TENDER DOCUMENT

<u>FOR</u>

REPAIR / RENOVATION OF LAB NO. 7-A,B & ROOM NO. 14 IN BOTANY DEPARTMENT AT 1ST FLOOR OF SCHOOL OF CHEMICAL AND LIFE <u>SCIENCES</u>

JAMIA HAMDAD HAMDARD NAGAR, NEW DELHI-62

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NOTICE INVITING TENDER

Jamia Hamdard invites sealed items rate Tenders from Registered/Empanelled Contractors/Working Agencies at Jamia Hamdard /Govt. for the below work. The tender documents and other details are available on the website: <u>www.jamiahamdard.edu</u>. Last date of submission of the Tender is 03-03-2020 upto 3.00 pm. The parties/Agency may submit the tender after satisfying themselves eligible for the work as per Terms & Conditions of Tender.

Name of the work	REPAIR / RENOVATION OF LAB NO 7-A,B & ROOM NO 14 IN BOTANY DEPARTMENT AT 1 ST FLOOR OF SCHOOL OF CHEMICAL AND LIFE SCIENCES
Estimated Value I. Civil Works':	5.19 Lakhs
II. Electrical Works':	1.5 Lakhs
Earnest Money	
I. Civil Works':	Rs. 10,500.00/- In the form of DD in favour of Jamia Hamdard, New Delhi
II. Electrical Works':	Rs. 3000.00 /- In the form of DD in favour of Jamia Hamdard, New Delhi
Date of Issue of tender	19 - 02 - 2020. The tender will be issued from the respective department after satisfying the documents.
Last Date and Time of Submission of Tender	03-03- 2020 at 3.00 pm In Purchase Section Adm. Block,(Basement) Jamia Hamdard, Hamdard Nagar, New Delhi-62
Date & Place of opening of tender	03 -03- 2020 at 3.30 pm Office of the Sr. Consultant Adm. Block, Jamia Hamdard, Hamdard Nagar, New Delhi-62
Tender fee I. Civil Works':	Rs. 500.00 in DD- in favour of Jamia Hamdard or cash receipt of Jamia Hamdard (Non Refundable)
II. Electrical works:	Rs. 500.00 in DD- in favour of Jamia Hamdard or cash receipt of Jamia Hamdard. (Non Refundable
TIME PERIOD	One Month

(1) <u>SCOPE OF WORK</u>

I. Civil Works

- a. Scope of work consists of repair/ renovation of Lab no 7-A,B & Room No 14 in Botany department at 1st floor School of chemical and life science.
- b. Vitrified flooring, false ceiling, Granite, Tilling works, plumbing, aluminium and wooden works, etc.
- c. Demolishing brick work, flooring, including repairing works.

II. Electrical Works

- a. Supply, Installation, Testing and Commissioning of Submain Circuit wirings, cabling, MCBs, DBs, Fittings & Fixtures etc.
- b. Dismantling of old fittings/wirings as and where required
- c. Feasibility should be explored to use the existing circuits, conduits and DBs etc.

(2) ELIGIBILITY CRITIERIA

- 1. Bidders must have registration / empanelled with Govt. Semi Govt. or State Govt. organization for electrical works. Bidders have to submit the related copies of the documents and other Registration Certificates justifying the eligibility criteria along with his Tender. The original will have to be produced when demanded for verification.
- 2. Contractors should have executed similar nature of works of at least one contract of 80% value of estimated cost of works or two contracts of similar nature of works of 60% value of estimated cost of works or three contacts of similar natures of works of 40% value of estimated cost of works in the last 3 years in any institutional Buildings, Universities and produce credentials in support thereof.
- 3. Certified documents of having successfully completed similar works during the last 3 years as on 31-12-2019 should also be attached.
- 4. The Bidders must have GST, PAN and other necessary Registration Certificates.

(3) SUBMISSION OF BIDS

1. Submission of Tender: Tenders should be submitted in sealed envelope super-scribing NIT No. & name of work, due date for opening, bidder's name & address. The tender duly filled should be dropped in the tender box kept in the Purchase Section; 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. Any clarifications/amendments/corrigenda etc., to NIT before last date of submission of bid will only be available on our website: www.jamiahamdard.edu. Therefore bidders are advised to keep visiting our website.

In this bid, the bidder shall submit the following:

- a. Covering letter on Company's Letter head
- b. Earnest Money Deposit.
- c. Copies of GST, PAN and other necessary Registration Certificate
- d. Company's financial performance documents (Audited balance sheet, and profit and loss statement)
- e. Copies of work orders for similar nature of works as per criteria for eligibility mentioned above.
- f. Entire NIT duly signed & stamped by the bidder.
- g. Bidder not complying the bid & equability criteria is liable to be rejected.
- h. Completion certificate submitted should be issued / signed by an officer not below the rank of Executive Engineer/Assistant Engineer.
- i. BOQ of Civil Engineering Works is cited on Annexure "X"
- j. BOQ of Electrical Works is cited on Annexure "A"

In this bid, the related works' bidders are required to quote his item rates in the above said attached BOQ in accordance with the scope of works, terms & conditions & technical specifications enclosed. The rates/price quoted by contractor should be all inclusive i.e. should include all material cost, labour, services, plant/machinery/tools & tackles, ladders & scaffolding required for work, freight, Insurance, Octroi, Govt. duties & levies, GST, Service Tax, Sales Tax etc.), transport/cartage of materials/labour and all other expenses not specifically mentioned but reasonably implied. Nothing over and above these rates shall be payable to contractor. Further nothing extra in rates will be considered for any variations in tender quantities or due to any site difficulties. It is mandatory for bidder to quote all items rate as asked for in the BOQ/ PRICE schedule. Failure in not filling some item rates will lead to rejection of tender. The bidders should quote unconditional rates, neatly written without any overwriting and all pages should be duly signed & stamped.

