OFFICE OF THE PROJECT MANAGER, HIMSR PROJECT Jamia Hamdard

New Delhi-110062

Short Term NIT

17/04/2017

Sealed item rate quotations are invited for the following job. The agency having sufficient experience of such works and having TIN/WCT may only apply.

<u>Name of Work:</u> Supplying, Assembling, Erecting, Testing & Commissioning of LT Distribution panels, Refaida Block, Ground and First Floor.

Site / Location of Work: Rufaid Block, HIMSR Project, Jamia Hamdard New Delhi-110062.

Time Period for completion of work: - 15 days from the issue of the work order.

EMD: Rs.15,000.00 (DD should be made in favour of Jamia Hamdard)

The BOQ may be collected from the office of the A.E. (Electrical) from 17-04-2017 to 30-04-2017 from 9:00am to 3:00pm or downloaded from the website of Jamia Hamdard and the sealed rates be deposited in the tender box kept at Office of the Medical Superintendent, HAHC Hospital by 3:00pm on 30-04-2017. Tenders will be opened on 01-05-2017 at 3:00pm in the Office of the Medical Superintendent, HAHC Hospital. Bidders are also requested to be present at the time of opening of Tenders.

The bids may be submitted by the following categories of parties.

Contractors should have executed similar nature of work in prestigious institutional buildings, Universities, Hospitals etc, and produce credentials in support thereof.

The quantities given in the schedule are tentative and the actual quantities to be executed may vary (+ or -). The total works have to be executed within 15 days from award of work. Therefore, contractors with large work force/resources need only apply. Delay in execution of works shall attach liquidated damage charges as per CPWD condition of contract. The contractors may also visit the site /office for any clarification before submission of their tender.

Last date of submission of bid	:	30.04. 2017	(up to 3pm)
Date of opening of bids	:	01.05.2017	(at 3:00 pm)
Time for completion	:	15days	

Requirements to be fulfilled:

- i. No subletting or subcontracting of the work will be permitted.
- ii. The Company shall give an undertaking that they shall not employ minor workman.
- iii. The Bidder has not been black listed by any of the Govt. Depts./Govt. Institutions etc. during last three years.
- 1. The EMD in the form of Demand Draft infavour of "Jamia Hamdard" should be submitted along with the tender.
- 2. The tenderers shall attach copy of PAN Card.
- 3. Duly sealed tenders shall be dropped in the tender box placed at the Office of the Medical Superintendent, HAHC Hospital.
- 4. The conditional bids shall not be considered under any circumstances and rejected without any notice or assigning any reasons therefore.
- 5. All bids once submitted shall be the property of Jamia Hamdard, and bidders will lay no claim whatsoever on the same.
- 6. Jamia Hamdard, reserves the right to reject any or all the tenders in full or in part without assigning any reasons whatsoever, and the decision of the University in this regard will be binding on all the bidders. Tenderers not complying with any of the provisions stated in this tender document are liable to be rejected. Jamia Hamdard, reserves the right to accept or reject any or all tenders without assigning any reason and does not bind himself to accept the lowest tender.
- 7. No T & P shall be supplied by the University.
- 8. Taxes as applicable shall be deducted from the contractor bill as per Govt. of India rules.
- 9. Jamia Hamdard welfare fund charges will be deducted@0.25% of the amount of total billed amount.
- 10. Security shall be deducted @ 5 % of value of work done. The same shall be released after the defect and liability period of one year.
- The time allowed for completion of work shall be 15 days which shall be reckoned from 3rd (third) day from the date of issue of work order.

