



INDIAN INSTITUTE OF TECHNOLOGY, BOMBAY
ESTATE OFFICE, POWAI, MUMBAI, MAHARASHTRA - 400 076.
TEL: 022 2576 7927/4995 E-mail : drestate@iitb.ac.in

Advertisement No. H-20/21-22

IIT Bombay invites Technical Bid & Financial Bid for following work from the contractors having similar experience in Central Government Departments / State Government Departments / Central or State Autonomous Bodies / State or Central Public Sector Undertakings & Large Private Organizations. The detail of work is given below:

Sr. No.	Name of Work	Estimated Cost (In. Rs.) Incl. GST	EMD (In Rs.)	Time Limit
1	Retrofitting and renovation work of Main Administrative Building, Main Building Annex and Audit Building of IIT Bombay. (EO/A/WORKSHOP/WKS-195/21-22)	Rs.11,44,87,342/-	Rs.23,00,000/-	3 years

Intending bidders need to register themselves on IIT Bombay portal i.e. <https://portal.iitb.ac.in/vrp/index.jsp> to get User ID and Password. View the open tender on <https://ep.iitb.ac.in/irj/portal>. Please visit https://portal.iitb.ac.in/vrp/vrp_srm_docs.jsp for configuration process and user manual. Queries regarding vendor registration, configuration process please contact on 022 – 2159 3001(ASC Help-desk) and queries regarding online Bid submission please contact to +91 82915 56277/56377.

Tenders are invited through offline mode by this office keeping the date of sale of blank tender form from 05.07.2022 to 22.07.2022 upto 03:00 p.m. Date and time for submission of technical bid and financial bid are on 25.07.2022 from 09:15 a.m. to 11:15 a.m. Date of opening of Technical Bid will be 25.07.2022 at 11:30 a.m. Date of opening of Financial Bid will be on 03.08.2022. (Tentative)

All contractors/agencies should submit technical bid with the following documents in a separate envelop along with financial bid, failing to which their tender will be summarily rejected from the tendering process:

1) i. Experience of having successfully completed works during the last 7 years ending last day of the month previous to the one in which applications are invited :

Three similar completed works costing not less than the amount equal to 40% of estimated cost put to tender,

OR

Two similar completed works, costing not less than the amount equal to 60% of the estimated cost put to tender

Or

One similar completed work of aggregate cost not less than the amount equal to 80% of the estimated cost.

AND

ii. One completed work of any nature (either part of (i) or a separate one) costing not less than the amount equal to 40% of the estimated cost put to tender with some Central Government Departments / State Government Departments / State or Central Autonomous Bodies / State or Central Public Sector undertakings.

2) Detail statement for work completed, work in hand including balance commitment of work should be enclosed for last three year commencing from 1st April and ended with 31st March and **contractor should submit his details as per Annexure 'A' format with support of xerox copies of work order and work completion certificates, otherwise the bid capacity will not be calculated and his technical bid will be summarily rejected, and no Financial Bid will be opened.** (All contractors/agencies are hereby informed that they should upload Technical bid as per format of Annexure "A", changing in format is not allowed).

3) Submit a copy of the information in respect of manpower/mandays for above said work must be given in undertaking with official signature and seal/stamp, otherwise tender will be rejected.

4) Bank Solvency certificate 40% of estimated amount issued within one year from any Nationalized / Schedule Bank.

5) P. F. registration certificate.

- 6) P. F. challans of last 12 months.
- 7) (i) ESIC registration certificate and copies of ESIC challans of last 12 months.
OR
(ii) Contractors' all risks insurance (CAR policy) / Mediclaim policy.
- 8) PAN card.
- 9) GST registration certificate.
- 10) Income Tax Return for last 03 years.
- 11) List of Equipment's, Machinery, Tools.
- 12) List of Technical Staff with copies of their Degree/diploma certificate.
- 13) Labour Licence obtained during last 03 years.
- 14) Submit a Demand Draft / Pay Order of Rs.23,00,000/- (EMD amount) drawn in favour of "The Registrar, IIT Bombay" in technical bid envelop.
- 15) Contractor's having valid NSIC / MSME certificate should submit a copy of it in technical bid envelop for EMD exemption.
- 16) Power of Attorney, if any.
- 17) Proof of Constitution: An affidavit in case of Sole Proprietorship, Partnership Deed in case of Partnership Firm, Article of Association in case of Private / Public Limited Companies.

Handwritten signature
Superintending Engineer (I/C)

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Note:

The work will be executed with lowest bidder as per the terms and conditions of work order and tender documents signed by the lowest bidder. (All agencies are requested to submit a copy of Terms and Conditions with official signature and seal/stamp in technical bid envelop).

The validity of the bid will be valid for 6 months from the date of opening of tender.

If agency fails to submit the above mentioned documents by submitting in technical bid envelop, their technical bid may be rejected by the tender opening committee.

The available bid capacity will be calculated based on the above information received from the agencies & the agencies those who are having sufficient bid capacity, i.e. bid capacity more than the estimate value, will only be considered. The tender of agencies having less bid capacity will be rejected and the accepted agency financial bid will be opened.

Litigation history of the agency is required to be submitted along with the application. Tender would not be awarded if any inquiry proceeding / criminal case is found pending against the agency.

No work will be subletted to third party. If found payment of final bill will not be processed and the contractor's name will removed from the enlistment without giving him further notice.

Contractor's/Agencies/Proprietor's are requested to give Power of Attorney to your representative to deal any matter with any Officers or Staff of IIT Bombay on behalf of you or your agency.

Rates of an estimate are based on CPWD SOR 2016 and rate analysis.

The contractors have to quote his own rates against each item of work.

IIT Bombay reserve its rights to reject any or all tenders without assigning any reason and without any reference.

R. K. Gupta
Superintending Engineer (I/C)

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TO BE SUBMITTED IN A SEPARATE ENVELOP ALONG WITH FINANCIAL BID

**ANNEXURE 'A' (FORMAT)
TECHNICAL BID**

File No. : EO/A/WORKSHOP/WKS-195/21-22

Name of Work : Retrofitting and renovation work of Main Administrative Building, Main Building Annex and Audit Building of IIT Bombay.

Name of the Contractor _____

Sr. No.	Name of Client	Name of Works	2018-2019 (In Lakhs)	2019-2020 (In Lakhs)	2020-2021 (In Lakhs)	2021-2022 (In Lakhs)	
						Completed	Balance
			-	-	-	-	-
			-	-	-	-	-
Total Amount (In Lakhs)			-	-	-	-	-

Note : Contractor must submit his details as per Annexure 'A' with declaration stating that **he is possessing all the original copies of work orders and experience certificates, it will be produced as and when required to IIT Bombay.** However, if it is found false at later stage, the contractor will be debarred or blacklisted. Whereas, if information is not submitted as per Annexure 'A' format his bid capacity will not be calculated and his tender will be summarily rejected.

Superintending Engineer (I/C)

Am
By
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Signature of Contractor
Name & Address in full

WORK UNDERTAKING

EO/A/WORKSHOP/WKS-195/21-22

ESTATE OFFICE

To,
Superintending Engineer (I/C)
Indian Institute of Technology Bombay,
Powai, Mumbai, Maharashtra - 400 076.

Sub : Retrofitting and renovation work of Main Administrative Building, Main Building Annex and Audit Building of IIT Bombay.

Dear Sir,

We are hereby quoting all the rates for the attached schedule of short tender of the above mentioned job.

We hereby accept & signed all the General Terms and Conditions and Special Conditions of Contract.

The work will be completed within specified time limit of 3 years as mentioned in the notice inviting for tenders.

I / We agree to keep the tender open for One Hundred and Eighty (180) days from the due date of its opening / One Hundred and Eighty days from the date of opening of financial bid in case tenders are invited on 2/3 envelope system and not to make any modification in its terms and conditions.

Note: -

The following information is required to be provided. If fails to do so, the tender will be assumed incomplete and hence the same will be rejected.

- 1) No. of Unskilled casual labour to be required per day. :
- 2) No. of Skilled casual labour to be required per day. :
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The Mandays required for completion of work. :

Thanking you,

Yours faithfully,

Signature of the Contractor
With official Seal / Stamp of the firm

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
BOQ Notes:								
1)	<p>Main Building of IIT is a monumental building having special Elevational features which shall be preserved while Repairs/Re-Casting is carried out.</p> <p>Therefore the Dimensions, Designs, etc shall be taken from the Site & shall be exactly matching with the Existing Member/Section/Element, in respect of "Concrete Fins" (Vertical), "Concrete Chajjas" (Horizontal) within the Fins, GI/Aluminium "Louvers", Concrete Louvers, "Gutter" at Terrace level on East Façade, etc.</p>							
2)	<p>Notwithstanding anything contained in the Description of the BOQ/Specifications, it shall be noted that:</p> <p>a) Cost of Scaffolding shall be included in the respective Item. The Scaffolding shall not be paid separately.</p> <p>b) Cost of Protective Covering (along the Scaffolding) using Hessian Cloth/ Plastic Sheets/Nets etc, wherever required shall be included in the respective Items.</p> <p>It shall not be paid separately.</p> <p>c) Cost of Windows Covering shall be included in respective Items.</p> <p>It shall not be paid separately.</p> <p>d) Cost of Hacking, Curing, Cleaning, etc shall be included in respective Items.</p> <p>It shall not be paid separately.</p> <p>e) Cost of Material Testing, as directed shall be included in the respective Item.</p>							
3)	<p>For Specialized Items of Concrete, the Items have been segregated as per the "Element" to be Re-Cast, as per following Categories/Items:</p> <p>For Example:</p> <p>a) Concrete for Vertical "Fins",</p> <p>b) Concrete for Horizontal "Chajjas within Vertical Fins", (other Chajjas not included in this Item).</p> <p>c) Concrete for "Louvers" within Fins</p> <p>d) Concrete for Brackets & Beams for Gutter at Terrace Level</p> <p>e) Concrete for Bottom slab for Gutter at Terrace Level</p> <p>f) Concrete for Vertical Walls (Pardis) for Gutter at Terrace Level</p> <p>The Rate agreed for Specialized Item (particular Item) shall be applicable only to that respective Specialized "Element"/Form. For all other Concretes, Rates for General Items of Concrete (such as RCC Columns, Beams, Slabs, Chajjas, etc) shall be applicable, as mentioned against respective heads/Items.</p> <p>4) Cost of Shuttering, Centering, Strutting, Staging, etc, shall be included in respective Item of Concrete.</p> <p>It shall not be paid separately.</p> <p>5) Cost of Reinforcement Steel shall be paid separately as per the separate Item in BOQ.</p>							