4 GENERAL TERMS & CONDITIONS

- I. Earnest Money: An earnest money of **Rs 10,500.00** for the civil works and **Rs 3000.00** for the Electrical works have to be enclosed along with the Technical bid (Part-A). The EMD shall only be in the form of Bank Draft in favour of "Jamia Hamdard" payable "New Delhi". No Cheques/Cash shall be accepted as EMD. The refund of EMD to the technically disqualified shall be made within 15 days from the date of opening of price bid. The EMD of the successful lowest bidder (L1) shall be held back and will be released after completion of the works and site clearance.
- II. Validity of Tender: Tender shall be valid for our acceptance without any change in rates and NIT conditions for a period of 90 days from the date of opening of price bid.
- III. **Escalation**: No escalation over and above items rates quoted by the bidder shall be paid during the execution of contract.
- IV. Completion time: The time shall be the essence of this contract and entire work as titled above is to be completed in all respects within a period of 1 Month from the date of issue of the work order. Any delay in completing the work for reasons attributable to the Contractor is liable for liquidated damages as per clause 12 of NIT. Under the force-majeure conditions or delay due to reasons

beyond control of the contractor, Jamia Hamdard may grant suitable time extension without penalty for which the contractor has to request along with the justification/ reasons well in advance to Jamia Hamdard for approval without any prejudice to price escalation. No time extension request shall be considered after the expiry of completion period/contract. The decision of the Sr, Consultant (E & M) regarding Time extension will be final and binding on the contractor.

- V. The rates shall be inclusive of all taxes (Service Tax, GST etc.) duties and cartage etc. Jamia Hamdard welfare Relief Fund will be deducted @ 0.25% of the amount of total bill claimed.
- VI. **Deviations**: No deviation from the stipulated terms and conditions will be allowed. Tender will be unconditional.
- VII. **Site Conditions**: Contractor shall acquaint himself fully with the site conditions and the working environment of Jamia Hamdard before quoting his rates. No Compensation on account of any site difficulties will be entertained, at a later date, after award of the work.

VIII. 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 (Civil) /Assistant Engineer (Electrical)

- IX. **Correspondence**: All the correspondence in respect of tender/award of work shall be made to Sr. Consultant (E & M).
- X. **Terms of Payment**: The payment shall be made on submission of the bills in proper format by the contractor after due certification by the engineer responsible for supervision of the work. Contractor can submit two interim or running bills and one final bill after completion of work for claiming payment based on actual quantities of items of work executed as per BOQ and Engineer's instructions. 5% deductions will be made towards the security deposit from each running bill. The security deposit shall only be refunded after expiry of the defect & liability period.
- XI. Labour Laws: The contractor will abide by all the rules and regulations related to labour laws, accident, workmen compensation act, workmen insurance etc. This will be the sole responsibility of the contractor. Jamia Hamdard will not be a party at any stage in any of the disputes relating to the above. In case, Jamia Hamdard has to bear any expenditure due to non-conformance of the above provisions by the contractor, the same will be recovered from contractor's bills.
- XII. Rules governing the Contractor's employees working in the Jamia Hamdard Premises: The contractor's employees working inside the Jamia Hamdard campus will abide by the Centre's rules & regulations for works inside the campus. Any damage to the Jamia Hamdard property due to mishandling, carelessness on the contractor's or his workmen's part will be recoverable from the contractor's bills.
- XIII. Liquidated damages: In case the work is delayed beyond the specified completion period for reasons attributable to the contractor, deductions on account of Liquidated damages @1/2% of the contract value per week will be deducted subject to a maximum of 5% of the contract value. However, during the delayed period, Jamia Hamdard also reserves the right to get some portion of work done by any other contractor at the risk and cost of the existing contractor and amount to that effect along with 10% overhead charges will be deductable from his bills/dues.
- XIV. **Extra or substituted item**: If any extra or substituted item appears in the work, contractor shall submit its rate analysis supported with documents which shall be approved by Engineering Department. Analysis of rates will be based on DSR 18 document of CPWD or based on market rates for determining item rate and pay to contractor accordingly.