- 12. Time allowed for the work shall be strictly followed otherwise the contractor shall be liable to pay compensation @ 1.5% of the tendered value of the work per week of delay on the part of the contractor. The decision of Engineer-in-charge about the delay shall be final and binding.
- 13. No escalation in any form either of material or labour shall be payable by the University. The bidder shall also absorb any statutory escalation/increase of wages /material cost if any, anticipated during the contract tenure, including extended tenure.
- 14. All material brought at site shall be as per list of specification & schedule of quantities (shall be strictly followed) and shall be got entered in the site book and approved by Engineer-Incharge before being used.
- 15. Mandatory tests have to be carried out as asked for by the Engineer-In-Charge. Nothing extra shall be paid for such purpose.
- 16. Any violation of instruction/agreement or suppression of facts will attract cancellation of agreement without any reference or any notice period.
- 17. The Engineer- in-Charge without prejudice to any other right or remedy against the contractor which have either accrued or accrue thereafter to the Government, by a notice in writing to take the part work / part incomplete work of any item(s) out of his hands and shall have powers to take possession of the site and any materials, constructional plant, implements, stores, etc., thereon; and/or Carry out the part work / part incomplete work of any item(s) by any means at the risk and cost of the contractor.
- 18. The tenderer shall be solely responsible for any accident/medical/health related liability/compensation for the personnel deployed by it at Jamia Hamdard. The Jamia Hamdard shall have no liability in this regard.
- 19. The personnel provided by the agency will not claim to become the employees of Jamia Hamdard and there will be no Employee and Employer relationship between the personnel engaged by the Agency and Jamia Hamdard.
- 20. No tent or hut shall be allowed to be put up for workers to stay within the campus. The contractor is deemed to have inspected the site and thoroughly acquainted himself with the site conditions, availability of storage space for materials etc.

- 21. The tenderer should take extra precaution to ensure that there is absolutely no damage to the surrounding structure/existing system etc. If any damage made by agency, it will be got repaired/replaced/rectified by the agency itself at no extra cost.
- 22. The tenderer should make special note of the fact that the Renovation/remodelling/repair works are to be carried out in the existing functional building and the agency will adopt necessary barricading / covering of the area under execution with no / least disturbance to adjoining / surrounding areas of the building under use for teaching / research, etc. The tenderer shall depute their own security staff for watch and ward of their materials supplied/ installed at site till the final handing over of the complete work and temporary lockable shed/Almirah etc. shall be arranged by contractor at his own risk and cost. No accommodation/ staff/ lockable space will be provided by Jamia Hamdard under any circumstances.
- 23. It may here be noted, that the entire staff and labour of the Agency will follow all the security instructions issued by Jamia Hamdard University from time to time and these instructions may include the provisions to make suitable barricades or temporary wall fence to ensure that the labour confines itself to the area of the work ONLY. Serious action will be taken in case any of the contractor's workmen are found to be tampering with the Laboratory equipment and property of the University. Suitable damages will be recovered from the contractor's bills if anyone is found to do so. All decisions of the Engineer-in Charge in respect of the same will be final and binding on the contractor.
- 24. On completion of all work, Agency shall remove all surplus materials & leave the site in a broom clean condition, failing which the same shall be done at Agency's risk & cost.
- 25. The Agency shall ensure compliance of all statutory laws & bye laws of the central govt./ state govt./Municipal authorities related to the employment of their staff and all obligations under Minimum Wage Act, Workman Compensation Act, Provident Fund & Miscellaneous Provision Act, Bonus Act & Contract Labour Act 1970 etc. Jamia Hamdard University will not be responsible for such purposes in anyway.
- 26. Any claim, dispute or difference arising out of or in connection with this agreement and which cannot be settled by mutual consultations, shall be referred to sole Arbitration or an Arbitrator to be appointed by the Competent Authority of Jamia Hamdard. The award of the Arbitrator shall be final and binding between the parties as per the terms & conditions of the

Agreement to be executed on award of contract. The Arbitrator proceeding shall be governed by the Arbitration and Conciliation Ordinance dated 26th March, 1996 and shall be conducted in Delhi. The agreement drawn shall be subjected to the jurisdiction of the courts at Delhi.

GENERAL CONDITIONS FOR SUBMISSION OF TENDER

1. Submission of Tender:

Tenders should be submitted in sealed envelopes. The tender duly filled in should be sent to above mentioned address either by post or hand delivered in the tender box kept in the Office of the Medical Superintendent, HAHC Hospital, Jamia Hamdard. The Project manager Jamia Hamdard or Medical Superintendent will not be responsible for tenders lost in postal transit or otherwise.. It should not be handed over to any employee of the Jamia Hamdard. No tender shall be accepted later than the time schedule specified above. Tender once submitted will remain with the Jamia Hamdard and will not be returned to the bidder.

