#### CENTRE OF PLASMA PHYSICS

#### INSTITUTE FOR PLASMA RESEARCH

Nazirakhat, Sonapur-782402, Kamrup (M), Assam (India)

#### NOTICE INVITING TENDER

E-mail: enquiry@cppipr.res.in TENDER NO.:CPP-IPR/TN/Elect.Work/2017-18/54

Phone No. 0361-2220010 TENDER DATE: 16/02/2018

Estimated Cost: Rs. 5,27,700.00/- (Rupees Five lakhs Twenty Seven thousand Seven hundred only)

Estimate prepared as per DSR (E) 2016 & APWD (E) 2013-14 Excluding GST

Sealed tender in standard bidding documents is invited from reputed (govt. registered) contractors and firms for the following work:

NIT No & Date Name of Work		Completion Time
CPP-IPR/ TN/Elect.Work/2017-18/54	Electrical Works for Central UPS	45 days from Receipt of
Dated: 16/02/2018	System at CPP-IPR, Sonapur	Work Order

Last Date for Issue of Tender: 13/03/2018

Last Date and Time of Submission of Tender: 13:00 hrs. of 20/03/2018

Date of Opening of the Tender: 14:30 hrs. of 20/03/2018

#### **Issue of Tender Document:**

Tender documents will be issued at Centre of Plasma Physics- Institute for Plasma Research, Nazirakhat, Sonapur-782402, Kamrup, Assam on any working day during office hour within the last date of issue of Tender.

The Centre Director, CPP-IPR reserves the right to accept or reject any offer in full or part thereof without assigning any reason thereof.

# CENTRE OF PLASMA PHYSICS INSTITUTE FOR PLASMARESEARCH

Nazirakhat, Sonapur-782 402, Kamrup (M), Assam (India)

## **QUOTATION DOCUMENT**

TN No: CPP-IPR/TN/Elect.Work/2017-18/54 Dated: 16/02/2018

<b>NAME OF THE WORK:</b> Electrical W Issued to	cal Works for Central UPS System at CPP-IPR, Sonapur					
Address	:					
Phone No	:					
Work value	:					
Last date for Submission	:					
Date of opening of Quotation	:					
Address for Quotation Inviting Authorit	y:	Centre Director Centre of Plasma Physics-Institute for Plasma Research, Nazirakhat, Sonapur-782 402 Kamrup (M), Assam				

# CENTRE OF PLASMA PHYSICS INSTITUTE FOR PLASMA RESEARCH

Nazirakhat, Sonapur-782 402, Kamrup (M), Assam (India)

## **TECHNICAL BID**

**FOR** 

**Electrical Works for Central UPS System at CPP-IPR, Sonapur** 

## **DETAILS OF THE BIDDER**

1.	Name of the Bidder With Address	:
2.	Details of the contact persons Along with name & Designation	:
3.	Telephone/ Mobile Numbers	:
4.	FAX numbers	:
5.	E-mail ID	:
6.	Website	:
7.	GST registration no. :	
8.	PAN No	:
9.	Experience in this field (Years)	:
10.	Any other details	:

#### **ELIGIBILITY AND TERMS & CONDITIONS**

The Quotation and any order resulting from this NIT shall be governed by our Conditions of contract, a copy of which is being provided with this document. The Bidder quoting this Quotation shall be deemed to have read and understood the same.

The bidder has to enclose signed copy of this document (ALL PAGES SIGNED) as well as the terms & conditions with his Quotation.

The bidder has to submit a tender fee of **Rs.500** in the form of demand draft from a Nationalized Schedule Bank issued in favour of "Institute for Plasma Research A/c CPP, payable at Sonapur (only applicable for bidders who have downloaded the tender). The tender fee should be submitted along with Quotation document or else will be rejected.

#### **CERTIFICATE**

I/We have gone through the eligibility criteria and terms & conditions carefully (Annexure I), and I/we hereby certify that

- 1. I/ We possess the minimum eligibility for participating in the Quotation process.
- 2. I/ We agree to the mentioned terms and conditions, a signed copy of which is being enclosed with this document
- 3. Strike out whichever is not applicable
  - a. We have provided our own terms & conditions.
  - b. We will not accept the work order if our conditions are not agreed upon.
  - c. Even if our conditions are not agreed upon, we are ready to work according to your terms & conditions.
  - d. We have accepted your terms & conditions.

