



INDIAN INSTITUTE OF TECHNOLOGY BOMBAY
ESTATE OFFICE

NOTICE INVITING TENDER

Telephone No. 022 2576-4060, 022-2159-6922 email id 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.	Name of Work	Estimated Cost (In Rs.)	EMD (Rs.)	RFX	Duration of contract
1	Term contract for repairs to 'A' Type & 'B' Type residential vacant / occupied quarters at Central area. EO/A/CENTRAL/WKS-128/26-27	Rs 95,70,575/- Incl.18% GST	Rs.1,91,000/-	6100003159	12 months

Intending bidders need to register themselves on the IIT Bombay portal i.e. <https://portal.iitb.ac.in/vrp/index.jsp> to get User ID and Password. Please visit https://portal.iitb.ac.in/vrp/vrp_srm_docs.jsp for configuration process and user manual. For queries regarding vendor registration, and configuration process please contact on 022 - 2159 3001 (MDM Help-desk).

All tender documents, forms, etc are available online on <https://www.iitb.ac.in/resources/vendors-tenders> and Central Public Procurement Portal (CPPP) e-tender publishing portal of the Government of India.

Date and time of uploading of tender documents are from 25.09.2026 to 16.10.2026 till 11:15 a.m. Date of opening of Technical Bid will be 16.10.2026 at 11.30 a.m. and Financial Bid 23.10.2026 (Tentative).

All contractors/agencies should submit technical bid with the following documents, 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 **50%** 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.

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) Upload 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.

3) P. F. registration certificate.

4) P. F. challans of last 12 months.

Mr Pm 1/28
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28/9.

5) ESIC registration certificate and copies of ESIC challans of the last 12 months (as per the labourers engaged during a particular month). Contractor name should be mentioned in the challans else the agency will be disqualified. OR Contractors' all risks insurance (CAR policy)

6) PAN card.

7) GST registration certificate.

8) Income Tax Return for **assessment year** i.e. of **2023-24 ,2024-25 & 2025-26**.

9) List of Equipment's, Machinery, Tools.

10) List of Technical Staff with copies of their Degree/diploma certificate.

11) **Submit** DD/FDR/BG of Rs. 1,91,000/- in the name of "The Registrar, IIT Bombay" **before the opening of Technical Bid.** Contractors are also requested to upload a scanned copy of it to the online Tendering portal.

12) Power of Attorney, if any.

13) 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.

14) **Litigation history** of the agency is required to be upload along with the application. A tender would not be awarded if any inquiry proceeding / criminal case is found pending against the agency. If there is no enquiry then undertaking has to be uploaded in the format given.

15) Bank Solvency certificate 40% of estimated amount issued within one year from any Nationalized / Schedule Bank from the date of publishing of Tender.

16) 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 upload 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.

Terms & Conditions :

The documents listed above from Sr. No. 1 to 16 is mandatory for qualification in the technical bid evaluation process.

Select 'N5' tax code for 18% GST and upload all the above mentioned documents in "C folder" of online SRM tendering portal.

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.

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

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.

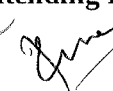
The rates is prepared from CPWD DSR 2023 & Fair Market rate & Rate Analysis.

Contractors are strictly prohibited from engaging in any correspondence related to tender documents with anyone other than the Tender Section. Any violation will result in disqualification from all future tenders.

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.

IIT Bombay reserve its rights to reject any or all tenders without assigning any reason and without any reference. IIT Bombay reserves the right to request a detailed justification of the quoted rates from the lowest bidder, if deemed necessary by the Engineer-in-Charge. Should the justification provided by the bidder be considered unsatisfactory or unsubstantiated, the Engineer-in-Charge shall have full authority to reject the bid, irrespective of it being the lowest.


24/9/26
Dy. Superintending Engineer



23/09/26
23/09

DECLARATION

- (a) We are not involved in any litigation that may have an impact of affecting or compromising the works as required under this tender.
- (b) We are not black-listed by any Central/State Government/Public Sector Undertaking in India.
- (c) We hereby confirm and declare that M/s [Company Name] does not have any Litigation / Arbitration History with any Government department, Public Sector Undertaking (PSU), or Private Sector agency for works executed during the **last 5 years**.
- (d) I/we undertake that the documents submitted are genuine/authentic and nothing material has been concealed therefrom and that I/we are not debarred by any Government organization and are competent to have the contract. I/we understand that the contract is liable to be cancelled, if found to be having obtained, through fraudulent means/concealment of information.

(Signature of Authorized Signatory)

Name of the bidder: _____

Complete Address: _____

Address (Works), if _____

any: Contact Nos. _____

TO BE UPLOADED ON SRM TENDERING PORTAL WITH FINANCIAL BID

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

File No. : EO/A/CENTRAL/WKS-128/26-27

Name of Work : Term Contract for repairs to 'A' type & 'B' type residential vacant/occupied quarters at Central area.

Name of the Contractor -----

Sr. No.	Name of Client	Name of Works	2022-23 (In Lakhs)	2023-2024 (In Lakhs)	2024-2025 (In Lakhs)	2025-2026 (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.

Dy. Superintending Engineer
24/11/26
23/09/26
29/10/26

Signature of Contractor
Name & Address in full

WORKS UNDERTAKING

EO/A/CENTRAL/WKS-128/26-27

To,
Dy. Superintending Engineer
Indian Institute of Technology,
Powai, Mumbai – 400 076.

Sub : Term Contract for repairs to 'A' type & 'B' type residential vacant/occupied quarters at Central 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 01 Year as mentioned in the notice inviting for short tenders.

