

TENDER DOCUMENTS

FOR

Face-lifting of Pul-Pehlapdur Campus



**JAMIA HAMDARD
HAMDARD NAGAR, NEW DELHI-62**

JAMIA HAMDARD
HAMDARD NAGAR, NEW DELHI-110062
NOTICE INVITING TENDER

NIT No. JH/Civil/Face_Lift/P.P./38/24

Date: 07.05.2024

Jamia Hamdard invites sealed items rate Tenders in two bids system (Technical & Financial) from Registered Contractors at Govt./Semi Govt. Departments/Higher Educational Institutions for the below mentioned work. The Tender documents and other details are available on the website: www.jamiahamdard.edu. **Last date of submission of the Tender is 27.05.2024 up to 3.00 PM.**

The bidders are also advised to visit site to satisfy themselves before submitting the bids. Bidders not fulfilling the eligibility criteria may be rejected.

NAME OF WORK:	Face-lifting of Pul-Pehlapdur Campus
ESTIMATED COST:	Rs. 53,68,777.00 (i/c GST)
EARNEST MONEY:	Rs 1,07,400.00
TENDER COST:	Rs. 1500 only (Non Refundable)
PRE BID MEET:	17.05.2024 AT 11:00 AM in the office of Ex. Engineer
TIME PERIOD:	60 days.

The Tender duly filled should be dropped in the Tender Box kept in Purchase Section, Admin Block **on or before 27.05.2024 upto 3.00 PM** along with demand draft of Earnest money & Tender fee in sealed envelope clearly specifying the name of work. The D.Ds shall be in favour of “Jamia Hamdard” payable at New Delhi. The Tender shall be opened on same day at 3.30 PM by the tender committee in the presence of available interested parties in the Office of Executive Engineer and the Financial bid of the eligible parties will be opened after due information to eligible parties.

In case the required procedure is not followed, the tender can be rejected. Jamia Hamdard reserves the right to reject any or all tenders or split the tenders without assigning any reason whatsoever.

Registrar

Copy to:

1. System Analyst, Computer Center, to kindly upload the NIT with tender documents on the University’s website.
2. PA to Finance Officer for kind information
3. Executive Engineer for kind information
4. Dean, HILSR for kind information
5. Concerned AE (Civil) for necessary action

(1) **SCOPE OF WORK**

- **Face-lifting of Pul-Pehlapdur Campus as per attached BOQ at Annexure ‘X’**

(2) **ELIGIBILITY CRITERIA**

- Registered Contractors at Govt./Semi Govt. Departments/Higher Educational Institutions or Working Agencies at Jamia Hamdard
- 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 contracts of similar natures of works of 40% value of estimated cost of works in the last 5 years in any Govt./Semi Govt./State Govt. Departments/Institutional Buildings, Universities and produce credentials in support thereof.
- The firm should have average annual financial turnover of at least Rs. 60 Lakhs during the preceding last 3 consecutive financial years. Turnover Certificate must be verified by the Chartered Account with a valid UDI no. if certificate not available, Copies of the audited balance sheet (duly verified by Chartered Account with a valid UDI no.) of the vendor/bidder for the last three financial years may be attached.
- Bankers certificate for credit worthiness (Solvency Certificate) not less than Rs. 30 Lakhs
- The Bidders must have G.S.T & PAN No., and should attach ESI, EPFO registrations, if applicable.

Note: - Tenders shall also be liable for rejection on any of the following grounds:

- a) Tenders submitted late.
- b) Tenders containing remarks uncalled for.
- c) Conditional tenders
- d) Tenders not submitted on prescribed Performa.
- e) Telegraphic tenders.
- f) Tender submitted without E.M.D. and Cost of tender document.

(3) **SUBMISSION OF BIDS**

Submission of Tender: Tenders should be submitted in two Parts i.e. “Technical bid” (Part-A) and “Price bid” (Part-B) in two separate sealed envelopes. Both the parts should be further put in a single 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.

Technical Bid (Part-A):

In this bid, the bidder shall submit the following:

- a. Covering letter on Company's Letter head
- b. Bio data of company (Company profile, organizational setup, credentials, list of plant, machinery & tools in his possession).
- c. D.D.s of Tender Fee & Earnest Money Deposit.
- d. Copies of GST no., PAN no., ESI, EPFO Registration etc., as if applicable
- e. Company's financial performance documents (Turnover Certificate, Audited balance sheet, and profit and loss statement)
- f. Copies of work orders for 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.
- g. Entire NIT (except Price bid) duly signed & stamped by the bidder.
- h. Experience of having successfully completed works during the last 3 years ending last day of the month previous to the one in which applications are invited.

