amp	Each	2665.50
	(xi) 144mm x 144 mm, 0-600 Amp	Each	2665.50
	(xii) 144mm x 144 mm, 0-800 Amp	Each	2584.50
2	CT operated Digital Moving Coil Ammeter 1.5 % accuracy confirming to IS specification suitable KV 230 volt, 50 Htz AC supply of Rishav/Schneider/AR/C&S		
	(i) 96mm x 96mm, 0-60 Amp	Each	2194.50
	(ii) 96mm x 96mm, 0-100 Amp	Each	2235.00
	(iii) 96mm x 96mm, 0-200 Amp	Each	2400.00
	(iv) 96mm x 96mm, 0-400 Amp	Each	2518.50
	(v) 96mm x 96mm, 0-600 Amp	Each	2607.00
	(vi) 96mm x 96mm, 0-800 Amp	Each	2608.50
	(vii) 144mm x 144 mm, 0-60 Amp	Each	2415.00
	(viii) 144mm x 144 mm, 0-100 Amp	Each	2602.50
	(ix) 144mm x 144 mm, 0-200 Amp	Each	2655.00
	(x) 144mm x 144 mm, 0-400 Amp	Each	2820.00
	(xi) 144mm x 144 mm, 0-600 Amp	Each	2608.50
	(xii) 144mm x 144 mm, 0-800 Amp	Each	2805.00

3	Moving Iron Volt Meter (0-500) volt suitable for 440 volt, 50 Hz, Ac supply as per ISS of Rishav.Schneider/AE		
	(i) 96mm x 96mm	Each	1950.00
	(ii) 144mm x 144mm	Each	2625.00
4	Selector Switch for Ammeter 10/15 amp of VKS/Kaycee/Equivalent	Each	867.00
5	Selector Switch for Voltmeter 415/440 V of VKS/Kaycee/Equivalent	Each	975.00
6	LED Pilot indicating lamp of red, yellow, blue colour complete of reputed make		
	(i) 20 mm size	Each	216.00
	(ii) 25 mm size	Each	262.50
7	LT Power Capacitor (Single Unit) suitable for 415/440V, 3 ph 50hz, Ac Supply duly tested confirming to IS :2834- 1964 of Bajaj. Ajanta/Jevic/Elspe (Activar)/ Chaitanya		
	(i) 5 KVAR	Each	3750.00
	(ii) 10 KVAR	Each	5085.00
	(iii) 15 KVAR	Each	9750.00
	(iv) 20 KVAR	Each	12000.00
	(v) 35 KVAR	Each	24000.00
8	HRC Potential Fuse Link 2 Amp (Panel Mounting) of ISI approve make	Each	177.00
9	HRC Potential Fuse Base 2 Amp (Panel Mounting) of ISI approve make	Each	210.00
10	LOW Tension HRC Fuse (Bolted/Cartridge) type 415/440V, 50		
	Hz Ac supply of breaking capacity 12 KA of Siemens/ L&T/ Havel		
	(i) 32 Amp	Each	202.50
	(ii) 63 Amp	Each	270.00
	(iii) 100 Amp	Each	577.50
	(iv) 125 Amp	Each	705.00
	(v) 160 Amp	Each	990.00
	(vi) 200 Amp	Each	1237.50
	(vii) 250 Amp	Each	1500.00
	(viii) 300/315 Amp	Each	1770.00
	(ix) 400 Amp	Each	2550.00
(x) 630 Amp	Each	2628.00	