2. Price Bid:

In this bid the bidder is required to quote his items rates/prices for the **above said works** "**at HIMSR PROJECT, JAMIA HAMDARD.**" in the schedule of work attached. Items rates should be filled in both i.e. figure and words. The scope of work & technical specifications are provided for your reference. The quoted prices shall be including all the taxes levied by statutory Govt. bodies. It is mandatory on bidder to quote all items rate as asked for in the **BOQ/ Schedule of work**. Failure to adhere to this condition may lead to rejection of tender. The bidders should quote unconditional rates, neatly written without any overwriting and duly signed & stamped in all pages.

2.1 CONTRACTOR TO SATISFY HIMSELF ABOUT SITE CONDITIONS

Before tendering, the Contractor shall visit and examine the site and satisfy himself as to the site conditions, the correct dimensions of the work and facilities. In case of any doubt, may be clarified from the office of the Assistant Engineer (Electrical).

SCOPE OF WORK

3.1 **SCOPE**

The general character and the scope of work is illustrated and defined by the Schedule of Quantities, drawings and Specifications herewith attached (However, little changes may be made in the drawings if required for better result).

3.2 **EXTENT**

The Contractor shall carryout and completes the said work in every respect in accordance with the contract, and with the directions of and to the satisfaction of the Engineer-in-charge.

4. TYPE OF CONTRACT

The Contract shall be an item rate contract. The Contractor shall be paid at the contract rates, for the actual quantity of work carried out by him in accordance with the Contract documents as measured.

5. SCHEDULE OF QUANTITIES

The quantities given in the Schedule of Quantities are provisional and are meant to indicate the intent of the work and provide a uniform basis for tendering. The Contractor shall be paid for the actual quantity of work executed by him in accordance with Contract Documents at the contract rates.

6. PAYMENT OF CONTRACTORS BILL

Subject to the provisions of terms and conditions of the contract, JAMIA HAMDARD, shall affect Contract payments against RA Bills shall be released to the contractor as below:

Final Bill:- Within one (1) months of submission of the Bill with the final completion certificate and as per the terms and conditions of the Contract.

Note: All Bills are required to be supported by Detailed Measurement Sheet and Analysis of Rates for Extra Items and its approval along with the Bill. The Bills shall be submitted in specified format which should indicate quantities executed in all RA Bills and cumulative Quantities besides current bill quantities along with tendered quantity/unit/rates. There may occur deviations from the above noted schedule of payments in exigent circumstances.

7. Generality of this present provision shall not be deemed to cut down or limited in any way because in certain cases it may and in other cases it may not be expressly stated that the Contractor shall do or perform a work or supply articles or perform services at his own cost or without additional payment or without extra charges or words to the same effect or that it may be stated or not stated that the same are included in and covered by the Schedule of Rates.

BILL OF QUANTITIES, THREE NUMBERS OF ELECTRICAL DISTRIBUTION PANELS

	FLOOR DISTRIBUTION PANELS	UNIT	RATE	AMOUNT	REMARK
1	FLOOR DISTRIBUTION PANELS , 3 NUMBERS AS				
	MENTIONED BELLOW:				
	Supplying, Assembling, erecting, testing and				
	commissioning of 415V, 3 Phase, 50 Hz, 4 wire system,				
	sheet steel clad, dust and vermin proof cubical and				
	Indoor type floor/ wall mounted, free standing				
	extendible type Panel compartmentalized design and				
	fabricated out of 2 mm CRCA sheet steel complete				
	with suitable size of Aluminium Bus bars, Electrical				
	interlock as per the various status of all equipments				
	indicated on the drawings. Providing & Fixing of base				
	plate/ channel, P/F the following Switchgears, complete with earth Bus bar throughout the length of				
	the panel, terminal arrangement for Incomings/				
	outgoings cables and also outgoing terminations for				
	various sizes of cables, The incoming and outgoing				
	feeders shall be accommodated in a modular multi-				
	tier arrangement, adequate size bus duct/ cable alley,				
	Painting, Earthing, Numbering, Danger plate etc.				
	complete as required as per specifications and				
	drawing attached.				
1.1	Main Light and Power Panel for Ground & First Floor	1SET			
	Incoming:				
	1 No. 500 amps, 25 KA, (Ics=Icu) 4P MCCB with over				
	current and short circuit release complete with				
	1 No. Intelligent multifunction digital panel meters of				
	class 1.0 accuracy with communication interface port				
	RS 485 for recording V (Between Phases and between				
	each phase and neutral), A (In each Phase and neutral				
), KWHr with suitable rating CTs, CT shorting links,				
	R,Y,B LED indicting lamp and 2A control SP MCB's.				
	Bus Bars:				
<u> </u>	Electrolytic high conductivity aluminium three phase				
	and neutral busbars rated at 415V, 50 Hz. 600 amps,				
	and neutral puspars rated at 415V, 50 mz. 000 dilips,				

