# Malaviya National Institute of Technology Jaipur

Jawahar Lal Nehru Marg, JAIPUR-302017 (Rajasthan)
Ministry of Education
(Government of India)



# **Open Tender Enquiry For**

Procurement of Electrical work for badminton court near sports office

#### MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

Phone: 0141-2713312,2713352

No. F5(2064)ST/MNIT/Estate /2021

#### **NOTICE INVITING QUOTATIONS**

**Registrar** MNIT, JLN Marg, Jaipur invites sealed tenders for the supply of "Electrical work for badminton court near sports office" of this Institute in Single Bid System as per schedule given below:

Schedule			
Event	Date & Time		
Download of Tender	11.07.2022		
Bid Submission Last Date & Time	03.08.2022 by 2.00 PM		
Bid Opening Date & Time	03.08.2022 at 3.00 PM		
Earnest Money	(Rs. 58,000.00)		
	<b>EMD</b> in the form of Demand Draft in the name of		
	The Registrar, MNIT payable at Jaipur or NEFT/RTGS		
	in the bank account details as under:-		
	Bank Name: ICICI Bank Ltd.,		
	Bank Branch: MNIT Jaipur		
	Account Holder: Registrar MNIT Jaipur, J.L.N.		
	Marg, Jaipur		
	Bank Account No: 676805000011		
	Bank IFSC Code: ICICI0006768		
Performance Bank Guarantee	3% of the contract value valid till warranty period plus 60 days.		
Warranty	Standard OEM warranty not less than 1 year		
Delivery	60 Days		
Bid Validity days	90 days		
Email Address (for Technical	storepurchase@mnit.ac.in		
Clarifications)			

Quotation must be enclosed in a properly sealed envelope addressed to **Deputy Registrar (S&P), Malaviya National Institute of Technology, Jawahar Lal Nehru Marg, Jaipur -302017** (E-mail address storepurchase@mnit.ac.in) by designation and not by name. The quotations must be super scribed "Quotations for the supply of "Electrical work for badminton court near sports office"" as called for in Tender Notice No. ------- dated \_\_\_\_\_\_\_ due on------- at --------AM/PM. The Quotation must reach on or before the due date and time mentioned in the 'Schedule'. The documents must be dropped in the tender box available in Central Store during office hours (9.30am to 6.00pm) on all working days. Bids delivered to any other place or any individual shall not be considered as valid document. Quotations sent by e-mail will also not be considered valid. The complete Tender document can be viewed and downloaded only from the website (www.mnit.ac.in) and CPPP site <a href="https://eprocure.gov.in/epublish/app">https://eprocure.gov.in/epublish/app</a> during the tender period.

# 2. INVITATION FOR TENDER OFFER FOR PROCUREMENT OF "ELECTRICAL WORK FOR BADMINTON COURT NEAR SPORTS OFFICE"

Malaviya National Institute of Technology, Jaipur (MNIT) invites bids from eligible and experienced OEM (Original Equipment Manufacturer) or OEM Authorized Dealer for procurement of "Electrical work for badminton court near sports office" (warranty period as stated at "Schedule") on site comprehensive warranty from the date of receipt of the material as per terms & conditions specified in the tender document.

#### 2.1. TECHNICAL SPECIFICATION:

S.No.	Instrument Specifications Electrical work for badminton court near sports office	Unit	Qty
1	Supply of IK09 rating recessed/surface mounting heavy duty Vertical type sheet steel 1.6mm thick Distribution board as per PWD specification for electrical Works ISI marked conformingtoIS-13032&IS-8623/conforming to IEC61439-3 with provision of incomer suitable for MCCB and SP/TP MCB as outgoing, phosphatised, powder painted complete. IP43-Double door with Provision of Incomer MCCB 63/ 100 /125 A Rating - 8 Way (Make: Schneider (neo break), Siemens, HPL, GE, Standard, Indoasian(gold), Havell's, C & S, ABB (S270), L&T, Legrand (Ekinoxe / Lexic))	Each	2
2	Supply of of IP40 quick make and quick break 4 pole current limiting Moulded case circuit breaker (MCCB) made of flame retardent & heat resistant material having following current rating, short circuit breaking capacity at 440/415V, 50Hz; O/L & S/C settings as per PWD specification for electrical Works, conforming to IS/IEC60947P-2:2003.  63 Amp, 18 kA,adjustable O/L & fixed S/C setting, Ics = 100 % Icu (Make: Schneider (neo break), Siemens, HPL, GE, Standard, Indoasian(gold), Havell's, C & S, ABB (S270), L&T, Legrand (Ekinoxe / Lexic))	Each	2
3	Four pole Isolator - 63 A rating (Make: Schneider (neo break), Siemens, HPL, GE, Standard, Indoasian(gold), Havell's, C & S, ABB (S270), L&T, Legrand(Ekinoxe / Lexic))	Each	2
4	Supply of 240/415V AC MCB with positive isolation of breaking capacity not less than 10KA (C tripping characteristic as per type of load and site requirement) 4KV impulse with stand voltage, as per PWD specification for electrical Works with ISI marked IS8828(1996)/conforming to IEC60898-12002, IEC60947-2.  Single pole MCB - 10 A rating (Make: Schneider (neo break), Siemens, HPL, GE, Standard, Indoasian(gold), Havell's, C & S, ABB (S270), L&T, Legrand (Ekinoxe / Lexic))	Each	48
5	Supply of P.V.C. / XLPE insulated & P.V.C. sheathed Armoured aluminium cable of 1.1 KV grade as per PWD specificationfor electrical Works.  - 70.0 Sq. mm, 3.5 core, Armoured Cable (Make: Gloster, CCI, Finolex, Rallison, Ekta, Delton, Havell's, KEI, Paramount, Worldcab, Diatron, Unicab, Unistar, Orientcab, Empire, Orbit, Polycab, National)	Mtrs	120
6	Supplying of ISI marked P.V.C. insulated submersible cable as per PWD specification for electrical Works confirming to IS:694 and as per IS 8130: 2013 of 1.1 kV grade.  2.5 Sq.mm 3 core Round copper cable.  (Make RR Kabel, National, Finolex, Rallison, Delton, Eon (Indoasian), KEI, Terexal,	Mtrs.	640