	(xi) 800 Amp	Each	3877.50
11	LOW Tension HRC Fuse (DIN/Knife) type 415/440V, 50 Hz Ac supply of breaking capacity 12 KA of Siemens/ L&T/ Havels/ C&S		
	(i) 32 Amp	Each	225.00
	(ii) 63 Amp	Each	600.00
	(iii) 100 Amp	Each	831.00
	(iv) 125 Amp	Each	861.00
	(v) 160 Amp	Each	1125.00
	(vi) 200 Amp	Each	787.50
	(vii) 250 Amp	Each	1650.00
	(viii) 300/315 Amp	Each	1839.00
	(ix) 400 Amp	Each	2139.00
	(x) 630 Amp	Each	2724.00
(xi) 800 Amp	Each	3448.50	
12	Fuse Base for LT HRC Fuse 415 v, 50hz, Ac supply of L&T/Siemens/Havels for Bolted/ Cartridge type		
	(i) 32 Amp	Each	193.50
	(ii) 63 Amp	Each	382.50
	(iii) 100 Amp	Each	675.00
	(iv) 125 Amp	Each	825.00
	(v) 160 Amp	Each	975.00
	(vi) 200 Amp	Each	1425.00
	(vii) 250 Amp	Each	1500.00
	(viii) 300/315 Amp	Each	1650.00
	(ix) 400 Amp	Each	1950.00
	(x) 630 Amp	Each	2400.00
(xi) 800 Amp	Each	3750.00	
13	Fuse Base for LT HRC Fuse 415 v, 50hz, Ac supply of L&T/Siemens/HavelsforKnife type		
	(i) 32 Amp	Each	334.50
	(ii) 63 Amp	Each	418.50
	(iii) 100 Amp	Each	417.00
	(iv) 125 Amp	Each	525.00
	(v) 160 Amp	Each	525.00
	(vi) 200 Amp	Each	847.50
	(vii) 250 Amp	Each	945.00
	(viii) 300/315 Amp	Each	1237.50
	(ix) 400 Amp	Each	1896.00
(x) 630 Amp	Each	2260.50	

	(xi) 800 Amp	Each	3748.50
14	On/OFF Push Button Switch(Set of two) suitable for Panel Mounting of VKS/Siemens/Havels)	Set	772.50
15	GI Earth wire (Earth Continuity Conductor)		
	(i) 6 SWG	Kg	192.00
	(ii) 8 SWG	Kg	210.00
16	(iii) 7/12 SWG	Kg	177.00
	Copper Earth wire		
	(i) 8 SWG	Kg	1770.00
17	(ii) 10 SWG	Kg	1950.00
	G.I Earth Pipe		
18	(i) 50mm x 2.5mtr long	Each	1912.50
	(ii) 37mm x 2.5mtr long	Each	1950.00
19	C.I Earth Pipe 100 dia x 2.5 mtr long	Each	2700.00
20	G.I Plate for plate earthing of size 600mm x 600mmx 60mm	Kg	558.00
21	Copper Plate for plate earthing of size 600mm x 600mmx 30mm	Kg	1800.00
21	Transformer oil clear and transparent & free from suspended matter or sediments and specific resistance (resistivity)(Min.) at 90 degree Celsius , 35 x 10 Ohm-cm and at 27 degree Celsius 1500 x 10 ohm-cm(IS:6103/1971), Dielectric dissipation factor (tan delta) at 90 degree Celsius (Max.)(IS:6262-1971)0.02 & Flash Point PenskyMarten(Closed) (Min.)140 degree Celsius (Is:1448/1970)	Ltr	435.00
22	Current Transformer for metering duty wound on Bakelite Housing 0.5 KVA a per ISS of Rishav/AE/Ramanuj		
	(i) 60/5 Amp	Each	1149.00
	(ii) 100/5 Amp	Each	1668.00
	(iii) 200/5 Amp	Each	1668.00
	(iv) 300/5 Amp	Each	2452.50
	(v) 400/5 Amp	Each	2850.00
	(vi) 600/5 Amp	Each	3219.00
(vii) 800/5 Amp	Each	3532.50	

Specification of item Group-B of 2023-24
Supply of internal wiring & illumination items

SI No.	Specification of Items	Unit	Rate/Unit
1	P.V.C Flexible conduit (ISI approved make & quality)		
(i)	12mm	Mtr	30.00
(ii)	19mm	"	45.00
(iii)	25mm	"	60.00
(iv)	37mm	"	75.00
(v)	50mm	"	90.00
2	P.V.C conduit pipe (berlia or equivalent) thickness 1.5mm		
(i)	25mm dia	Mtr	60.00
(ii)	20mm dia	"	45.00
3	P.V.C Elbow		
(i)	25mm	Each	12.00
(ii)	20mm	"	10.50
4	P.V.C Bend		
(i)	25mm	Each	15.00
(ii)	20mm	"	15.00
5	P.V.C Junction Box		
(i)	20mm		
(a)	1 way	Each	22.50
(b)	2 way	"	22.50
(c)	3 way	"	22.50
(d)	4 way	"	22.50
(ii)	25mm		
(a)	1 way	Each	27.00
(b)	2 way	"	28.50
(c)	3 way	"	30.00
(d)	4 way	"	30.00
6	P.V.C Tee		
(i)	20 mm	Each	9.00
(ii)	25mm	"	10.50
7	P.V.C board (best quality)		
(i)	100mmx100mm	Each	177.00
(ii)	100mmx150mm	"	255.00
(iii)	200mmx150mm	"	330.00
(iv)	200mmx250mm	"	427.50
(v)	250mmx300mm	"	525.00
8	Wooden screw assorted size	Doz	33.00