25kA, insulated with heat shrinkable coloured PVC sleeves & clip on shrouds for joints. Outgoing: 2Nos. 100A 4P MCCB 25 Ka breaking capacity. (1 for skill lab+1 Spre) 1 Nos. 100A 4P MCCB 25kA breaking capacity. 16 Nos. 63A 4P MCB 15kA breaking capacity. (4 Spare) 8 Nos. 40A 4P MCB 15kA breaking capacity (4Spare) Panel Described as above. 12 UPS PANELS GROUND & FIRST FLOOR PANEL: 12. UPS PANELS GROUND & FIRST FLOOR PANEL: 11. Incoming: 1 Nos. 200 amps, 25kA, (Ics=Icu) 4P MCCB with over current and short circuit release complete with 1 No. Intelligent multifunction digital panel meters of class 1.0 accuracy with communication interface port RS 485 for recording V (Between Phase and between each phase and neutral), A (In each phase and neutral), KWHr with suitable rating CTs, CT shorting links, R,Y, B LED indicating lamp and 2A control SP MCB's. Bus Bars: Electrolytic high conductivity aluminium three phase and neutral busbars rated at 415V, 50 Hz., 300 amps, 25kA, insulated with heat shrinkable coloured PVC sleeves & clip on shrouds for joints, Qutgoing:- Qutgoing:- 1.3 Main A/C Panel for Ground & First Floor OUTDOOR 1.3 Main A/C Panel for Ground & First Floor OUTDOOR 1.3 Main A/C Canel for Ground & First Floor OUTDOOR			1	1	1	
Outgoing:- Image: Control of the set of th						
2Nos. 100A 4P MCCB 25 Ka breaking capacity. (1 for skill lab+1 Spare)		sleeves &clip on shrouds for joints.				
2Nos. 100A 4P MCCB 25 Ka breaking capacity. (1 for skill lab+1 Spare)						
skill lab+1 Spare) Image: Control of the second		Outgoing:-				
1 Nos. 100A 4P MCCB 25kA breaking capacity. Image: Control of the second se		2Nos. 100A 4P MCCB 25 Ka breaking capacity. (1 for				
16 Nos. 63A 4P MCB 15kA breaking capacity. (4 Spare) 8 Nos. 40A 4P MCB 15kA breaking capacity (4Spare) Panel Described as above.		skill lab+1 Spare)				
8 Nos. 40A 4P MCB 15kA breaking capacity (4Spare) Image: Comparison of the system system of the system of the system of the		1 Nos. 100A 4P MCCB 25kA breaking capacity.				
Panel Described as above. Image: Comparison of the system of the sys		16 Nos. 63A 4P MCB 15kA breaking capacity. (4 Spare)				
Image: Incoming: Image: Im		8 Nos. 40A 4P MCB 15kA breaking capacity (4Spare)				
Incoming: Image: Image: <td></td> <td>Panel Described as above.</td> <td></td> <td></td> <td></td> <td></td>		Panel Described as above.				
Incoming: Image: Image: <td>12</td> <td>LIPS PANELS GROUND & FIRST FLOOR PANEL</td> <td>1SFT</td> <td></td> <td></td> <td></td>	12	LIPS PANELS GROUND & FIRST FLOOR PANEL	1SFT			
1 Nos. 200 amps, 25kA, (Ics=Icu) 4P MCCB with over current and short circuit release complete with 1 No. Intelligent multifunction digital panel meters of class 1.0 accuracy with communication interface port RS 485 for recording V (Between Phase and between each phase and neutral), A (In each phase and neutral), KWHr with suitable rating CTs, CT shorting links, R,Y, B LED indicating lamp and 2A control SP MCB's. Bus Bars: Electrolytic high conductivity aluminium three phase and neutral busbars rated at 415V, 50 Hz., 300 amps, 25kA, insulated with heat shrinkable coloured PVC sleeves & clip on shrouds for joints, Outgoing:- 2 Nos. 63A 4P MCB 'C' 15 kA breaking capacity. 4 Nos. 40 A 2 P MCB 'C' 15 kA breaking capacity. 1.3 Main A/C Panel for Ground & First Floor OUTDOOR 1SET 1.3 Main A/C Panel for Ground & First Floor OUTDOOR 1SET 1.00. 500 amps, 25kA, (Ics=Icu) 4p MCCB with over	1.2		1021			
current and short circuit release complete with						