	Plaza, Anchor, L & T,Standard, Paramount, Empire, Orient Cab, Orbit, HPL, Unicab, Polycab, Havell's, Diatron)		
7	Supply of Medium duty rigid PVC conduit - 25MM (Make: AKG, BEC, Precision, Polypack, Shrinath, Polycab, Plaza, Dauphin, Richa)	Mtrs	270
8	Supply of PVC nipple (Suitable for 25 mm PVC Conduit ) (Make: AKG, BEC, Precision, Polypack, Shrinath, Polycab, Plaza, Dauphin, Richa)	Nos.	90
9	Supply of following modular accessories made out of unbreakable and fire retardant poly carbonate with silver contacts including making connections testing etc. as required. (Make: Schneider electric- Opale, Legrand- Mylinc, Anchor - Woods, ABB)		
9.1	16 A one way switch	Each	32
9.2	16 A 6 pin shuttered socket	Each	32
10	Supply of following size mounting grid plates with cover plates as per PWD specification for electrical Works, made from fireretardent UV established high performance engineering plastic suitable for all universal metal boxes for front installation & removal direct fit type complete.  - 6 Module (Make: Schneider electric- Opale, Legrand- Mylinc, Anchor - Woods, ABB)	Each	16
11	Supply of following size hot dip galvanized M.S.box of 18 SWG as per PWD specification for electrical Works - 6 Module	Each	16
12	Exhaust Fan (Double ball bearing, capacitor start single phase metallic blade fresh air fan) - 300 mm (Make Almonard, CG, Alstom, Khaitan, Usha, Havells)	Each	8
13	M.S. Sections- 40mm x 40mm X 2.6 mm (thikness) (Make : APOLLO, KALINGA, SWASTIK)	mtrs	60
14	Supply of IK07 IP-66 protected high power LED flood light system with Pressure diecast aluminium housing LM6/ADC12 material, toughened glass diffuser with suitable lenses on LED to achieve various beam angles, 240 volt, 50Hz, of high power LED lamps. Integrated driver must be potted & has a unique BISR number shall be high efficiency having efficiency more than 85% and incompliance to BIS certified and T.C. certificate. The System level Luminaire efficacy>=120 lm/wt with High Power LEDs is to be used. LED driver Input Voltage AC120 to 270VAC with High voltage Cut off @>=300VAC and Auto resetting Safety. Input Frequency 50Hz±3%, Power Factor>0.95, driver Efficiency>85%, THD(I)<10%, drivercurrent<1000mA shown in LM79 report. driver should be Phase to phase protection of 440V for 4Hrs. Electrical Connector Must be provided, Surge Protection Min>=4KV internal and10KV external, System life of 30000 Burning hours with 70% of Initial Lumens maintained, color Rendering Index>70 and CCT5700K±355K. Driver current<1000mA shown in LM79 report. Manufactures Word Mark/Name Engraved /Embossing/ Screen printing on die cast housing to allow trace ability/authenticity. Fixture shall be IS 10322 Complianced.  - High Power LED Flood Light - 400W (Make: CG, Bajaj, Wipro, Surya, Havell's, GE, Pierlite, Philips)	Each	32
15	Supply of material for Plate Earthing as per PWD specification for electrical Works as per IS:3043 with copper Earth plate of size 600mm x 600mm x 3.0mm. 20 mm dia. G.I. 'B' class watering Pipe (10m), including all accessories like nut, bolts, reducer, nipple, wire meshed funnel, and Heavy duty weather proof polypropylene earth pit chamber with lockable Jam free lid suitable for safe working load 5000 Kg or more of size Top Dia. 225 to 260 mm, Bottom Dia 300 to 350 mm. and Height 250 to 300 mm. salt and coke/charcoal as per norms.	Set	2

Fabrication, Supply of outdoor type cubical type LT panel suitable for 415 V, 3 Phase, 4 Wire 50 Hz AC supply system having front surface area as per approved design. The panel should be fabricated in compartmentalized (preferably) design from CRCA sheet steel of 2.0 mm thick for frame work & covers (panel Structure), 1.6 mm thick for door, 3 mm thick for gland plates. Nine tank cleaning process from chemical treatment of the sheet for best finish & quality coating. Powder coating complete with 7 tank process for powder coating in approved shade. The panel having 1000 Amp capacity extensible type TPN aluminium alloy bus bars of

high conductivity, DMC/ SMC bus bar supports.

Bottom base channel of MS section not less than 100 mm x 50 mm x 5 mm thick ((Hight 900 mm), fabrication shall be done in transportable sections, entire panel shall have a common GI earth bar of size 50 mm x 6 mm at the rear with 2 Nos. earth stud, solid connections from main bus bar to switch gears with required size of Al. bus bars and control wiring (with PVC insulated FRLS copper wire of required size, terminal, lugs, Tape, hardware & accessories), cable alleys, cable gland plates in two half, panel tested up to 6300A at 80 KA @690V, including providing following switch gears:-

#### **Incoming**

01 No. 400 Amps, 36KA 4 Pole Microprocessor type MCCB with Ics=100%Icu with O/L, S/C & E/F protection complete, having on & off trip indication lamp and Spreader Link.

LED Multifunction Meter having V, A, F, PF, kW, kVA, kVAR, kWh, kVAh, kVARh, Runhours, On hours, Interrupts, RPM\*,

% Unbalance (V, A), Phase angle, THD, Neutral current, % Load, Maximum Demand (kW & kVA), MD reset with suitableAccessories- 1 Set with suitable CT's (10VA, 400/5A) and back up MCBs.

3 Nos. Phase indicating LED lamps with backup MCBs, breaker ON/OFF/Trip indication light, test terminal block set, MCB ,circuits as per standard practice , auxiliary contact for positive interlocking of the breakers, Shunt Trip Coil  $220\ V$  AC as required .

Bus Bars - TPN aluminium bus bars of minimum 1000 Amp capacity with heat shrinkable coloured sleeves and including DMC/SMC bus bar Cross Section side supports and their spacing etc, for withstanding fault as per CPRI complete with wiring, terminals, lugs, PVC channel with accessories, GI Earth Bus (50x6MM).

#### Outgoing

5 Nos. 160 Amps, 25KA 4 Pole Thermal Magnetic Release type MCCB with Ics=100%Icu with O/L, S/C protection complete with spreader link.

4 Nos. 100 Amps, 18KA 4 Pole Thermal Magnetic Release type MCCB with Ics=100%Icu with O/L, S/C protection complete with spreader link.

2 Nos. 63 Amps, 18KA 4 Pole TM type MCCB with Ics=100%Icu with O/L, S/C protection complete with spreader link.

NOTE:- 1) MCCB's wherever specified shall have extendable rotary handle.

- 2) All MCCB's shall be provided with phase barriers, phase spreaders link complete as required.
- 3) The drawing of L.T. Panel to be got approved from Department before fabrication. The panel may be tested in front of representative of the Institute before dispech. The commissioning may be done by the manufacturer after installation.
- 4) Manufactured by: Seimens, Mile stone, coremetal craft Ltd., AdLac, Advance, Johns Electric, Neptune. Make of the

Swithgears: ABB, Legrand, Schneider, Seimens, L&T

Set

1

Fabrication, Supply of outdoor type cubical type LT panel suitable for 415 V, 3 Phase, 4 Wire 50 Hz AC supply system having front surface area as per approved design. The panel should be fabricated in compartmentalized (preferably) design from CRCA sheet steel of 2.0 mm thick for frame work & covers (panel Structure), 1.6 mm thick for door, 3 mm thick for gland plates. Nine tank cleaning process from chemical treatment of the sheet for best finish & quality coating. Powder coating complete with 7 tank process for powder coating in approved shade. The panel having 1000 Amp capacity extensible type TPN aluminium alloy bus bars of high conductivity, DMC/ SMC bus bar supports. Bottom base channel of MS section not less than 100 mm x 50 mm x 5 mm thick ((Hight 900 mm), fabrication shall be done in transportable sections, entire panel shall have a common GI earth bar of size 50 mm x 6 mm at the rear with 2 Nos. earth stud, solid connections from main bus bar to switch gears with required size of Al. bus bars and control wiring (with PVC insulated FRLS copper wire of required size, terminal, lugs, Tape, hardware & accessories), cable alleys, cable gland plates in two half, panel tested up to 6300A at 80 KA @690V, including providing following switch gears:-Incoming 01 No. 160 Amps, 36KA 4 Pole Microprocessor type MCCB with Ics=100%Icu with O/L, S/C & E/F protection complete, having on & off trip indication lamp and Spreader Link. LED Multifunction Meter having V, A, F, PF, kW, kVA, kVAR, kWh, kVAh, kVARh, Runhours, On hours, Interrupts, RPM\*, % Unbalance (V, A), Phase angle, THD, Neutral current, % Load, Maximum Demand (kW & kVA), MD reset with suitable Accessories- 1 Set with suitable CT's (10VA, 400/5A) and back Set 1 up MCBs. 3 Nos. Phase indicating LED lamps with backup MCBs, breaker ON/OFF/Trip indication light, test terminal block set, MCB, circuits as per standard practice, auxiliary contact for positive interlocking of the breakers, Shunt Trip Coil 220 V AC asrequired. Bus Bars - TPN aluminium bus bars of minimum 1000 Amp capacity with heat shrinkable coloured sleeves and including DMC/SMC bus bar Cross Section side supports and their spacing etc, for withstanding fault as per CPRI complete with wiring, terminals, lugs, PVC channel with accessories, GI Earth Bus (50x6MM). Outgoing 4 Nos. 100 Amps, 18KA 4 Pole Thermal Magnetic Release type MCCB with Ics=100% Icu with O/L, S/C protection complete with spreader link. 2 Nos. 63 Amps, 18KA 4 Pole TM type MCCB with Ics=100% Icu with O/L, S/C protection complete with spreader link. NOTE:- 1) MCCB's wherever specified shall have extendable rotary handle. 2) All MCCB's shall be provided with phase barriers, phase spreaders link complete as required. 3) The drawing of L.T. Panel to be got approved from Department before fabrication. The panel may be tested in front of representative of the Institute before dispech. The commissioning may be done by the manufacturer after installation. 4) Manufactured by: Seimens, Mile stone, coremetal craft Ltd., AdLac, Advance, Johns