Note

1. Completion certificate submitted should be issued by an officer not below the rank of Executive Engineer.
2. All documents submitted by the bidder should be self-attested along with stamp

Price Bid (Part-B):

- i. BOQ is cited on **Annexure "X"**
 - 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. Tenderer should quote their rates both in figure and words.

4. GENERAL TERMS & CONDITIONS

- I. **Earnest Money:** An earnest money of **Rs. 1,07,400.00** 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, 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 60 days from 2nd day of the date of issue of work order. Any delay in completing the work for reasons attributable to the Contractor is liable for liquidated damages as per clause XVII of NIT. The contractor shall not be entitle to any compensation for any loss suffered by hindrance on account of delay in commencing or executing the work, whatever the cause for such delays may be including delays in procuring Government controlled or other materials. 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 Executive Engineer 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. Site will be handed over as it is where it is and nothing extra shall be paid for clearing and disposal of Rubbish & Malba.
- 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. The rates of different items are for all heights, depth, curvature and width unless otherwise specified against the item. In case of any doubt, may be clarified from the office of the Assistant Engineer (Civil).

IX. Water & Electricity :

Electricity: Temporary Electric Connection if required will be supplied by the Jamia Hamdard. The necessary cabling and metering etc. will be done by the contractor at his own cost. He shall be pay for the consumption at the prevailing rates of charges as per bills of Jamia Hamdard.

Water: Contractor to make their own arrangement of potable water for execution of work and drinking of labours by or arrange from outside at their own cost. The Contractor will ensure by Laboratory test that water is fit for construction and drinking purpose, if required.

- X. **Correspondence:** All the correspondence in respect of tender/award of work shall be made to Executive Engineer.
- XI. The Contractor shall not be allowed to possess any space or rooms inside the building.
- XII. No work shall be done at night (8 PM to 9 AM) or as decided mutually and on National Holidays without the instruction in written of Jamia Hamdard.
- XIII. **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 their 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. 05 % deductions will be made towards the security deposit from each running bill. The security deposit shall only be refunded as per the clause XIX.
- XIV. **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.
- XV. **Work not to be sublet:** If the Contractor shall assign or sublet this contractor, or attempt so to do, or become in solvent or commence any insolvency proceeding of, if any bribe, gift, loan, given promised or offered by the Contractor to any person in the employ of Employer, then Jamia Hamdard shall have power to termination of contract.
- XVI. 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.

- XVII. **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 @0.5% 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 deductible from his bills/dues.
- XVIII. **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 document of CPWD or based on market rates for determining item rate and pay to contractor accordingly.
- XIX. **Defect Liability period:** Defect liability period shall be six (06) months from the date of completion of work. Any defect arising in this period will be rectified by him at his own cost. Failure to do so, shall lead to forfeiture of security deposit.
- XX. **Security Deposit:** A security deposit equal to 05 % of the value of work will be deducted from Contractor's bills.
- XXI. **Release of Security Deposit:** after the completion of the Defect liability period of 06 months, as per clause XIX, subject to satisfactorily rectification of all defects.
- XXII. 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.
- XXIII. Contractor will take due permission for entry of all his workmen in Jamia Hamdard. No unauthorized person will be allowed to work inside.
- XXIV. 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.
- XXV. 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.

- XXVI. 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.
- XXVII. 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.
- XXVIII. 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.
- XXIX. 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.
- XXX. 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.
- XXXI. 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.
- XXXII. Tender once submitted will remain with the Jamia Hamdard and will not be returned to the bidders.
- XXXIII. **Termination of Contract:** The Jamia Hamdard reserve the right to terminate the contract on account of poor workmanship, failure to mobilize site within 15 days, 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.
- XXXIV. 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.
- XXXV. Any dispute arising out of this contract will be subjected to jurisdiction of New Delhi/Delhi.

XXXVI. 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.

XXXVII. 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 thereafter, 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 with the mutual consent of both the parties where decision shall be final and binding upon the parties concerned.

The parties shall act strictly according to provisions of Indian Laws while implementing and interpreting this MoU/agreement, NIT etc. The Courts at New Delhi shall have exclusive pecuniary and territorial jurisdiction for the purpose of this MoU/agreement, NIT etc.