1 No. Intelligent multifunction digital panel meters of class 1.0 accuracy with communication interface port RS 485 for recording V (Between Phase and between each phase and neutral), A (In each phase and neutral), KWHr with suitable rating CTs, CT shorting links, R,Y, B LED indicating lamp and 2A control SP MCB's. Bus Bars: Electrolytic high conductivity aluminium three phase and neutral busbars rated at 415V, 50 Hz., 300 amps, 25kA, insulated with heat shrinkable coloured PVC sleeves & clip on shrouds for joints, Outgoing:- 2 Nos. 63A 4P MCB 'C' 15 kA breaking capacity. 4 Nos. 40 A 2P MCB 'C' 15 kA breaking capacity 10 Nos. 40A 2 P MCB 'C' 15 kA breaking capacity 13 Main A/C Panel for Ground & First Floor OUTDOOR UNIT Incoming: 1No. 500 amps, 25kA, (Ics=Icu) 4p MCCB with over		• • • • • •				
class 1.0 accuracy with communication interface port RS 485 for recording V (Between Phase and between each phase and neutral), A (In each phase and neutral), KWHr with suitable rating CTs, CT shorting links, R,Y, B LED indicating lamp and 2A control SP MCB's. Bus Bars: Image: Comparison of the second seco						
class 1.0 accuracy with communication interface port RS 485 for recording V (Between Phase and between each phase and neutral), A (In each phase and neutral), KWHr with suitable rating CTs, CT shorting links, R,Y, B LED indicating lamp and 2A control SP MCB's. Bus Bars: Image: Comparison of the second seco		1 No. Intelligent multifunction digital papel meters of				
RS 485 for recording V (Between Phase and between each phase and neutral), A (In each phase and neutral), KWHr with suitable rating CTs, CT shorting links, R,Y, B LED indicating lamp and 2A control SP MCB's. Image: Control SP MCB's. Bus Bars: Image: Control SP MCB's. Image: Control SP MCB's. Electrolytic high conductivity aluminium three phase and neutral busbars rated at 415V, 50 Hz., 300 amps, 25kA, insulated with heat shrinkable coloured PVC sleeves & clip on shrouds for joints, Image: Control SP MCB's. Outgoing:- Image: Control SP MCB's' 15 kA breaking capacity. Image: Control SP MCB's' 15 kA breaking capacity. 10 Nos. 40A 2 P MCB 'C' 15 kA breaking capacity. Image: Control SP MCB's' 15 kA breaking capacity. Image: Control SP MCB's' 15 kA breaking capacity. 1.3 Main A/C Panel for Ground & First Floor OUTDOOR ISET UNIT Image: Control SP MCB 'S' 15 kA, (Ics=Icu) 4p MCCB with over Image: Control SP MCB 'S' 15 kA, (Ics=Icu) 4p MCCB with over						
each phase and neutral), A (In each phase and neutral), KWHr with suitable rating CTs, CT shorting links, R,Y, B LED indicating lamp and 2A control SP MCB's.Image: Control SP MCB's.Bus Bars:Image: Control SP MCB's.Image: Control SP Section SPElectrolytic high conductivity aluminium three phase and neutral busbars rated at 415V, 50 Hz., 300 amps, 25kA, insulated with heat shrinkable coloured PVC sleeves & clip on shrouds for joints,Image: Control SP Image: Control SP Section SPOutgoing:- 2 Nos. 63A 4P MCB 'C' 15 kA breaking capacity.Image: Control SP Image: Control SP Section SPImage: Control SP Image: Control SP Image: Control SP1.3Main A/C Panel for Ground & First Floor OUTDOOR UNITISET Image: Control SP Image: Control SP Image: Control SPImage: Control SP Image: Contro						
neutral), KWHr with suitable rating CTs, CT shorting links, R,Y, B LED indicating lamp and 2A control SP MCB's.MCB's.Image: Control SP MCB's.Bus Bars:Image: Control SP Server StructureElectrolytic high conductivity aluminium three phase and neutral busbars rated at 415V, 50 Hz., 300 amps, 25kA, insulated with heat shrinkable coloured PVC sleeves & clip on shrouds for joints,Control SpectraImage: Control SpectraOutgoing:- 2 Nos. 63A 4P MCB 'C' 15 kA breaking capacity.Image: Control Spectra4 Nos. 40 A 4P MCB 'C' 15 kA breaking capacityImage: Control Spectra10 Nos. 40A 2 P MCB 'C' 15 kA breaking capacityImage: Control Spectra1.3Main A/C Panel for Ground & First Floor OUTDOOR UNITISETIncoming: 1 No. 500 amps, 25kA, (Ics=Icu) 4p MCCB with overImage: Control Spectra						