Note: Sample of each item shall be approved by engineer-in charge before supply of items

Electric, Neptune. Make of the Swithgears: ABB, Legrand, Schneider, Seimens, L&T

#### 3. GENERAL TERMS & CONDITIONS

- **3.1. Compliance certificate:** This certificate must be provided indicating conformity to the technical specifications. (**Annexure-I**)
- **3.2. Due date**: The tender has to be submitted on or before the due date. The offers received after the due date and time will not be considered.
- 3.3. Earnest Money Deposit (EMD): The Bidder should submit EMD as per "Schedule". The Bid without EMD would be considered as UNRESPONSIVE and will not be accepted. The EMD will be refunded without any interest to the unsuccessful Bidders after the award of contract. The bidders are required to submit their bank details/cross cancelled cheque in this regard. In case of successful bidder, it will be refunded after receipt of Performance Bank Guarantee. NSIC / MSME registered bidders must submit copy of valid NSIC / MSME Registration Certificate for exemption of EMD.
- **3.4. Opening of the tender**: The bid will be opened by a committee duly constituted for this purpose. The bids (complete in all respect) received will be opened in presence of bidder's representative if available. Only one representative will be allowed to participate in the tender opening. Purchase order will be awarded to firm  $(L_1)$  quoting lowest price and meeting all technical specifications and conditions.

#### 3.5. Purchase preference to Micro and Small Enterprises (MSEs):

Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference for product/services, the bidder must be the manufacturer/Service provider of the offered product/service. Relevant documentary evidence in this regard shall be submitted along with the bid in respect of the offered service. If L-1 is not an MSE and MSE Service Provider (s) has/have quoted price within L-1+ 15% of margin of purchase preference /price band defined in relevant policy, then 100% order quantity will be awarded to such MSE bidder subject to acceptance of L1 bid price.

**3.6. Acceptance/ Rejection of bids:** The Institute reserves the right to reject any bid not fulfilling the eligibility criteria. Submission of incomplete bid/ incomplete bid format would lead to rejection of bids. All documents required to be submitted should be the part of the bid. If any document is not submitted, the bid will be treated as incomplete and this would lead to rejection. No communication in this regard will be entertained. Non-compliance of tender terms, non-submission of required documents, lack of clarity of the specifications, contradiction between bidder's specification and supporting documents etc. may lead to rejection of the bid.

#### **3.7.** Pre Qualification Criteria:

- 3.7.1. Bidder should be the manufacturer / authorized dealer. Letter of Authorization from Original Equipment Manufacturer (OEM) specific to the tender should be enclosed in the format (Annexure II). Letter of authorization from OEM in any other format or not specific to this tender will not be accepted.
- 3.7.2. In the tender, either the Indian agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.
- 3.7.3. If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product.

- 3.7.4. The Bidder must have successfully executed / completed at least one single order of Rs. 18,49,000.00 or 2 orders each of Rs.11,56,000.00 or 3 orders each of Rs. 9,25,000.00 for similar products in last three years to any IIT/NIT/CFTIs/ any other Govt. organization. Copies of contracts / purchase orders and documentary evidence of successful execution / completion in support of Past Experience of Similar product along with names, address and contact details of clients shall be submitted in the format (Annexure III) with the bid for verification by the Buyer.
- 3.7.5. Only "Class–I and Class-II local supplier will be eligible to bid notified vide (DPIIT) Notification No. P- 45021/2/2017-PP (BE-II) dated 4th June, 2020. It is mandatory for bidders to quote items having local content more than 20%. Refer revised Public Procurement (Preference to Make in India), Order 2017 P-45021/2/2017-B.E-II dated 04.06.2020 issued by DPIIT, Ministry of Commerce and Industry, Govt. of India. (Submit duly filled Annexure IV for the same)

#### 3.8. Delivery and Documents:

Delivery of the goods should be made within a maximum period mentioned at the 'Schedule' from the date of placement of purchase order.

#### 3.9. Liquidated Damages (L.D):

If a supplier fails to execute the order in time as per the terms and conditions stipulated therein, it will be open to the purchaser to recover liquidated damages for delay in delivery and installation from the supplierat the rate 0.5% of the value of the order per week subject to a maximum of 10% of the total order value. The L.D charges can be increased in case of gross violation of the Purchase Order terms as decided by the Competent Authority of the Institute.

**3.10. Place of Jurisdiction**: The place of jurisdiction would be Jaipur (Rajasthan).

#### 3.11. Taxes and Duties

Suppliers shall be entirely responsible for all taxes, duties, license fees, octroi, road permits, etc., incurred until delivery of the contracted Goods to the Purchaser. However, GST in respect of the transaction between the Purchaser and the Supplier shall be payable extra, if so stipulated in the order.

#### **3.12. Payment**:

- 1) 100% payment shall be made by the Purchaser against delivery, inspection, successful installation, commissioning and acceptance of the equipment at MNIT Jaipur in good condition and to the entire satisfaction of the Purchaser and on production of unconditional performance bankguarantee as specified in bid document.
- 2) GST Deduction at source as per Order/ notification of the Govt.
- 3) GST No of MNIT Jaipur is **08AAAJM0351L1Z6**
- **3.13. Defective Equipment**: If any of the equipment supplied by the Supplier is found to be substandard, refurbished, un-merchantable or not in accordance with the description/specification or otherwise faulty, the committee will have the right to reject the equipment or its part. The prices of such equipment shall berefunded by the Supplier with 18% interest if such payments for such equipment have already been made. All damaged or unapproved goods shall be returned at suppliers cost and risk and the incidental expenses incurred thereon shall be recovered from the supplier. Defective part in equipment, if found before installation and/or during warranty period, shall be replaced within 7 days on receipt of the intimation from this office at the cost and risk of supplier including all other charges. In case supplier fails to replace above item as per above terms & conditions, MNIT Jaipur may consider "Banning" the supplier.

- **3.14. Genuine Pricing:** Vendor is to ensure that quoted price is not more than the price offered to any other customer in India to whom this particular item has been sold.
- **3.15. Exemption to Startups**: If the bidder is a Startup, the bidder shall be exempted from the requirement of "Bidder Turnover" criteria and "Experience Criteria". In case any bidder is seeking exemption from Turnover / Experience Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer.
- **3.16. Exemption to MSME:** If the bidder is a Micro or Small Enterprise as per latest definitions under MSME rules, the bidder shall be exempted from the requirement of "Bidder Turnover" criteria and "Experience Criteria". In case any bidder is seeking exemption from Turnover / Experience Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer.
- **3.17.** Price must be submitted in the prescribed format (**Annexure-V**)