9	Plastic gutka 25/37mm with washer long	Pkt	87.00
10	Brasspin 12mm with washer	"	150.00
11	Flush type switch (ISI approved)		
(i)	5 Amps	Each	72.00
(ii)	15Amps	"	177.00
12	Flush type socket (3pin)		
(i)	5 Amps	Each	105.00
(ii)	15Amps	"	210.00
13	Flush type switch socket combination		
(i)	5Amps (3Pin)	Each	210.00
(ii)	15 Amps (3pin)	"	345.00
(iii)	15 Amps (5pin)	"	300.00
14	Pendant holder	Each	30.00
15	Battern holder	Each	43.50
16	Bracket with holder	Each	150.00
17	Porcelain holder (threaded type)		
	(i)200 watt	Each	88.50
	(ii)500 watt	Each	265.50
18	Tube light copper blast 40 watt	Each	525.00
19	Tube light starter	Each	30.00
20	Tube light Holder	Each	31.50
21	Electronic Tube Light Choke (Ballast)	Each	525.00
22	36/40 Watt Tube Light	Each	138.00
23	3 Pin Plug Top		
	(i)15 Amps	Each	231.00
	(ii)5 Amps	Each	135.00
24	Ceiling Rose(Best Quality)	Each	45.00
25	Metal Switch Box (Best Quality)		
	(i)100mm x 100mm	Each	213.00
	(ii)150mm x 100mm	Each	240.00
	(iii)200mm x 150mm	Each	375.00
	(iv)200mm x 300mm	Each	525.00
(v)300mm x 350mm	Each	750.00	
26	Casing Capping		
	(i)25mm	Mtr	87.00
	(ii)19mm	Mtr	82.50

27	Bulk head fitting with cast alluminium resistance canopy and clear or heat resistance glass suitable for 100W/200W GIS Lamp Complete	Each	3540.00
28	Bulb Shade (Standard Size)	Each	150.00
29	PVC Plastic Flexible Wire 5 Amps	Mtr	18.00
30	PVC square box joint box	Each	30.00
31	PVC Saddle 20mm	Each	7.50
32	GI Saddle 25mm	Each	12.00
33	GI Saddle 20mm	Each	6.00
34	GI Saddle 25mm	Each	6.00
35	Solvent Cement 100 ml bottle	Bottle	88.50
36	Casing Capping Accessories 20mm		
	(i)L	Each	12.00
	(ii)T	Each	12.00
	(iii)Outer/External	Each	12.00
	(iv)Inner/Internal	Each	12.00
37	Incadascent Bulb (Bajaj/Philips/Equivalent ISI approved)		
	(i)60 Watt	Each	36.00
	(ii)100 Watt	Each	54.00
	(iii)200 Watt	Each	54.00
	(iv)500 Watt	Each	133.50
38	CFL Bulb (Bajaj/Philips/Equivalent ISI approved)		
	(i)15 Watt	Each	600.00
	(ii) 20Watt	Each	690.00
	(iii)25Watt	Each	690.00
	(iv)30 Watt	Each	796.50
39	Flourescent Tube Light Luminairis Complete with Bulb, Ballast etc.	Set	828.00
	(36W/40W)(Bajaj/Equivalent make)		
40	(i) Igniter for 250W HPSV lamp	Each	900.00
	(ii) HPSV Lamp 250 W	Each	900.00
	(iii) Ballast for 250W HPSV Lamp	Each	4071.00
	(iv) Condenser for 250W HPSV Lamp	Each	867.00