links, R,Y, B LED indicating lamp and 2A control SP MCB's.Image: Control SP MCB's.Bus Bars:Image: Control SP MCB's.Electrolytic high conductivity aluminium three phase and neutral busbars rated at 415V, 50 Hz., 300 amps, 25kA, insulated with heat shrinkable coloured PVC sleeves & clip on shrouds for joints,Image: Control SP Substration of Control SP MCB'S.Image: Control SP MCB'SImage: Control SP MCSB'SImage: Control SP MCSB'SIma						
MCB's.Image: Constraint of the second se						
Bus Bars: Image: Constraint of the second secon						
Electrolytic high conductivity aluminium three phase and neutral busbars rated at 415V, 50 Hz., 300 amps, 25kA, insulated with heat shrinkable coloured PVC sleeves & clip on shrouds for joints, Outgoing:- 2 Nos. 63A 4P MCB 'C' 15 kA breaking capacity. 4 Nos. 40 A 4P MCB 'C' 15 Ka breaking capacity 10 Nos. 40A 2 P MCB 'C' 15 kA breaking capacity Panel Described as above. Main A/C Panel for Ground & First Floor OUTDOOR UNIT Incoming: 1No. 500 amps, 25kA, (Ics=Icu) 4p MCCB with over 		MCB S.				
and neutral busbars rated at 415V, 50 Hz., 300 amps, 25kA, insulated with heat shrinkable coloured PVC sleeves & clip on shrouds for joints,Outgoing:-2 Nos. 63A 4P MCB 'C' 15 kA breaking capacity.4 Nos. 40 A 4P MCB 'C' 15 Ka breaking capacity10 Nos. 40A 2 P MCB 'C' 15 kA breaking capacityPanel Described as above.1.3Main A/C Panel for Ground & First Floor OUTDOOR UNIT1SETIncoming:1 No. 500 amps, 25kA, (Ics=Icu) 4p MCCB with over		Bus Bars:				
and neutral busbars rated at 415V, 50 Hz., 300 amps, 25kA, insulated with heat shrinkable coloured PVC sleeves & clip on shrouds for joints,Image: Coloured PVC sleeves & clip on shrouds for joints,Outgoing:-Image: Coloured PVC 		Electrolytic high conductivity aluminium three phase				
25kA, insulated with heat shrinkable coloured PVC sleeves & clip on shrouds for joints,Image: Coloured & First Floor OUTDOOR sleeves & clip on sleeves & clip on sleeve & clip on sleeve & clip on sleeves & clip on sleeve &						
sleeves & clip on shrouds for joints,Image: Clip on shrouds for joints,Image: Clip on shrouds for joints,000000000002Nos. 63A 4P MCB 'C' 15 kA breaking capacity.1mmmetric on the shore of the shor		•				
Outgoing:-Image: Content of the second s						
2 Nos. 63A 4P MCB 'C' 15 kA breaking capacity. 4 Nos. 40 A 4P MCB 'C' 15 Ka breaking capacity 10 Nos. 40A 2 P MCB 'C' 15 KA breaking capacity Panel Described as above. 1.3 Main A/C Panel for Ground & First Floor OUTDOOR UNIT 1SET Incoming: 1No. 500 amps, 25kA, (Ics=Icu) 4p MCCB with over						
4 Nos. 40 A 4P MCB 'C' 15 Ka breaking capacity Image: Comparison of the sector of		Outgoing:-				
10 Nos. 40A 2 P MCB 'C' 15kA breaking capacity Image: Comparison of the second sec		2 Nos. 63A 4P MCB 'C' 15 kA breaking capacity.				
Panel Described as above. Image: Comparison of the second sec		4 Nos. 40 A 4P MCB 'C' 15 Ka breaking capacity			1	
1.3 Main A/C Panel for Ground & First Floor OUTDOOR 1SET UNIT Incoming: 1 1No. 500 amps, 25kA, (Ics=Icu) 4p MCCB with over 1		10 Nos. 40A 2 P MCB 'C' 15kA breaking capacity			1	
UNIT Incoming: 1No. 500 amps, 25kA, (Ics=Icu) 4p MCCB with over		Panel Described as above.			1	
Incoming: 1No. 500 amps, 25kA, (Ics=Icu) 4p MCCB with over	1.3	Main A/C Panel for Ground & First Floor OUTDOOR	1SET			
1No. 500 amps, 25kA, (Ics=Icu) 4p MCCB with over		UNIT				
		Incoming:				
current and short circuit release complete with		1No. 500 amps, 25kA, (Ics=Icu) 4p MCCB with over				
		current and short circuit release complete with				