- XV. **Defect Liability period**: Defect liability period shall be one year from the date of completion of work. Any defect arising in this period due to contractor's fault will be rectified by him at his own cost. Failure to do so, shall lead to forfeiture of security deposit.
- XVI. Security Deposit: A security deposit equal to 05 % of the value of work will be deducted from Contractor's bills and shall be refunded after the completion of defect liability period of one year after ensuring successful performance of the system executed by the contractor.
- XVII. Contractor should depute a qualified supervisor dedicated for this work, who will monitor and coordinate the works from contractor's side and interact with the Jamia Hamdard Engineers, responsible for supervision of work, on regular basis.
- XVIII. Contractor will take due permission for entry of all his workmen in Jamia Hamdard. No unauthorized person will be allowed to work inside.
 - XIX. The contractor will arrange all necessary materials, tools, equipment, access ladders & scaffolding, measuring instruments and working consumables etc. needed for execution of the works. Safe custody of all such material will be contractor's sole responsibility. No extra charges will be paid for the same. Watch and ward of all material till the system is taken over by Jamia Hamdard shall be the sole responsibility of the contractor and pilferage etc. shall be entirely to his account.
 - XX. During execution of work, Engineer can make minor changes in the scope of work as per site conditions or other reasons. Contractor will have no extra claim in his rates for the same.
 - XXI. If during the execution of works, any damage is caused to Jamia Hamdard property by contractor's/contractors' workers, contractor will duly make good the loss. Jamia Hamdard has the right to make suitable deduction from contractor's bills along with penalty, if contractor fails to make good the loss.
- XXII. During execution of work, the contractor/contractors should follow all standard norms of safety measures/precautions as per relevant IS codes and CPWD specifications to avoid accidents/damages to man, machines and buildings, at his own cost. Contractor will have his own arrangement to escort the labour to the nearest hospital for treatment in case any injury happens to any worker during execution of work.
- XXIII. Manpower deployed by the contractor at our site for carrying out contract works is strictly prohibited being associated with any other works on the campus.
- XXIV. No material belonging to the contractor whether consumable or non-consumable should be brought inside the Jamia Hamdard campus without proper entry at the Main Gate nor any material should be taken out without proper gate pass issued by the authorized representatives of the Centre.
- XXV. During execution of the work, contractor should dispose of waste material on regular basis and should keep the area of work properly cordoned off and neat and clean as far as possible. After completion of work, contractor should clear the site completely of all unwanted and junk material before submitting his final bill.
- XXVI. Jamia Hamdard will provide electricity, if needed, the electrical energy meter will be provided by the contractor and necessary deduction will be made as per the actual consumption of electricity during execution of work. The contractor has to make his own arrangements for water.
- XXVII. Tender once submitted will remain with the Jamia Hamdard and will not be returned to the bidders.
- XXVIII. Termination of Contract: The Jamia Hamdard reserve the right to terminate the contract on account of poor workmanship, failure to mobilize site within 15days, non-compliance of

specifications for the works, abnormal delay in progress of work, violation of any contract provisions by the contractor. In such case, contractor's EMD and security deposit deducted so far will be forfeited.

- XXIX. The contract can also be terminated on the request of contractor. In such cases the contractor is liable to pay Liquidated damages @ 5% of tendered value besides forfeiture of EMD & security deposit recovered so far.
- XXX. Any dispute arising out of this contract will be subjected to jurisdiction of New Delhi/Delhi.
- XXXI. Tenders not complying with any of the provisions stated in this tender document are liable to be rejected. Jamia Hamdard also reserves the right to accept or reject any or all the tenders without assigning any reason and does not bind himself to accept the lowest tender or split the work in two or three parts.
- XXXII. That in the event of any difference, or dispute arising between the parties to this Agreement for any reasons whatsoever relating to the contract, whether during the substance of this Agreement or their after, it has specifically been agreed that the party will endeavor to amicably resolve the difference, but in case if dispute or differences still remain unresolved, the same shall be referred to the sole Arbitrator appointed by the Vice Chancellor of Jamia Hamdard and the Arbitrator decision shall be final and binding upon the parties concerned.

(5) SPECIAL TERMS AND CONDITIONS

- I. Makes of Items to be used by contractor will be according to the list of approved makes given. No other makes will be used by the contractor.
- II. Contractor will first submit the sample of relevant make to Sr. Consultant for approval before procuring the material.
- III. Contractor will arrange proper necessary material at his own cost and will take all safety measures like safety belts, extra labour to hold ladders etc. If it is observed that work is proceeding without adequate safety precautions, work may be stopped by Engineer in-charge and in such cases, contractor will be solely responsible for delay and its consequences thereof.

(6) TECHNICAL SPECIFICATIONS

- I. As per CPWD Specifications and attached BOQ.
- II. Granite on top of the counter should be Jet black.
- III. In flooring only double charged vitrified tiles will be laid.
- IV. For wall the designer tiles of size 600mmx300 will be used.
- V. List of approved make of electrical materials is attached at Annexure B.

(7) CHECK LIST

TO BE SUBMITTED ALONG WITH BID

The tenderers are requested to ensure the submission of the essential documents to avoid disqualification of the bid. However, the check list is not exhaustive and the tenderer are requested to go through to NIT & related documents carefully and completely for fulfillments of tenderers requirement.

