

#### INDIAN INSTITUTE OF TECHNOLOGY, BOMBAY ESTATE OFFICE, POWAI, MUMBAI, MAHARASHTRA – 400 076

TEL. 022 2576 4995 E-mail: drestate@iitb.ac.in

IIT Bombay invites digitally signed 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		Estimated Cost (In Rs.) Incl. 18% GST	EMD (Rs.)	Time Limit	RFX No.
1.	Civil repairs and internal painting to various vaccant/residing quarters at Hillside area. EO/A/HILLSIDE/WKS-86/24-25	Rs.48,65,720/-	Rs. 97,000/-	06 MONTHS	6,00001831

Intending bidders needs to be register themselves on HT Bombay portal i.e. <a href="https://portal.iitb.ac.in/vrp/index.jsp">https://portal.iitb.ac.in/vrp/index.jsp</a> to get User ID and Password. View the open tender on <a href="https://portal.iitb.ac.in/vrp/vrp\_srm\_docs.jsp">https://portal.iitb.ac.in/vrp/vrp\_srm\_docs.jsp</a> Please visit https://portal.iitb.ac.in/vrp/vrp\_srm\_docs.jsp for configuration process and user manual. Queries regarding to vendor registration please contact on 022 – 2159 3001(ASC Help-desk) and queries regarding to online Bid submission please contact to +91 82915 56277/6377 or mail at <a href="mailto:srm@iitb.ac.in">srm@iitb.ac.in</a>.

Date and time of submission of tender documents digitally are from 13.09.2024 to 25.09.2024 till 11:15 a.m.Date of opening of Technical Bid will be 25.09.2024 at 11.30 a.m. and and Financial Bid 25.09.2024 (Tentative)

Interested contractors/agencies are requested to upload Technical bid and Financial bid on the SRM tendering portal of HT Bombay.

- (A) All contractors/agencies should upload technical bid with the following documents on SRM tendering portal, 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 1<sup>st</sup> April and ended with 31<sup>st</sup> 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) Upload a scan 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 from the date of publishing of Tender.
- 5) P. F. registration certificate.
- 6) P. F. challans of last 12months.
- (i) ESIC registration certificate and copies of ESIC challans of last 12months.
  - (ii) Contractors' all risks insurance (CAR policy) / Mediclaim policy.
- 8) PAN card.
- 9) GST registration certificate.
- 10) Income Tax Return for last 03 years i.e. of 2021-22, 2022-23 and 2023-24.
- 11) List of Equipment's, Machinery, Tools.
- 12) List of Technical Staff with copies of their Degree/diploma certificate.
- 13) Labour Licence obtained during in 03 years.

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- 14) The contractors who were empanelled under Estate Office under (2018-23) list need not have to upload Demand Draft. The contractors other than empanel list that are applying for tender need to upload a scan copy of Demand Draft / Pay Order for Rs.97,000/-(EMD amount) drawn in favour of "The Registrar, IIT Bombay" on online Tendering Portal.
- 15) Power of Attorney, if any.
- 16) 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.

#### Note:

Those contractors who do not have documents mentioned above from <u>Sr. No. 1 to 16</u> need not apply as it is mandatory documents to qualify in technical bids.

Upload all your relevant documents in the serial order mentioned above. It is **advisable** not to make more than <u>03 folders of 5MB</u> while uploading documents.

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 upload a scan copy of Terms and Conditions with official signature and seal/stamp on SRM online tendering portal)

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

If agency fails to submit the above mentioned documents by uploading to the online portal, their technical bid may be rejected.

Litigation history of the agency is required to be uploaded 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 subleted 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-DSR-2021 and market rate analysis.

The contractor have to quote his own rates online against each item of work and need to select N5 tax code thereafter.

Scan and upload all the above mentioned documents in "C folder" of online SRM tendering protal.

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

No queries will be entertained within 24 hours prior to the opening of the tender. We kindly request all contractors to upload their quotations well in advance of the submission deadline to ensure a smooth and timely process.

)Superintending Engineer (I/C)

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### TO BE UPLOADED ON SRM TENDERING PORTAL WITH FINANCIAL BID

## ANNEXURE 'A' (FORMAT) TECHNICAL BID

File No.: EO/A/HILLSIDE/WKS-86/24-25

Name of Work : Civil repairs and internal painting to various vacant / Residing quarters at Hillside area.

Name of the Contractor -----

Sr. No.	Name of Client	Name of Works	2021-22 (In Lakhs)	2022-2023 (In Lakhs)	2023-2024 (In Lakhs)	2024-2 (In La	
- N						Completed	Balance
			<del>-</del>		_	-	-
			-	-	••	-	-
2		Total Amount (In Lakhs)		-	_	-	<b>P</b> -

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 been calculated and his tender will be summarily rejected.

Superintending Engineer (I/C)

Signature of Contractor Name & Address in full

#### **WORKS UNDERTAKING**

#### EO/A/HILLSIDE/WKS-86/24-25

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

Sub : Civil repairs and internal painting to various vacant / Residing quarters at Hillside area.

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 06 Months as mentioned in the notice inviting for short tenders.

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.

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.

<ol> <li>No. of Unskilled casual labour to be required per day.</li> <li>No. of Skilled casual labour to be required per day.</li> </ol>	: :
The Mandays required for completion of work.	:
Thanking you,	

Yours faithfully,

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

# INDIAN INSTITUTE OF TECHNOLOGY BOMBAY POWAI, MUMBAI-400 076.

EO/A/HILLSIDE/WKS-86/24-25

ESTATE OFFICE

Name of Work :- Civil repairs and internal painting to various vacant / Residing quarters at Hillside area.

#### SCHEDULE OF WORK

	SCHEDGE OF WORK		1
Sr. No.	Description of Work	Qty.	Unit
1	Excavation for foundation in earth, soil of all types, sand, gravel and soft murum including removing the excavated materials upto a distance of 50 meters beyond the building area, and lift upto 1.50 metres, stacking and spreading as directed including preparing the bed for the foundation and necessary backfilling, ramming, watering complete excluding shoring and strutting.	1.00	Cum
2	Laying dry trap/ rubble stone soling of 230mm size thickness including hand packing and compacting using IITB stone including breaking and making/cutting stone/boulders in required size, lead and lift from any where in the campus etc. complete.	1.00	Cum
3	Providing and laying in situ plain cement concrete M-20 having proportion not less than 1:1.5:3 with minimum cement content of 360kg/cum as per IS 456-2000 for foundation and bedding The rates shall includes bailing out water manually centering shuttering compacting by vibrator and curing etc., complete.	1.00	Cum
4	Dismantling plain cement concrete work including breaking concrete by mechanical means/ chiseling, wedging etc., and stacking the debris upto a distance of 50 meters or spreading/leveling in low laying area as directed by Engineer Incharge.	1.00	Cum
5	Dismantling R.C.C. work including breaking concrete by mechanical means, chiselling, wedging etc., cutting the reinforcement, stacking the serviceable materials and stacking the debris upto a distance of 50 metres or spreading/leveling in low laying area as directed by Engineer Incharge. as directed.	1.00	Cum
6	Providing and casting in situ dense and impervious cement concrete M-25 of trap metal for R.C.C. overhead water tank slab, lintel, beam and chajja as per detailed designs and drawing or as directed by Engineer Incharge including erecting plywood shuttering with strutting, propping etc. and removal of formwork, necessary compaction, curing etc Only steel centering and formwork is to be used.	1.00	Cum
7	Exposing the existing damaged RCC members like columns, beams, slabs, chajjas, paradi, fins etc in patches or any length by using electrical cutting tools up to any depth till the corroded reinforcement will be opened allround without damaging brickwork, plaster in the vicinity, cleaning, stacking the debris with in 50 meters or spreading/leveling in low laying area as directed by Engineer Incharge, cleaning the site etc. complete, including covering the furniture with plastic sheet while exposing concrete.  Note:- Proper tools to be used for removal of concrete.  The exposed area shall be measured for the payment of this item.	160.00	Sqm/