Deputy Registrar Stores and Purchase MNIT Jaipur

#### **COMPLIANCE SHEET**

	Name of Item: Electrical work for badminton court near sports office				Supporting Page No.
S.No.	Instrument Specifications	Unit	Qty		
1	Supply of IK09 rating recessed/surface mounting heavy duty Vertical type sheet steel 1.6mm thick Distribution board as per PWD specification for electrical Works ISI marked conformingtoIS-13032&IS-8623/conforming to IEC61439-3 with provision of incomer suitable for MCCB and SP/TP MCB as outgoing, phosphatised, powder painted complete.  IP43-Double door with Provision of Incomer MCCB 63/ 100 /125 A Rating - 8 Way  (Make: Schneider (neo break), Siemens, HPL, GE, Standard, Indoasian(gold), Havell's, C & S, ABB (S270), L&T, Legrand (Ekinoxe / Lexic))	Each	2		
2	Supply of of IP40 quick make and quick break 4 pole current limiting Moulded case circuit breaker (MCCB) made of flame retardent & heat resistant material having following current rating, short circuit breaking capacity at 440/415V, 50Hz; O/L & S/C settings as per PWD specification for electrical Works, conforming to IS/IEC60947P-2:2003.  63 Amp, 18 kA,adjustable O/L & fixed S/C setting, Ics = 100 % Icu (Make: Schneider (neo break), Siemens, HPL, GE, Standard, Indoasian(gold), Havell's, C & S, ABB (S270), L&T, Legrand (Ekinoxe / Lexic))	Each	2		
3	Four pole Isolator - 63 A rating (Make: Schneider (neo break), Siemens, HPL, GE, Standard, Indoasian(gold), Havell's, C & S, ABB (S270), L&T, Legrand (Ekinoxe / Lexic))	Each	2		
4	Supply of 240/415V AC MCB with positive isolation of breaking capacity not less than 10KA (C tripping characteristic as per type of load and site requirement) 4KV impulse with stand voltage, as per PWD specification for electrical Works with ISI marked IS8828(1996)/conforming to IEC60898-12002, IEC60947-2.  Single pole MCB - 10 A rating (Make: Schneider (neo break), Siemens, HPL, GE, Standard, Indoasian(gold), Havell's, C & S, ABB (S270), L&T, Legrand (Ekinoxe / Lexic))	Each	48		
5	Supply of P.V.C. / XLPE insulated & P.V.C. sheathed Armoured aluminium cable of 1.1 KV grade as per PWD specificationfor electrical Works.  - 70.0 Sq. mm, 3.5 core, Armoured Cable (Make: Gloster, CCI, Finolex, Rallison, Ekta, Delton, Havell's, KEI, Paramount, Worldcab, Diatron, Unicab, Unistar, Orientcab, Empire, Orbit, Polycab, National)	Mtrs	120		

	Supplying of ISI marked P.V.C. insulated submersible cable as per PWD specification for electrical Works			
6	confirming to IS:694 and as per IS 8130 : 2013 of 1.1 kV grade.	3.6	640	
	2.5 Sq.mm 3 core Round copper cable.	Mtrs.	640	
	(Make RR Kabel , National, Finolex, Rallison, Delton, Eon			
	(Indoasian), KEI, Terexal, Plaza, Anchor, L & T,Standard,			
	Paramount, Empire, Orient Cab, Orbit, HPL, Unicab, Polycab,			
	Havell's, Diatron)			
7	Supply of Medium duty rigid PVC conduit - 25MM	Mtrs	270	
,	(Make: AKG, BEC, Precision, Polypack, Shrinath, Polycab,	Witis	270	
	Plaza, Dauphin, Richa)			
8	Supply of PVC nipple (Suitable for 25 mm PVC Conduit )		0.0	
0	(Make: AKG, BEC, Precision, Polypack, Shrinath, Polycab,	Nos.	90	
	Plaza, Dauphin, Richa)			
	Supply of following modular accessories made out of			
9	unbreakable and fire retardant poly carbonate with silver			
	contacts including making connections testing etc. as required.			
	(Make: Schneider electric- Opale, Legrand- Mylinc, Anchor -			
	Woods, ABB)			
9.1	16 A one way switch	Each	32	
9.2	16 A 6 pin shuttered socket	Each	32	
	Supply of following size mounting grid plates with cover plates as			
	per PWD specification for electrical Works, made from fire			
10	retardent UV established high performance engineering plastic	Each	16	
	suitable for all universal metal boxes for front installation &			
	removal direct fit type complete.			
	- 6 Module			
	(Make: Schneider electric- Opale, Legrand- Mylinc, Anchor - Woods, ABB)			
	( oods, 1155 )			
11	Supply of following size hot dip galvanized M.S.box of 18 SWG as	Each	16	
	per PWD specification for electrical Works - 6 Module			
10	Exhaust Fan (Double ball bearing, capacitor start single phase	Б 1	0	
12	metallic blade fresh air fan) -300 mm	Each	8	
	(Make Almonard, CG, Alstom, Khaitan, Usha, Havells)			
	M.C. Cootions, 40mm v. 40mm V. 2.6 mm (thilmses)			
13	M.S. Sections- 40mm x 40mm X 2.6 mm (thikness) (Make : APOLLO, KALINGA, SWASTIK)	mtrs	60	
	(Marc. 111 OLLO, RALINOTI, 5 WASTIN)			
	Supply of IK07 IP-66 protected high power LED flood light			
	system with Pressure diecast aluminium housing LM6/ADC12			
	material, toughened glass diffuser with suitable lenses on LED to			
	achieve various beam angles, 240 volt, 50Hz, of high power LED			
	lamps. Integrated driver must be potted & has a unique BISR			
	number shall be high efficiency having efficiency more than 85%			
14	and incompliance to BIS certified and T.C. certificate. The System	Each	32	
	level Luminaire efficacy>=120 lm/wt with High Power LEDs is to			
	be used. LED driver Input Voltage AC120 to 270VAC with High			
	voltage Cut off @>=300VAC and Auto resetting Safety. Input			
	Frequency 50Hz±3%, Power Factor>0.95, driver Efficiency>85%,			
	THD(I)<10%, drivercurrent<1000mA shown in LM79 report. driver should be Phase to phase protection of 440V for 4Hrs.			
	Electrical Connector Must be provided, Surge Protection			
	Electrical Confector which be provided, Surge Frotection			