S.	Enclosures	Submitted
No.		
1.	Cost of tender document	
2.	EMD	
3.	Similar works order	
4.	Annual turnover certificate for the last three years with certification from practicing charted accountant	
5.	Copy of registration letter	
6.	Signature with stamp in all pages of tender documents.	
7.	Bank account detail	
8.	E-mail address	
9.	Address for communication	
10.	Phone no, Mobile no, Landline no.	

Signature of the Tenderers

(8) LIST OF APPROVED MAKES (Civil Works)

1.	Ordinary Portiant Cement	L&T, Ultra Tech, ACC, or other brads approved by the Architect
2.	Steel Reinforcement Bars	TISCO, SAIL, RINL, Rathi udyog Ltd.
3.	Structural Steel Sections	TISCO, SAIL RINL, Supreme
4.	Stone Aggregate (Blue/Black)	Sohna, Pali or other Approved
5.	Water proof Shuttering	Cengtury, Green, Duro/Haryana Plywood
6.	Vitrified flooring and wall tiles	Kajaria, Orient, Somany, or equivalent.
7.	Exterior Paint	Apex (Asian), weathere shield (ICI DULUX) Shalimar,
8.	White Cement	Birla, JK Cement
9.	Waterproofing	Structural Water proofing Co. Dr. Fixint, Overseas Water Proofing
10,	Silicon Sealants	Dow Corning.GE
11,	Glass and mirror	Saint Gobain/Guardian/Asahi
12.	The Adhesives	Weber, Lafarge, Keisel, Balendura
13.	Expansion joint covers	CS, Inpro
14.	Glass	Saint Gobain, Guardian, Glaverbel,
15.	Gypsum board	Gyp pro, Lafarge or equivalent.
16.	Calcium silicate false	Armstrong or equivalent.
	ceiling	
17.	CPVC pipes	Astrial, Supreme or equivalent.
18.	S.S. sink	Neelkhant or equivalent.
19.	Aluminum	Jindal Or equivalent
20.	Commercial board and ply	Century/ Greenlam or equivalent.

(Signature of bidder)

Note:- Entire NIT duly signed & stamped by the bidder

ANNEXURE-B

LIST OF APPROVED MAKES

(Electrical)

S.No	Details of Materials	Manufacture's Name
1	INTERNAL ELECTRICAL WORK	
(A)	INTERNAL WIRING:	
1.0	PVC Conduit and Conduit Accessories	BEC/AKG/Polypack/Setia
2.0	PVC Insulated FR Copper Conductor wire	Havell's /Finolex/Polycab/RR Kabel
3.0	MCB / MCCBs/ELCB / Double Door Distribution Boards / Insulated	Legrand-Lexic / L&T/ Hager / ABB /Siemens/ Schneider
4.0	LT Cable PVC / XLPE Insulated	Havells /Nicco / Polycab
5.0	AC Box	ABB / Anchor/ Havells
6.0	Modular Switch and Sockets	Anchor Roma, Crabtree, Havells
7.0	Light Fittings and Fixtures	Philips / Havells / Wipro
8.0	Networking Wires / Cables	Tyco /D-Link /System (E)
9.0	Internet outlet (IO)/ RJ-11 and RJ-45	Anchor Roma
10.0	Speakers / Volume Controller	Ahuja
11.0	LED Panel Lights / LED Hanging Lights	Philips/ Havells /Crompton
12.0	Ceiling Fans	Crompton Greaves (High Speed)

(Signature of the Contractor & Stamp)

ANNEXURE-''X''

	B.O.Q				
Repair buildir	r and renovation of Lab no 7A,B and Room No 14 in ang.	Botany d	epartme	nt at 1st fl	oor of F/science
S.NO	Description	Qty	unit	Rate	Amount
1	Taking out existing wooden door shutter, repair by cutting, painting etc. and refixing of repaired door shutters to existing door frames, including replacement of hinges with screws, etc. as required, all complete as per the direction of the Engineer-in-charge.	3.00	Each		
2	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in- charge.	1.50	cum		
3	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in charge.				
	Nominal concrete 1:4:8 or leaner mix (i/c equivalent design mix)	1.20	cum		
4	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.				
	In cement mortar	1.70	cum		
5	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead.				
	For thickness of tiles 10 mm to 25 mm	55.00	sqm		
6	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	5.00	cum		
7	Dismantling of flushing cistern of all types (C.I./PVC/Vitrious China) including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead.	3.00	Each		
8	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq.meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground, all complete as per direction of Engineerin- Charge.				
	With cement mortar 1:4 (1 cement : 4 fine sand)	25.00	Sqm		