8	Old reinforcement treatment providing and applying reinforcement treatment, comprising of following operations. Cleaning the reinforcement from all sides by using wire brush, tools etc. Application of rust converter such as Alkaline base(Rust kill A) as per manufacturers specification, cleaning as directed complete. Actual consumption of Alkaline base converter shall be measured for payment on weight basis. Invoice of authorized dealer will be verified. The chemical to be procured in sealed container & seal to be opened in presence of the IITB representatives.		Kg
9	Providing and applying an effective bond coat of Polymer (SBR) Stuco latex of structural waterproofing (Cicco)/ Resicon 400, and cement in the proportion of 1:1 by using brush in multiples of coat as required to accommodate the whole thickness of PMM wherever required on the surface of old concrete / repaired concrete Polymer (SBR) of approved manufacturer should have the following properties:Scaffolding will be paid under respective item. 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 bond coat shall be measured for payment on weight basis. Invoice of authorized dealer will be verified. The chemical to be procured in sealed container & seal to be opened in presence of the IITB representatives	64.00	Kg
10	Providing and Placing in position readymix polymer mortar manufacture by Dr. Fixit, Sunanda, Roff, MC Bouchmey, Chembond and approved and adding water in the proportion of 1:0.14 (polymer mortar: water) in prepared grooves / cracks of the concrete court in layers as directed including mixing the polymer mortar with water using forced action mixer mild curing with water for 3 days etc. Complete. (Payment will be paid for the actual quantity of polymer mortar PX used on weight basis. Invoice of authorised Dealer will be verified etc all complete as directed by Estate office).	8000.00	Kg
11	Removing the existing cement plaster of any thickness without causing dust nuisance and stacking the debris upto a distance of 50 meters or spreading/leveling in low laying area as directed by Engineer Incharge and cleaning the site including , covering window/opening with plywood while removal of plaster etc complete	160.00	Sqm
12	Removing the old cement concrete or any type of tiles from flooring/dado including back coat plaster levelling the surface, cleaning the site including sorting out servisable tiles and stacking the same and debris disposing off upto a distance of 50 meters or spreading/leveling in low laying area as directed by Engineer Incharge	400.00	Sqm (
13	Providing internal cement plaster 12mm to 20mm thick in a single coat in cement mortar 1:4 without neeru finish to concrete or brick surfaces in all positions and curing complete.	100.00	Sqm /
14	Providing waterproof plaster in wc/ bath/water tanks 20mm thick for dado in cement mortar 1:3 with neat finishing, floating using waterproofing compound at the rate of 1 kg per bag of cement of approved make and manufacturer and curing etc. Complete.	100.00	Sqm

15	Providing and Placing in position Readymix Plaster manufactured by M/s. A. V. Conchem, Ultra-Tech Cement, Ready Plast, up to 20mm thick in one coat and adding water in the proportion of 1:0.17( Ready Mix Plaster: water) at any floor over the prepared Brick wall, Solid ,Hollow & AAC block work and Concrete RCC surfaces, as directed mixing the Readymix Plaster with water using forced action mixer, mild curing will be done with water for 3-5 days etc complete. (Invoice of authorized dealer will be verified)		Sqm
16	Removing the existing loose and damaged brickbat coba waterproofing treatment/finishes as IPS/ tiling/ side plaster from the terrace/WC/ bath up to any thickness with out making any damages to the slab with the use of sharp chisels, levelling and cleaning the surface including lowering down debrises and stacking the debris upto a distance of 50 meters or spreading in low lying area and levelling as directed. etc. all complete.	13.00	Cum
17	Providing waterproofing in W.C and bath including brick bat coba in all position including providing and laying 12mm bedding in cement mortar 1:3 on virgin concrete slab with waterproofing compound @ IKg/per bag of cement laying brick bat coba of required thickness in cm 1:5 with waterproofing compound 1Kg/bag of cement grouting and finishing the top layer with 20mm thick brick bedding in cm mortar 1:3 with waterproofing compound 1Kg/per bag of cement and testing the treated portion for 48 hours by pond test and covering ten year's guarantee on requisite stamp paper including all leads, lifts and curing etc, complete.	13.00	Cum
18	Pulling down burnt brick masonry (in cement mortar) with plaster including sorting out serviceable bricks and stacking the same and debris separately upto a distance of 50 metres or spreading the debris in low laying area and leveiling etc. Complete.	1.00	Cum
19	Providing second class burnt brick masonry with conventional / I.S. Type bricks in cement mortar 1:4 in superstructure including striking joints, racking out joints, watering etc. complete.	1.00	Cum
20	Providing second class burnt brick masonry with conventional / I.S. Type bricks in cement mortar 1:4 in half brick thick wall including mild steel longitudinal reinforcement of 2 bars of 6 mm diameter/2 hoop iron strips 25mm x 1.6mm at every third course properly bent and bonded at ends ,racking out joints and watering etc. complete.	1.00	Sqm
21	Providing and erecting steel tublar props of required height upto 14' feet, L head or flat head braced at center at center and supporting a continuous 2" x 3" wooden runner, resting on wedge and block minimum capacity 3 ton to support the structure provisionally during repair and jacketing etc. And maintaining them in position till completion of all related items Complete. The props are erected in perfect vertical in plumb taking/ transferring the load equally/ uniformly. The location of every prop should be one over another floor and it should not be eccentric. The tightening of every prop should be uniform to all props to strain the building uniformly. The work should be carried out with all the safety measures like helmet, safety belt and adequate labour insurance under the supervision of qualified supervisor	10.00	per No.
	Providing and laying super fluid micro concrete of IITB approved manufacturer for exposed RCC member like slab,column,beam,staircase pardi,lintel mixed proportion as per manufacturers specification at any floor providing and fixing plywood form work in line and level, cleaning, curing etc. complete. the compressive strength of super fluid micro concrete should be 25N/sqmm including working platform	150.00	Kg /