ANNEXURE-'B''

(5) LIST OF APPROVED MAKES

1.	OPC 43	ACC, Ultratech, Ambuja, or other equivalent brands approved by the Engineer in-charge
2.	Floor Tiles	Kajaria, Orient or as approved by the Engineer in-charge
3.	Flush Doors	Century, Duro or its equivalent as approved by the Engineer in-charge
4.	POP	Birla, JK Cement or as approved by the Engineer in-charge
5.	Putty	Birla, JK Cement or as approved by the Engineer in-charge
6.	Acrylic Distemper (Premium)	Asian, ICI, Nerolac Premium Quality or as approved by the Engineer in-charge
7.	Synthetic Enamel Paint (Premium)	Asian, ICI, Nerolac Premium Quality or as approved by the Engineer in-charge
8.	Acrylic Exterior (Premium)	Asian, ICI, Nerolac Premium Quality or as approved by the Engineer in-charge
9.	Elastomeric liquid membrane waterproofing chemical	Asian, Dr. Fixit Solyseal, Sikalastic-450 (I) or as approved by the Engineer in-charge
10.	URP waterproofing agent	Dr. Fixit or as approved by the Engineer in-charge

Note:-Contractors are requested to read the complete tender documents and visit the site before submission of Bids.

Schedule of Quantities

S.no.	Description of work	Qty	Unit	Rate	Amount
Repair and whitewash interior and exterior work of Staff quarters (A,B,D,E & F & Pili Kothi block) at Pulpehladpur campus					
1	Removing white wash, color wash, plastic emulsion paint, oil bound distemper, synthetic enamel paint etc. by scrapping with sand papering removing loose particles etc. and making surface smooth for the work.	4936.67	sqm		
2	Applying a priming coat with ready mixed water based interior primer of approved brand (Asian paints ,ICI Dulux ,Nerolac & Berger)make including necessary tools & paints and scaffolding /jhoola up to all hights .	4936.67	Sqm		
3.00	Filling putty making surface using ready made powder 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	3208.00	sqm		
4	Distemping with oil bound washable distemper (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 stainer of approved brand for making of required shades with brushes etc, completes				
a	Old work (two or more coats)	1728.00	Sqm		
b	New work (three or more coats)	3208.00	Sqm		
5	Painting with synthetic enamel paint of approved brand and make (Asian paint,ICI Dulux ,Nerolac & Berger paint)to give an even shade such as blue green buff and all other requirment shades including using of colors stainer of approved brand for making of require shades with brushes etc complete including necessary centring and shuttring and scaffolding up to all hight.				
a	Old work(two or more coats)	346.56	Sqm		
b	Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture	1320.00	Sqm		

6	Finishing walls with premium Acralic smooth extirior paint with silicone additives like Apex wethe shield etc.of approved barnd and manufacturar (Asian paints ICI Dulex & Berger paints)of required shades .				
a	New work (three or moor coats) over and including base coat of water based extirior primer of same brand applied of same brand applied including necessary tools & plans and Scaffolding /Jhoola up to all hight.	643.14	Sqm		
b	Old work (one or more coats applied @ 2.20 kg/10 sqm) over priming coat of primer applied @ 0.80 litrs/10 sqm complete including cost of Priming coat.Old work(two or mre coats)	1054.53	Sqm		
Total amount A					
Mandatory Civil repair work of Staff quarters (A,B,D,E & F & Pili Kothi block) at Pulpehladpur campus					
S.no.	Description of work	Qty	Unit		
7	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 Engineer-in-Charge.				
a	With cement mortar 1:4 (1 cement : 4 fine sand)	100.00	Sqm		
b	With cement mortar 1:4 (1cement: 4 coarse sand)	104.00	Sqm		
8	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)	140.00	Sqm		

9	Providing and fixing double scaffolding system (cup lock type) on the exterior side, up to seven story height made with 40 mm dia M.S. tube 1.5 m centre to centre, horizontal & vertical tubes joining with cup & lock system with M.S. tubes, M.S. tube chollies, M.S. clamps and M.S. staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for the required duration as approved and removing it there after .The scaffolding system shall be stiffened with bracings, runners, connection with the building etc wherever required for inspection of work at required locations with essential safety features for the workmen etc. complete as per directions and approval of Engineer-in-charge .The elevational area of the scaffolding shall be measured for payment purpose .The payment will be made once irrespective of duration of scaffolding.	40.00	sqm		
10	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.	3.32	cum		
11	Extra for cutting reinforcement bars manually/ by mechanical means in R.C.C. or R.B. work (Payment shall be made on the cross sectional area of R.C.C. or R.B. work) as per direction of Engineer-in-charge.	33.28	Sqm		
12	Washed stone grit plaster on exterior walls height upto 10 metre above ground level, in two layers, under layer 12 mm cement plaster 1:4 (1 cement : 4 coarse sand), furrowing the under layer with scratching tool, applying cement slurry on the under layer @ 2 Kg of cement per square metre, top layer 15 mm cement plaster 1:1/ 2:2 (1 cement: 1/2 coarse sand : 2 stone chipping 10 mm nominal size), in panels with groove all around as per approved pattern, including scrubbing and washing the top layer with brushes and water to expose the stone chippings ,complete as per specification and direction of Engineer-in-charge (payment for providing grooves shall be made separately).	60.00	Sqm		