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9	Providing and fixing Ist quality ceramic glazed wall		Sqm	
	tiles conforming to IS: 15622 (thickness to be specified	8.00		
	by the manufacturer), of approved make, in all colours,			
	shades except burgundy, bottle green, black of any size			
	as approved by Engineerin-Charge, in skirting, risers of			
	steps and dados, over 12 mm thick bed of cement mortar			
	1:3 (1 cement : 3 coarse sand) and jointing with grey			
	cement slurry @ 3.3kg per sqm, including pointing in			
	white cement mixed with pigment of matching shade			
	complete			
10	Providing and laying vitrified floor tiles in different			
	sizes (thickness to be specified by the manufacturer)			
	with water absorption less than 0.08% and conforming			
	to IS: 15622, of approved make, in all colours and			
	shades, laid on 20mm thick cement mortar 1:4 (1 cement			
	: 4 coarse sand), jointing with grey cement slurry @ 3.3			
	kg/ sqm including grouting the joints with white cement			
	and matching pigments etc., complete.			
	Size of Tile 600x600 mm	63.00	Sqm	
11	Providing and fixing false ceiling at all height including			
	providing and fixing of frame work made of special			
	sections, power pressed from M.S. sheets and			
	galvanized with zinc coating of 120 gms/sqm (both side			
	inclusive) as per IS : 277 and consisting of angle cleats			
	of size 25 mm wide x 1.6 mm thick with flanges of 27			
	mm and 37mm, at 1200 mm centre to centre, one flange			
	fixed to the ceiling with dash fastener 12.5 mm dia x			
	50mm long with 6mm dia bolts, other flange of cleat			
	fixed to the angle hangers of 25x10x0.50 mm of			
	required length with nuts & bolts of required size and			
	other end of angle hanger fixed with intermediate G.I.			
	channels 45x15x0.9 mm running at the spacing of 1200			
	mm centre to centre, to which the ceiling section 0.5 mm			
	thick bottom wedge of 80 mm with tapered flanges of 26			
	mm each having lips of 10.5 mm, at 450 mm centre to			
	centre, shall be fixed in a direction perpendicular to G.I.			
	intermediate channel with connecting clips made out of			
	2.64 mm dia x 230 mm long G.I. wire at every junction,			
	including fixing perimeter channels 0.5 mm thick 27			
	mm high having flanges of 20 mm and 30 mm long, the			
	perimeter of ceiling fixed to wall/partition with the help			
	of rawl plugs at 450 mm centre, with 25mm long dry			
	wall screws @ 230 mm interval, including fixing of			
	gypsum board to ceiling section and perimeter channel			
	with the help of dry wall screws of size 3.5×25 mm at			
	230 mm c/c, including jointing and finishing to a flush			
	finish of tapered and square edges of the board with			
	recomme-nded jointing compound , jointing tapes ,			
	finishing with jointing compound in 3 layers covering			
	upto 150 mm on both sides of joint and two coats of			
	primer suitable for board, all as per manufacturer's			
	specification and also including the cost of making			
	openings for light fittings, grills, diffusers, cutouts made			
	with frame of perimeter channels suitably fixed, all			
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	complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with				
	12.5 mm thick tapered edge gypsum moisture resistant board	74.00	Sqm		
12	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels.				
	Granite of any colour and shade Area of slab upto 0.50 sqm	11.50	sqm		
13	Providing edge moulding to 18 mm thick marble stone counters, Vanities etc., including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge.				
	Granite work	16.00	Rmt		
14	Extra for fixing marble /granite stone, over and above corresponding basic item, in facia and drops of width upto 150 mm with epoxy resin based adhesive, including cleaning etc. complete.	20.00	Rmt		
15	Extra for providing opening of required size & shape for wash basin/ kitchen sink in kitchen platform, vanity counter and similar location in marble/ Granite/ stone work, including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. complete.	3.00	Each		
16	Providing and fixing white vitreous china laboratory sink with C.I. brackets, C.P. brass chain with rubber plug, 40 mm C.P brass waste and 40mm C.P. brass trap with necessary C.P. brass unions complete, including painting of fittings and brackets, cutting and making good the wall wherever required :				
	Size 600x450x200 mm	2.00	sqm		
17	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.				
	Flexiblepipe 32 mm dia	2.00	Each		
18	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS:3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm), with necessary accessories and screws etc. complete.	7.00	Each		
19	Renewing glass panes, with putty and nails wherever necessary including racking out the old putty:				

	Float glass panes of nominal thickness 4 mm (weight not less than 10kg/sqm)	13.53	Sqm	
20	Providing & Fixing decorative high pressure laminated sheet of plain / wood grain in gloss / matt/ suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S, including cost of adhesive of approved quality.			
	1.0 mm thick	5.00	Sqm	
21	Providing and fixing chromium plated brass 50 mm cupboard or wardrobe knobs with nuts complete.	16.00	Each	
22	Providing and fixing bright /matt finished Stainless Steel handles of approved quality & make with necessary screws etc all complete. 100mm	17.00	Each	
23	Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable material and stacking of serviceable material with in 50 meters lead as directed by Engineer-in-charge.	10.87	sqm	
24	Providing and fixing the aluminium partitions with extruded built up standard tubular sections of size 2.5"x1.5" of 16 gauge, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions i.e at top ,bottom and sides with required EPDM rubber/neoprene gasket etc .Aluminium sections shall be smooth ,rust free, straight, mitered and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing /paneling ,c.p brass/stainless steel screws, all complete as per the direction of Engineer in charge. The partition having the 5mm thick glass on top and on bottom 12 mm thick particle board of approved color complete as required/ as existing.	334.00	Sqft	
25	Providing and fixing the aluminum Door with extruded built up standard tubular sections of size top, vertical and middle 3.25"x1.75" of 16 gauge, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions i.e at top ,bottom and sides with required EPDM rubber/neoprene gasket etc .Aluminium sections shall be smooth ,rust free, straight, mitered and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing /paneling ,c.p brass/stainless steel screws, all complete as per the direction of Engineer in charge. The door having the 5mm thick glass on top and on bottom 12 mm thick particle board of approved color including p/f the aluminium tower bolt, al-drope. door stopper complete as required.	84.00	Sqft	
26	Fabricating, making and fixing the wooden cupboard which is made out of 19mm thick comercial board with	3.00	Sqm	