23	Providing and laying bedding by means of leveling the floor surface with cement sand mortar 1:4 laid to proper slope and level including compaction, flow preparation, roughening cement slurry etc. up to 40mm thickness finishing with brooming to receive floor tiles, curing all complete as directed.	50.00	Sqm
24	Providing and laying non skid ceramic tiles of size 300mm x 300mm and thickness as per manufacturers specification of approved make for flooring in toilet/bath/balcony/common passage/lobby where surface area is less than 2 sq.mtr in required position laid on bed of cement mortar 1:4 including neat cement float, filling joints with neat cement slurry, curing and cleaning complete.	30.00	Sqm
25	Providing and laying 1st quality glazed ceramic tiles of size 300mm x 200mm and thickness as per manufacturers specification of approved make for dado/wall in required position fixed with neat cement paste, curing and cleaning complete. Colour shade as approved by Engineer In Charge. Note: (Back coat plaster will be paid separately)	140.00	Sqm
26	Providing and laying vitrified mirror finish decorative type tiles like Somani/Kajaria/Regency/Bell/H.R.Jhonson/Nitco etc. of size 600mm x 600mm and thickness as per manufacturers specification of approved make, shade and pattern and having water absorption between 0.08% to 2.5% for flooring/skirting in required position laid on a bed of 1:4 cement mortar including neat cement float, filling, joints with cement slurry, curing and cleaning etc. Complete	50.00	Sqm
27	Providing and laying plain ceramic tiles of size 600mmx600mm and thickness as per manufacturers specification of approved make for flooring in required position laid on bed of cement mortar 1:4 including neat cement float, filling joints with neat cement slurry, curing and cleaning complete. Texture and colour shade as existing or approved by Engineer Incharge.	50.00	Sqm
28	Providing and laying cement concrete flooring 40mm thick with M-15 cement concrete laid to proper line level and slope including compaction, filling joints, finishing with brooming to receive floor tiles, etc., as directed, and curing complete.	50.00	Sqm
29	Machine polishing to cement / marble mosaic tiled flooring or any other type of flooring including cleaning, washing, etc. Complete.	140.00	Sqm
30	Hand polishing to dado, skirting including cleaning, washing etc. Complete.	20.00	Sqm
31	Dismantling existing kitchen platform made of kadappa/concrete slab top and kadappa/concrete support carefully and lowering down the debris at ground level and stacking up to 50 meters beyond the building area or spreading/leveling in low laying area as directed by Engineer Incharge. as directed.etc, complete.	10.00	per No.
32	Providing and laying black colour machine cut mirror polished granite stone slab required size and 16mm to 18mm thick of approved quality and colour for kitchen platform/cupboard shelves in required pattern laid on a bed of cement mortar 1:6 including neat cement float, filling joints with neat coloured cement slurry, curing, hand polishing and cleaning complete.	35.00	Sqm

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33	Providing and fixing Kadappa stone slab for kitchen platform/cupboard shelves of approved type and design 25mm to 30 mm thick in cement mortar 1:4 including filling joints, curing, cleaning etc. complete.	70.00	Sqm
34	Providing and laying black colour granite slabs 16 to 18mm thick of approved quality colour door / windows sill / cladding, on a bed of 1:4 cement mortar including rounding / moulding of nozzles / adjust, filling joints with white cement to match colour of slab, curing polishing etc complete.  a)75/80mm wide	50.00	Rmt
	b)100/110mm wide	65.00	Rmt
35	Providing and fixing machine cut mirror polished green coloured marble slab of required size and about 16mm to 18mm thick of approved quality for boxing of windows, door frame of toilets on cement mortar 1:4 including neat cement float, filling joints, rounding and moulding the edges, curing minor polishing rubbing and cleaning etc complete.	5.00	Sqm
36	Removing door and windows of any size and type 'with frame' mild steel / wrought iron grill work and stacking the same in estate store (civil)/as directed by engineer in charge	25.00	per No.
37	Removing door and windows shutters of any size and type 'without frame' and stacking the same in estate store (civil)/as directed by engineer in charge	25.00	per No.
	Providing and fixing C.P. teak sizes as per existing frames wood frame for doors/ventilators/windows,etc including all mouldings rebating holdfasts and finishing including 1 coat of cold tar to be applied on backside of frame in fixing MS hold fast as per site requirement with screws and 2 coats of SEP of existing colour/shade of the bldg over a one coat of wood primer etc. complete. Mode of measurement will be finished size of teakwood. Contractor will be allowed to take away old frame and for which 5% deduction will be made of schedule rate of this item.  Note: Sample testing to be carried out from each lot as per IS requirement before commencement of work at contractor's risk and cost.	1.00	Cum
39	Providing and fixing teakwood fully glazed single / double leaf windows / ventilators rectangular in shape adopting section of 70mm x 32mm for styles and rails as per existing pattern including providing and fixing 5mm thick plain / bajiri glass with teakwood beading, fixing the window / ventilator shutters with 75mm size brass butt hinges 2 Nos. for each shutter, aluminium towerbolt 100mm size one for each shutter, aluminium handle 125mm one for each shutter or as per site requirement, of classic/Archies make hooks & eyes 200mm one for each shutter, etc. including 2 coats of SEP of existing colour/shade of the bldg over a one coat of wood primer etc. complete.  Contractor will be allowed to take away old frame and for which 5% deduction will be made of schedule rate of this item. Note: Sample testing to be carried out from each lot as per IS requirement before commencement of work at contractor's risk and cost.	10.00	Sqm

40	Providing and fixing solid core flush door in single leaf 35mm thick as approved by Engineer Incharge all necessary beads, moulding and lipping, and finishing lipping/beading brass oxidised fixtures and fastenings chromium plated handles,on both sides and finishing with 2 coats of existing colour/shade SEP over a coat of wood primer ISI make Duraboard/Kitply/Merino Ply etc. complete (without frame). contractor will be allowed to take away old shutter and for which 5% deduction will be made of schedule rate of this item.	5.00	Sqm
41	Shifting of household material inside the quarter before the commencement of work and shifting back the same after the work is completed by taking due care of residents belonging in all respect.	3.00	per Flat
42	Providing and fixing 35mm FRP door manufactured by M/s. Advance, Company including brass hinges 4" 3nos, both side 4" brass handles, 8" brass aldrop for outside, brass tower bolt from inside, etc. complete	17.00	Sqm
43	Providing and fixing 600 x 450mm x 6mm thick mirrors of approved Indian quality copper plated with 10mm (3/8") thick plywood backing, in the masonry etc. Make Modi Guard/Saint-Gobain etc. complete. contractor will be allowed to take away old mirror if available and for which 5% deduction will be made of schedule rate of this item.	12.00	Per No
44	Providing and fixing 6mm thk Glass shelf 125mm (5") wide and 610mm (24") long with necessary chromium plated brackets providing teak wood gutties etc. Make Modi Guard/Saint-Gobain etc. complete. contractor will be allowed to take away old glass shelf if available and for which 5% deduction will be made of schedule rate of this item.	6.00	Per No
45	Providing and fixing in position night latch of approved make, quality and pattern with automatic locking arrangement, duplicate keys etc. make ISI Godrej/ Europa removing the old lock and depositing to estate office maint. Unit etc. complete	6.00	Per No
46	Providing and fixing mortise lock of Godrej make 6 lever with keys in duplicate of IITB approved brand including removing the old lock and depositing to estate office maint. Unit etc. complete	6.00	Per No
47	Replacing by providing and fixing 5mm thick plain /bajari sheet glass of doors and windows etc. Including putty. Make ModiGuard/Saint-Gobain/Pilkington/Asahi Float etc. complete.	10.00	Per Sqm
48	Providing and fixing chromium plated towel rail 750mm long,20mm dia.and of approved quality fixed on chromium plated bracket including providing teak wood gutties in masonry etc. complete.contractor will be allowed to take away old towel rail if available and for which 5% deduction will be made of schedule rate of this item.	6.00	Per No
49	Providing and fixing hydraulic door closer of approved quality make Godrej/Hyper/Everite and to door shutter including making proper adjustment for smooth operation complete.contractor will be allowed to take away old door closer if available and for which 5% deduction will be made of schedule rate of this item	6.00	Per No