Min>=4KV internal and10KV external, System life of 30000 Burning hours with 70% of Initial Lumens maintained, color Rendering Index>70 and CCT5700K±355K. Driver current<1000mA shown in LM79 report. Manufactures Word Mark/Name Engraved /Embossing/ Screen printing on die cast housing to allow trace ability/authenticity. Fixture shall be IS 10322 Complianced.  - High Power LED Flood Light - 400W (Make: CG, Bajaj, Wipro, Surya, Havell's, GE, Pierlite, Philips)  Supply of material for Plate Earthing as per PWD specification for electrical Works as per IS:3043 with copper Earth plate of size 600mm x 600mm x 3.0mm. 20 mm dia. G.I. 'B' class watering Pipe (10m), including all accessories like nut, bolts, reducer, nipple, wire meshed funnel, and Heavy duty weather proof polypropylene earth pit chamber with lockable Jam free lid suitable for safe working load 5000 Kg or more of size Top Dia. 225 to 260 mm, Bottom Dia 300 to 350 mm. and Height 250 to 300 mm. salt and coke/ charcoal as per norms.	Set	2		
Fabrication, Supply of outdoor type cubical type LT panel suitable for 415 V, 3 Phase, 4 Wire 50 Hz AC supply system having front surface area as per approved design. The panel should be fabricated in compartmentalized (preferably) design from CRCA sheet steel of 2.0 mm thick for frame work & covers (panel Structure), 1.6 mm thick for door, 3 mm thick for gland plates. Nine tank cleaning process from chemical treatment of the sheet for best finish & quality coating. Powder coating complete with 7 tank process for powder coating in approved shade. The panel having 1000 Amp capacity extensible type TPN aluminium alloy bus bars of high conductivity, DMC/ SMC bus bar supports.  Bottom base channel of MS section not less than 100 mm x 50 mm x 5 mm thick ((Hight 900 mm), fabrication shall be done in transportable sections, entire panel shall have a common GI earth bar of size 50 mm x 6 mm at the rear with 2 Nos. earth stud, solid connections from main bus bar to switch gears with required size of Al. bus bars and control wiring (with PVC insulated FRLS copper wire of required size, terminal, lugs, Tape, hardware & accessories), cable alleys, cable gland plates in two half, panel tested up to 6300A at 80 KA @690V, including providing following switch gears:-	Set	1		
Incoming				
01 No. 400 Amps, 36KA 4 Pole Microprocessor type MCCB with Ics=100%Icu with O/L, S/C & E/F protection complete, having on & off trip indication lamp and Spreader Link.  LED Multifunction Meter having V, A, F, PF, kW, kVA, kVAR, kWh, kVAh, kVARh, Runhours, On hours, Interrupts, RPM*, W Unbalance (V, A), Phase angle, THD, Neutral current, % Load, Maximum Demand (kW & kVA), MD reset with suitable Accessories- 1 Set with suitable CT's (10VA, 400/5A) and back up MCBs.				
	Burning hours with 70% of Initial Lumens maintained, color Rendering Index>70 and CCT5700K±355K. Driver current<1000mA shown in LM79 report. Manufactures Word Mark/Name Engraved /Embossing/ Screen printing on die cast housing to allow trace ability/authenticity. Fixture shall be IS 10322 Complianced.  - High Power LED Flood Light - 400W (Make: CG, Bajaj, Wipro, Surya, Havell's, GE, Pierlite, Philips)  Supply of material for Plate Earthing as per PWD specification for electrical Works as per IS:3043 with copper Earth plate of size 600mm x 600mm x 3.0mm. 20 mm dia. G.I. B' class watering Pipe (10m), including all accessories like nut, bolts, reducer, nipple, wire meshed funnel, and Heavy duty weather proof polypropylene earth pit chamber with lockable Jam free lid suitable for safe working load 5000 Kg or more of size Top Dia. 225 to 260 mm, Bottom Dia 300 to 350 mm. and Height 250 to 300 mm. salt and coke/ charcoal as per norms.  Fabrication, Supply of outdoor type cubical type LT panel suitable for 415 V, 3 Phase, 4 Wire 50 Hz AC supply system having front surface area as per approved design. The panel should be fabricated in compartmentalized (preferably) design from CRCA sheet steel of 2.0 mm thick for frame work & covers (panel Structure), 1.6 mm thick for door, 3 mm thick for gland plates. Nine tank cleaning process from chemical treatment of the sheet for best finish & quality coating. Powder coating complete with 7 tank process for powder coating in approved shade. The panel having 1000 Amp capacity extensible type TPN aluminium alloy bus bars of high conductivity, DMC/ SMC bus bar supports.  Bottom base channel of MS section not less than 100 mm x 50 mm x 5 mm thick (Hight 900 mm), fabrication shall be done in transportable sections, entire panel shall have a common GI earth bar of size 50 mm x 6 mm at the rear with 2 Nos. earth stud, solid connections from main bus bar to switch gears with required size of Al. bus bars and control wiring (with PVC insulated FRLS copper wire of required size, terminal, l	Burning hours with 70% of Initial Lumens maintained, color Rendering Index>70 and CCT5700K±355K. Driver current<1000mA shown in LM79 report. Manufactures Word Mark/Name Engraved /Embossing/ Screen printing on die cast housing to allow trace ability/authenticity. Fixture shall be IS 10322 Complianced.  High Power LED Flood Light - 400W (Make: CG, Bajaj, Wipro, Surya, Havell's, GE, Pierlite, Philips)  Supply of material for Plate Earthing as per PWD specification for electrical Works as per IS:3043 with copper Earth plate of size 600mm x 600mm x 3.0mm. 20 mm dia. G.I. 'B' class watering Pipe (10m), including all accessories like nut, bolts, reducer, nipple, wire meshed funnel, and Heavy duty weather proof polypropylene earth pit chamber with lockable Jam free lid suitable for safe working load 5000 Kg or more of size Top Dia. 225 to 260 mm, Bottom Dia 300 to 350 mm. and Height 250 to 300 mm. salt and coke/ charcoal as per norms.  Fabrication, Supply of outdoor type cubical type LT panel suitable for 415 V, 3 Phase, 4 Wire 50 Hz. AC supply system having front surface area as per approved design. The panel should be fabricated in compartmentalized (preferably) design from CRCA sheet steel of 2.0 mm thick for door, 3 mm thick for gland plates. Nine tank cleaning process from chemical treatment of the sheet for best finish & quality coating. Powder coating complete with 7 tank process for powder coating in approved shade. The panel having 1000 Amp capacity extensible type TPN aluminium alloy bus bars of high conductivity, DMC/ SMC bus bar supports.  Bottom base channel of MS section not less than 100 mm x 50 mm x 5 mm thick (High 900 mm), fabrication shall be done in transportable sections, entire panel shall have a common GI earth bar of size 50 mm x 6 mm at the rear with 2 Nos. earth stud, solid connections from main bus bar to switch gears with required size of Al. bus bars and control wiring (with PVC insulated FRLS copper wire of required size, terminal, lugs, Tape, hardware & accessories), cable alleys, cable g	Burning hours with 70% of Initial Lumens maintained, color Rendering Index>70 and CCT\$700K±355K. Driver current<1000mA shown in LM79 report. Mauntactures Word Mark/Name Engraved /Embossing/ Screen printing on die cast housing to allow trace ability/authenticity. Fixture shall be IS 10322 Complianced.  - High Power LED Flood Light - 400W (Make: CG, Bajaj, Wipro, Surya, Havell's, GE, Pierlite, Philips)  Supply of material for Plate Earthing as per PWD specification for electrical Works as per IS:3043 with copper Earth plate of size 600mm x 600mm x 3.0mm. 20 mm dia. G.I. B' class watering Pipe (10m), including all accessories like nut, bolts, reducer, nipple, wire meshed funnel, and Heavy duty weather proof polypropylene earth pit chamber with lockable Jam free lid suitable for safe working load 5000 Kg or more of size Top Dia. 225 to 260 mm, Bottom Dia 300 to 350 mm. and Height 250 to 300 mm. salt and coke/ charcoal as per norms.  Fabrication, Supply of outdoor type cubical type LT panel suitable for 415 V, 3 Phase, 4 Wire 50 Hz AC supply system having front surface area as per approved design. The panel should be fabricated in compartmentalized (preferably) design from CRCA sheet steel of 2.0 mm thick for frame work & covers (panel Structure), 1.6 mm thick for door, 3 mm thick for gland plates. Nine tank cleaning process from chemical treatment of the sheet for best finish & quality coating, Powder coating complete with 7 tank process for powder coating in approved shade. The panel having 1000 Amp capacity extensible type TPN aluminium alloy bus bars of high conductivity, DMC/ SMC bus bar supports.  Bottom base channel of MS section not less than 100 mm x 50 mm x 5 mm thick ((Hight 900 mm), fabrication shall be done in transportable sections, entire panel shall have a common GI earth bar of size 50 mm x 6 mm at the rear with 2 Nos. earth stud, solid connections from main bus bar to switch gears with required size of Al. bus bars and control wiring (with PVC insulated FRLS copper wire of required size, terminal,	Burning hours with 70% of Initial Lumens maintained, color Rendering Index-70 and CCT5700K±355K. Driver current-1000mA shown in LM79 report. Manufactures Word Mark/Name Engraved /Embossing/ Screen printing on die cast housing to allow trace ability/authenticity. Fixture shall be IS 10322 Complianced.  - High Power LED Flood Light - 400W (Make: CG, Bajaj, Wipro, Surya, Havell's, GE, Pierlite, Philips)  Supply of material for Plate Earthing as per PWD specification for electrical Works as per IS:3043 with copper Earth plate of size 600mm x 600mm x 3.0mm. 20 mm dia. G.I. 'B' class watering Pipe (10m), including all accessories like nut, bolts, reducer, nipple, wire mesched funnel, and Heavy duty weather proof polypropylene earth pit chamber with lockable Jam free lid suitable for safe working load 5000 Kg or more of size Top Dia. 225 to 260 mm. Bottom Dia 300 to 350 mm. and Height 250 to 300 mm. salt and coke/ charcoal as per norms.  Fabrication, Supply of outdoor type cubical type LT panel suitable for 415 V, 3 Phase, 4 Wire 50 Hz AC supply system having front surface area as per approved design. The panel should be fabricated in compartmentalized (preferably) design from CRCA sheet steel of 2.0 mm thick for frame work & covers (panel Structure). 1.6 mm thick for door, 3 mm thick for gland plates. Nine tank cleaning process from chemical treatment of the sheet for best finish & quality coating. Powder coating complete with 7 tank process for powder coating in approved shade. The panel having 1000 Amp capacity extensible type TPN aluminium alloy bus bars of high conductivity, DMC/ SMC bus bar supports.  Bottom base channel of MS section not less than 100 mm x 50 mm x 5 mm thick ((Hight 900 mm), fabrication shall be done in transportable sections, entire panel shall have a common GI carth bar of size 50 mm x 6 mm at the rear with 2 Nos. earth stud, solid connections from main bus bar to switch gears with required size of Al. bus bars and control wiring (with PVC insulated FRLS copper wire of required size, terminal