#### **ANNEXURE - I**

#### **ELIGIBILITY CRITERIA**

The bidder/contractor should satisfy the following conditions:

- (1) The Firm shall be a reputed organization with sound technical backing, registered and approved with any of the Central / State Government Departments, Railway, Defense, PSUs, etc. and providing satisfactory services. (please enclose up to date registration certificate)
- (2) The vendor/contractor/organization and any of its sister concern has not been banned/ blacklisted /debarred from working with any Central Govt./PSU / State Govt. / Any other Govt. Agencies/ Any other Institute or organization of National or International Repute for the last three years.
- (3) Bidders must have executed at least one (01) work with a contract value of Rs. 5 lakhs or above of similar kind in any of the previous three (03) years as on 31/01/2018.
- (4) The firm should be a profit making organization for the last three (03) financial years ending 31/03/2017.
- (5) Should submit upto date Labour license certificate.
- (6) Should submit GST registration certificate.

#### **TERMS & CONDITIONS**

- The quotation and any order resulting from this NIT shall be governed by our Conditions of contract and contractor quoting this NIT shall be deemed to have read and understood the same in to. Non-acceptance of these terms & conditions may lead to rejection of the bid.
   Single Bid: The quotation will have to be submitted in single bid, in a properly sealed cover. Quotation number, Date and subject ("QUOTATION FOR
- number, Date and subject ("QUOTATION FOR \_\_\_\_\_\_\_\_\_") has to be mentioned over the envelope along with the bidder's full postal address, failing which the bid will not be considered. The Quotation should bear a court fee stamp of Rs. 8.25 (Rupees eight and twenty five paisa) only (non-refundable) to be affixed with the Quotation without which no Quotation will be considered for acceptance.
- 3. Late and delayed Quotations will not be considered, irrespective of the cause of the delay.
- 4. In case, any <u>unscheduled</u> holiday occurs on prescribed closing date the next working day shall be the prescribed date of closing.
- 5. **Earnest Money Deposit**: EMD of **Rs. 10600.00/-**in the form of demand draft from a Nationalized Schedule Bank issued in favour of "**Institute for Plasma Research**" **A/c CPP**, payable at Sonapur. The EMD should be submitted along with Quotation document or else will be rejected.
- 6. Rates: Rates quoted for all items should be FOR CPP-IPR Nazirakhat, Sonapur, on DOOR DELIVERY basis.
  - a. Prices are required to be quoted according to the units indicated in the NIT. When Quotations are given in terms of units other than those specified in our document, relationship between the two sets of units must be furnished.
  - b. Wherever options are specified in the NIT documents, CPP-IPR reserves the right to accept any option/s irrespective of whether all the contractors/bidders have quoted for all the options or not. The decision of CPP-IPR in this regard will be final.
- 7. The bid for works shall remain open for acceptance for a period of **90 days** from the date of opening of bids.
- 8. The Contractor whose tender is accepted will be required to furnish "Performance Bank Guarantee of 5%" (Five Percent) of the tendered amount within 10 days from issue of "Letter of Acceptance".
- 9. **Security Deposit:** On acceptance of tender, the Contractor shall at the option of the Purchaser and within the period specified by him, submit a Bank Guarantee from SBI or any one of the nationalized banks or reputed private banks, viz. AXIS Bank, ICICI Bank, IDBI Bank and HDFC Bank towards Security Deposit not exceeding 10% (ten percent) of the tendered value of the contract/purchase order valid till acceptance of the material, as the Purchaser shall specify. If the Contractor is called upon by the Purchaser to submit Security Deposit and the contractor fails to

provide the same within the period specified such failure shall constitute a breach of the Contract and the Purchaser shall be entitled to make other arrangements for the repurchase of the stores contracted for at the risk and expenses of the Contractor and/or recover from the Contractor damages arising from such cancellation. No claim shall lie against the purchaser either in respect of interest if any due on Security Deposit or depreciation in value. The security deposit should be valid for six months beyond the date of completion of all contractual obligations. EMD shall be refunded to the successful bidder on receipt of security deposit. The Security Deposit shall be held by CPP-IPR as security for the due performance of the CONTRACTOR's obligations under the Contract. The security deposit shall be refunded to the contractor within six months from the date of expiry/termination of the contract.