50	Providing and fixing brass eye glass of approved quality, type,make,size and shape etc to door shutter complete.contractor will be allowed to take away old peep glass eye giass if available and for which 5% deduction will be made of schedule rate of this item	12.00	per No.
51	Providing and fixing Nylon wire for drying cloths with 1" dia Stainless steel pipe, Stainless steel Tee, Single wheel, double wheel, required Hook, and Nylon wire of 6mm dia meter required length and 6 rows of wires of adequate spacing including necessary fittings and fixtures etc. complete as directed by engineer In charge.contractor will be allowed to take away old drying cloth unit if available and for which 5% deduction will be made of schedule rate of this item Note;- Mode of measurement will be running meter of width 0.8 Mt. Including all above accessories.		Rmt
52	Providing and fixing for drying cloth unit 6mm dia nylon rope etc. complete contractor will be allowed to take away old rope if available and for which 5% deduction will be made of schedule rate of this item	160.00	Rmt
53	Providing and fixing PVC Mesh for windows grill and balcony railing to prevent entry of monkey for New C type building including providing & fixing teak wood beading patti 20mm x 4mm finished size 1" S.S. screw to periphery of mesh including labour, step ladder, two coat SEP with one coat of wood primer to beading patti etc complete.	35.00	Sqm
54	Providing and fixing G.I. Welded mesh 12mm x 12mm and (18 gauge) to teakwood frame work including fixing weld mesh with 37mm x 12mm teakwood bedding patti and necessary pocketing for opening for shutters with necessary screws, fitting as directed	20.00	Sqm
55	Providing and fixing new fitting with new screw, removing old broken fitting contractor will be allowed to take away old fitting and fixtures if available and for which 5% deduction will be made of schedule rate of this item wherever existing a) 4" Archies tower bolt	6.00	Per No.
	b) 6" Archies tower bolt	6.00	Per No.
	c) 5" Archies handle	6.00	Per No.
***************************************	d) 6" Archies handle	6.00	Per No
~	e) Safety chain	30.00	Per No.
******************	f) 8" Tadipatti Aluminum Archies	6.00 <	Per No./
	g) Rubber door stopper	75.00 <	Per No.
	h) 9" Archies hookness	6.00 <	Per No.
56	Providing and fixing 20mm thick cement bonded wood particle board (bison panel) ISI make to cover toilet duct/weather Shed at any floor on M.S. Angle frame and will be paid under respective item, providing suitable hole for fixing nuts and bolts and vent pipe of any diameter including making suitable groove on plaster and vatta, proper slope complete as directed.  Note: Holes to be made on the wall has to be done by using drill machine and groove by groove cutting machine precoated Bolts/ hook to be grouted in the wall by using of approved polymer mortar after cleaning and applying polymer bond coat in cement mortar 1:1 ratio	10.00	Sqm

57	Providing and fabricating structural steel works in rolled sections angles, flat patii tees for balcony, window, bison board framing as per existing design & pattern including fixing in position with connecting plates, braces and welding, as necessary including a coat of metal primer & two coat of Synthetic Enamel Paint etc. complete.	100.00	Kg
58	Removing, making addition/ alternation and refixing existing two track Aluminum sliding window size 1.40 x 1.20m for provision of exhaust fan providing and fixing using required aluminium section aluminum pipe 3"x1" ,1"x2" T/B shutter channel,1"x3/4" 'F' channel & 1"x1 1/2"'L' channel ,5mm clear glass, 3/4" bearing 4nos ,rubber gasket,wool foil, star lock including etc. complete.	2.00	Per Job
59	Providing and fixing SS 304 mosquito mesh shutter in existing 2 track aluminium sliding window of any size by providing and fixing new U channel,interlocking handle section 40x18x1.5mmmm,top/bottom bearing handle section 40x18x1.5mm,,side section handle single 40x18x1.5mm including p/f 6"star lock with all the necessary fittings like screws, along with anodizing filling the gaps with binding material like silicone sealant etc including removing existing aluminum window and refixing the same after necessary addition and alteration for smooth operation and mosquito proof window including p/f new clear pvc and bearing for existing shutter as directed by Engineer incharge Note: Mode of measurement will be full area of single track window.	5.00	Sqm
60	Providing and fixing SS 304 mosquito mesh shutter in existing 3 track sliding aluminum window by p/f new U channel ,interlocking section handle 40x18x1.5mm,top/bottom handle section 40x18x1.5mm,25x25mm tee including p/f 6"star lock with all the necessary fittings like screws,along with anodizing filling the gaps with binding material like silicone sealant etc including removing existing aluminum window and refixing the same after necessary addition and alteration for smooth operation and p/f new clear pvc and bearing for existing shutter as directed by Engineer incharge Note: Mode of measurement will be the newly provided mosquito net shutter.	5.00	Sqm
61	Providing and fixing SS 304 mosquito mesh shutter in existing 4 track sliding aluminum window by p/f new U channel ,interlocking handle section 50x25x1.5mm,top/bottom bearing handle section 60x25x1.5mm,25x25mm tee including p/f 6"star lock with all the necessary fittings like screws,along with anodizing filling the gaps with binding material like silicone sealant etc including removing existing aluminum window and refixing the same after necessary addition and alteration for smooth operation and p/f new clear pvc and bearing for existing shutter as directed by Engineer incharge Note: Mode of measurement will be the newly provided mosquito net shutter.	5.00	Sqm
62	Providing & Fixing Stainless steel 304 grade kitchen trolley including 3 nos drawers supporting frame with minimum 25kg /Rmt of length of trolley below kitchen counter including channels & 18mm thick plywood and 1mm sunmica both side, and 40 x 50mm finished size teakwood frame with including 2 coat of polishing etc. complete.	5.00	Rmt /