	circuits as per standard practice, auxiliary contact for positive interlocking of the breakers, Shunt Trip Coil 220 V AC as required.			
	Bus Bars - TPN aluminium bus bars of minimum 1000 Amp capacity with heat shrinkable coloured sleeves and including DMC/SMC bus bar Cross Section side supports and their spacing etc, for withstanding fault as per CPRI complete with wiring, terminals, lugs, PVC channel with accessories, GI Earth Bus (50x6MM).			
	Outgoing			
	5 Nos. 160 Amps, 25KA 4 Pole Thermal Magnetic Release type MCCB with Ics=100%Icu with O/L, S/C protection complete with spreader link.			
	4 Nos. 100 Amps, 18KA 4 Pole Thermal Magnetic Release type MCCB with Ics=100% Icu with O/L, S/C protection complete with spreader link.			
	2 Nos. 63 Amps, 18KA 4 Pole TM type MCCB with Ics=100%Icu with O/L, S/C protection complete with spreader link.			
	NOTE:- 1) MCCB's wherever specified shall have extendable rotary handle.			
	2) All MCCB's shall be provided with phase barriers, phase spreaders link complete as required.			
	3) The drawing of L.T. Panel to be got approved from			
	Department before fabrication. The panel may be tested in front ofrepresentative of the Institute before dispech. The			
	commissioning may be done by the manufacturer after installation.			
	4) Manufactured by : Seimens, Mile stone, coremetal craft Ltd., AdLac, Advance, Johns Electric, Neptune. Make of the Swithgears : ABB, Legrand, Schneider, Seimens, L&T			
17	Fabrication, Supply of outdoor type cubical type LT panel suitable for 415 V, 3 Phase, 4 Wire 50 Hz AC supply system having front surface area as per approved design. The panel should be fabricated in compartmentalized (preferably) design from CRCA sheet steel of 2.0 mm thick for frame work & covers (panel Structure), 1.6 mm thick for door, 3 mm thick for gland plates. Nine tank cleaning process from chemical treatment of the sheet for best finish & quality coating. Powder coating complete with 7 tank process for powder coating in approved shade. The panel having 1000 Amp capacity extensible type TPN aluminium alloy bus bars of high conductivity, DMC/ SMC bus bar supports.  Bottom base channel of MS section not less than 100 mm x 50 mm x 5 mm thick ((Hight 900 mm), fabrication shall be done in transportable sections, entire panel shall have a common GI earth bar of size 50 mm x 6 mm at the rear with 2 Nos. earth stud, solid connections from main bus bar to switch gears with required size of Al. bus bars and control wiring (with PVC insulated FRLS copper wire of required size, terminal, lugs, Tape, hardware & accessories), cable alleys, cable gland plates in two half, panel tested up to 6300A at 80 KA @690V, including providing following switch gears:-	Set	1	

	Incoming			
	01 No. 160 Amps, 36KA 4 Pole Microprocessor type MCCB with Ics=100%Icu with O/L, S/C & E/F protection complete,			
	having on & off trip indication lamp and Spreader Link.			
	LED Multifunction Meter having V, A, F, PF, kW, kVA, kVAR, kWh, kVAh, kVARh, Runhours, On hours, Interrupts, RPM*,			
	% Unbalance (V, A), Phase angle, THD, Neutral current, % Load, Maximum Demand (kW & kVA), MD reset with suitable			
	Accessories- 1 Set with suitable CT's (10VA, 400/5A) and back up			
	MCBs.			
	3 Nos. Phase indicating LED lamps with backup MCBs, breaker ON/OFF/Trip indication light, test terminal block set, MCB,			
	circuits as per standard practice, auxiliary contact for positive interlocking of the breakers, Shunt Trip Coil 220 V AC as			
	required.			
	Bus Bars - TPN aluminium bus bars of minimum 1000 Amp capacity with heat shrinkable coloured sleeves and including DMC/SMC bus bar Cross Section side supports and their spacing etc, for withstanding fault as per CPRI complete with wiring, terminals, lugs, PVC channel with accessories, GI Earth Bus (50x6MM).			
	Outgoing			
	4 Nos. 100 Amps, 18KA 4 Pole Thermal Magnetic Release type			
	MCCB with Ics=100%Icu with O/L, S/C protection complete with			
	spreader link.			
	2 Nos. 63 Amps, 18KA 4 Pole TM type MCCB with			
	Ics=100% Icu with O/L, S/C protection complete with spreader			
	link.			
	NOTE:- 1) MCCB's wherever specified shall have extendable rotary handle.			
	2) All MCCB's shall be provided with phase barriers, phase			
	spreaders link complete as required.			
	3) The drawing of L.T. Panel to be got approved from			
	Department before fabrication. The panel may be tested in front			
	ofrepresentative of the Institute before dispech. The			
	commissioning may be done by the manufacturer after installation.			
	4) Manufactured by: Seimens, Mile stone, coremetal craft Ltd., AdLac, Advance, Johns Electric, Neptune. Make of the Swithgears: ABB, Legrand, Schneider, Seimens, L&T			
18	Proof of Earnest Money Deposit			
19	Copy of GST Certificate and PAN			
20	Non Blacklisting of Supplier and Price reasonabilitydeclaratio	n		
21	Required past Experience	_		
22	Minimum average annual turnover of the bidder			
23	After Sale Service Certificate			
24	Manufacturer's Authorization Letter			
25	Declaration of Local Content			

Sig	gnature of Bidder	
me:		

Name:	
<b>Designation:</b>	

#### **MANUFACTURERS' AUTHORIZATION FORM**

[The bidder shall require the Manufacturer to fill in this Form in accordance with the Instructions indicated. This letter of authorization should be on the letter head of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer]

Date: [insert date (as day, month and year) of Bid Submission] Tender No.: [insert number from Invitation forBids]

To: [insert complete name and address of Purchaser] WHEREAS

We [insert complete name of Manufacturer], who are official manufacturers of [insert type of goods manufactured], having factories at [insert full address of Manufacturer's factories], do hereby authorize [insert complete name of Bidder] to submit a bid the purpose of which is to provide the following Goods, manufactured by us [insert name and or brief description of the Goods], and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with Clause 4.23 of the Terms and Conditions, with respect to the Goods offered by the above firm. Further We also ensure to support on regular basis with technology / product updates.

**Signed:** [insert signature(s) of authorized representative(s) of the Manufacturer] **Name:** [insert completename(s) of authorized representative(s) of the Manufacturer]

**Title**: [insert title]

Duly authorized to sign this Authorization on behalf of: [insert complete name of Bidder]

Dated on day of , [insert date of signing]

# Past Experience details

Name of the organization	Name of Contact Person	Contact No.	Copy of Purchase Oro (Page no.)
	1 CISUII		(1 age no.)