	6mm thick back ply. All the expose surface pasted with				
	1mm thick laminate of approved colour and make				
	complete as per required design including all necessary				
	hardware like magnetic catcher, handle , tower bolt, lock				
	etc.and painting and polishing work				
27	Providing and fixing the Vertical blinds of approved		Sqm		
21	make and fabric .The vertical blind will be fixed on the	1 20	Sqiii		
		4.30			
	wall by gittey with screws compete as required.				
28	Providing and fixing the 12mm thick PVC ply on the		Sqm		
	existing window and door i/c supporting members	10.40			
	complete as required.				
29	Providing and fixing the P.V.C flooring1.6mm thick of		Sqm		
27	LG make complete as required.	11.00	Sqiii		
		11.00	~		
30	Removing white wash, color wash, plastic emulsion		Sqm		
	paint, oil bound distemper, synthetic enamel paint etc.	264.91			
	by scrapping with sand papering removing loose				
	particles etc. and making surface smooth for the work.				
31	Applying a priming coat with ready mixed water based	264.91	Sqm		
	interior primer of approved brand (Asian Paiants, ICI				
	Dulux, Nerolac & Berger) make including necessary				
22	Tools & plants and scaffolding/jhoola up to all height.	2(1.01	9		
32	Filling putty making surface using ready made powder	264.91	Sqm		
	base putty of approved brand Birla putty. JK wall putty				
	or as approved by the engineer in charge etc. complete				
	on walls surface interior including sand papering after				
	filling the putty making the surface smooth for applying				
	the finishing painting coat including necessary centering				
	& shuttering and scaffolding lup to all heights complete				
33	Distempering with oil bound washable distemper				
55					
	(acrylic) of approved make and brand (Asian Paints, ICI				
	Dulx, Nerolac & Berger) to give an even shade such as				
	blue green buff and all other required shades including				
	using of color staianer of approved brand for making of				
	required shades with brushes etc, completes				
	b) new work (three or more coats)	184.20	Sqm		
	, , ,		1		
34	Painting with synthetic enamel paint of approved brand				
54	and make (Asian Paints, ICI Dulux, Nerolac & berger)				
	to give an even shade such as blue green buff and all				
	other required shades including using of colors stainer of				
	approved brand for making of required shades with				
	brushes etc. complete including necessary centering &				
	stuttering and scaffolding up to all height.				
	a) Old work (two or more coats)	98.00	Sqm		-
			~~~~		
35	Deliching work with clear leaguer polich to give an aver	61.12	Sam		_
35	Polishing work with clear, lacquer polish to give an ever	01.12	Sqm		
	shine with prepare surface using spirit lakh dana N.C				
	Sealer and clear lacquer with spray				
36	Painting with Fungal paint of approved brand and make	80.71	Sqm		-
	Asian Paints & make i/c coating of Dr. Fixit U.R.P and		-		
	apply anti fungal primer and finishing with anti fungal				
	paint Two or more coat				
i i		1	1		

(Signature of the Contractor & Stamp)

#### ANNEXURE-"A"

# BOQ for Electrical Work at of Lab no 7A , 7B and Room No 14 in Botany department at 1st floor of School of chemical and life sciences .

S.No.	Particular	Qty	Unit	Rate	Amount
1	<b>DSR-2018/1.10.1</b> Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required (Make: Havells/ Polycab / Finolex)	5	Nos.		
2	DSR-2018/1.14 Supplying and fixing of following sub-main circuit wiring with PVC insulated copper conductor alongwith loop earthing single core cable and laying in PVC Conduit/casing, capping on surface/recessed etc. as required. (Make: Havells/ Polycab / Finolex/RR kabel)				
а	$2 \times 2.5$ sq. mm + $1 \times 2.5$ sq. mm earth wire (1.14.2)	35	Rmt		
b	$2 \times 4.0$ sq. mm + $1 \times 4.0$ sq. mm earth wire (1.14.3)	193	Rmt		
c	$4 \times 10$ sq. mm + 2 × 6 sq. mm earth wire (1.14.10)	60	Rmt		
d	$2 \times 10$ sq. mm + $1 \times 6$ sq. mm earth wire (1.14.5)	35	Rmt		
3	DSR-2018/1.31 Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular switch, connections etc. as required. (Make: Anchor Roma / Havells)	3	Nos.		
4	DSR-2018/1.32 Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required. (Make: Anchor Roma / Havells)	16	Nos.		
5	<b>DSR-18/1.25</b> Supplying and fixing two module stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required (Make: Anchor Roma / Havells)	3	Nos.		
6	<b>DSR-2018/2.10</b> Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of Single poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				

a	Single Pole MCB (2.10.1) (Make: ABB/ Hager /			
a	Havells)	24	Nos.	
7	<b>DSR-2018/2.4.1</b> Supplying and fixing following way,			
,	horizontal type three pole and neutral, sheet steel,			
	MCB distribution board, 415 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			
	MCB/RCCB/Isolator) (Make: ABB/ Hager /			
	Havells)			