- 10. **Genuine Pricing**: The contractor is to ensure that quoted price is not more than the price offered to any other customer in India.
- 11. **Measurement:** Various dimensions of the works executed will be measured jointly in presence of contractor and engineer in charge of CPP-IPR. Based upon these field data quantities for payment will be calculated. Dimensions will be measured correct up to a centimeter.
- 12. **Rate:** The rate shall include the cost of all materials, transportation, forest royalty (weather applicable) and labour/machine involved etc. in all the operations described above.
- 13. **Payment**: The Payment will be made by a crossed account payee cheque normally within 30 days from the date of completion of the work or receipt of invoice, whichever is later. Wherever, advance payment is involved, it will be paid only against Bank Guarantee from Nationalized/Scheduled Bank. No correspondence will be entertained within 30 days from the date of submission of final bill for payment.
- 14. **Guarantee:** The workmanship offered by the bidder should be guaranteed for a minimum period of 6 (six) months, against defective materials, design, workmanship. For defects noticed during the Guarantee period, replacement/rectification should be arranged free of cost by the contractor within a reasonable period of such notification.
- 15. **Time allowed:** The time allowed for completion of the work will be 45(forty five) days from the receipt of formal work order. However more completion time may be allowed depending upon the work schedule to be decided by the authorities of the centre.
- 16. Where counter terms and conditions have been offered by the contractor the same shall not be deemed to have been accepted by us, unless our specific written acceptance thereof is obtained.
- 17. The bidders must ensure that their offers are strictly as per our specifications.
- 18. Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the constructions.
- 19. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed.
- 20. The bidder shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other service required for executing the work unless otherwise specifically provided for in the contract document.
- 21. Submission of a bid by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done, local conditions and other factors having a bearing on the execution of the work.
- 22. The acceptance of a quotation will rest with the Center Director, CPP-IPR who does not bind himself to accept the lowest bid and reserves himself the authority to reject any or all of the bids received, without assigning any reason. Center Director, CPP-IPR further reserves the right to accept any part of the bid and the bidder shall be bound to perform the same at the rates quoted.
- 23. On acceptance of the bid, the name of the accredited representative(s) of the contractor who would be responsible for taking instructions from the Engineer-in-charge shall be communicated to the Engineer-in-charge.

24. **GOODS AND SERVICES TAX** where legally liveable will be admitted and reimbursed at the rate applicable during original delivery period. When GOODS AND SERVICE TAX is claimed as extra by the vendor in general, the following certificates should be submitted by the vendor to the Paying Authority on the bills itself:-

Certified that the GOODS AND SERVICES TAX charged has not been exempted under the GST Act or the rules made there-under and the amount charged on account of GST are not more than what is payable under the provision of relevant ACT or the rules there-under.

Certified further that we are being assessed to GST and also that where there are statutory exemptions under the Relevant Act/Law of the State Government concerned, we have availed ourselves of it and certified non-availability of such a provision for GST wherever claimed.

Certified further in respect of amount claimed into the bill no claim is pending for refund/or admissible. Certified that in the event of our getting refund in whole or in part of the element of GOODS AND SERVICES TAX claimed from Government, we shall pass on the benefit to the Purchaser by remitting to Government the amount equivalent to the amount of refund obtained by us.

Certified further that we (our Branch or agent)	(address) are registered in the state of
under GST Regn. No	
	(Stamp & Signature of the Vendor)

The vendor shall solely be responsible for declaration of Goods and Service Tax made in his invoice and shall indemnify the purchaser from any claim or its liability from concerned authorities at any stage.

Certificate with each bill to the effect that no refund has been obtained in respect of the reimbursement of GST made to vendor during three months immediately preceding the date of the claim covered by the relevant bill. AN UNDERTAKING to the effect that in case any refund of GST is granted to the vendor by concerned authorities in respect of stores supplied under the contract, they shall pass on the credit to the purchaser immediately along with a certificate from their Director/Manager/Proprietor/Accountant to the effect that the credit so passed on relates to the GST originally paid for the stores supplied under the contract. In case of their failure to do so within 10 days of the issue of the refund orders to them by the Authorities, the purchaser would be empowered to deduct a sum equivalent to the amount refunded by the authorities without any further reference to the vendor, from any of their outstanding bills against this or any other pending Government Contracts and that no dispute on this account would be raised by the vendor.

Vendor should provide GSTIN Certificate along with HSN code of the tendered item along with their quotation.