63	Providing making and fixing in position 18mm thick kitchen platform and above/below service platform shutter by using water proof plywood with using 2" x 1 1/2 finished size teak wood frame and approved laminate 1mm thick from out side and 0.8mm thick from inside (merino/greenlam) including ss decorative handle, 3" x 20mm L Brass C.P hinges,magnet ball catch to each shutter and other fitting fixture etc. complete.	5.00	Sqm
64	Providing and Making & fixing wall mounted cupboard unit of 0.35m depth including teakwood frame ( 50 x 40mm) finished size using approved quality marine plywood 18mm thick with 1mm laminate from out side and 0.8mm thick laminite from inside including 125mm brass CP decorative handles, 3" S.S. Hinges, magnet ball catch, screws for each shutter etc complete	2.00	Sqm
65	Removing kitchen platform and above/below service platform shutter of any size and type with frame including existing SS trolley ,and stacking the same and depositing to hillside maintenance unit as directed by Engineer in charge including lead and lift from any floor etc, complete.	1.00	Per Job
66	Providing and fixing shutter below platform and for cupboard made of aluminium anodized 15 micron or powder coated L type section for frame 38 x 25x1.2mm or near available handle section 40x18x1.2mm for shutter Top & bottom and sides, P/F 4mm thick hardner sheet of bakelite P/F stainless steel hinges 75mm x 20mm , S.S. Tower bolt and magnet . handle (S.S.) fixing shutter on aluminium frame with screws properly in line and level, etc. Complete.	4.00	Sqm
67	Providing and fixing C-Class G.I. pipes 15mm internal diameter heavy type weight and outer dia ,as per IS requirement and embossed at every meter as ISI mark and name of the manufacturer Like, Tata/Jindal/ Zenith etc. to walls, ceilings,etc. with screwed sockets, backnuts, elbows, tees, reducers, enlargers, plugs, clamps etc. projecting 50mm from face of wall and fixing on wall by means of galvanlsed bracket of 30 x 5mm plate and 8mm square rod with G.I. clamp with washer including necessary drilling in holes in walls / slabs Including etc, and remaking good the demolished portion to restore the same in original condition neatly and applying metal primer and two coats of SEP painting including removing the existing pipe, if available and contractor will be allowed to take away old pipe and for which 5% deduction will be made of schedule rate of this item	40.00	Rmt
68	Providing and fixing C- Class G.I. pipes 20mm internal diameter heavy type weight and outer dia, as per IS requirement and embossed at every meter as ISI mark and name of the manufacturer Like, Tata/Jindal/ Zenith etc. to walls, ceilings, etc. with screwed sockets, backnuts, elbows, tees, reducers, enlargers, plugs, clamps etc. projecting 50mm from face of wall and fixing on wall by means of galvanised bracket of 30 x 5mm plate and 8mm square rod with G.I. clamp with washer including necessary drilling in holes in walls / slabs Including etc, and remaking good the demolished portion to restore the same in original condition neatly and applying metal primer and two coats of SEP including removing the existing pipe, if available and contractor will be allowed to take away old pipe and for which 5% deduction will be made of schedule rate of this item	6.00	Rmt

69	Providing and fixing C-Class G.I. pipes 25mm internal diameter heavy type weight and outer dia, as per IS requirement and embossed at every meter as ISI mark and name of the manufacturer Like, Tata, Jindal/ Zenith etc. to walls, ceilings, etc. with screwed sockets, backnuts, elbows, tees, reducers, enlargers, plugs, clamps etc. projecting 50mm from face of wall and fixing on wall by means of galvanised bracket of 30 x 5mm plate and 8mm square rod with G.I. clamp with washer including necessary drilling in holes in walls / slabs Including etc, and remaking good the demolished portion to restore the same in original condition neatly and applying metal primer and two coats of SEP including removing the existing pipe, if available and contractor will be allowed to take away old pipe and for which 5% deduction will be made of schedule rate of this item.	6.00	Rmt
70	Providing and fixing C-Class G.I. pipes 40mm internal diameter heavy type weight and outer dia, as per IS requirement and embossed at every meter as ISI mark and name of the manufacturer Like, Tata/Jindal/ Zenith etc. to walls, ceilings, etc. with screwed sockets, backnuts, elbows, tees, reducers, enlargers, plugs, clamps etc. projecting 50mm from face of wall and fixing on wall by means of galvanised bracket of 30 x 5mm plate and 8mm square rod with G.I. clamp with washer including necessary drilling in holes in walls / slabs Including etc, and remaking good the demolished portion to restore the same in original condition neatly and applying metal primer and two coats of SEP including removing the existing pipe, if available and contractor will be allowed to take away old pipe and for which 5% deduction will be made of schedule rate of this item.	20.00	Rmt
71	Providing and fixing C-Class G.I. pipes 50mm internal diameter heavy type weight and outer dia, as per IS requirement and embossed at every meter as ISI mark and name of the manufacturer Like, Tata/Jindal/ Zenith etc. to walls, ceilings, etc. with screwed sockets, backnuts, elbows, tees, reducers, enlargers, plugs, clamps etc. Including fixing GI line on pedestal above parapet wall, and remaking good the demolished portion to restore the same in original condition neatly and applying metal primer and two coats of SEP including removing the existing pipe, if available and contractor will be allowed to take away old pipe and for which 5% deduction will be made of schedule rate of this item.	10.00	Rmt
72	Providing and fixing ISI-1729-2002 grade 75mm dia. ISI make NECO/ALCO cast iron waste water pipe with lugs necessary fittings such as bends, tees, single junctions, double junctions, slotted vent, offsets on walls or into the ground including filling joints with cement mortar 1:2 proportion fixing on wall by means by galvanised bracket of 30 x 5mm plate and 8mm square rod with G.I. clamp with washer projecting 50mm from face of wall and painting the exposed faces with one coat zinc primer and two coats of anti corrosive paint Including removing the existing AC/CI/PVC pipe if available contractor will be allowed to take away old pipes and for which 5% deduction will be made of schedule rate of this item etc.	10.00	Rmt

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73	Providing and fixing ISI-1729-2002 grade 100mm dia. ISI make NECO/ALCO cast iron waste water pipe with lugs necessary fittings such as bends, tees, single junctions, double junctions, slotted vent, offsets on walls or into the ground including filling joints with cement mortar 1:2 proportion fixing on wall by means by galvanised bracket of 30 x 5mm plate and 8mm square rod with G.I. clamp with washer projecting 50mm from face of wall and painting the exposed faces with one coat zinc primer and two coats of anti corrosive paint Including removing the existing AC/CI/PVC pipe if available contractor will be allowed to take away old pipes and for which 5% deduction will be made of schedule rate of this item etc.	10.00	Rmt
74	Providing and fixing A- type P.V.C. waste water pipes 75mm dia. having wall thickness of 3.2 to 3.8mm conforming to I.S. including P.V.C. plug bend, necessary fittings such as offsets, shoes including fixing pipe on wall by means of galvanised bracket of 30 x 5mm plate and 8mm square rod with G.I. clamp with washer projecting 50mm from face of wall using approved filling the joints using rubber gasket with solvent cement and properly resting the shoe of pipes on C.C. or masonry blocks, including necessary , 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.including removing the existing pipe,if available and contractor will be allowed to take away old AC/CI/PVC pipe for which 5% deduction will be made of schedule rate of this item .	10.00	Rmt
75	Providing and fixing 100mm(ID) dia.ISI approved HDPE pipes with wall thickness of 15 mm to 20mm for taking sewage waste water with all required fittings such as bend, tee, elbows etc. with proper line and gradient connecting all joints with fusion butt weilding by using suitable welding machine or hot plate, testing the line & joint as per manufacturer specification etc. all complete as directed by Engineer Incharge.	10.00	Rmt
76	Providing and fixing 150mm(ID) dia.ISI approved HDPE pipes with wall thickness of 15 mm to 20mm for taking sewage waste water with all required fittings such as bend, tee, elbows etc. with proper line and gradient connecting all joints with fusion butt weilding by using suitable welding machine or hot plate, testing the line & joint as per manufacturer specification etc. all complete as directed by Engineer Incharge.	10.00	Rmt
77	Providing and fixing 15cm x 10cm salt glazed stone ware gully trap in cement concrete 1:4:8 outside the building including connecting to salt glazed stoneware pipe, brick masonry camber with cast iron lid for the gully trap etc. Complete as directed.	5.00	Per No.
78	Removing and refixing European W.C. pans including disconnecting the sanitary and water supply connections, and removing pan carefully and keeping in a side to carefully refix after completion of work etc. complete.	2.00	Per No
70	Providing and fixing European type white glazed earthenware 580mm water closet pan of IITB approved brand with seat and lid with hinges and rubber buffers 10 litres white H.D.P.E. flushing cistern of IITB approved brand with fittings,pipes and stop tap, with fittings and clamps,exposed pipes and cutting and making good walls and floors etc. complete	6.00	per No.