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
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Part A: Structural Repairs: (Including Repairs/Re-Casting of Fins, Chajjas, Gutter, etc):

1	Horizontal Net for safety of drive ways & cars: P/F Safety Nets having openings not more than 50 mm X 50 mm, with adequate supports, as directed by the consultants, so as to protect the Surroundings, open-spaces around the building, etc. complete as directed.	388	851		1,239.00	m ²	Rs..... (_____ _____)	
2	Providing and fixing securely 12mm thick plywood for making temporary partition during execution of work at site, supported by Necessary Framework of Wood, and fixing the plywood sheets and removing the same after completion of work and taking out dismantled material out of IIT campus etc. completed as directed.	5,082	2,064		7,146.00	m ²	Rs..... (_____ _____)	
3	Removing doors and window frame with shutters of any size and type with fittings (if available) and handing over the same to IIT, as directed. If the material is Disposed off/ taken out the IIT Campus, if directed, then the Recovery for material taken out shall be as under: a) Recovery of wood scrap will be done @ Rs. 25 per kg, of material taken out. b) Recovery of Aluminium scrap will be done @ Rs. 120 per kg, of material taken out. c) Recovery of Structural steel will be done @ Rs. 20 per kg, of material taken out.	438	191		629.00	m ²	Rs..... (_____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
4	Carefully removing internal or external plaster of any thickness, in patches or any length without damaging structure, brickwork in the vicinity, by using electric cutting tools including cutting a groove first to demarcate exact area of damage taken place, stacking the debris within 500 meter, cleaning the site etc. complete, including covering the furniture, floor, windows and partitions with plastic sheets while chipping with double scaffolding. Note:- a) No extra payment shall be made for extra thickness removed. b) Proper tools to be used for removal of concrete and it should be seen by contractor no damage on the other side / nearby area will be taken place and if required other portions are to be checked by the contractors with respect to the damage before commencement of the work.	5,548	3,766	378	9,692.00	m2	Rs..... (_____ _____ _____ _____)	
5	Dismantling burnt brick masonry (in cement mortar) with plaster including sorting out serviceable bricks and lowering down debris, stacking the same and debris separately upto a distance of 500 meters or spreading the debris as directed.	35	16	32	83.00	m3	Rs..... (_____ _____ _____ _____)	
6	Chipping the RCC surface and cleaning the rusted reinforcement and exposed surface by wire brush mechanical device or any other established method and applying rust passivator solution of Krishna Conchem, approved make and quality with cotton waste swab to reinforcement and allowing to dry the same for 24 hours, brushing of loose particles and applying 1st coat of rust preventing coating of polymer and cement slurry in 1:1 proportion with soft brush without adding water including applying another coat of rust preventing after 4 hours allowing Air curing for 24 hours etc. including scaffolding etc. complete. Stacking the debris upto a distance of 500 meters or spreading as directed.	2,416	1,647	118	4,181.00	m2	Rs..... (_____ _____ _____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
7	Dismantling R.C.C. work including breaking concrete by chiselling, wedging etc., cutting the reinforcement, lowering down debris, stacking the debris upto a distance of 500 meters or spreading as directed.	182	36	56	274.00	m3	Rs..... (_____ _____ _____ _____)	
8	Dismantling plain cement concrete work including breaking concrete by chiselling, wedging etc., and stacking the debris upto a distance of 500 meters or spreading as directed.	61	23	5	89.00	m3	Rs..... (_____ _____ _____ _____)	
9	Removing the old cement Tiles or any type of tiles from floor / wall carefully including levelling the surface, cleaning the site, stacking the debris etc., upto 500 meter, etc., complete.	653	200	194	1,047.00	m2	Rs..... (_____ _____ _____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
10	Disposing debris, loose stones, boulders, concrete pieces broken etc. collected and stacked as directed including loading in trucks, transporting out of IIT Campus including obtaining approval from Government/ private land owners for disposing off on to their approved location. The contractor will be solely responsible for disposing debris out of campus and the debris are to be removed from site within 72 hours from stacking (30% voids will be deducted for debris, loose stones, boulders, concrete pieces, from actual measurement of Truck/Vehicle).	637	394	161	1,192.00	m3	Rs..... (_____ _____ _____ _____)	
11	Removing soling without dust nuisance including sorting out the stone chips and debris separately and stacking upto distance of 500 meters as directed.	85	35		120.00	m3	Rs..... (_____ _____ _____ _____)	
12	Excavation for foundation, Plinth protection, etc. in earth, soil of all types, sand, gravel, soft and hard murum, soft rock etc. including removing the excavated materials up to a distance of 50 meters beyond the site of work and Depth/ lift up to 1.50 meters, stacking and spreading as directed preparing the bed for the foundation and necessary dewatering using pump, backfilling, ramming, watering, including shoring and strutting, providing necessary barricading around excavated area etc. complete.	75	50	25	150.00	m3	Rs..... (_____ _____ _____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
13	Excavation for foundation, Plinth protection, etc. in earth, soil of all types, sand, gravel, soft and hard murum, soft rock etc. including removing the excavated materials up to a distance of 50 meters beyond the site of work and Depth/lift above 1.50 meters, stacking and spreading as directed preparing the bed for the foundation and necessary dewatering using pump, backfilling, ramming, watering, including shoring and strutting, providing necessary barricading around excavated area etc. complete.	25	20	10	55.00	m3	Rs..... (_____ _____ _____ _____)	
14	Removing Galvanized Iron, Asbestos Cement, Polycarbonate, FRP, or any type of sheet roof covering and handing over the same to IIT, as directed. If the material is Disposed off/ taken out the IIT Campus, if directed, then the Recovery for material taken out shall be as under: a) Recovery of Galvanized Iron Sheets will be done @ Rs. 25 per kg, of material taken out. b) Recovery for rest of the materials will be: Nil.		185		185.00	m2	Rs..... (_____ _____ _____ _____)	
15	Re-fixing the removed Galvanized Iron, Asbestos Cement, Polycarbonate, FRP, or any type of sheet roof covering, as directed.		50		50.00	m2	Rs..... (_____ _____ _____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
16	Carefully removing all types of false ceilings, Partitions, Panelling, along with frame work, without damaging other parts/ structure, rectifying the damages including scaffolding and stacking the sections at site for refixing and taking the damaged false ceiling sheets and ceiling frame sections if any, outside campus etc. all complete as directed.	1,576	1,218	399	3,193.00	m2	Rs..... (_____ _____ _____ _____)	
17	Carefully removing Gypsum/Calcium Silicate false ceiling sheets without removing or damaging the frame work, without damaging the surrounding structure, rectifying the damages, including scaffolding, and disposing the removed material, etc. all complete as directed.	120	96		216.00	m2	Rs..... (_____ _____ _____ _____)	
18	Providing and applying an effective bond coat of Polymer (SBR) approved by IITB and cement in the proportion of 1:1 by using brush in multiples coats as required to accommodate the whole thickness of polymer modified mortar wherever required including scaffolding wherever required on the surface of old concrete / repaired concrete Polymer (SBR) of approved manufacturer should have the following properties: · Suspended solid particles should not be less than 40% · Specific gravity should not be more than 1.01 · PH should not be less than 8.5 Note: The actual consumption of polymer shall be measured for payment on weight basis. Challans & GST Tax Invoices of authorized dealer will be verified.	3,624	2,471	177	6,272.00	Kg.	Rs..... (_____ _____ _____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
19	Providing and Placing in position Ready-mix Polymer mortar manufactured by BASF, Dr. Fixit, M.C. Bouchmey, and adding water in the proportion of 1:0.14 (Polymer mortar : water) or as specified by the manufacturer, at any floor over the prepared RCC surfaces in layers as directed (thickness of each layer shall not exceed 10 to 15mm) including mixing the polymer mortar with water using forced action mixer including double scaffolding wherever required, mild curing will be done with water for 3 days etc. complete. (payment will be paid for the actual quantity of polymer mortar used on weight basis. Challans & GST Tax Invoices of authorized dealer will be verified)	170,086	119,902	6,230	296,218.00	Kg.	Rs..... (_____ _____)	
20	Providing and laying super fluid micro concrete of approved manufacturer at any floor after reinforcement treatment coat including mixing with 10mm to 5mm size quartz aggregate in the ratio of 1 part super fluid micro concrete to 0.75 part of quartz aggregate by weight providing marine plywood formwork in line and level, cleaning, curing etc. complete. The compressive strength of super fluid micro concrete should not be less than 20N / mm ² . (Payment will be paid for the actual quantity of only micro concrete used on weight basis. Weight of the Aggregates added shall not be paid. Challans of authorized dealer will be verified)	59,029	42,503	11,461	112,993.00	Kg.	Rs..... (_____ _____)	
21	Providing and fixing in position Thermo-Mechanically Treated bars of grade Fe-500 D or more, for reinforcement of various diameters, for Repairs, for R.C.C. footings, foundations, slabs, beams, columns, canopies, staircases, chajjas, lintels, parties, coping, fins etc. as per detailed designs, drawings and schedules including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete.	10,784	2,229	6,253	19,266.00	Kg.	Rs..... (_____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
22	Drilling Holes Drilling straight and inclined holes upto 200mm depth and upto 20mm dia in concrete / masonry using electrically operated drilling machine and fixing steel including scaffolding.	1,933	1,318	618	3,869.00	Nos	Rs..... (_____ _____)	
23	Epoxy material of approved brand like Araldite for fixing (Anchoring) of Reinforcement Steel bars of various diameters (especially Stirrups), into the concrete. (Payment will be paid for the actual quantity of Epoxy material used on weight basis. Challans & GST Tax Invoices of authorized dealer will be verified)	19	13	6	38.00	Kg.	Rs..... (_____ _____)	
24	Providing and Injecting material of approved brand like Hilti HIT-RE 500 V3 in RCC including fixing various diameter reinforce bars including drilling hole as per manufacturer specifications, blowing out the hole and finishing etc. complete as directed. This item does not include P/F Anchor Bolts. The Steel/Bolts to be anchored by this Hilti material shall be paid under Item of Steel Reinforcement.	628			628.00	Nos	Rs..... (_____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
25	Grouting existing RCC structure as per following operations including scaffolding, sealing leak paths with lead wool, removing nipple, plugging the hole with neat cement paste by ram packing, cleaning etc. complete. 1) Add Sunplex powder (manufacture by Sunanda) (or approved equivalent, as approved) 1 kg in one bag of cement of 50 kg with adequate water, or as per manufacturer's specifications. 2) Using mechanical means of pressure grouting with the above mix. The pressure shall be 5-10 psi. 3) The grouting to be done into the cracks of ceiling, walls, columns & beams if necessary. 4) After through grouting sealing the holes with neat cement paste. Weight of only Cement shall be measured for payment)	4,832	3,294	236	8,362.00	Kg.	Rs..... (_____ _____ _____ _____)	
26	Epoxy Grouting to existing RCC structure/ Uncoursed Rubble Masonry as per following operations including scaffolding, sealing leak paths with lead wool, removing nipple, plugging the hole with neat cement paste by ram packing, cleaning etc. complete. 1) Grouting by Low Viscosity Epoxy Injection of material of approved brand like Epco- KP/HP-250 including Resin & Hardener. 2) Using mechanical means of pressure grouting with the above mix. 3) The grouting to be done into the cracks of Uncoursed Rubble Masonry, columns & beams if necessary. 4) After through grouting sealing the holes with neat cement paste.	95	70	20	185.00	Kg.	Rs..... (_____ _____ _____ _____)	
27	Laying dry trap/ rubble stone soling of required thickness including hand packing and compacting etc. complete using stones supplied by IITB, including transporting stone from various locations from IIT campus area up to working site and cutting the stone in required size, etc., as per requirement, complete.	74	23		97.00	m3	Rs..... (_____ _____ _____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
28	Laying dry trap/ rubble stone soling of required thickness including hand packing and compacting etc. complete using stones bought by the contractor, including transporting up to working site and cutting the stone in required size, etc, as per requirement, complete.	15	6		21.00	m3	Rs..... (_____ _____)	
29	Providing Uncoursed Rubble Masonry (using stones supplied by IITB) of trap stones in cement mortar 1:6 (Cement: Sand/Grit) including racking out joints when plastering is to be done, striking out joints, watering and pointing with cement mortar 1:3 on outside exposed faces, including providing header stones @ 1 header per sqm. to the full thickness of wall, providing weep holes, with 110mm dia PVC. pipes including collecting and transporting stone stacked within campus of IIT-B, cutting stones/ boulders in pieces as per requirement, scaffolding etc. complete as directed.	9	6		15.00	m3	Rs..... (_____ _____)	
30	Providing Uncoursed Rubble Masonry (using stones bought by the contractor) of trap stones in cement mortar 1:6 (Cement: Sand/Grit) including racking out joints when plastering is to be done, striking out joints, watering and pointing with cement mortar 1:3 on outside exposed faces, including providing header stones @ 1 header per sqm. to the full thickness of wall, providing weep holes, with 110mm dia PVC. pipes including transporting stones, cutting stones/ boulders in pieces as per requirement, scaffolding etc. complete as directed.	6	3		9.00	m3	Rs..... (_____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
31	P/A Pointing (Raised and cut pointing) on stone work with cement mortar 1:3 (1 cement : 3 fine sand), as directed, all complete.	77	66		143.00	m2	Rs..... (_____ _____)	
32	P/A Polymer Pointing (Raised and cut pointing) on stone work with cement+Sand 1:3 (1 cement : 3 fine sand) including Polymer (1kg. of polymer per 5kg. Cement), as directed, all complete.	51	34		85.00	m2	Rs..... (_____ _____)	
33	Providing and casting in situ Plain Cement Concrete (PCC) in volumetric proportion 1:1.5:3, using stone aggregate for flooring, etc., as directed including centering, formwork, compacting, dewatering, roughening the surface if special finish is to be provided and curing, etc., complete, as directed.	55	23	5	83.00	m3	Rs..... (_____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
34	<p>RCC for Vertical Fins: Providing and casting in situ Reinforced Cement Concrete (RCC) using volumetric proportion 1:1:2 (having strength not less than 25N/mm²) using Cement of approved Brand & Grade, using sand as fine aggregate, trap metal, for R.C.C. vertical fins, as directed, including centering, formwork, compacting, roughening the surface if special finish is to be provided and curing, excluding steel reinforcement and including casting cubes and testing. The Item shall include cost of Centering, Shuttering, Formwork, supports, staging, Scaffolding, etc. complete. Reinforcement Steel shall be paid separately under relevant item. The dimensions, Shape & design shall be exactly matching with existing Fins. The Line-Level, Finish is the essence of this item.</p>	34			34.00	m ³	Rs..... (_____ _____)	
35	<p>RCC for Chajjas between Vertical Fins: Providing and casting in situ Reinforced Cement Concrete (RCC) using volumetric proportion 1:1:2 (having strength not less than 25N/mm²) using Cement of approved Brand & Grade, using sand as fine aggregate, trap metal, for R.C.C. chajjas <u>Only between vertical fins</u>, as directed, including centering, formwork, compacting, roughening the surface if special finish is to be provided and curing, excluding steel reinforcement and including casting cubes and testing. The Item shall include cost of Centering, Shuttering, Formwork, supports, staging, Scaffolding, etc. complete. Reinforcement Steel shall be paid separately under relevant item. The dimensions, Shape & design shall be exactly matching with existing Chajjas. The Line-Level, Finish is the essence of this item.</p>	12			12.00	m ³	Rs..... (_____ _____)	
36	<p>RCC for all other Chajja: Providing and casting in situ Reinforced Cement Concrete (RCC) using volumetric proportion 1:1:2 (having strength not less than 25N/mm²) using Cement of approved Brand & Grade, using sand as fine aggregate, trap metal, for all other R.C.C. chajjas including for Annex bldg. chajjas, as directed, including centering, formwork, compacting, roughening the surface if special finish is to be provided and curing, excluding steel reinforcement and including casting cubes and testing. The Item shall include cost of Centering, Shuttering, Formwork, supports, staging, Scaffolding, etc. complete. Reinforcement Steel shall be paid separately under relevant item. The dimensions, Shape & design shall be exactly matching with existing Chajjas. The Line-Level, Finish is the essence of this item.</p>		21	2	23.00	m ³	Rs..... (_____ _____)	