a	4  way  (4 + 12),  Double door	1	Nos.	
8	DSR-2018/2.3.3	1	1105.	
0	Supplying and fixing 12way, double door, 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,	1	Nos.	
	interconnections, powder painted including earthing			
	etc. as required. (But without MCB/RCCB/Isolator)			
	(Make: ABB/ Hager / Havells)			
9	DSR-2018/2.13			
	Supplying and fixing following rating, four pole, 415			
	V, isolator in the existing MCB DB complete with			
	connections, testing and commissioning etc. as			
	required. (Make: ABB/ Hager / Havells)			
a	63Amp (2.13.2)	1	Nos.	
10	DSR-2018/2.18			
	Supplying and fixing 20 A, 240 V, SPN Industrial			
	type socket outlet, with 2 pole and earth, metal			
	enclosed plug top alongwith 20 A "C" curve, SP,			
	MCB, in sheet steel enclosure, on surface or in	4	Nos.	
	recess, with chained metal cover for the socket outlet			
	and complete with connections, testing and			
	commissioning etc. as required. (Make: Anchor /			
	ABB / Havells)			
11	DSR-2018/2.13			
	Supplying and fixing following rating, four pole, 415			
	V, isolator in the existing MCB DB complete with			
	connections, testing and commissioning etc. as			
	required. (Make: ABB/ Hager / Havells)			
a	63Amp (2.13.2)	1	Nos.	
12	Supply and Fixing of 63A DP MCB complete with	_		
	connection etc as required. (Make: ABB/ Hager /	2	Nos.	
	Havells)			
13	DSR-2018/1.27			
	Supplying and fixing following size/ modules, GI	3		
	box alongwith modular base & cover plate for		Nos.	
	modular switches in recess etc. as required.			
	a)(1.27.5) 8 Module (125mmX125mm) (Makes Anakan Paras (Hawalla)			
14	(Make: Anchor Roma / Havells) Supply of 3.5×70 sq.mm XLPE sheathed, PVC			
14	insulated, Aluminum armored cable, 1.1KV Grade	20	Dent	
	make:(Havells/ Polycab)	20	Rmt.	
	max. 110,0110/ 1 01,000	1	1	1 1

15   DSR-187.7.2     Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of 70 sq. mm (clamped with 25X3mm MS flat clamp)on wall surface as required.   18   Rmt     16   Supplying, installing on wall, testing and commissioning of 200 amp capacity TPN bus bar with powder coated painted box complete, fully PVC insulated 4 Nos. copper bus bars having current density of 130 A/ sq cm at nominal current rating in convenient sections and suitable for 415 volts, 3 phase, 4 wire, 50 Hz, A.C. supply   Nos.     17   Providing and fixing 160 amp rating and 25KA breaking capacity and pole MCCB along with thermo magnetic release and terminal spreaders in existing cubicle panel board including drilling holes in cubicle panel board including the cubicle p					1	
commissioning of 200 amp capacity TPN bus bar with powder coated painted box complete, fully PVC insulated 4 Nos. copper bus bars having current density of 130 A/ sq em at nominal current rating in convenient sections and suitable for 415 volts, 3 phase, 4 wire, 50 Hz, A.C. supply   1   Nos.     17   Providing and fixing 160 amp rating and 25KA breaking capacity and pole MCCB along with thermo magnetic release and terminal spreaders in existing cubicle panel board including drilling holes in cubicle panel board including drilling holes in cubicle panel board including drilling holes in cubicle panel score resisting cubicle panel score and ube/lamp etc. directly on celling/ with brass conpression gland and aluminum lugs for following size of PVC insulated and PVC sheathed / XLPE aluminum conductor cable of 1.1 KV grade as required.   1   Nos.     19   Supply and Fixing of 63A TPN MCB in the existing DB complete connection, testing and commissioning of pre-wired, 20 W LED tube fitting complete with all accessories and tube/lamp etc. directly on celling/ wall, including connections with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required of 20Watt LED Batton Tube light fitting complete vint all accessories, etc. complete in all respect (Make: Crompton/Havells/Phillips)   2   Nos.     21   Supply Installation testing and commission of pre- wired, 2x2 square 36 watt LED panel light complete with all accessories, etc. complete in all respect (Make: Crompton/Havells/Phillips)   10   Nos.     22   Supply and fixing of fan hook   2   Nos.   1	15	PVC sheathed / XLPE power cable of 1.1 KV grade of 70 sq. mm (clamped with 25x3mm MS flat clamp)on wall surface as required.	18	Rmt		