80	Providing and fixing Orrisa type White glazed earthenware 580mm x 450 mm water closet pan Parryware/ Hindwre/ cera make including trap, including cement concrete bedding, 10 litres capacity H.D.P.E flushing cistern Parryware/ Hindware/ cera/ slimline make with fittings, inlet pipe with stop tap(Seiko), brackets, with fittings and clamps, and making good the walls and floors etc. complete. (excluding waterproofing with brick bat coba)	12.00	per No.
81	Providing and fixing 10cm cast iron nahani trap with fixed SS nahani trap jali, with ss rim cast iron plug bend and piece of cast iron pipe upto plug bend including removing old the hahani trap, breaking brickwork/concrete and redoing the same etc, complete contractor will be allowed to take away old nahani trap and for which 5% deduction will be made of schedule rate of this item. etc. complete.	20.00	per No.
82	Providing and fixing 10cm PVC Nahani trap fixed with PVC grating ,PVC plug bend and piece of PVC pipe upto plug bend including breaking brickwork/concrete and redoing the same, etc complete	3.00	per No.
83	Providing and fixing white glazed earthenware wash hand basin make Parryware /hindware /CERA/Jhonsan-Peddar/Hindustan/Nycer of 55cm x 40cm size including one pillar tap, C.I. brackets, stop tap and 1/2" PVC connection for inlet including outlet polyethylene waste water pipe upto required length making good the damaged surface, testing etc. Complete. contractor will be allowed to take away old wash basin if available for which 5% deduction will be made of schedule rate of this item.	10.00	Per No.
84	Providing and fixing white glazed earthenware wash hand basin make Parryware /hindware /CERA/Jhonsan-Peddar/Hindustan/Nycer of 450cm x 300cm size including one pillar tap, C.I. brackets, stop tap and 1/2" PVC connection for inlet including outlet polyethylene waste water pipe upto required length making good the damaged surface, testing etc. Complete. contractor will be allowed to take away old wash basin if available for which 5% deduction will be made of schedule rate of this item.	6.00	Per No.
85	Providing and fixing new Nirali make stainless steel sink of size 60 x 45 x 20 cm including Nirali make waste coupling all connections of G.I. supply and flexible 40mm dia waste pipe upto trap chromium plated 15mm dia bib tap(Seiko make) etc. complete. contractor will be allowed to take away old sink and for which 5% deduction will be made of schedule rate of this item	10.00	Per No
86	Providing and fixing PVC low/high level flushing cistern with all fittings as approved by IITB inlet G.I. pipe with stop tap, providing and fixing 32mm or required heavy duty PVC outlet bend pipe from flushing cistern upto the w.c. pan, 15mm dia PVC connection to the tank etc. Make Hindware/ CERA/ Slimline/ Hindustan/ Nycer etc . all complete. as directed.	25.00	Per No.
	Providing and fixing good quality 32mm Nelson/Parryware ISI make flush valve of approved brand / pattern to the existing flush valve of water closet all complete as directed including removing the old available flush valve etc. all complete. Contractor will be allowed to take away old flush valve if available and for which 5% deduction will be made of schedule rate of this item.	6.00	Per No.

88	Providing and fixing 10 cm dia chromium plated brass shower rose to 15 mm dia. Supply pipe including necessary G.I. Bend and socket complete. contractor will be allowed to take away old shower if available and for which 5% deduction will be made of schedule rate of this item	12.00	Per No.
89	Providing and fixing 100 to 125mm dia stainless steel nahani trap jali with ring etc. complete.	6.00	per No.
90	Providing and fixing 15mm diameter ,400 gm Bib cock Seiko make, anti-static with guarantee against any manufacturing defect including socket, union nuts etc, complete contractor will be allowed to take away old bib tap if available and for which 5% deduction will be made of schedule rate of this item. Etc. complete.		per No.
91	Providing and fixing 15mm diameter 400 gm Stop cock/angle cock Seiko make, anti-static with guarantee against any manufacturing defect including socket, union nuts etc, complete contractor will be allowed to take away old bib tap if available and for which 5% deduction will be made of schedule rate of this item. Etc. complete.	25.00	per No.
92	Providing and fixing 15mm diameter,400 gm chromium plated 4" pillar tap cock of Seiko make approved IIT brand with deluxe knob for wash hand basin contractor will be allowed to take away old pillar tap if available and for which 5% deduction will be made of schedule rate of this item. Etc. complete.	25.00	Per No.
93	Providing and fixing 2 in 1 tap of approved make including necessary fitting fixtures etc, for which 5% deduction will be made of schedule rate of this item. Complete as directed by Engineer in charge	12.00	per No.
94	Providing and fixing stainless steel jet spray of approved make including necessary pipe of required length socket/union etc, complete as directed by Engineer in charge. contractor will be allowed to take away old jet spray if available and for which 5% deduction will be made of schedule rate of this item. Etc. complete.	12.00	per No.
95	Providing and fixing CEON-CHR-347 KNM sink cock of jaquar make including fitting fixture for which 5% deduction will be made of schedule rate of this item, if available. Etc, complete as directed by Engineer in charge	6.00	per No.
	Providing and fixing new fitting approved by IITB with new screw, removing old broken fitting wherever existing.  a) white Solid plastic seat with lid for EWC for pan	25.00	per No.
	b) 32mm dia PVC flexible pipe for sink or wash basin up to nahani trap	100.00	per No.
•	c) ½" x 1½' to 2' length PVC connection pipes	25.00	per No.
	d) 6" C.P. full thread Waste coupling	3.00	per No.
	e) 4" C.P. Half thread Waste coupling	3.00 /	per No.
97	Providing and fixing 25 mm dia (n.b) gun metal Ball valve( Float valve) Heavy Duty of Techno make, and fixing in proper position with spurn yarn, adhesivel etc. including necessary fixtures and fittings such as sockets, union etc. as required and fixing in proper position all complete.	12.00	per No.
98	Providing and fixing 20 mm dia (n.b) gun metal heavy Ball valve( Float valve) Heavy Duty of Techno make make, and fixing in proper position with spurn yarn, adhesive including necessary fixtures and fittings such as sockets, union etc. as required and fixing in proper position all complete. etc. all complete.	12.00	per No.