	F	 	1	
	1 No. Intelligent multifunction digital panel meters of			
	class 1.0 accuracy with communication interface port			
	RS 485 for recording V (Between Phases and between			
	each phase and neutral), KWHr, with suitable rating			
	CTs, CT shorting links, R,Y, B LED indicating lamp and 2			
	A control SP MCB's			
	Bus Bars:			
	Electrolytic high conductivity aluminium three phase			
	and neutral busbars rated at 415V, 50 Hz, 600 amps,			
	25kA, insulated with heat shrinkable coloured PVC			
	sleeves & clip on shrouds for joints.			
	Outgoing:-			
	2Nos. 100A 4P MCCB 20kA breaking capacity (1 for			
	skill lab+1 Spare)			
	20 Nos. 63A 4P MCCB 20 kA breaking capacity. (4			
	Spare)			
	8Nos. 40A 4P MCB 15kA breaking capacity (4 Spare)			
	Panel Described as above.			
•				

Specification of Materials to be used:

S. No.	Description of Goods	Make
1.	500A 4P MCCB, 36KA100% ICU D Sine with T/M Release)/C, S/C	L&T/ Schneider/ABB
2.	Rotary Handle 500A MCCB	L&T/ Schneider/ABB
3.	Spreader link 500A 4P MCCB	L&T/ Schneider/ABB
4.	Aux. Contact for MCCB 1C/O	L&T/ Schneider/ABB
5.	100A 4P MCCB 1C/O	L&T/ Schneider/ABB
6.	100A 4P MCCB, 36KA100% ICU D Sine with T/M Release)/C, S/C	L&T/ Schneider/ABB
8.	Rotary Handle 100A MCCB	L&T/ Schneider/ABB
9.	Spreader Link 100A 4P MCCB	L&T/ Schneider/ABB
10.	CT 500/5A	L&T/ Schneider/ABB

SIGNATURE OF CONTRACTOR WITH SEAL