25. No Engineer of Gazetted rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India/ State Governments allowed to work as a contractor for a period of two years of his retirement from Government Services, without the previous permission of the Government of India/State Government. This contract is liable to be cancelled if either the contractor or any of his employees is found at any time to be such a person who had not obtained the

- permission of the Government of India/State Government as aforesaid before submission of the bid or engagement in the contractor's service.
- 26. Signed copy of this document as well as the Quotation paper being provided to the bidder (ALL PAGES TO BE SIGNED) should be enclosed with each Quotation as a token of acceptance for the terms and conditions specified in the quotation.
- 27. Canvassing in connection with the Quotation is strictly prohibited and the Quotation submitted by the contractor who resorts to such canvassing will be liable to rejection.
- 28. The contractor must produce income tax clearance certificate on the latest form as prescribed by the Ministry of Finance, Govt of India. The contractor should submit Xerox copy of PAN card.
- 29. Rates quoted by the bidder/contractor in item rate shall be accurately filled in so that there is no discrepancy in the rates written in figures and in words- However, if a discrepancy is found, the rates which correspond with the amount worked out by the contractor shall be taken as correct.
- 30. If the amount of an item is not worked out by the bidder/contractor, or it does not correspond with the rate written either in figures or in words, then the rates quoted by bidder in words shall be taken as correct.
- 31. Where the rate quoted by the bidder in figures and in words tally, but the amount is not worked out correctly, the rate quoted by the contractor will be taken as correct, not the amount.
- 32. The bidders should quote in figures as well as in words the rate and amount Quoted by them. The amount of each item should be worked out and the requisite total be given. All corrections shall be attested with date and signature of the bidders.
- 33. When a bidder signs a Quotation in an Indian Language, the total amount Quoted should also be written in the same language. In the case of illiterate contractors, the rates or the amounts Quoted should be attested by a witness.
- 34. Any changes in works can be made by Centre Director or Engineer-in-Charge as per requirement and the contractor will bind himself to do the job.
- 35. The contractor will have to follow sequential work program in consultation with the Engineer-in-charge.
- 36. Proper safety precautions to be taken during execution of work.
- 37. Any damage of existing facilities that may occur during execution will be considered as contractors fault and will be rectified free of cost by the contractor.
- 38. All works shall have to be carried out by the contractor as per C.P.W.D general specification.
- 39. No compensation will be paid by Client for loss and damage to contractors materials during execution.
- 40. Suitable water supply and electricity arrangement for staff and labour as well as for the work to be provided by the contractor at his own cost.
- 41. The contractor shall comply with all the provisions of the Minimum wages act, 1984, Contract Labour (R&A) Act 1970 the rules framed there under and other labour laws affecting contract labour that may be brought in to force time to time.
- 42. The Engineer-in-Charge may instruct the contractor to dismiss or remove from the site of work any person or persons employed by the contractor who may be incompetent or misconduct himself and the contractor should follow such instruction.
- 43. **Delay in delivery**: The date of delivery is an essential part of this tender. The supply of the item shall have to be completed within the scheduled time mentioned in the purchase order/contract. The tenderer failing to do so shall entitle the purchaser to recover Liquidated Damages at the rate of 0.5% (half percent) of the total order value for the delay of each week in the scheduled time of supply, subject to a maximum of 5% (five percent) of total order value.

# CENTRE OF PLASMA PHYSICS INSTITUTE FOR PLASMA RESEARCH

Nazirakhat, Sonapur-782 402, Kamrup (M), Assam (India)

## TECHNICAL SPECIFICATION AND PRICE BID

FOR

**Electrical Works for Central UPS System at CPP-IPR, Sonapur** 

# ANNEXURE - II

## TECHNICAL SPECIFICATIONS & PRICE BID

## QUALITY AND SAFETY STANDARDS (ELECTRICAL)

The following specification are to be followed for Quality & safety standard mentioned in all cases. The list of brands is only indicative and individual item that do not conform to the Quality and Safety standards mentioned will not be accepted, even if they are from any one of the brands mentioned. All the fittings etc. should be from the same brand as far as possible to maintain the aesthetic.

Sl	Item	Quality	Safety	Brands
		Standard	Standard	
1	BUSBAR Chamber	IEC-60439/IS-8623	IP31	Havells, Legrand, L&T,
	System	IEC-60529/IS-2147		Anchor, ABB, MK Schneider, MG, Hager, Finolex, plasto-plast,
2	RCCB, 30 mA	IS 12640 Part 1/	IP20	CRABTREE, Philips
		IEC 61008-1		
		EN 61008 - 1		
3	Distribution Boxes	ICE 61439-3	IP43	
		IS:13032 /IS:8623		
4	MCB	IS / IEC 60898 - 1,	IP20	
		IEC 60947 - 2		
5	RCBO,30 mA	IS 12640 : Part 2	IP20	
		IEC 61009-1		
		EN: 61009-1		
6	Wires, FRLS	IS:694, RoHS, FRLS, anti-termite		
		and anti-rodent		
7	Switches	As per	> IP65 as per	
		BS EN 60669-1:2000	BS EN 60529	
8	Light	Halogen free, long life (~ 20000 hr )		
9	Casing-Caping	ISI 14927 part-2		