breaking capacity and pole MCCB along with thermo magnetic release and terminal spreaders in existing cubicle panel, making connections, etc. as required.   1     18   DSR-18/9.1   Supplying and making end termination with brass compression gland and aluminum lugs for following size of PVC insulated and PVC sheathed / XLPE aluminum conductor cable of 1.1 KV grade as required.   2   Nos.     a   3½ X 70 sq. mm (38mm) (9.1.23)   2   Nos.     19   Supply and Fixing of 63A TPN MCB in the existing DB complete connection, testing and commissioning of pre-wired, 20 W LED tube fitting complete with all accessories and tube/lamp etc. directly on ceiling/ wall, including connections with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required of 20Watt LED Batton Tube light fitting complete connection etc as required. (Make: Crompton/Havells/Phillips)   2   Nos.     21   Supply Installation testing and commission of required. (Make: Crompton/Havells/Phillips)   10   Nos.     22   Supply Installation testing and commission of prewired, 2x3 square 36 watt LED panel light complete with all accessories, etc. complete in all respect (Make: Crompton/Havells/Phillips)   2   Nos.     21   Supply and fixing of fan hook   2   Nos.   10     22   Supply and fixing of fan hook   2   Nos.     23   Dismantling of old fan, tube fitting fixtures, circuits, etc.   1   Job	16	commissioning of 200 amp capacity TPN bus bar with powder coated painted box complete, fully PVC insulated 4 Nos. copper bus bars having current density of 130 A/ sq cm at nominal current rating in convenient sections and suitable for 415 volts, 3	1	Nos.		
with brass compression gland and aluminum lugs for following size of PVC insulated and PVC sheathed / XLPE aluminum conductor cable of 1.1 KV grade as required.   Image: science	17	breaking capacity and pole MCCB along with thermo magnetic release and terminal spreaders in existing cubicle panel board including drilling holes in cubicle panel, making connections, etc. as required.	1			
19   Supply and Fixing of 63A TPN MCB in the existing DB complete connection, testing and commissioning etc. as required. (Make: ABB/ Hager / Havells)   1   Nos.     20   Supply Installation, testing and commissioning of pre-wired, 20 W LED tube fitting complete with all accessories and tube/lamp etc. directly on ceiling/ wall, including connections with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required of 20Watt LED Batton Tube light fitting complete connection etc as required. (Make: Crompton/Havells/Phillips)   2   Nos.     21   Supply Installation testing and commission of pre- wired, 2x2 square 36 watt LED panel light complete with all accessories, etc. complete in all respect (Make: Crompton/Havells/Phillips)   10   Nos.     22   Supply and fixing of fan hook   2   Nos.   1     23   Dismantling of old fan, tube fitting fixtures, circuits, etc.   1   Job	18	with brass compression gland and aluminum lugs for following size of PVC insulated and PVC sheathed / XLPE aluminum conductor cable of 1.1 KV grade as				
DB complete connection, testing and commissioning etc. as required. (Make: ABB/ Hager / Havells)   1   Nos.     20   Supply Installation, testing and commissioning of pre-wired, 20 W LED tube fitting complete with all accessories and tube/lamp etc. directly on ceiling/ wall, including connections with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required of 20Watt LED Batton Tube light fitting complete connection etc as required. (Make: Crompton/Havells/Phillips)   2   Nos.     21   Supply Installation testing and commission of prewired, 2x2 square 36 watt LED panel light complete with all accessories, etc. complete in all respect (Make: Crompton/Havells/Phillips)   10   Nos.     22   Supply and fixing of fan hook   2   Nos.     23   Dismantling of old fan, tube fitting fixtures, circuits, etc.   1   Job	a	3 ¹ / ₂ X 70 sq. mm (38mm) (9.1.23)	2	Nos.		
pre-wired, 20 W LED tube fitting complete with all accessories and tube/lamp etc. directly on ceiling/ wall, including connections with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required of 20Watt LED Batton Tube light fitting complete connection etc as required. (Make: Crompton/Havells/Phillips)2Nos.21Supply Installation testing and commission of pre- wired, 2x2 square 36 watt LED panel light complete with all accessories, etc. complete in all respect (Make: Crompton/Havells/Phillips)10Nos.22Supply and fixing of fan hook2Nos.23Dismantling of old fan, tube fitting fixtures, circuits, etc.1Job	19	DB complete connection, testing and commissioning etc. as required. (Make: ABB/ Hager / Havells)	1	Nos.		
wired, 2x2 square 36 watt LED panel light complete with all accessories, etc. complete in all respect (Make: Crompton/Havells/Phillips)   10   Nos.     22   Supply and fixing of fan hook   2   Nos.     23   Dismantling of old fan, tube fitting fixtures, circuits, etc.   1   Job	20	pre-wired, 20 W LED tube fitting complete with all accessories and tube/lamp etc. directly on ceiling/ wall, including connections with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required of 20Watt LED Batton Tube light fitting complete connection etc as	2	Nos.		
23 Dismantling of old fan, tube fitting fixtures, circuits, etc. 1 Job	21	wired, 2x2 square 36 watt LED panel light complete with all accessories, etc. complete in all respect	10	Nos.		
etc.	22	Supply and fixing of fan hook	2	Nos.		
Total	23		1	Job		
					Total	

(Signature of the Contractor & Stamp)