Str. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
37	<p>RCC for Slab of Gutter at Terrace: Providing and casting in situ Reinforced Cement Concrete (RCC) using volumetric proportion 1:1:2 (having strength not less than 25N/mm²) using Cement of approved Brand & Grade, using sand as fine aggregate, trap metal, for R.C.C. Slab (bottom-slab) of Gutter at Terrace level, as directed, including centering, formwork, compacting, roughening the surface if special finish is to be provided and curing, excluding steel reinforcement and including casting cubes and testing.</p> <p>The Item shall include cost of Centering, Shuttering, Formwork, using 12mm Waterproof Plywood, supports, staging, Scaffolding, etc. complete. Reinforcement Steel shall be paid separately under relevant item. The dimensions, Shape & design shall be exactly matching with existing member. The Line-Level, Finish is the essence of this item.</p>	11			11.00	m3	Rs..... (_____ _____ _____ _____)	
38	<p>RCC for Side-walls (Pardi) for Gutter at Terrace: Providing and casting in situ Reinforced Cement Concrete (RCC) using volumetric proportion 1:1:2 (having strength not less than 25N/mm²) using Cement of approved Brand & Grade, using sand as fine aggregate, trap metal, for R.C.C. Side-Walls (Pardi) for Gutter, as directed, including centering, formwork, compacting, roughening the surface if special finish is to be provided and curing, excluding steel reinforcement and including casting cubes and testing.</p> <p>The Item shall include cost of Centering, Shuttering, Formwork, supports, staging, Scaffolding, etc. complete. Reinforcement Steel shall be paid separately under relevant item. The dimensions, Shape & design shall be exactly matching with existing member. The Line-Level, Finish is the essence of this item.</p>	19			19.00	m3	Rs..... (_____ _____ _____ _____)	
39	<p>RCC for Brackets for Gutter at Terrace: Providing and casting in situ Reinforced Cement Concrete (RCC) using volumetric proportion 1:1:2 (having strength not less than 25N/mm²) using Cement of approved Brand & Grade, using sand as fine aggregate, trap metal, for R.C.C. brackets for Gutter at Terrace level, as directed, including centering, formwork, compacting, roughening the surface if special finish is to be provided and curing, excluding steel reinforcement and including casting cubes and testing.</p> <p>The Item shall include cost of Centering, Shuttering, Formwork, supports, staging, Scaffolding, etc. complete. Reinforcement Steel shall be paid separately under relevant item. The dimensions, Shape & design shall be exactly matching with existing members. The Line-Level, Finish is the essence of this item.</p>	14			14.00	m3	Rs..... (_____ _____ _____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
40	RCC for Columns: Providing and casting in situ Reinforced Cement Concrete (RCC) using volumetric proportion 1:1.2 (having strength not less than 25N/mm ²) using Cement of approved Brand & Grade, using sand as fine aggregate, trap metal, for R.C.C. Columns, at any level, as directed, including centering, formwork, compacting, roughening the surface if special finish is to be provided and curing, excluding steel reinforcement and including casting cubes and testing. The Item shall include cost of Centering, Shuttering, Formwork, supports, staging, Scaffolding, etc. complete. Reinforcement Steel shall be paid separately under relevant item.	4	3	2	9.00	m ³	Rs..... (_____ _____ _____ _____)	
41	R.C.C. for Beams, Lintels, etc.: Providing and casting in situ Reinforced Cement Concrete (RCC) using volumetric proportion 1:1.2 (having strength not less than 25N/mm ²) using Cement of approved Brand & Grade, using sand as fine aggregate, trap metal, for R.C.C. Beams, Lintels, etc., at any level, as directed, including centering, formwork, compacting, roughening the surface if special finish is to be provided and curing, excluding steel reinforcement and including casting cubes and testing. The Item shall include cost of Centering, Shuttering, Formwork, supports, staging, Scaffolding, etc. complete. Reinforcement Steel shall be paid separately under relevant item.	29	5	22	56.00	m ³	Rs..... (_____ _____ _____ _____)	
42	RCC for Slabs: Providing and casting in situ Reinforced Cement Concrete (RCC) using volumetric proportion 1:1.2 (having strength not less than 25N/mm ²) using Cement of approved Brand & Grade, using sand as fine aggregate, trap metal, for R.C.C. Slabs, at any level, either for full slabs or Parts of Slabs, as directed, including centering, formwork, compacting, roughening the surface if special finish is to be provided and curing, excluding steel reinforcement and including casting cubes and testing. The Item shall include cost of Centering, Shuttering, Formwork, supports, staging, Scaffolding, etc. complete. Reinforcement Steel shall be paid separately under relevant item. Special care shall be taken, such as placing wooden planks & Chavis/Rafters below the props, etc., as directed, to safeguard stability of the lower slab while props are placed over existing lower slab while Re-casting a new slab in Audit Section. The cost of such extra precautions shall be included in the rate quoted.	7	4	34	45.00	m ³	Rs..... (_____ _____ _____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
43	<p>Screed Concrete for Repairs:</p> <p>a) P/A polymer slurry/bonding coat of approved brand of Polymer & Cement in ratio 1:1, to exposed RCC members (Slab) within 30 minutes of P/Casting of concrete</p> <p>b) P/L Concrete screed of conc. 1:1:2 Volumetric Mix (Strength not less than 25 N/mm²), over the treated surface of the floor slab, average thickness 50mm.</p> <p>Centering, Shuttering is not needed for this Item.</p>	89	111		200.00	m ²	Rs..... (_____ _____ _____ _____)	
44	<p>Providing second class burnt brick masonry with best available approved quality well burnt bricks having crushing strength of 35 kg./square cm. and maximum water absorption of 20%, in cement mortar 1:4 in half brick thick wall including providing RCC Band (patli) of M-20 concrete (1:1½:3), 100mm x 100mm to the full length of wall at every one meter height, using two numbers 8mm dia tor steel reinforcement, scaffolding, racking out joints and curing complete.</p>	50	24		74.00	m ²	Rs..... (_____ _____ _____ _____)	
45	<p>Providing second class burnt brick masonry with IS approved quality well burnt bricks having crushing strength of 35 kg. / square cm. and maximum water absorption of 20% in cement mortar 1:6 in superstructure including striking joints, racking out joints, curing, cleaning and scaffolding complete.</p> <p>For the parapet Walls, there shall be a Concrete Beam provided on the Top of Brick-work. The Concrete will be paid separately under the Item of RCC Beams.</p>	129	26	50	205.00	m ³	Rs..... (_____ _____ _____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
46	Providing Single Coat cement plaster of required thickness, not less than 12mm thick, in single coat, in cement mortar 1:4 (without neeru finish) over concrete or brick surfaces, in all positions with the use of scaffolding/ step ladder, including Pre-Wetting, Cleaning, curing, etc., all complete.	1,279	415	36	1,730.00	m2	Rs..... (_____ _____ _____ _____)	
47	Providing and applying white cement based Birla make wall care putty of average thickness 1mm, over plaster/ concrete surface in proper line / level to prepare surface even and smooth for including preparing the wall surface for the application of wall care putty etc. complete as directed.	1,279	415	36	1,730.00	m2	Rs..... (_____ _____ _____ _____)	
48	Providing Double Coat Sand face plaster using approved screened sand, in all positions including base coat as per required thickness (to match the existing surface) in cement mortar 1:4 using water proofing compound (as per manufacturer's specification) and curing the same for not less than two days and keeping the surface of base coat rough to receive the sand faced treatment 8mm thick in cement mortar 1:3 using water proofing compound (as per manufacturer's specification), finishing the surface by taking out grains and curing for 14 days, scaffolding etc. complete. Cement slurry shall be applied on the first coat, before application of the second coat, as directed.	5,489	3,246	585	9,320.00	m2	Rs..... (_____ _____ _____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
49	Rough cast/Pebble Dash plaster (matching with existing finish), upto any height above ground level with a mixture of sand and gravel or crushed stone from 6 mm to 10 mm nominal size, dashed over and including the fresh plaster in two layers, under layer 12 mm cement plaster 1:4 (1 cement : 4 coarse sand) using water proofing compound (as per manufacturer's specification) and top layer 10 mm cement plaster 1:3 (1 cement : 3 fine sand) mixed with water proofing compound (as per manufacturer's specification).	748	570	20	1,338.00	m2	Rs..... (_____ _____ _____ _____)	
50	Providing and Applying waterproof plaster in single coat in CM 1:3 of required thickness as directed, using approved screened sand, using water proofing compound (as per manufacture specification), over a Bond coat of Polymer-Cement Slurry (Cement 1 part: Polymer 1 Part), in all positions, including scaffolding, cleaning, curing for 14 days, etc. complete.	396			396.00	Sqmt	Rs..... (_____ _____ _____ _____)	
51	Providing and laying water proofing cement concrete (IPS) at any level, over Chajjas, inside Pond at basement, etc., as directed, to average 50mm thick with 1:1.5:2 cement concrete laid to proper level and slope using silt free clear river sand including compaction, filling joints, adding recommended waterproofing admixtures as per manufacturer's specifications, marking false marks as directed to give appearances of tiles of 30cm x 30cm or other approved size laid diagonally / square, finishing with extra cement in any colour as directed, testing the treatment by ponding with water for 14 days, providing waterproofing guarantee for 7 (seven) years in requisite non judicial stamp paper in favor of IITB including all lead and lift etc. complete.	348	224	30	602.00	m2	Rs..... (_____ _____ _____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
52	Providing temporary steel supports such as tubular steel props 50mm dia, as required for supporting system till the repaired-work of the beam, column, slab, chajja, etc. is completed in all respects as directed and when required in any floor of any height inside and outside of the building and removing the supporting system as directed without damaging the structure.	400	300	350	1,050.00	Nos	Rs..... (_____ _____)	
53	P/F Kota stone slab flooring 25 mm thick, over 20 mm (average) thick base, laid over Bedding with cement floats, and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete. The Base/ Bedding shall be of cement mortar 1 : 4 (1 cement : 4 coarse sand). The measurement shall be taken of finished Areas/ Dimensions.	195	90	25	310.00	m ²	Rs..... (_____ _____)	
54	P/F Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars over & including 12 mm (average) thick cement mortar 1:3 (1 cement: 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete	17	9		26.00	m ²	Rs..... (_____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
55	Providing and laying vitrified tiles for Flooring & Skirting of size not less than 600 X 600 mm (thickness not less than 8mm), 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 @ 3.3kg/sqm including grouting the joints with white cement and matching pigments etc., complete.	118	101	169	388.00	m ²	Rs..... (_____ _____)	
56	Providing and laying rectified Glazed Ceramic floor tiles of size not less than 300 X 450 mm or more (thickness not less than 6mm), of 1st quality conforming to IS : 15622, of approved make, in all colours, shades, laid on 20mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand), jointing with grey cement slurry @ 3.3kg/sqm, including pointing the joints with white cement and matching pigments etc., complete.	226			226.00	m ²	Rs..... (_____ _____)	
57	Providing and fixing 1st quality ceramic wall tiles of size 600 X 300 mm or more, conforming to IS: 15622 (thickness not less than 6mm), of approved make, in all colours, shades of any size as approved by Engineer-in-Charge, in skirting, and dados, over 12 mm thick plaster 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.	97			97.00	m ²	Rs..... (_____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
58	Providing and laying colour veined granite slabs 18 to 20mm thick of approved quality colour and veins for platform, door / windows sill / claddings, Top of Parapet wall in Passages, partitions on a bed of 1:4 cement mortar or including base coat of 12mm thick plaster for vertical faces including rounding / moulding of nozzles / adjust, filling joints with white cement to match colour of slab, curing polishing etc. complete.	306	104		410	m2	Rs..... (_____ _____)	
59	Providing and fixing Kadappa stone slab for platform of approved type and design 20 to 30mm thick in cement mortar 1:4 including providing and fixing border patti on front edge, filling joints, curing, cleaning etc. complete.	50	75		125	m2	Rs..... (_____ _____)	
60	Machine polishing to Old kotah/ marble/ mosaic tiled flooring or any other type of flooring including cleaning, washing, etc. complete as directed.	1,370	570		1,940	m2	Rs..... (_____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
61	Extra for Mirror polishing on Kotah stone work where ever required to give high gloss finish complete.	212	98	25	335	m2	Rs..... (_____ _____ _____ _____)	
62	Providing and fixing 2nd class country teakwood frame for doors, windows, ventilators, railing by using wood of required size as per site condition including all moulding, rebating, hold fast etc. complete as directed. Finished size shall be measured.	0.60	0.28		0.88	m3	Rs..... (_____ _____ _____ _____)	
63	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	357	357		714	kg	Rs..... (_____ _____ _____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
64	Providing and fixing plain pre-coated galvanized iron sheet (manufacture by AMNS) for chajjas, thickness 0.60mm, of required colour along with necessary accessories like self drilling and tapping screws with weather cap with all leads and lift, making grooves on wall for fixing sheet and making joint water tight for providing wata at junction etc. complete as directed.		78		78	m2	Rs..... (_____ _____ _____ _____)	