13	Providing and fixing factory made Fiberglass Reinforced plastics (F.R.P.) chajja 4 mm thick of required colour, size and design made by Resin Transfer Moulding (RTM) Machine Technology, resulting in void free compact laminate in single piece, having smooth gradual slope curvature for easy drainage of water and duly reinforced by 2 nos vertically and 1nos horizontally 50x2 mm thick M.S. flat with 12 mm in built hole for grouting on the existing wall along with the 50 mm flanges duly inserted and sealed in the wall complete in one single piece casted monolithically, including all necessary fittings . The FRP Chajja should be manufactured using unsaturated Polyester resin as per IS: 6746, duly reinforced with fibre glass chopped strand mat (CSM) as per IS: 11551 complete with protective Gel coat U/V coating on Top for complete resistance from the extreme of temperature, weather & sunlight. Note - Only plan area of chajjas shall be measured for making payment]	33.28	sqm		
14	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 cum	1.00	cum		
15	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in : Cement mortar 1:6 (1 cement : 6 coarse sand)	1.00	cum		
16	12 mm cement plaster of mix : 1:6 (1 cement: 6 fine sand)	40.32	Sqm		
17	15 mm cement plaster on the rough side of single or half brick wall of mix : 1:6 (1 cement: 6 fine sand)	45.65	Sqm		
18	Providing and fixing ISI marked flush door shutters conforming to IS :2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters: 35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws sqm	57.00	Sqm		
19	Providing & fixing fly proof wire gauze to windows, clerestory windows & doors with M.S. Flat 15x3 mm and nuts & bolts complete. Stainless steel (grade 304) wire gauze of 0.5 mm dia wire and 1.4 mm aperture on both sides	100.00	Sqm		

20	Minor Repairing of wooden door, window with necessary required material nails, fevicoal, hinges, 6mm ply, Aluminium sheet etc. complete as required. Note: The above job is for the whole Pul-Pehladpur Campus which consists 6 Blocks having 5-10 Flats each	1.00	Job		
	Total amount B				
Waterproofing treatment of Roof of A,B, D, E,F block ,Pili Kothi and Al-baruni Hostel at Pul-Pehladpur campus.					
21	Raking out joints in lime or cement mortar and cleaning of roof with preparing the surface for re-pointing or replastering, including disposal of rubbish to the dumping ground, all complete as per direction of Engineer-in-Charge.	1700.00	sqm		
22	Grading roof for water proofing treatment with Cement concrete 1:2:4 (1 cement : 2 coarse sand :4 graded stone aggregate 20mm nominal size)	53.00	Cum		
23	Providing gola 75x75 mm in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 stone aggregate 10 mm and down gauge), ncluding finishing with cement mortar 1:3 (1 cement : 3 fine sand) as per standard design :In 75x75 mm deep chase	450.00	meter		
24	Providing and applying fibre reinforced elastomeric liquid water proofing membrane with resilient acrylic polymers having Sun Reflectivity Index (SRI) of 105 on top of concrete roof in three coats @10.76 litre/ 10 sqm. One coat of self-priming of elastomeric waterproofing liquid (dilution with water in the ratio of 3:1) and two coats of undiluted elastomeric waterproofing liquid (dry film thickness of complete application/system not less than 500 microns). The operation shall be carried out after scrapping and properly cleaning the surface to remove loose particles with wire brushes, complete in all respect as per the direction of Engineer-in-Charge.	2100.00	sqm		
25	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 with waterproofing agents complete, including disposal of rubbish to the dumping round, all complete as per direction of Engineer-in-Charge. With cement mortar 1:4 (1 cement : 4 fine sand)	250.00	Sqm		
26	Providing & applying of URP Waterproofing agent in grading i/c necessary t&p etc. complete as per the direction of Engineer in charge	720	Ltr		
	Total C				

	Total A+B+C			
	Total in words			

(Signature of the Contractor & Stamp)