Signature of Bidder	
Name:	
Designation:	
<b>Organization Name:</b>	
Contact No.:	

## DECLARATION OF LOCAL CONTENT

### [For Local Content of Products, Services or Works]

(To be given on Company Letter Head – For tender value below Rs.10 Crores)
(To be given by Statutory Auditor/Cost Auditor/Cost Accountant/CA for tender value above Rs.10 Crores)

	Registrar IT Jaipur					
	ect: Declaration of Local Content nder reference No					
2. W	ountry of Origin of Goods being offered:  ith reference to Order No. P- 45021/2/2017-PP(BE-II) dated 16-09-2020 of DPIIT, Ministry of ommerce and Industry, Govt. of India, we fall under the following category of supplier (please tick the rrect category) for the items for which this tender has been floated and being bided.					
•	Class I local supplier – has local content equal to more than 50%. Local contents added at (name of location).					
•	Class II local supplier – has local content more than 20% but less than 50%. Local content sadded at(name of location).					
•	Non-local supplier – has local content less than or equal to 20%. Local contents added at (name of location).					
d R	We are solely responsible for the above mentioned declaration in respect of category of supplier. False declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which we may be debarred for up to 2 years as per Rule 151(iii) of the General Financial Rules along with such other actions as may be permissible under law.					
	Signature of Bidder/ Agent					
	Name:					
	Designation: Organization Name:					
	Contact No :					

#### Annexure V

#### PRICE BID FORMAT

1	2	3	4	5			6
1		3	7	Price (Rs.)		U	
				5 (A)	5 (B)	5 (C)	-
Sl. No.	Name Item with Description	Unit	Qty.	Unit	Price	GST	TotalItemprice
51. 110.	Tunic tem with Description	Oilit	Qıy.	Price	4 x 5(a)	payable	6=5(b)+5(c)
1	Supply of IK09 rating recessed/surface mounting heavy duty Vertical type sheet steel 1.6mm thick Distribution board as per PWD specification for electrical Works ISI marked conformingtoIS-13032&IS-8623/conforming to IEC61439-3 with provision of incomer suitable for MCCB and SP/TP MCB as outgoing, phosphatised, powder painted complete.  IP43-Double door with Provision of Incomer MCCB 63/ 100 /125 A Rating - 8 Way (Make: Schneider (neo break), Siemens, HPL, GE, Standard, Indoasian(gold), Havell's, C & S, ABB (S270), L&T, Legrand (Ekinoxe / Lexic))	Each	2			payaoto	3 3(0)13(0)
2	Supply of of IP40 quick make and quick break 4 pole current limiting Moulded case circuit breaker (MCCB) made of flame retardent & heat resistant material having following current rating, short circuit breaking capacity at 440/415V, 50Hz; O/L & S/C settings as per PWD specification for electrical Works, conforming to IS/IEC60947P-2:2003.  63 Amp, 18 kA,adjustable O/L & fixed S/C setting, Ics = 100 % Icu (Make: Schneider (neo break), Siemens, HPL, GE, Standard, Indoasian(gold), Havell's, C & S, ABB (S270), L&T, Legrand (Ekinoxe / Lexic))	Each	2				
3	Four pole Isolator - 63 A rating (Make: Schneider (neo break), Siemens, HPL, GE, Standard, Indoasian(gold), Havell's, C & S, ABB (S270), L&T, Legrand(Ekinoxe / Lexic))	Each	2				
4	Supply of 240/415V AC MCB with positive isolation of breaking capacity not less than10KA (C tripping characteristic as per type of load and site requirement) 4KV impulse with stand voltage, as per PWD specification for electrical Works with ISI marked IS8828(1996)/conforming to IEC60898-12002, IEC60947-2.  Single pole MCB - 10 A rating (Make: Schneider (neo break), Siemens, HPL, GE, Standard, Indoasian(gold), Havell's, C & S, ABB (S270), L&T, Legrand (Ekinoxe / Lexic))	Each	48				

5	Supply of P.V.C. / XLPE insulated & P.V.C. sheathed Armoured aluminium cable of 1.1 KV grade as per PWD specification for electrical Works.  - 70.0 Sq. mm, 3.5 core, Armoured Cable (Make: Gloster, CCI, Finolex, Rallison, Ekta, Delton, Havell's, KEI, Paramount, Worldcab, Diatron, Unicab, Unistar, Orientcab, Empire, Orbit, Polycab, National)	Mtrs	120		
6	Supplying of ISI marked P.V.C. insulated submersible cable as per PWD specification for electrical Works confirming to IS:694 and as per IS 8130: 2013 of 1.1 kV grade.  2.5 Sq.mm 3 core Round copper cable.  (Make RR Kabel, National, Finolex, Rallison, Delton, Eon (Indoasian), KEI, Terexal, Plaza, Anchor, L& T,Standard, Paramount, Empire, Orient Cab, Orbit, HPL, Unicab, Polycab, Havell's, Diatron)	Mtrs.	640		
7	Supply of Medium duty rigid PVC conduit - 25MM (Make: AKG, BEC, Precision, Polypack, Shrinath, Polycab, Plaza, Dauphin, Richa)	Mtrs	270		
8	Supply of PVC nipple (Suitable for 25 mm PVC Conduit ) (Make: AKG, BEC, Precision, Polypack, Shrinath, Polycab, Plaza, Dauphin, Richa)		90		
9	Supply of following modular accessories made out of unbreakable and fire retardant poly carbonate with silver contacts including making connections testing etc. as required.  (Make: Schneider electric- Opale, Legrand- Mylinc, Anchor - Woods, ABB)				
9.1	16 A one way switch	Each	32		
9.2	16 A 6 pin shuttered socket	Each	32		
10	Supply of following size mounting grid plates with cover plates as per PWD specification for electrical Works, made from fireretardent UV established high performance engineering plastic suitable for all universal metal boxes for front installation & removal direct fit type complete.  - 6 Module (Make: Schneider electric- Opale, Legrand- Mylinc, Anchor - Woods, ABB)	Each	16		
11	Supply of following size hot dip galvanized M.S.box of 18 SWG as per PWD specification for electrical Works - 6 Module	Each	16		
12	Exhaust Fan (Double ball bearing, capacitor start single phase metallic blade fresh air fan) <b>-300 mm</b> (Make Almonard, CG, Alstom, Khaitan, Usha, Havells)	Each	8		