65	Removing and re-fixing existing grills with necessary modification, welding, cutting, replacing damaged member (new mild steel will be paid separately) etc. completed as directed.	81	487	208	776	m2	Rs..... (_____ _____ _____ _____)	
66	Fixing any type of sheets for roofing supplied by Institute with necessary accessories like hooks with washers and weather cap or J hook of approved quality with necessary cutting as per require size, all leads and lift including scaffolding etc. complete as directed.		125		125	m2	Rs..... (_____ _____ _____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
67	Providing and fixing mild steel grill work for window, ventilator, partition weighing 15 kg. per sqm as per drawing including necessary welding and painting with one coat of red lid oil paint and two coats of oil paint of approved shade) of anti-corrosive paint etc. complete.	18	83		101	m2	Rs..... (_____ _____)	
68	Add for extra weight or deduct for less weight over item no. 67 for fabricating such as cutting, shaping, riveting etc. mild steel for grill works including welding and painting with one coat of red lid oil paint and two coats of oil paint of approved shade.	200	150		350.00	Kg.	Rs..... (_____ _____)	
69	Providing and fixing in position two track aluminium sliding windows using sections of size 61 mm x 31mm x 1.3 mm (not less than 0.659kg/mtr) thick for bottom, sides and top. The shutter should be of bearing bottom of size 40 mm x 18 mm x 1.25 mm (not less than 0.417kg/mtr) thick , top member of size 40 mm x 18 mm x 1.20 mm (not less than 0.475kg/mtr) thick, Interlocking section size of 43 mm x 27 mm x 1.30 mm (not less than 0.558kg/mtr) thick and handle section of size 43mm x 18 mm x 1.30 mm (not less than 0.424kg/mtr) thick including providing and fixing 5mm thk. glass in the shutter using rubber gasket, approved quality minimum two nos. PVC rollers for each shutter, necessary locks, handles, PVC lining and other required fittings, etc. complete as directed by Engineer in charge.(Note: All aluminium sections and fitting are 15 micron anodized/ powder coated).	45	15		60.00	m2	Rs..... (_____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
70	Providing and fixing in position three track aluminium sliding windows using sections of size 92 mm x 31mm x 1.30 mm thick for bottom, sections of size 92 mm x 31mm x 1.30 mm (0.933kg/mtr) thick for sides and top. The shutter comprising of bottom and top member of size 40 mm x 18 mm x 1.25 mm (0.417kg/mtr) thick, interlocking section of size 40 mm x 18 mm x 1.10 mm (0.469kg/mtr) thick and handle section of size 40mm x 18 mm x 1.25 mm (0.417kg/mtr) thick including providing and fixing 5mm thk. glass in the shutter using rubber gasket with require fittings such as approved quality minimum two nos.PVC rollers for each shutter, necessary locks, handles, PVC lining and other required fittings, etc. complete as directed by Engineer in charge.(Note: All aluminium sections and fitting are 15 micron anodized/ powder coated).	28	36		64	m2	Rs..... (_____ _____ _____ _____)	
71	Providing, making and fixing fully glazed aluminium partition/windows/cladding at any height, of any size using 63mm x 38mm x 1.65mm (not less than 0.942kg/mtr)15 micron / powder coated anodized aluminium single groove partition section and 63mm x 38mm x 1.53mm (not less than 0.942kg/mtr) 15 micron / powder coated anodized aluminium double groove partition section for frame, providing and fixing 5mm thick clear plain glass fixed with glazing clips, rubber gasket etc. complete. This type of windows/Cladding is at Atrium next to staircase. The design shall be same as existing. The openable part within this window/Cladding shall be paid separately under relevant Item after deduction of the quantity from this Item.	190	24		214.00	m2	Rs..... (_____ _____ _____ _____)	
72	Supplying, fabricating and fixing in position openable window comprising of only Frame & Shutters made out of Z sections as described, using aluminium sections 42 x 37 x 1.5mm (not less than 0.724 kg/mtr) size aluminium Z section for window shutter, 28 x 14.5 x 1.5mm size (not less than 0.286 kg/mtr), aluminium clip for window shutter, 45 x 45 x 1.5mm size (not less than 0.764 kg/mtr), 37mm x 37mm (not less than 0.820 kg/mtr) angles 2mm thick, 5mm thick plain or frosted glasses with rubber gasket, 3 Nos. S.S. hinges 75mm size (heavy) on each window shutter, aluminium tower bolt 100mm size 1 Nos on each leaf, aluminium stay 200mm to 250mm long 1 No per leaf, aluminium handle 1 Nos. per leaf etc. complete.(all aluminium sections should be 15 micron anodized / powder coated section). This type of windows are at different locations. The design shall be same as existing. This Item of Openable Part shall be paid either independently wherever it is Stand-Alone, or shall be paid after deduction of the same quantity from the Item of Fixed Windows/Partitions.	76	10		86	m2	Rs..... (_____ _____ _____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
73	Re-fixing the Removed Aluminium/wooden door/windows frames with shutters by making minor modification (if required) with new screws, Hardware/ fittings, Bearings, etc., complete as directed.	45	106		151.00	m2	Rs..... (_____ _____)	
74	Removing & Re-fixing Existing/old weather sheds using necessary New Hardware, as directed.		23		23	m2	Rs..... (_____ _____)	
75	Cementitious Louvers at East Side (having Size: Length 3'-3", Width 1'-1", Thick 1.5") To match exactly with existing Louvers. Providing & Fixing New Louvers made out of Precast Concrete or of Ferrocrete, either Pre-cast or Cast in situ, as per manufacturer's specifications & procedures, including necessary Centering, Shuttering, Support system, <u>including cost of Reinforcement</u> as per manufacturer's specification, including cost for Removing the existing members, curing, finishing, cleaning, etc., complete, including scaffolding. The shape, Size, Design, fixing procedure shall be exactly as per existing Louvers.	53			53.00	Nos	Rs..... (_____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
76	<p>Cementitious Louvers at East Side (having Size: Length 3'-3", Width 1'-1", Thick 1.5") To match exactly with existing Louvers.</p> <p>Removing & Re-fixing above type of Louvers which are removed for carrying out repairs to the building, including cost for Removing & Re-fixing the existing members, curing, finishing, cleaning, etc., complete, including scaffolding.</p>	263			263.00	Nos	Rs..... (_____ _____ _____ _____)	
77	<p>Cementitious Louvers at East Side (having Size: Length 3'-3", Width 1'-1", Thick 1.5") To match exactly with existing Louvers.</p> <p>Repairing & Finishing the less-damaged Louvers using neat cement, etc, as directed, including scaffolding.</p>	316			316.00	Nos	Rs..... (_____ _____ _____ _____)	
78	<p>Cementitious Louvered Grills on West side of Passage between Main Building & Annex (Approx. Size: Ht 11'-0" X Horizontal Width 1'-6" X Overall Thickness of Box Approx. 10", individual thickness of Louvers approx. 1.5"). Shape, Size, Design to match exactly with existing Louvered-Grill:</p> <p>Providing & Fixing New Louvered-Grills made out of Precast Concrete/Ferrocrite, either Pre-cast or Cast in situ, as per manufacturer's specifications & procedures, including necessary Centering, Shuttering, Support system, <u>including cost of Reinforcement</u> as per manufacturer's specification, including cost for Removing the existing members, curing, finishing, cleaning, etc complete, including scaffolding. The shape, Size, Design, fixing procedure shall be exactly as per existing Louvered-Grills.</p>	30			30.00	Nos	Rs..... (_____ _____ _____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
79	<p>Cementitious Louvered Grills on West side of Passage between Main Building & Annex (Approx. Size: Ht 11'-0" X Horizontal Width 1'-6" X Overall Thickness of Box Approx. 10", individual thickness of Louvers approx. 1.5"). Shape, Size, Design to match exactly with existing Louvered-Grill:</p> <p>Removing & Re-fixing above type of Louvered-Grills, which are in good condition, including cost for Removing & Refixing the existing members, curing, finishing, cleaning, etc., complete, including scaffolding.</p>	8			8.00	Nos	Rs..... (_____ _____)	
80	<p>Metallic Louvers (Formed Section) on the West Side of Main Building. (Specially Formed Section with Curved surface, with overall size: Length 2'-8", Width 1'-4", with matching Gauge of the Metal Sheet, not less than 16G) Shape, Size, Design & fixing method to match exactly with existing member. P/F Metallic Louvers exactly as per existing Shape, Design, Specifications, as directed, including cost of Removal of damaged members, necessary Hardware, scaffolding, support system, etc., complete as directed.</p>	434			434.00	Nos	Rs..... (_____ _____)	
81	<p>Providing, fabrication & fixing structural glazing work using aluminum sections for vertical and horizontal having size 114mm x63mm x2.5mm thick (not less than 2.44 kg/mtr.), providing and fixing Tinted toughening 6mm thick glass in the panels with all necessary fittings, fixtures, screws, pump filled structural silicon sealant & hardware, making partition watertight, scaffolding etc. complete. (all aluminium sections should be 15 micron anodized/ powder coated and shop drawing will be provided by contractor before execution of work.)</p>	207			207.00	m2	Rs..... (_____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
82	P/F Pivoted windows using 'Z' section of size 42 x 32 x 1.5mm (not less than 0.920 kg/mtr), 15 micron anodised, providing and fixing 6mm thk. tinted toughening glass including all necessary fittings such as aluminium Z clips, aluminium pipe, aluminium angle, screws, nails, aluminium pivoted stay 2 nos.,aluminium Z handles 1 no. etc. and other required fittings including microwave EPDM rubber gaskets, pump filled structural silicon sealant & hardware, making window watertight, scaffolding etc. completed as directed. (all aluminium sections should be 15 micron anodized/ powder coated and shop drawing will be provided by contractor before execution of work.)	10			10.00	m2	Rs..... (_____ _____ _____ _____)	
83	Providing, fabrication & fixing structural glazing work using aluminum sections for vertical and horizontal having size 114mm x63mm x2.5mm thick (not less than 2.44 kg/mtr.), providing and fixing 4mm thick designer aluminium composite sheet of approved colour and pattern in the panels with all necessary fittings, fixtures, screws, pump filled structural silicon sealant & hardware, making partition watertight, scaffolding etc. complete. (all aluminium sections should be 15 micron anodized/ powder coated and shop drawing will be provided by contractor before execution of work.)	78			78.00	m2	Rs..... (_____ _____ _____ _____)	
84	Providing and fabricating structural steel works in rolled sections like joists, channels, angles, tees, hollow sections and any other required sections etc. as per detailed designs & drawings for supports, rafters, purlins, railing, staircase and any other work including fixing in position with connecting plates, braces and welding, riveting, bolting as necessary including one coat of primer & two coat of oil paint, scaffolding etc. complete.	2,219	500		2,719.00	kg	Rs..... (_____ _____ _____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
85	Fabricating and fixing structural steel works in rolled sections supplied by Institute, like joists, channels, angles, tees, hollow sections and any other required sections etc. as per detailed designs & drawings for supports, rafters, purlins, railing and any other work including fixing in position with connecting plates, braces and welding, riveting, bolting as necessary including one coat of primer & two coat of oil paint, scaffolding etc. complete.	500	500		1,000.00	Kg.	Rs..... (_____ _____)	
86	Providing and fixing perforated aluminium 15 micron anodized sheet having 16 gauge thickness of approved pattern and fixing over existing frame using powder coated nut and bolt of required size and approved make, making panels of required size as per direction, panels should be removable type as and when required, including scaffolding, cutting in required size etc. completed as directed.	68			68.00	m2	Rs..... (_____ _____)	
87	Supplying, fabricating and fixing in position fully opaque single leaf aluminium anodized openable door shutter using aluminium standard door section 60mm x 40mm (not less than 1.055 kg/mtr) for all verticals, top & bottom members, providing and fixing 16 gauge perforated aluminium sheet, including heavy duty hinges, 1' long decorative stainless steel handles 2 nos., lock and other require fittings etc. all complete as directed. (All aluminium sections should be 15 micron anodized/ powder coated and fittings should be approved before installation)	35			35.00	m2	Rs..... (_____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
88	<p>Providing and fixing in position three track aluminium sliding windows using sections of size 92 mm x 31mm x 1.30 mm thick for bottom, sections of size 92 mm x 31mm x 1.30 mm (0.933kg/mtr) thick for sides and top. The shutter comprising of bottom and top member of size 40 mm x18 mm x 1.25 mm (0.417kg/mtr) thick , interlocking section of size 40 mm x 18 mm x 1.10 mm (0.469kg/mtr) thick and handle section of size 40mm x 18 mm x 1.25 mm (0.417kg/mtr) thick including providing and fixing perforated aluminium Sheet of 16G having Anodizing of 15 micron in the shutter using rubber gasket with require fittings such as approved quality minimum two nos. PVC rollers for each shutter, necessary locks, handles, PVC lining and other required fittings, etc. complete as directed by Engineer in charge.(Note: All aluminium sections and fitting are 15 micron anodized/ powder coated).</p>		14		14.00	m2	Rs..... (_____ _____)	
89	<p>Supplying, fabricating and fixing in position aluminium louvered ventilator using aluminium box section of size 63mm x 37mm (not less than 1.054 kg/mtr) for outer frame, aluminium flat of size 25mm x 5mm of weight not less than 0.337 Kg/mtr for fixing louvers of size 79mm x 30.3mm x 2mm of weight not less than 0.599 Kg/m (Jindal section 20782), filling all gaps with appropriate fillers, screws, bolts etc. all complete as directed. (All aluminium sections should be 15 micron anodized/ powder coated)</p>	25	15		40	m2	Rs..... (_____ _____)	