	(v) 250W HPSV Lamp Holder	Each	270.00
41	(i) Igniter for 125W HPSV Lamp	Each	337.50
	(ii) HPSV Lamp 125W	Each	1050.00
	(iii) Ballast for 125W HPSV Lamp	Each	4200.00
	(iv) Condenser For 250W HPSV Lamp	Each	750.00
	(v) 125W HPSV Lamp Holder	Each	225.00
42	(i) Igniter for 250W HPMV Lamp	Each	600.00
	(ii) HPMV Lamp 250W	Each	900.00
	(iii) Ballast for 250W HPMV Lamp	Each	3900.00
	(iv) Condenser for 250W HPMV Lamp 15 micro Farad	Each	600.00
	(v) 250W HPMV Lamp Holder	Each	225.00
	(vi) 250W HPMV Luminaires Complete set (Bajaj/Eqvt)	Set	5550.00
43	(i) Igniter for 125W HPMV Lamp	Each	525.00
	(ii) HPMV Lamp 125W	Each	675.00
	(iii) Ballast for 125W HPMV Lamp	Each	3750.00
	(iv) Condenser for 125W HPMV Lamp 15 micro Farad	Each	450.00
	(v) 125W HPMV Lamp Holder	Each	244.50
44	Modular Switch		
	(i) 5 Amps	Each	180.00
	(ii) 15 Amps	Each	600.00
45	Modular Socket		
	(i) 5 Amps	Each	180.00
	(ii) 15Amps	Each	600.00
46	Metal Box for modular switch sockets		
	(i) 1-3 M	Each	150.00
	(ii) 4-5 M	Each	219.00
	(iii) 6 M	Each	330.00
	(iv) 8 M	Each	450.00
	(v) 12 M	Each	600.00
	(vi) 16 M	Each	750.00

47	Residual Current Circuit Breaker (RCCB)		
	(i) 25 Amps	Each	7500.00
	(ii) 32 Amps	Each	7725.00
	(iii) 40 Amps	Each	7725.00
	(iv) 63 Amps	Each	10500.00
48	Earth Leakage Circuit Breaker (ELCB)		
	(i) 25 Amps	Each	7500.00
	(ii) 32 Amps	Each	8250.00
	(iii) 40 Amps	Each	7950.00
	(iv) 63 Amps	Each	9750.00
49	Call Bell Push	Each	82.50
50	Electronic Call Bell /Chime	Each	525.00
51	Exhaust Fan of reputed make (Orient/Equivalent)	Each	4248.00
52	Ceiling Fan of Orient/Equivalent make		
	(i) 1220 mm	Each	3894.00
	(ii) 1400 mm	Each	3900.00
53	Bajaj/Equivalent make 500 Watt Halogen Flood Light Luminaires Complete set	Set	2655.00
54	Bajaj/Equivalent make 500 Watt GLS Flood Light Luminaires Complete set	Set	2400.00
55	Bajaj/Equivalent make CFL Luminaires complete with bulb,choke, etc. 36 Watt	Set	3600.00
56	Air Brake Contractor (i)70Amp	Each	18000.00
57	TP Dz Fuse Unit (i) 25 Amp	Each	2700.00

Group-C
Supply of Miscellaneous Items

Sl No.	Specification of Items	Unit	Rate/Unit
1	Panel lock & key of standard size	Each	375.00
2	M.S Electrode (Ferro speed)		
(i)	10 SWG	pkt	1785.00
(ii)	12 SWG	pkt	2176.50
3	M. Seal for general purpose	Kg	1095.00
4	Nylone rope (assorted dia)	Kg	300.00
5	Steel brush		
(i)	25 mm	Each	105.00
(ii)	50 mm	"	177.00
6	Charcoal	kg	70.50
7	Salt	"	40.50
8	M.S Nuts & bolts(assorted size)	"	240.00
9	M.S Washer (assorted size)	"	225.00
10	Painting brush		
(i)	25mm	Each	124.50
(ii)	50mm	"	210.00
11	Waste cotton	kg	193.50
12	Emery paper		
(i)	Rough	Each	21.00
(ii)	Smooth	"	24.00
13	Emery cloth		
(i)	Rough	Each	22.50
(ii)	Smooth	"	27.00
14	Brass pin 12mm	pkt	175.50
15	M.S Screw assorted size	"	141.00
16	Hacksaw blade of size		
(i)	12mmx300mm	Each	37.50
(ii)	25mmx300mm	"	51.00
17	Panel screw brass coated cylindrical thread		
(i)	6 mm long	Doz	123.00
(ii)	12 mm long	"	193.50
(ii)	20 mm long	"	229.50
18	B.P sheet of size		
(i)	1.2 mm thick, 1.00mtrx2.5mtr	Each	3600.00
(ii)	1.6mm thick, 1.00mtrx2.5mtr	"	4459.50
19	Matal Hinges(Assorted size)	pkt	352.50
20	BrassNuts & Bolts(Assorted size)	kg	630.00