13	M.S. Sections- 40mm x 40mm X 2.6 mm (thikness) (Make : APOLLO, KALINGA, SWASTIK)	mtrs	60		
14	Supply of IK07 IP-66 protected high power LED flood light system with Pressure diecast aluminium housing LM6/ADC12 material, toughened glass diffuser with suitable lenses on LED to achieve various beam angles, 240 volt, 50Hz, of high power LED lamps. Integrated driver must be potted & has a unique BISR number shall be high efficiency having efficiency more than 85% and incompliance to BIS certified and T.C. certificate. The System level Luminaire efficacy>=120 lm/wt with High Power LEDs is to be used. LED driver Input Voltage AC120 to 270VAC with High voltage Cut off @>=300VAC and Auto resetting Safety. Input Frequency 50Hz±3%, Power Factor>0.95, driver Efficiency>85%, THD(I)<10%, drivercurrent<1000mA shown inLM79 report. driver should be Phase to phase protection of 440V for 4Hrs. Electrical Connector Must be provided, Surge Protection Min>=4KV internal and10KV external, System life of 30000 Burning hours with 70% of Initial Lumens maintained, color Rendering Index>70 and CCT5700K±355K. Driver current<1000mA shown in LM79 report. Manufactures Word Mark/Name Engraved /Embossing/ Screen printing on die cast housing to allow trace ability/authenticity. Fixture shall be IS 10322 Complianced.  - High Power LED Flood Light - 400W (Make: CG, Bajaj, Wipro, Surya, Havell's, GE, Pierlite, Philips)	Each	32		
15	Supply of material for Plate Earthing as per PWD specification for electrical Works as per IS:3043 with copper Earth plate of size 600mm x 600mm x 3.0mm. 20 mm dia. G.I. 'B' class watering Pipe (10m), including all accessories like nut, bolts, reducer, nipple, wire meshed funnel, and Heavy duty weather proof polypropylene earth pit chamber with lockable Jam free lid suitable for safe working load 5000 Kg or more of size Top Dia. 225 to 260 mm, Bottom Dia 300 to 350 mm. and Height 250 to 300 mm. salt and coke/charcoal as per norms.	Set	2		
16	Fabrication, Supply of outdoor type cubical type LT panel suitable for 415 V, 3 Phase, 4 Wire 50 Hz AC supply system having front surface area as per approved design. The panel should be fabricated in compartmentalized (preferably) design from CRCA sheet steel of 2.0 mm thick for frame work & covers (panel Structure), 1.6 mm thick for door, 3 mm thick for gland plates. Nine tank cleaning process from chemical treatment of the sheet for best finish & quality coating. Powder coating complete with 7 tank process for powder coating in approved shade. The panel having 1000 Amp capacity extensible type TPN aluminium alloy bus bars of high conductivity, DMC/ SMC bus bar supports.  Bottom base channel of MS section not less than 100 mm x 50 mm x 5 mm thick ((Hight 900 mm), fabrication shall be done in transportable sections, entire panel shall have a common GI earth bar of size 50 mm x 6 mm at the rear with 2 Nos. earth stud, solid connections from main bus bar to switch gears with	Set	1		

6300A at 80 KA @690V, including providing following switch gears:-			
Incoming	_		
01 No. 400 Amps, 36KA 4 Pole Microprocessor type MCCB with Ics=100%Icu with O/L, S/C & E/F protection complete, having on & off trip indication lamp and Spreader Link.			
LED Multifunction Meter having V, A, F, PF, kW, kVA, kVAR, kWh, kVAh, kVARh, Runhours, On hours, Interrupts, RPM*,			
% Unbalance (V, A), Phase angle, THD, Neutral current, % Load, Maximum Demand (kW & kVA), MD reset with suitable Accessories- 1 Set with suitable CT's (10VA, 400/5A) and back up MCBs.			
3 Nos. Phase indicating LED lamps with backup MCBs, breaker ON/OFF/Trip indication light, test terminal block set, MCB ,circuits as per standard practice, auxiliary contact for positive interlocking of the breakers, Shunt Trip Coil 220 V AC as required.			
Bus Bars - TPN aluminium bus bars of minimum 1000 Amp capacity with heat shrinkable coloured sleeve and including DMC/SMC bus bar Cross Section side supports and their spacing etc, for withstanding faul as per CPRI complete with wiring, terminals, lugs, PVC channel with accessories, GI Earth Bus (50x6MM)	t		
Outgoing			
5 Nos. 160 Amps, 25KA 4 Pole Thermal Magnetic Release type MCCB with Ics=100%Icu with O/L, S/C protection complete with spreader link.			
4 Nos. 100 Amps, 18KA 4 Pole Thermal Magnetic Release type MCCB with Ics=100%Icu with O/L, S/C protection complete			
with spreader link.  2 Nos. 63 Amps, 18KA 4 Pole TM type MCCB with Ics=100% Icu with O/L, S/C protection complete with spreader link.			
NOTE:- 1) MCCB's wherever specified shall have extendable rotary handle.			
2) All MCCB's shall be provided with phase barriers, phase spreaders link complete as required.			
3) The drawing of L.T. Panel to be got approved from Department before fabrication. The panel may			
be tested in front ofrepresentative of the Institute before dispech. The commissioning may be done by the			
manufacturer after installation.	_		
4) Manufactured by : Seimens, Mile stone, coremetal craft Ltd., AdLac, Advance, Johns Electric, Neptune. Make of the Swithgears : ABB, Legrand, Schneider, Seimens, L&T			

17	Fabrication, Supply of outdoor type cubical type LT panel suitable for 415 V, 3 Phase, 4 Wire 50 Hz AC	~			
1 /	supply system having front surface area as per approved design. The panel should be fabricated in	Set	1		
	compartmentalized (preferably) design from CRCA sheet steel of 2.0 mm thick for frame work & covers				
	(panel Structure), 1.6 mm thick for door, 3 mm thick for gland plates. Nine tank cleaning process from				
	chemical treatment of the sheet for best finish & quality coating. Powder coating complete with 7 tank				
	process for powder coating in approved shade. The panel having 1000 Amp capacity extensible type TPN				
	aluminium alloy bus bars of high conductivity, DMC/ SMC bus bar supports.				
	Bottom base channel of MS section not less than 100 mm x 50 mm x 5 mm thick ((Hight 900 mm),				
	fabrication shall be done in transportable sections, entire panel shall have a common GI earth bar of size 50				
	mm x 6 mm at the rear with 2 Nos. earth stud, solid connections from main bus bar to switch gears with				
	required size of Al. bus bars and control wiring (with PVC insulated FRLS copper wire of required size,				
	terminal, lugs, Tape, hardware & accessories), cable alleys, cable gland plates in two half, panel tested up to				
	6300A at 80 KA @690V, including providing following switch gears:-				
	Incoming				
	01 No. 160 Amps, 36KA 4 Pole Microprocessor type MCCB with Ics=100%Icu with O/L, S/C & E/F				
	protection complete,				
	having on & off trip indication lamp and Spreader Link.				
	LED Multifunction Meter having V, A, F, PF, kW, kVA, kVAR, kWh, kVAh, kVARh, Runhours, On				
	hours, Interrupts, RPM*, % Unbalance (V, A), Phase angle, THD, Neutral current, % Load, Maximum Demand (kW & kVA), MD				
	reset with suitable Accessories - 1 Set with suitable CT's (10VA, 400/5A) and back up MCBs.  3 Nos. Phase indicating LED lamps with backup MCBs, breaker ON/OFF/Trip indication light, test				
	terminal block set, MCB,				
	circuits as per standard practice, auxiliary contact for positive interlocking of the breakers, Shunt Trip				
	Coil 220 V AC asrequired.				
	Bus Bars - TPN aluminium bus bars of minimum 1000 Amp capacity with heat shrinkable coloured				
	sleeves and including				
	DMC/SMC bus bar Cross Section side supports and their spacing etc, for withstanding fault as per CPRI				
	complete with wiring, terminals, lugs, PVC channel with accessories, GI Earth Bus (50x6MM).				
	Outgoing				
	4 Nos. 100 Amps, 18KA 4 Pole Thermal Magnetic Release type MCCB with Ics=100%Icu with O/L, S/C				
	protection complete with spreader link.				
	2 Nos. 63 Amps, 18KA 4 Pole TM type MCCB with Ics=100%Icu with O/L, S/C protection complete				
	with spreader link.				
	NOTE:- 1) MCCB's wherever specified shall have extendable rotary handle.				 

				Designation		
				Name:		
					Signatur	e of Bidder/ Agent
		(in words):			•••••	••••
Total bi	d price (for Indian components) in Indian Currency*:	(in figures) :				
			GRAND TOTAL			
			If any other cost (Please specify)			
	1		Total			
	Make of the Swithgears : ABB, Legrand, Schneider, Sein	nens, L&T	ivance, Johns Electric, Neptune.			
	manufacturer after installation. 4) Manufactured by : Seimens, Mile stone, coremetal cra	oft I td. AdI ao Ad	Ivones Johns Floatrie Mentune			
	be tested in front ofrepresentative of the Institute before	dispech. The com	nmissioning may be done by the			
	3) The drawing of L.T. Panel to be got approved from	n Department before	ore fabrication. The panel may			
	2) All MCCB's shall be provided with phase barriers, phase	ase spreaders link	complete as required.			