90	<p>Providing and Fixing 20mm thick cement bonded wood particle board (bison panel) for chajja, ceiling, staircase at any floor, providing suitable hole for fixing nuts and bolts including making suitable groove on walls, making vata at joint, P/F sheet in proper slope with all require fittings and fixtures including double scaffolding wherever required complete as directed.</p>	18	27		45	m2	Rs..... (_____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
91	Re-fixing the removed cement bonded wood particle board (bison panel) or any type of Sheets, for chajja and ceiling at any floor, including making suitable groove on walls, making vata at joint, P/F sheet in proper slope with new fittings and fixtures including double scaffolding wherever required complete as directed.	4	9		13	m2	Rs..... (_____ _____)	
92	Fixing any type of Roofing sheets for roofing, supplied by Institute, with necessary accessories like hooks with washers and weather cap or J hook of approved quality with necessary cutting as per require size, all leads and lift including scaffolding etc. complete as directed.	100	50		150.00	m2	Rs..... (_____ _____)	
93	Providing and fixing translucent horizontal (Marvell Make or equivalent) roller blinds water resistant cloth of required size and colour including all necessary accessories and installation at any height etc. complete all as directed. (Sample of blind should be approved before installation)	56	55	36	147.00	m2	Rs..... (_____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
94	Providing and fixing blackout horizontal (Marvell Make or equivalent) roller blinds water resistant cloth of required size and colour including all necessary accessories and installation at any height etc. complete all as directed. (Sample of blind should be approved before installation)	52	40	29	121.00	m2	Rs..... (_____ _____ _____ _____)	
95	Providing and fixing transparent blinds horizontal (Marvell Make or equivalent) roller blinds water resistant cloth of required size and colour including all necessary accessories and installation at any height etc. complete all as directed. (Sample of blind should be approved before installation)	77	67	45	189.00	m2	Rs..... (_____ _____ _____ _____)	
96	Providing & Fixing of G.I Lay-in perforated metal ceiling system manufacture by Armstrong consisting of 600x600mm size grid with fleece laying in tiles of pre-coated galvanized steel in 0.4/0.5 mm thickness in required colour with 15mm wide T - section silhouette flanges of required colour having rotary stitching on the main Runner including P/F 1200mm & 600mm cross Tees as per manufacturer specifications.	345	300	70	715.00	m2	Rs..... (_____ _____ _____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
97	Providing & Fixing 12mm thick Gypsum board (for false ceiling), wherever existing Gypsum False-ceiling is removed/broken for carrying out Repairs or otherwise, to match with the existing ceiling, including framing if required, The boards should be taped and filled from underside to give smooth, seamless surface with all required fittings and fixtures etc. complete as directed.	200	120	84	404.00	m2	Rs..... (_____ _____ _____ _____)	
98	Providing and fixing in position Calcium Silicate Board, 6mm thick, for false ceiling, Hilux or India Gypsum make, as per manufacturer's specifications, using screws fixed to the underside of grid suspended from the main ceiling as per manufacturer's instruction and specification. G. I. Grid should consist of ceiling sections at maximum center to center distance of 450 mm, Perimeter channel intermediate 1200 mm. The ceiling section should be fixed to intermediate channel with connection clips G. I. Grid should be fixed to RCC slab above with the help of 25mmX0.5mm strap hanger & soffit cleat. The joints between soffit cleat, strap hanger & G.I. grid should be fixed with nut bolts, Soffit cleats should be fixed to R.C.C. ceiling with W. E. type rawl plug & fastener maximum c/c distance (both ways) of strap hangers should be 1200mm. When the false ceiling is provided only in part of an Area/in Patches, then the new system shall be matching with the existing system.	525	412	150	1,087.00	m2	Rs..... (_____ _____ _____ _____)	
99	Providing and fixing cove false ceiling using 6.00mm Calcium silicate board (Hilux make) using G.I frame work for intermediate and perimeter channels of required width as per site requirement, entire suspended by strap hangers from soffits on the slab spread suitably including finishing with jointing, paper tape etc. complete as per manufacturer's specifications. When the false ceiling is provided only in part of an Area/in Patches, then the new system shall be matching with the existing system.	100	80	32	212.00	Rmt	Rs..... (_____ _____ _____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
100	<p>Providing & Fixing of Dune microlook R.H 99% NRC ceiling system consisting of 600x600mm size grid with fleece laying in tiles of pre-coated galvanized steel in 0.4/0.5 mm thickness in required colour with 15mm wide T - section silhouette flanges of required colour having rotary stitching on the main Runner including P/F 1200mm & 600mm cross Tees as per manufacturer specifications.</p> <p>When the false ceiling is provided only in part of an Area/in Patches, then the new system shall be matching with the existing system.</p>	75	64	32	171.00	m2	Rs..... (_____ _____ _____ _____)	
101	<p>Providing & Fixing 150C aluminium plain wide linear false ceiling system with require suspension system manufacture by Convet or Intersil metallic product in required colour per manufacturer specifications with used of step ladder including making required cutout for electrical and AC fixtures etc. completed as directed.</p> <p>When the false ceiling is provided only in part of an Area/in Patches, then the new system shall be matching with the existing system.</p>	90	50	16	156.00	m2	Rs..... (_____ _____ _____ _____)	
102	<p>Re-fixing existing metal or grid false ceiling to its position in proper line and level with new screws, wire nails including use scaffolding or stepladder, rectifying all damages etc. completed as directed.</p>	60	250		310.00	m2	Rs..... (_____ _____ _____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
103	Providing, Making and Fixing Aluminium Partition using 63mm x 38mm x 1.65mm (not less than 0.942kg/mtr) 15 micron / powder coated anodized aluminium single groove partition section and 63mm x 38mm x 1.53mm (not less than 0.942kg/mtr) 15 micron / powder coated anodized aluminium double groove partition section for frame, providing and fixing aluminium perforated 15 micron anodized sheet having 16 gauge of approved pattern fixed with glazing clips, rubber gasket etc. complete.	138	96	30	264.00	m2	Rs..... (_____ _____)	
104	Providing & fixing in position Partitions made by using framework of Aluminum Pipe Sections of size 2.5" x 1.5"x 16G, at 600mm c/c as frame with 12mm thick commercial plywood finish on both sides of the Partition. The partition shall be filled up by insulation of Fibre Glass having 50 mm thickness, density of 32 Kg/M3, Including making necessary arrangement of raceway with removable type panels for electrical/ lan/ telephone work with all required hardware etc. complete as directed.	189	138	42	369.00	m2	Rs..... (_____ _____)	
105	Providing & fixing 1mm thick designer or solid colour laminate of century, green lam, royal touch, Marino brand with approved pattern and design on partition/ door shutter/ door frame/ over window including, making necessary groves wherever required as per standard practice including cost of Fevicol etc. complete as directed.	168	112	40	320.00	m2	Rs..... (_____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
106	Providing & fixing veneer 4mm thick, Century Veneers/ Natural Veneers, of approved design on partition/ door shutter/ door frame/ over window including, making necessary groves wherever required as per standard practice including cost of Fevicol etc. complete as directed.	117	73	28	218.00	m2	Rs..... (_____ _____ _____ _____)	
107	Providing & fixing Calcium Silicate Sheets, 6mm thick, Hilux or India Gypsum make, on partition/ door shutter/ door frame/ over window including, making necessary groves wherever required as per standard practice including cost of Fevicol etc. complete as directed.	93	90	20	203.00	m2	Rs..... (_____ _____ _____ _____)	
108	Providing and fixing wall paneling made out of 50 x 25 mm CCTW frame, Panel size of 600 x 600 mm center to center, or as per site condition, covered by 12mm thick commercial plywood finished with 1mm thick design Laminate/sunmika of approved brand and color including all fittings such as nails, mirror screws with cap of approved quality, fevicol and other required fittings, making panels removable type as and when required etc. completed as directed	45	30	15	90.00	m2	Rs..... (_____ _____ _____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
109	Removing & Re-fixing existing partitions with Sliding Windows: Carefully removing existing partition with sliding windows and re-fixing the same with existing glass / particle boards etc. with new screws, nails, rubber gasket, beading and other required fittings including as per new altered size, fixing L angles to all corners of partition, cutting, making good the partition including scaffolding etc. all complete as directed.	108	108	42	258.00	m2	Rs..... (_____ _____ _____ _____)	
110	Removing & Re-fixing existing partitions: Carefully removing existing partitions and re-fixing the old removed aluminium frame partitions with existing glass / particle boards etc. with new screws, nails, rubber gasket, beading and other required fittings including cutting making good the partition including scaffolding etc. all complete as directed.	180	135	60	375.00	m2	Rs..... (_____ _____ _____ _____)	
111	Supplying, fabricating and fixing in position aluminium anodized single or double leaf operable door shutter using aluminium standard door section 80mm x 40mm (not less than 1.139kg/mtr) for verticals, top and bottom, providing and fixing aluminium perforated 15 micron anodized sheet having 16 gauge of approved pattern fixed with glazing clips, rubber gasket including using 3 nos stainless steel hinges 4" long for each shutter, 9" long handles 2 nos. for each shutter, lock, stainless steel tower bolt 8" long 1 no for each shutter, P/F 'U' channel for border etc. all complete as directed. (All aluminium sections should be 15 micron anodized/ powder coated)	21	21	8	50.00	m2	Rs..... (_____ _____ _____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
112	Providing, fabricating and fixing in position partly opaque and partly glazed aluminum anodized openable door in single or double leaf shutter using aluminum standard door section 80mm x 40mm (not less than 1.139kg/mtr) for verticals and middle, 100mm x 40mm (not less than 1.60kg/mtr) for top & bottom members, 12mm thick both side decorative pre-laminated particle board (Novapan) of approved colour up to 1200mm height and 5mm thick clear/ bajri glass above opaque panels, glazing clips, rubber gasket including using 3 nos stainless steel hinges 4" long for each shutter, 9" long stainless steel handles 2 nos. for each shutter, lock, stainless steel tower bolt 8" long 1 no for each shutter and other required fittings etc. all complete as directed. (All aluminium sections should be 15 micron anodized/ powder coated)	25	25	11	61.00	m2	Rs..... (_____ _____ _____ _____)	
113	Providing and fixing aluminium section for frame work of various work of required size of 15 micron anodized including fixing with required fittings such as screws and other required fittings including fixing in proper alignment, rectifying all damaged, P/F wood inside frame for fixing hinges etc. completed as directed.	125	110	50	285.00	Kg.	Rs..... (_____ _____ _____ _____)	
114	Providing and Fixing solid core flush door in single or double leaf having thickness not less than 32mm of commercial type of exterior grade, approved commercial plywood facing both side without glazing and venetians, all necessary beads, moulding and lipping, 8" long stainless steel tower bolt 1 no for each shutter, 6 lever Godrej mortise lock with handle with triplicate keys and other required fittings etc. complete (without frame). (Fittings will be approved by Engineer in charge before fixing)	63	50	19	132.00	m2	Rs..... (_____ _____ _____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
115	Providing and fixing 2 mm thick PVC flooring (vinyl flooring) of approved brand in roll or tile form having properties as per manufacturer specifications of approved shade and in approved pattern on smooth and leveled bed, fixing the flooring as per manufacturer specifications etc. complete.	135	140	32	307.00	m2	Rs..... (_____ _____ _____ _____)	
116	Providing protection for tiles by POP (Gypsum) as directed wherever required (inside the premises), without damaging the tiles, then removing completely the same as per directions, including all costs/charges for materials, labour etc., complete.	1,120	900	112	2,132.00	m2	Rs..... (_____ _____ _____ _____)	
117	Providing and erecting 2.00 meter high temporary barricading by bamboo at site including writing and painting Signage's, glow lamps, reflective signs, marking, flags, caution tape as directed by the Engineer-in Charge. Rate include its maintenance for damages, painting, all incidentals, labour materials, equipment's and works required to execute the job. The barricading shall not be removed without prior approval of Engineer-in-Charge.	956			956.00	m2	Rs..... (_____ _____ _____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
118	Providing & Fixing vision glass 5mm thick with beading of Teak Wood, etc complete, within Door/Partition, as directed.	2.00	2.00	1.00	5.00	m2	Rs..... (_____ _____)	
119	Providing and fixing reflective type sun control film of approved type of Garware make with cutting, fixing etc. complete as directed.	30	30	12	72.00	m2	Rs..... (_____ _____)	
120	Providing & Fixing/Tying Sacrificial Galvanic Anode, manufactured by Krishna Conchem, for corrosion protection of reinforcement in concrete, as directed including cleaning the reinforcement, at locations as directed.	500	300	75	875.00	Nos	Rs..... (_____ _____)	

St. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
121	Supplying, fitting and fixing in position automatic Hydraulic Door Closer of Hyper or approved make and type conforming to IS:3564 with all necessary screws, fittings and fixtures, as directed etc. all materials, tools, plant and labour complete; as directed.	25	20	10	55.00	Nos	Rs..... (_____ _____)	
122	Supplying, fitting and fixing in position floor spring door closer of Hyper or approved make and type with all necessary screws, fittings and fixtures, as directed etc. all materials, tools, plant and labour complete; as directed.	15	10	5	30.00	Nos	Rs..... (_____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
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Part B: Waterproofing Treatment over terraces, Parapets, OHWT, etc:

1	Breaking of existing Waterproofing system on Terrace Slab: Breaking open existing waterproofing treatment upto mother slab completely & carefully as directed, removing, lowering down & disposing off the debris, as directed, thoroughly brooming, cleaning & washing with water the bare surface of terrace slab as directed.	542	924	242	1,708.00	m2	Rs..... (_____ _____ _____ _____)	
2	Providing and laying waterproofing treatment of 120mm av. thickness consisting of 20mm thick layer in cement mortar 1:3 with water proofing compound as per manufacturer's specs as base, constructing and laying brick bat coba in cement mortar 1:5 with waterproofing compound as per manufacturer's specs and having average thickness of 80mm and finishing with 20mm thick cement plaster layer in cement mortar 1:3 with water proofing compound, including laying glass fiber cloth of approved quality in top layer including all lead, lifts and laid to proper slope to drain off water entirely including watta at the junction of parapet and work upto a height of 300mm or as directed and including finishing the top layer of water proofing treatment with false marking of 30cm x 30cm or as directed and covering the whole treatment with ten years' guarantee, on requisite stamp paper etc. complete.	546	993	275	1,814.00	m2	Rs..... (_____ _____ _____ _____)	
3	Providing hoisting and fixing in position ISI mark plastic storage water tank (Make -Sintex, BMC approved) on roof of buildings at any height with all fitting, fixtures connecting the tank (in let and out let) with the existing water line, providing and fixing over flow pipe with mosquito proof brass coupling & mosquito-proof CI cover with locking arrangements approved by MCGB, using required fitting / fixtures as directed by Estate office.	10,000			10,000.00	Per lit	Rs..... (_____ _____ _____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
4	Providing Water-tight Expansion joints in reinforced cement concrete framed structure at terrace level or any other location, with plain pre-moulded filler 25mm thick including 3mm SS plate, fixing teak wood battens on both faces and finishing as directed etc. complete.	20	15		35.00	Rmt	Rs..... (_____ _____ _____ _____)	