99	Providing and fixing 20 mm dia (n.b) gun metal UTAM make heavy gate valve bearing IS marks including necessary fixtures and fittings such as sockets, union etc. as required and fixing in proper position all complete.	6.00	per No.
100	Providing and fixing 25 mm dia (n.b) gun metal UTAM make heavy gate valve bearing IS marks including necessary fixtures and fittings such as sockets, union etc. as required and fixing in proper position all complete.	6.00	per No.
101	Providing and fixing 40 mm dia (n.b) gun metal UTAM make heavy gate valve bearing IS marks including necessary fixtures and fittings such as sockets, union etc. as required and fixing in proper position all complete.	6.00	per No.
102	Providing and laying temporary loop connection to main water supply inlet and outlet of water tank with 'C' class pipe upto 6 meter of length or as required of any dia elbows, tees, reducers, plugs, clamps etc. including other connections and commissioning the water supply line and remaking to original connections after repair etc. complete.	2.00	Per Job
103	Constructing inspection chambers of internal clear dimensions 900mm x 450mm with 230mm thick brick masonry wall in cement mortar 1:6 over abed of 150mm thick cement concrete M-20 (1:1½:3) foundation with 150mm minimum offset beyond masonry wall plastering with cement mortar 1:4, 20mm thick on internal, external and all exposed faces, finished with floating coat of neat cement, including necessary cement concrete M-20 (1:1½:3) for forming benching and channel, providing and fixing C. I. steps weighing not less than 3.50 Kg. fixing top one at 450 mm from top level and remaining steps at 300mm vertical spacing in staggered fashion, including providing and fixing precast R.C.C. frame and cover of suitable size, medium duty, manufactured by Prathibha Industries or as approved by Engineer Incharge and fixing with cement concrete coping M-20 (1:1½:3) and plastering complete including necessary dewatering, if required etc. for chambers of depth upto 1000mm.	3.00	Per No.
104	Labour charges for modification of the existing window MS grills by means of cutting, fabricating, welding etc and refixing it in position/line/level/plumb including taking care of necessary safety precautions at site including scrapping old paint of grill and applying one coat of metal primer & two coats of Synthetic Enamel Paint of colour shade approved by Engineer In charge etc complete. (Appr. Area 9.24 sqm)	1.00	Per Flat
105	Removing any kind debris including loading in truck and conveying to dumping point approved by BMC, unloading spreading etc, complete with all leads and lifts. 30% voids will be deducted in case of truck measurements. (The debrises /boulders /excavated stuff/surples material to be taken away after the permission from the Executive Engineer (SWM) is required to be obtained before commencement of work.	55.00	Cum
100	Transporting surplus excavated materials such as soil and debris to any where within IIT campus as directed by Engineer incharge including loading, transporting, unloading, spreading and leveilling etc. complete. 30% voids will be deducted in case of truck measurement.	1.00	Cum
107	Providing and fixing aluminium framing for the existing/new mirror of Ananta with $2" \times 1"$ aluminum handle patti, rubber gasket, $1" \times 1" \times 2"$ aluminum 'L' and screws including removing the mirror from the wall safely and refixing it back with necessary fitting and cleaning the site etc complete.	1.00	Per No
108	Providing and fixing 59 1/2" X 42 1/2" X 6mm thick mirrors of approved Indian quality copper plated, on the wall etc. make Modi Guard/Saint-Gobain etc. complete. contractor will be allowed to take away old mirror if available and for which 5% deduction will be made of schedule rate of this item.	1.00	Per No

109	Providing and fixing stainless steel pipe of 1 to 1.5 mtr length for jet spray including removing the old pipe and taking the same away, complete as directed by Engineer in charge. contractor will be allowed to take away old pipe if available and for which 5% deduction will be made of schedule rate of this item. Etc. complete.	12.00	Per No
110	Providing and fixing brass jet spray nozzel including removing the old one and taking the same away, complete as directed by Engineer in charge. contractor will be allowed to take away old nozzle if available and for which 5% deduction will be made of schedule rate of this item. Etc. complete.	12.00	Per No
111	Providing and fixing stainless steel nirali sink coupling including removing the old one and taking the same away, complete as directed by Engineer in charge. contractor will be allowed to take away old coupling if available and for which 5% deduction will be made of schedule rate of this item. Etc. complete.	6.00	Per No
112	Providing and fixing Wall mounted closet STUDIO 20061 (41x36x52)cm along with white seat cover, anchor fastner, washer including removing the old pan and fixing the new with proper position etc all complete	2.00	Per No
113	Removal and refixing of old door/window shutters without damaging the hinges/frame and fixing it in position with proper alignment and operation etc complete.	5.00	Per Job
114	Labour charges for removal and refixing of existing wash basin with new anchor bolts including all necessary fittings and fixtures etc complete	5.00	Per No
115	Providing and fixing 2 in 1 jaquar wall mixer with provision with 115mm long bend pipe on upper side, connecting legs and wall flanges with all labour charges including removing existing wall mixture and depositing to Estate store etc complete	6.00	Nos
116	Providing and laying Rectified and vitrified matt finish decorative type tiles like Somani/Kajaria/Regency/Bell/H.R.Jhonson/Nitco etc. of size 600mm x 600mm and thickness as per manufacturers specification of approved make, shade and pattern as available in market over an existing floor / IPS on cement mortar 1:3 curing all complete as directed, with white cement pigments finished to levels slope or plumb as required including cutting of tiles. Curing, acid washing etc. all complete.	20.00	Sqm
117	Providing and fixing 20mm dia aluminum powder coated heavy duty Draffery curtain rods as per approved by estate office with acrylic side holders and brass chromium plated middle brackets and other required fittings as directed by Engineer Incharge.	10.00	Rmt
118	Providing and fixing double scaffolding system (cup lock type) on the exterior side, up to seven story height made with 40 mm dia M.S. tube 1.5 m centre to centre, horizontal & vertical tubes joining with cup & lock system with M.S. tubes, M.S. tube challies, M.S. clamps and M.S. staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for the required duration as approved and removing it there after .The scaffolding system shall be stiffened with bracings, runners, connection with the building etc wherever required for inspection of work at required locations with essential safety features for the workmen etc. complete as per directions and approval of Engineerin-charge .  Note:The elevational area of the scaffolding shall be measured for payment purpose .  Note The payment will be made once for sequential works at a particular location irrespective of duration of scaffolding.	100.00	Sqm
119	Providing and fixing in position steel TMT bar reinforcement of various diameters for slabs, beams, columns,chajjas, lintels, pardies, etc. as per by Engineer Incharge including cutting, bending, hooking the bars,cost of welding rod for welding to existing reinforcement and supporting as required complete.	30.00	Kg