21	Electrically Tested Rubber Hand Gloves as per IS Specification No.47701968/1991 up 11 kv	Pair	877.50
22	Rubbar Board as per IE Specification	pair	1500.00
23	fire grip/miniaser or equievelent make ISS maked with ISO 0001 35 fire extinguisher DCP(dry cemical powder)type complete with all accssiroise		
i	2 kg capacity	each	6724.50
ii	5 kg capacity	each	12000.00
iii	10 kg capacity	each	14700.00
24	Washing Soap	kg	184.50
25	Air Break contractor,3P,L&T,Seimens,Havells,C utter,Hummer or any other reputed make		
i	25 AMP	each	6900.00
ii	32 mpr	each	11745.00
iii	63 amp	each	14688.00
26	Al lug of best quality		
i	50 sqmm	each	36.00
ii	90 sqmm	each	60.00
iii	120 sqmm	each	87.00
iv	185 Sqmm	each	124.50
v	240 sqmm	each	145.50
vi	300 Sqmm	each	159.00
vii	400 sqmm	each	184.50
Viii	500 sqmm	each	217.50
27	Al bottle lug of best quality		
i	2.5 sqmm	each	16.50
ii	4 sqmm	each	18.00
iii	6 sqmm	each	19.50
iv	10 sqmm	each	22.50
v	16 sqmm	each	30.00
vi	20 sqmm	each	42.00
vii	35 sqmm	each	58.50

viii	50 sqmm	each	67.50
ix	70 sqmm	each	75.00
x	95 sqmm	each	84.00
xi	120 sqmm	each	105.00
xii	150 sqmm	each	112.50
xiii	185 sqmm	each	129.00
xiv	240 sqmm	each	133.50
xv	320 sqmm	each	144.00
xvi	400 sqmm	each	150.00
xvii	50 sqmm	each	157.50
	Maltistand copper conductor , pvc/ XL PE insulated armoured, pvc sheathed,1100Volt,Armoured cable confirming to IS :1554(P-1)/7098(P- 1)with leatest amendmets of crystal /Havells make		
i	2 Core,1.5 sqmm	each	247.50
ii	2 core, 2.5 sqmm	each	315.00
iii	3 core,1.5 sqmm	each	315.00
iv	3 core,2.5 sqmm	each	442.50
v	4 Core,1.5 sqmm	each	405.00
Vi	4 Core,2.5 Sqmm	each	528.00
Vii	5 Core,1.5 Sqmm	each	435.00
viii	5 Core,2.5 Sqmm	each	565.50
XI	6 Core,1.5 sqmm	each	480.00
X	6 core, 2.5 sqmm	each	690.00
Xi	7 core,1.5 sqmm	each	510.00
Xii	7 core,2.5 sqmm	each	750.00
Xiii	8 Core,1.5 sqmm	each	555.00
Xiv	8 Core,2.5 Sqmm	each	810.00
Xv	95 Core,1.5 Sqmm	each	645.00
Xvi	9 Core,2.5 Sqmm	each	937.50
Xvii	10 Core,1.5 sqmm	each	720.00
Xviii	10 Core,2.5 Sqmm	each	1020.00
XiX	12 Core,1.5 Sqmm	each	855.00
XX	12 Core,2.5 Sqmm	each	1185.00