Part C: Plumbing Works: (Wherever required during the repairs)

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
1	Carefully removing the existing G.I. pipe 12mm to 40mm diameter from floor / walls / slab etc. without damaging the structures and taking out the same outside campus including scaffolding etc. completed as directed.	350	130	65	545.00	Rmt	Rs..... (_____ _____)	
2	Carefully removing the existing G.I. pipe above 40mm diameter from floor / walls / slab etc. without damaging the structures and taking out the same outside campus including scaffolding etc. completed as directed.	400	50	25	475.00	Rmt	Rs..... (_____ _____)	
3	Carefully removing the existing C.I. / PVC / HDPE / C I drain pipes from floor / slab with out damaging the structure and taking out the same out of IIT Campus including scaffolding etc. completed as directed.	469	378	42	889.00	Rmt	Rs..... (_____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
4	Providing and laying 15 mm dia nominal bore I.S.I. approved 'C' class galvanized iron pipes having weight as per IS specification to walls, ceilings, floors etc. with screwed sockets, back nuts, elbows, tees, reducers, enlargers, plugs, clamps, etc. including necessary drilling in holes in walls / slabs etc. and remaking good the demolished portion to restore the same in original condition neatly and applying primer and two coats of oil painting including necessary scaffolding etc. or as directed etc. complete.	100	50	25	175.00	Rmt	Rs..... (_____) _____)	
5	Providing and laying 20 mm dia nominal bore I.S.I. approved 'C' class galvanized iron pipes having weight as per IS specification to walls, ceilings, floors etc. with screwed sockets, back nuts, elbows, tees, reducers, enlargers, plugs, clamps, etc. including necessary drilling in holes in walls / slabs etc. and remaking good the demolished portion to restore the same in original condition neatly and applying primer and two coats of oil painting including necessary scaffolding etc. or as directed etc. complete.	25	20	10	55.00	Rmt	Rs..... (_____) _____)	
6	Providing and laying 25 mm dia nominal bore I.S.I. approved 'C' class galvanized iron pipes having weight as per IS specification to walls, ceilings, floors etc. with screwed sockets, back nuts, elbows, tees, reducers, enlargers, plugs, clamps, etc. including necessary drilling in holes in walls / slabs etc. and remaking good the demolished portion to restore the same in original condition neatly and applying primer and two coats of oil painting including necessary scaffolding etc. or as directed etc. complete.	50	40	20	110.00	Rmt	Rs..... (_____) _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
7	Providing and laying 40 mm dia nominal bore I.S.I. approved 'C' class galvanized iron pipes having weight as per IS specification to walls, ceilings, floors etc. with screwed sockets, back nuts, elbows, tees, reducers, enlargers, plugs, clamps, etc. including necessary drilling in holes in walls / slabs etc. and remaking good the demolished portion to restore the same in original condition neatly and applying primer and two coats of oil painting including necessary scaffolding etc. or as directed etc. complete.	25	20	10	55.00	Rmt	Rs..... (_____ _____)	
8	Providing and laying 50 mm dia nominal bore I.S.I. approved 'C' class galvanized iron pipes having weight as per IS specification to walls, ceilings, floors etc. with screwed sockets, back nuts, elbows, tees, reducers, enlargers, plugs, clamps, etc. including necessary drilling in holes in walls / slabs etc. and remaking good the demolished portion to restore the same in original condition neatly and applying primer and two coats of oil painting including necessary scaffolding etc. or as directed etc. complete.	100	50	25	175.00	Rmt	Rs..... (_____ _____)	
9	Providing and Fixing 110mm dia. P.V.C. pipes conforming to I.S., with necessary fittings such as bends, tees, single junctions, double junctions, slotted vent, offsets on wall, including proper slope, filling the joints using rubber gasket with solvent, cement etc. completed as directed.	68	63	7	138.00	Rmt	Rs..... (_____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
10	Providing and Fixing 75mm dia. P.V.C. pipes conforming to I.S., with necessary fittings such as bends, tees, single junctions, double junctions, slotted vent, offsets on wall, including proper slope, filling the joints using rubber gasket with solvent, cement etc. completed as directed.	34	41	7	82.00	Rmt	Rs..... (_____ _____)	
11	Providing and fixing 100mm dia. cast iron soil / waste water pipe with necessary fittings such as bends, tees, single junctions, double junctions, slotted vent, offsets on walls or in the ground including filling joints with cement mortar 1:2 and two coats of anticorrosive paint including fixing the pipe on walls by means of nails driven through lugs in wooden holders / battens including necessary scaffolding complete or as directed.	30			30.00	Rmt	Rs..... (_____ _____)	
12	Providing and fixing 75mm dia. cast iron waste water pipes with necessary fittings such as bends, tees, single junctions, double junctions, slotted vent, offsets on walls or in the ground including filling joints with cement mortar 1:2 and two coats of anticorrosive paint including fixing the pipe on walls by means of nails driven through lugs in wooden holders / battens including necessary scaffolding complete or as directed.	30			30.00	Rmt	Rs..... (_____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
13	Providing and fixing 25mm dia. nominal bore gun metal gate valve with C.I. wheel of approved quality (screwed end) with required fittings and fixtures etc. completed as directed.	10	10		20.00	Nos	Rs..... (_____ _____)	
14	Providing and fixing 40mm dia. nominal bore gun metal gate valve with C.I. wheel of approved quality (screwed end) with required fittings and fixtures etc. completed as directed.	4	4		8.00	Nos	Rs..... (_____ _____)	
15	Providing and fixing 50mm dia. nominal bore gun metal gate valve with C.I. wheel of approved quality (screwed end) with required fittings and fixtures etc. completed as directed.	5	5		10.00	Nos	Rs..... (_____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
16	Re-fixing existing removed G.I pipe line of any diameter upto 3" dia (75mm) with required fittings and fixtures etc. completed as directed with scaffolding.	450			450.00	Rmt	Rs..... (_____ _____ _____ _____)	
17	Providing and fixing P.V.C. rain water pipes 150mm outer dia. conforming to I.S. including proper rain water receiving recess with P.V.C. plug bend, necessary fittings such as offsets, shoes including fixing the pipe on wall using approved M.S brackets projecting 25mm to 40mm from face of wall & fixing with heavy duty PVC clips of approved quality & number, filling the joints using rubber gasket with solvent cement and properly resting the shoe of pipes on C.C. or masonry blocks, including necessary scaffolding, and maintenance for 3 years for any leakages or dislocation of pipes. All the PVC fittings and additional two piece socket clips shall be got approved from engineer in charge complete.	49	82	28	159.00	Rmt	Rs..... (_____ _____ _____ _____)	
18	Re-fixing existing removed Rain-water pipes upto 6" Dia PVC pipes with required fittings, clips and fixtures etc. completed as directed with scaffolding.	288	192		480.00	Rmt	Rs..... (_____ _____ _____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
19	Providing and fixing 15 mm nominal bore brass stop cock of approved quality with required fittings and fixtures etc. completed as directed.	20	10	5	35.00	Nos	Rs..... (_____ _____)	
20	Providing and fixing 20 mm nominal bore brass stop cock of approved quality with required fittings and fixtures etc. completed as directed.	20	10	5	35.00	Nos	Rs..... (_____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
Part D: Painting & Coating work:								
1	<p>Providing and applying elastic, elastomeric membrane-forming system with anti-carbonation and breathing properties. The system shall be based on solvent free acrylic polymers with selected mineral fillers and shall be resistant to ultra-violet rays, crack bridging type, carbonation resistant, breathable, environment friendly, water proofing coating. For anti-carbonation, equivalent Air layer Thickness denoted as R or SDCO\geq50m for breathability equivalent Air layer Thickness denoted as SDH\leq4m for vapor transmitting barrier. The system consists of one coat primer or equivalent. The consumption of main elastomeric coating to give film thickness of 150-200 microns (Solid contents, 40% \pm3%) shall be approx. 400-450 gms/m2 per two coat depending upon the method of application (either by roller or brush) and surface smoothness of the concrete. The total Dry Film Thickness of the coating system shall be minimum 150 microns for the above system.</p>	11,562	5,670	836	18,068.00	m 2	Rs..... (_____ _____ _____ _____)	
2	<p>Elastomeric coating shall be in suitable approved shades, including cost of materials, cleaning the external Surfaces/ Plaster/ RCC members by stiff brushes/ by special methods as directed, by Pressurized water-jet, opening of cracks as directed, crack-filling, & as per approved specifications, including cost of scaffolding. P/A Coating system as per approved scheme & type, as per detailed specifications, including cost of scaffolding. The entire system shall be guaranteed for water-tightness & for colour-fastening, for Five years. The contractor shall submit detailed scheme for coating system which shall be got approved from the consultants/ Society. The system shall be manufactured & guaranteed by reputed & approved manufacturer. The system shall either have colour of its own or there shall be a final coating of approved shade as integral part of the system. (List of Approved Brands for Elastomeric Coating: BASF, Jotun)</p>	50	30	15	95.00	m 2	Rs..... (_____ _____ _____ _____)	
	<p>Providing & Applying priming with ready mixed pink or Grey or IITB approved primer of approved brand and manufacture on wood work (hard and soft wood</p>							