120	Removal of alumunium sliding windows of various sizes at any floor at any height including lead and lift, stacking and depositing carefully removed windows at hillside maintenance unit etc. Complete.	10.00	Sqm
121	Supplying, fabricating and fixing in position fully glazed aluminium opeanable window using aluminium 15 micron anodized / powder coated section 42 x 30 x 1.25mm size aluminum single border outer frame of window shutter, 42 x 46.2 x 1.35mm size aluminum Z section for window shutter, 28 x 14.5 x 1.60mm size aluminum clip for window shutter, 42 x 46.2 x 1.35 mm size aluminum center patti (mullion), 43 x 1.5mm size aluminum flat patti, 37mm x 37mm and 25mm x 25mm aluminum angles 2mm thick, 20 x 1.5mm thick aluminum glazing clip, 5mm thick plain or frosted glasses with rubber gasket, 3 Nos. S.S. hinges 75mm size (heavy) on each window shutter, aluminum stay 200mm to 250mm long 1 No per leaf, aluminum handle 1 Nos. per leaf, provision for fixing AC with teak wood members inside box, (if required) including fixing the windows shutters on the aluminium single side partition section for outer frame and intermediate section of size 63x38x1.47mm thick etc complete (all aluminium sections should be 15micron anodized/power coated section).	5.00	Sqm
122	Providing and fixing in position three track aluminium sliding windows using sections of size box pipe 100x25x1.5mm,track 92 mm x 31.75mm x 1.20 mm thick for bottom, sections of size 92 mm x 31.75mm x 1.20 mm thick for sides and top. The shutter comprising of bottom and top member of size 40 mm x18 mm x 1.29 mm thick, interlocking section of size 40 mm x 18 mm x 1.3 mm thick and handle section of size 40mm x 18 mm x 1.29 mm thick including providing and fixing SS 304 mosquito mesh in the shutter using Uchannel with require fittings such as approved quality minimum two nos.PVC rollers for each shutter, necessary locks, handles, wool foil and other required fittings, etc. complete as directed by Engineer in charge.( Note: All aluminium sections and fitting are 15 micron anodized/ powder coated).	10.00	Sqm
123	Removal and refixing of existing mosquito mesh shutter from the aluminium sliding window and fixing it in position with new SS 304 mosquito mesh ,proper alignment and operation including replacing the existing pvc bearing with new bearings etc complete.	10.00	Sqm
124	Removal and refixing of existing telescopic channels from the kitchen trolleys and fixing it in position with new 22" telescopic channels or as directed by Engineer incharge ,including proper functioning, alignment of the trolley etc complete.	2.00	Per pair
125	Removal and refixing of existing telescopic channels from the kitchen trolleys and fixing it in position with new 20" telescopic channels or as directed by Engineer incharge including proper functioning, alignment of the trolley etc complete.	2.00	Per pair
	Removal and refixing of existing telescopic channels from the kitchen trolleys and fixing it in position with new 16" telescopic channels or as directed by Engineer incharge ,including proper functioning, alignment of the trolley etc complete.	2.00	Per pair
127	Providing and fixing in position four track aluminium sliding windows using sections of size box pipe not less than 125x31x1.5mm,track 125 x 31 x 1.50 mm thick for bottom, sections of size 125 x 31 x 1.50 mm thick for sides and top. The shutter comprising of bottom and top member of size 40 mm x18 mm x 1.3 mm thick, interlocking section of size 40 mm x 18 mm x 1.3 mm thick and handle section of size 40mm x 18 mm x 1.3 mm thick including providing and fixing SS 304 mosquito mesh in the shutter using Uchannel with require fittings such as approved quality minimum two nos.PVC rollers for each shutter, necessary locks, handles, wool foil and other required fittings, etc. complete as directed by Engineer in charge.( Note: All aluminium sections and fitting are 15 micron anodized/ powder coated).	15.00	Sqm ⁄

128	Providing and laying vitrified tiles of 1st group as per IS 13712 1993 4.2.1 Johnson & Johnson / Kajaria for flooring and skirting approved by IITB 800mm x 800mm x 10 to 12 mm thick quality, brand and shade as available in market over an existing floor / IPS on cement mortar 1:3 including laying bedding by means of leveling the floor surface with cement concrete M-20 laid to proper line level including compaction, average 25mm to 40mm thickness finishing with brooming to receive floor tiles, curing all complete as directed. With white cement pigments finished to levels slope or plumb as required including cutting of tiles. Curing, acid washing etc. all complete.	50.00	Sqm
129	Removing, Repairing, cutting as per the existing area and refixing existing Aluminum sliding door including all new hardwares & accessories. fixing the same including finishing the side walls, jambs etc complete as specified. The cost to be inclusive of application of approved colour sealant from outer side to make the system water tight.		Per Flat
130	Make Modification of existing door shutter by removing the door shutter and cutting the door shutter from bottom side up to 1/2" to 11/2" thick and refixing the same shutter after rectification work with new brass hinges, screws etc. complete.	1.00	Per Flat
131	Providing and applying Birla wall care white cement based putty as per manufacturer's specifications in approved shade and colour to existing rough surfaces/ plaster surface/brick wall and ceiling as directed by Engineer in charge etc, complete	100.00	Sqm
132	Providing and applying one coat of cement primer of approved manufacturer (Asian paints Decoprime wall primer or any other approved equivalent product of ICI or Goodlass Nerolac as directed by Engineer and as per manufacture specification including .Scrapping the old peeled off neeru finish /pop/ existing luster paint /concrete surface of ceiling /wall surface with sand paper and coating the surface with the use of step ladder etc, complete as directed.	2560.00	Sqm
133	Providing and applying one coat acrylic oil-bound distemper of approved quality colour and shade of IITB approved manufacturer to old/new surfaces including step ladder etc, complete.	100.00	Şqm
134	Providing and applying two coats of acrylic oil-bound distemper of IITB approved manufacturer & quality colour and shade as per product specification on old/new surfaces including removing the old peeled off neeru finish /pop/ existing luster paint / water proofing cement paint/wall paper by scappring, sand papering and preparing the surface smooth, necessary repairs to scratches including step ladder etc complete	2560.00	Sqm
135	Providing and applying one priming coat to over steel and other metal surfaces etc including preparing the surface by thoroughly cleaning oil, grease, dirt, and other foreign matter with wire brushing, fine fire steel wool, and sand paper as per manufacture specification etc. Complete.	122.00	Sqm
136	Providing and applying one priming coat to wood and wood based surface etc including preparing the surface by thoroughly cleaning oil, grease, dirt, and other foreign matter with wire brushing, fine fire steel wool, and sand paper as per manufacture specification step ladder etc. Complete.  (Note:- Contractors have to procure the paint materials in sealed containers. Containers will be opened in presence of IIT representative.  Spilling over paint on other areas externally as well as internally such as wall, floor furniture's etc are not allowed. If it occurs, it has to be cleaned by contractors completely at his own cost.)	285.00	Sqm

137	Providing and applying two coats of synthetic enamel paint of approved colour to new/old structural steel work and wood work in buildings and workshops including as per manufacture specification step ladder if necessary, cleaning and preparing surfaces by solvent, degreasing and derusting by manual scrapping/mechanically by sand blasting/shot blasting flame cleaning/by chemical methods etc,complete. (excluding primer coat)		Sqm
138	Providing and applying two coats synthetic enamel paint to ceiling fan Asian paint/ or any other IS approved and equivalent product of ICI or Goodlass Nerolac including one coat metal primer (N1) cleaning scrapping, removing, dust,rust as per manufacture specification etc complete with step ladder etc all complete.	31.00	per No.
139	Providing and applying two coats of exterior Acrylic exterior paint including exterior primer of approved colour and shade to the plastered surface as per manufacturers specification including preparing the surface Including stepladder etc, complete	50.90	Sam
140	Providing and applying one coat of Berger Protectomastic self priming high build coating, solvent borne zinc rich primer, having thickness as per manufacturer specification including preparing the surface by thoroughly removing grease, oil and other containments preferebly by using Bison degreasing solvent, using mechanical tools along with manual chipping and wire brushing to remove loose rust, thoroughly dust down all surfaces, followed by one coat of Epilux – 4 High Build Epoxy finish having thickness as per manufacturer specification followed by two coats of acrylic polyurethane enamel paint of Bergerthane finish of Berger having thickness as per manufacturer specification including suitable,tools, taking all safety measures, covering the floor area with plastic sheet, removing stains etc complete. NOTE: Mode of measurement will exposed surface area of painted work.	50.00	Sqm

- 1) Note: This schedule of work is given for reference purpose only. Contractors are requested to quote your rates online 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 recored 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. In addition to the existing safety clause of the tender document a penalty of Rs.5,000/- per case will be recovered from the bills of the particular works, in case any such safety violations are noticed.
- 4) 01% amount will be deducted from the bills for safety related measures which will be reimburse along with the final bill.
- 5) Taxes as per government notification time to time.
- 6) 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.

7) 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.

Superintending Engineer (I/C)