# PRICE BID

# A. Wiring for UPS Desktop points in Administrative building, Main Laboratory building, PPA Laboratory and Helicon Laboratory (As per APWD, SOR (E)13-14, DSR 2016)

Sl no	Specification	Unit	Quantity	Rate in RS (Both in fig & words)	Amount in  Rs (Both in fig. & words)
	Wiring for circuit/ sub-main wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.				
1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	Mtr	1180		
	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	Mtr	142		
	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	Mtr	144		
	2 X 10 sq. mm + 1 X 6 sq. mm earth wire	Mtr	50		
	Supplying and fixing following modular switch/ socket on the existing modular plate& switch box including connections but excluding modular plate etc. as required.				
2	5/6 A switch	Each	178		
	15/16 A switch	Each	2		
	3 pin 5/6 A socket outlet	Each	178		
	6 pin 15/16 A socket outlet	Each	2		
3	Supplying and fixing following size/modules, Gl box alongwith modular base & cover plate for modular switches in recess etc. as required.				
	6 Module(200mmX75mm)	Each	89		
4	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without				

Specification	Unit	Quantity	Rate in RS (Both in fig & words)	Amount in Rs (Both in fig. & words)
MCB/RCCB/Isolator)				
8 Way	Each	9		
12 Way	Each	4		
Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required				
SINGLE POLE 6 A. to 32 A. ratings , SP MCB, "C" curve, 10 kA breaking capacity	Each	95		
Single pole and neutral 6 A. to 32 A. ratings , SPN MCB, "C" curve, 10 kA breaking capacity	Each	15		
		Total		
			%	
	MCB/RCCB/Isolator)  8 Way  12 Way  Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required  SINGLE POLE 6 A. to 32 A. ratings , SP MCB, "C" curve, 10 kA breaking capacity  Single pole and neutral 6 A. to 32 A. ratings , SPN MCB, "C" curve, 10 kA	MCB/RCCB/Isolator)  8 Way  Each  12 Way  Each  Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required  SINGLE POLE 6 A. to 32 A. ratings , SP MCB, "C" curve, 10 kA breaking capacity  Single pole and neutral 6 A. to 32 A. ratings , SPN MCB, "C" curve, 10 kA Each	MCB/RCCB/Isolator)  8 Way  Each  9  12 Way  Each  4  Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required  SINGLE POLE 6 A. to 32 A. ratings , SP MCB, "C" curve, 10 kA breaking capacity  Single pole and neutral 6 A. to 32 A. ratings , SPN MCB, "C" curve, 10 kA breaking capacity  Each  15	Specification  MCB/RCCB/Isolator)  8 Way  Each 9  12 Way  Each 4  Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required  SINGLE POLE 6 A. to 32 A. ratings, SP MCB, "C" curve, 10 kA breaking capacity  Single pole and neutral 6 A. to 32 A. ratings , SPN MCB, "C" curve, 10 kA breaking capacity  Total  GST  (Both in fig & words)  (Both in fig & words)

# **B.** Wiring for Power from Mains to Battery Room:

Sl no	Specification	Unit	Quantity	Rate in RS (Both in fig & words)	Amount in Rs (Both in fig. & words)
1	Supplying with fitting and fixing panel mounting open execution 25KA 415V 50Hz 4P MCCB (Ics=Icu, adjustable Ir setting 0.7) without enclosure) of the following capacity complete with making necessary connection as approved, specified and directed by the deptt.				
	100A	Each	2		
2	Supplying with fitting and fixing panel mounting open execution 25 KA 415V 50Hz 3P MCCB (Ics=Icu, adjustable Ir setting 0.7) without enclosure of the following capacity complete with				