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
3	Providing & Applying priming with ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron/steel works	1,808	1,001	193	3,002.00	m2	Rs..... (_____ _____)	
4	Providing and applying two coats of synthetic enamel paint of IITB approved brand and shade to wood and steel work with the use of scaffolding, including scrapping, cleaning, covering the floor, windows, instruments during painting etc. complete.	1,858	1,031	208	3,097.00	m2	Rs..... (_____ _____)	
5	Providing and applying Melamine polish of required finish to wood work by spray machine including knotting and preparing the surface by scrapping, applying French polishing, scaffolding if required etc. complete as directed.	101	52		153.00	m2	Rs..... (_____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
6	Providing and applying one coat of seal cement primer IITB approved brand, cleaning the surface with the use of stepladder, scaffolding including scrapping the surface, filling the holes, levelling the entire surface with lambi / palti, covering the floor, windows, instruments during painting etc. complete.	5,429	3,059	867	9,355.00	m2	Rs..... (_____ _____)	
7	Providing and applying Acrylic oil bound distemper of IITB approved manufacturer and of desired colour and shade to old / new surfaces in two or more coats including scaffolding, preparing the surfaces (excluding priming coat), covering the floor, windows, instruments during painting complete.	5,204	2,939	777	8,920.00	m2	Rs..... (_____ _____)	
8	Providing and applying roller finish Acrylic plastic emulsion paint of IITB approved manufacturer and of desired colour and shade to old / new ceiling & wall surfaces in two coats with the use of stepladder, scrapping, preparing and levelling the surfaces with Acrylic palty, as per manufactures specification (excluding priming coat), covering the floor, windows, instruments during painting complete.	225	120	90	435.00	m2	Rs..... (_____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
9	<p>Providing and applying exterior coating for wall including mechanical cleaning of the external surface and treating surface in sound, clean and free from dirt, oil and other loose material and may be done with vacuum cleaning if required. All surface cracks upto 5 mm width will be filled up with Dr. Fixit Crack X paste or similar material. The external surface will be primed with Dr. Fixit Primeseal (or equivalent BASF/ FOSROC/ STP) diluted with potable water in the ratio of 2:1 by volume prior to application of Dr. Fixit Raincoat. Allow it to dry for at least 2 to 3 hours and then apply Dr. Fixit Raincoat or equivalent (BASF/ FOSROC/ STP) having DFT of 110 micron, elongation of > 100% as per ASTM D412-02 and algae Fungal resistance as per SS 345-1998. Accelerated weathering (2000 Hrs UV Exposure) as per ASTM D4587 No defects) in 2 coats by brush, roller or spray with required shade steiner to give required shade to the surface with an interval of 5 to 6hrs. Allow it to air cure for 7 days and do not dilute Dr. Fixit Raincoat by any means. Work includes scaffolding and cleaning the surface thoroughly, watering the surface etc. complete including covering the floor, window glass with plastic sheet and as directed by this office. Work shall be guaranteed for 5 years by the contractor on Rs. 500/- stamp paper including submitting written guarantee.</p> <p>(If any leakage occurs during the guarantee period the agency has to cover the terrace with tarpaulin. If the contractor fail to provide tarpaulin, Estate office will provide and fix tarpaulin at contractor's risk and cost. Security deposit will be released after 2 years but 1% per year)</p>	734	816	68	1,618.00	Sqmt	Rs..... (_____ _____ _____ _____)	
10	<p>Providing and applying three coats of Dr. Fixit Newcoat (or equivalent BASF/ FOSROC/ STP) over an one coat of Dr. fixit primer i.e Prime seal (prime seal mixed with water in ratio of 1:2) as per manufacturer's specification on plastered surface over concrete / brickwork including scaffolding and cleaning the surface thoroughly, watering the surface etc. complete including covering the floor, window glass with plastic sheet and as directed by this office. Apply three coats of new coats with different shades for monitoring with time interval of 6-8hrs. Between each coat(work shall be guaranteed for 5year and guarantee shall be provided on Rs. 500/- stamp paper). (if any leakage occurs during the guarantee period the agency has to cover the terrace with tarpaulin. If the contractor fail to provide tarpaulin, Estate office will provide and fix tarpaulin at contractor's risk and cost. Security deposit will be released after 2 years at 1% per year)</p>	29	26	7	62.00	Sqmt	Rs..... (_____ _____ _____ _____)	

Sr. No	Description of Item	Main Bldg. Estimated Qty.	Annex Estimated Qty.	Telephone Exchange & Audit Section Estimated Qty.	Estimated Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
11	Providing and Applying three coats of White Wash on old / new plastered surface for walls and ceiling and asbestos sheet using step ladder/ scaffolding upto 4mtr. height, scrapping and cleaning the surface by sand paper and brooming, adding Robbin blue as required, adding adhesives for bonding, cleaning the floor, filling all cracks, holes etc. with plaster of paris, covering the floor, windows, instruments during painting etc. complete.	1,475	1,388	404	3,267.00	m2	Rs..... (_____ _____ _____))	
							Gross Amount Rs.	
							CGST %	
							SGST %	
							Net Amount Rs.	
							Say Rs.	

(Rupees

_____) (Rates for all items & net amount of total to be filled with figure and words and should be mention clear & correct. If it is not done, it will be assumed as incomplete tender & tender opening committee will reject your offer at the time of opening of tenders/quotations).

1) Note : This schedule of work is given. Contractors are requested to quote your rates in financial bid.

2) If you will engage labourer 20 or more any day, you have to get labour licence as per contract Regulation & Abolition Act 1970 Rule 1971, and also, you have to keep all such record for inspection to the Principal Employer. If you will engage labour up to 10 Nos. per day, you have to file returns after completion of work as per Building & Construction Act to the Office of Regional Labour Commissioner (Central), Sion, Mumbai.

3) This work is to be executed as per the the clauses mentioned in the tender document signed by you.

4) Taxes as per government notification time to time.

5) Contractor must pay GST Taxes to concern authority within 30 days time limit after receipt of payment from IIT Bombay & said record must be submitted to IIT Bombay Accounts Section, otherwise action will be taken as deemed fit.

6) If any malpractices / fraud / negligent professional behaviour or any discrepancy / inconsistency / disparity / deviation / disagreement / dissimilarity / mismatch noticed, their contract will be terminated by issuing one month notice by following legal procedure and will be blacklisted and informed to all Government Authorities and Organisations.

Sd/-

Superintending Engineer (I/C)

Signature and Stamp of the Contractor