29	Single core copper conductor(flexible)industrial cable FR-LSH compound insulated(unsheathed)1100Volts confirming to IS : 694 Havells crylts make		
i	1 sqmm	RM	28.50
ii	1.5 sqmm	RM	39.00
iii	2.5 sqmm	RM	69.00
iv	4 sqmm	RM	97.50
v	6 sqmm	RM	141.00
30	Single core copper conductor(flexible) H/D PVC insulated industrial cable insulated(unsheathed)1100Volts confirming to IS : 694 Havells crylts make		
i	10 sqmm	RM	270.00
ii	16 sqmm	RM	480.00
iii	25 sqmm	RM	720.00
31	coir Rope	KG	360.00
32	Monila Rope	KG	420.00
33	Bhuluka Bamboo	each	406.50
34	Jati Bamboo	Each	405.00
35	Cotton Tap	Roll	97.50
36	Ampere Tap	Roll	270.00
37	PVC Tap(25mtr role)	Roll	106.50
38	Fuse wire best quality (50mtr length per role)		
i	5 amps	Roll	120.00
ii	15 amps	Roll	210.00
iii	32 amps	Roll	405.00
iv	63 amps	Roll	600.00
v	100 amps	Roll	813.00
vi	200 amps	Roll	921.00
vii	400 amps	Roll	1096.50
viii	630 amps	Roll	576.00
39	Aluminium Cable gland of different size any reputed make		
i	35 sqmm	Each	81.00
ii	50 sqmm	Each	97.50
iii	70 sqmm	Each	123.00
iv	95 sqmm	Each	142.50
v	120 sqmm	Each	160.50
vi	150 sqmm	Each	160.50

vii	185 sqmm	Each	177.00
viii	240 sqmm	Each	195.00
ix	300 sqmm	Each	231.00
X	400 sqmm	Each	265.50
40	Copper lug of best quality		
i	2.5 sqmm	each	22.50
ii	4 sqmm	each	30.00
iii	6 sqmm	each	45.00
iv	10 sqmm	each	60.00
v	16 sqmm	each	75.00
vi	25 sqmm	each	90.00
vii	35 sqmm	each	105.00
viii	50 sqmm	each	135.00
ix	70 sqmm	each	150.00
x	95 sqmm	each	180.00
xi	120 sqmm	each	210.00
xii	150 sqmm	each	240.00
xiii	185 sqmm	each	300.00
xiv	240 sqmm	each	375.00
xv	320 sqmm	each	525.00
xvi	400 sqmm	each	750.00
xvii	500 sqmm		900.00
41	Al cable socket bottle type of various sizes		
i	16 sqmm	Each	36.00
ii	25 sqmm	Each	36.00
iii	35 sqmm	Each	60.00
iv	50 sqmm	Each	87.00
v	70 sqmm	Each	135.00
vi	95 sqmm	Each	177.00
vii	120 sqmm	Each	210.00
viii	150 sqmm	Each	265.50
ix	185 sqmm	Each	300.00
x	240 sqmm	Each	337.50
xi	320 sqmm	Each	442.50
xii	400 sqmm	Each	531.00
Xiii	500 sqmm	Each	675.00
42	Al stripe for busbar		
i	25 mmX3mm	kg	990.00
ii	40 mmX6mm	kg	990.00
iii	60 mmX6mm	kg	990.00
43	copper stripe for busbar		0.00
i	25 mmX3mm	kg	1770.00
ii	40 mmX6mm	kg	1824.00
iii	60 mmX6mm	kg	1858.50
iv	70 mmX10mm	kg	1858.50
44	Bakelite Busbar insulator	each	25.50

45	Cable compound	KG	1237.50
46	Soldering flux for eyres melting (60% to 40%)	kg	1500.00
47	Alkap-P	kg	1185.00
48	Eyre No 7	per Bottle	195.00
49	Hylem sheet of 10/12mm thikness	kg	708.00
50	Ebonite Sheet 6/10mm thikness	kg	1098.00
51	Black/Red Electrical registance rubber sheet one side chequrred & other side with cloth finished tasted upto 15KVAR as per ISS of ISI approve 1.81 mtr (L)X0.9mtr (B)X10mm(T)(persident or eqivelent make)	each	459.00
52	Danger Plate suitable for 11 KV Line confirming to IS:2552/1963 of size 250mm x 200mm	Each	120.00
53	Danger Plate suitable for 440 Volt Line confirming to IS:2552/1963 of size 250mm x 200mm	Each	105.00
54	Coper Earth Plate	Each	18000.00
55	CT for Metering purpose	Each	2025.00