SI no	Specification	Unit	Quantity	Rate in RS (Both in fig & words)	Amount in Rs (Both in fig. & words)
	making necessary connection as approved by the Deptt. as specified and directed by the deptt.				
	100A	Each	1		
3	Supplying with fitting and fixing panel mounting open execution 35/36KA 415V 50Hz 3P MCCB (Ics=Icu, adjustable Irsetting 0.7) without enclosure) of the following capacity complete with making necessary connection as approved, specified and directed by the deptt.				
	250A	Each	1		
4	Supplying with fitting and fixing sheet steel, phosphatised, powder painted Single door surface mounting MCCB enclosure of the following rating MCCB fitted on wall with grouting nuts & bolts as reqd. complete with making necessary connection as approved, specified and directed by the deptt.				
	for 100A 3P/4P MCCB	Each	3		
	for 250A 3P/4P MCCB	Each	1		
5	Supplying including fitting and fixing bus bar chamber ( HPL/ GECO / or equivalent make) with 4 strips bus bar of length 450/600/900/1000 mm made of aluminium alloy or wrought aluminium suitable for 300 amp capacity complete with all accessories including connection etc. as required complete	Each	4		
6	Supplying with fitting and fixing 30/100/300mA sensitivity 240/415V 50Hz DP RCCB of the following capacity complete with making necessary connection as approved, specified and directed by the deptt.				
	25A	Each	2		
	40A	Each	1		

SI no	Specification	Unit	Quantity	Rate in RS (Both in fig & words)	Amount in Rs (Both in fig. & words)
7	Supplying with fitting and fixing sheet steel, phosphatised, powder painted dust & vermin proof Double door IP-43 surface mounting SPN MCB DB incorporated with bas-bar, Neutral link, Earth bar and din rail etc fitted on wall with grouting nuts & bolts as reqd. complete with making necessary connection as approved, specified and directed by the deptt.				
	8 way SPN double door	Each	2		
8	Supply and laying of following size PVC/XLPE insulated and PVC sheathed 1.1 KV G Solid Aluminium conductor up to 10 sq mm balance stranded conductor, XLPE Insulated, cores laid up, PVC tape inner sheathed, Armour (Aluminium for single core up to 70 sq mm balance Aluminium strip, Galvanised for cables up to 2x10 sq mm.3x10 sq mm,4x6 sq mm balance all galvanised steel strip), extruded PVC Type ST2 sheathed, 650/1100V grade as per IS 7908(Part 1) 1988 armoured U.G. cable U.G. cable laid in ground/partially in air (as required for termination over ground including excavation of cable trench up to depth of 75cm, refilling, protective brick covering, Sand cushioning etc complete handling of surplus spoil, debris et to proper place as specified and directed by the deptt. (Nicco/ Havells/RPG/CCI/Polycab/Gloster/ Finolex make)				
	3 & 1/2 Core A2XFY				
	35.00 Sq. mm.3 & 1/2 Core armoured U.G. cable	Mtr.	50		
	50.00 Sq. mm.3 & 1/2 Core armoured U.G. cable	Mtr.	50		
9	Supply with installation & commissioning of readymade maintenance free CPRI approved chemical earthing system with 50 mm dia. 3.00 Metres length corrosion free dual pipe technology G.I. CHEMRODE ELECTRODE complete with RESLOW Grounding Minerals (25)	Each	2		

Sl no	Specification	Unit	Quantity	Rate in RS (Both in fig & words)	Amount in Rs (Both in fig. & words)
	K and Advance Earth Pit cover (PV including excavation of earth pit and construction brick earth chamber including plastering both inner & outer surface of brick wall as specified and directed by the deptt.				
10	Supplying & laying of following size (25 x 4 mm) Copper strips drawn on surface from earth electrode to Electrical switch gears, machineries etc complete with supply of Brass nuts & bolts, screws etc including riveting, soldering & making necessary connection as approved, specified and directed by the deptt.	Mtr.	18		
11	Automatic Change over Switch, 63A	Each	1		
			Total		
			GST	%	
			Total (B)		

Sl	Specification	Amount in Rs
no		(Both in fig. & words)
<u>1</u>	Wiring for UPS Desktop points in Administrative building, Main	
	Wiring for UPS Desktop points in Administrative building, Main Laboratory building, PPA Laboratory and Helicon Laboratory	
<u>2</u>	Wiring for Power from Mains to Battery Room	
	Total C=(A+B)	
	Amount (In Words)	

#### NOTE:

- (1) The contractor must fill every column of the price bid. Quantities mentioned above are liable to change up to some extent and the contractor is bound to do the same as instructed.
- (2) The bidders are advised to visit the site before submission of their bids.
- (3) All items used in the process have to be of premium/ best quality available in the market.
- (4) All work to be executed as per standard, drawing and specification.
- (5) Test certificate of materials (if applicable) to be submitted.
- (6) Quality control to be done with proper record and documentation. The same will be submitted in the time of billing. Bill will not be released in absence of the same (if applicable).
- (7) Proper procedures to be followed as directed by the Engineer-in-Charge.