The following information is required to be provided.

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.

	Male	Female
No. of Unskilled casual labour to be required per day.		
No. of Skilled casual labour to be required per day.		
Total 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/CENTRAL/WKS-128/26-27

ESTATE OFFICE

Name of work :- Term Contract for repairs to 'A' type & 'B' type residential vacant / occupied quarters at Central area.

SCHEDULE OF WORK

Sr. No.	Description of work	Qty.	Unit
1) Repair work			
1.01	Carefully removing internal or external loose, damaged plaster in patches any height 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 with in 50 meter, cleaning the site etc. complete with help of steel 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 / near by 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. c) The area in vertical/ horizontal plane shall be measured.(Note : For external work steel double scaffolding will be paid in respective item)	100.00	Sqm
1.02	Removing the old cement concrete or any type of tiles from flooring manually at any floor including bedding levelling the surface, cleaning the site including sorting out serviceable tiles and lowering to ground level the debris and stacking it upto a distance of 50 meters from building (as directed by Engineer Incharge)	100.00	Sqm
1.03	Removing the any type of tiles manually from wall/ dado without damaging brick wall or any adjacent structure surface including removing plaster, levelling the vertical surface, cleaning the site including downloading the debris & stacking the debris upto 50 meters from building (as directed by Engineer Incharge)	100.00	sqm
1.04	Chipping of unsound/weak external or internal concrete of any thickness material from slabs, beams, columns, lintles etc. with manual Chisel including tapering of all edges, making square shoulders of cavities including cleaning the exposed concrete surface and reinforcement with wire brushes etc. and disposal of debris for all lead and lifts, with the help of working platform / steel double scaffolding all complete as per direction of Engineer-In-Charge (Note : For external work steel double scaffolding will be paid in respective item)	200.00	Sqm
1.05	Cleaning of reinforcement from the exposed reinforcement bars to give it a total rust free steel surface applying alkaline chemical rust remover of approved make with paint brush removing loose particles including with wire brush and thoroughly washing with water and allowing it to dry, with the help of steel double scaffolding all complete as per direction of Engineer-In-Charge. (Note : For external work steel double scaffolding will be paid in respective item)	100.00	L
1.06	Providing and applying an effective bond coat of Epoxy bonding agent manufactured by M/s. Krishna conchem, Dr. Fixit , Roff , Chembond or M.C. Bouchmey and hardner in the proportion of as per manufacture instruction (Base hardner) by using brush in multiples of coat as required to accommodate the whole thickness of PMM wherever required including stepladder/ working platform wherever required on the surface of old concrete/required concrete. Note- The actual consumption of Epoxy bonding coat shall be measured for payment on weight basis . Challans of authorized dealer will be verified (Note : For external work steel double scaffolding will be paid in respective item)	100.00	Kg
1.07	Providing and Placing in position Readymix Polymer mortar manufactured by M/s.Krishna Conchem, Dr.Fixit, Roff or M.C. Bouchmey, Chembond by adding water in the proportion of 1:0.14(Polymer mortar:water) 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 & with the help of steel double scaffolding / working platform 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 of authorized dealer will be verified) (Note : For external work steel double scaffolding wil be paid in respective item)	1000.00	Kg

1.08	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 with the help of steel double scaffolding and working platform 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 of authorized dealer will be verified. (Note : For external work steel double scaffolding will be paid in respective item)	50.00	Kg
1.09	Dismantling R.C.C. work manually/ mechanically including breaking concrete by chiselling, wedging etc., cutting the reinforcement, lowering down debris, stacking the serviceable materials and stacking the debris upto a distance of 50 metres or spreading as directed.	5.00	Cum
1.10	Pulling down burnt brickmasonry (in cement mortar) with plaster including sorting out serviceable bricks lowering down at Ground level and stacking the same and debris separately up to a distance of 50 metres beyond building etc. complete.	5.00	Cum
1.11	Providing sand face plaster externally to concrete stone or brick surface at any height using approved screened sand including preparing the base, watering and applying base coat of 15 to 20mm thick in cement mortar 1:4 using water proofing compound at the rate of 1 kilogram per cement bag and curing the same for not less than two days and making the surface of base coat rough to receive the sand faced treatment 8 to 10mm thick in cement mortar 1:4 and finishing the surface by taking out grains and curing for 14 days etc. Complete with the help of steel double scaffolding.(Note : For external work steel double scaffolding will be paid in respective item)	50.00	Sqm
1.12	Providing second class burnt brick masonry with conventional / I.S. Type bricks in cement mortar 1:6 in superstructure at any floor and any height including striking joints, racking out joints, watering wherever required etc. complete (Note : For external work steel double scaffolding will be paid in respective item)	5.00	Cum
1.13	Providing uncoursed rubble masonry of trap stones in cement mortar 1:6 in foundation and plinth of inner wall including bailing out water by pumping with suitable pumps, striking joints on unexposed faces and watering complete, including providing header stones @ 1 header per sqm. to the full thickness of wall, providing weep holes, with 100mm dia A. C. pipes if required in walls etc. Complete	5.00	Cum
1.14	Providing and fixing 18 mm thick gang saw cut, mirror polished granite , premoulded and prepolished, machine cut for kitchen platforms, vanity counters, doors and windows cladding , sills, shelf, facias and similar locations at any floor of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 fine sand) or in neat cement as required, joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels. a) area of slab upto 0.5 m2	30.00	Sqm
1.15	Providing and fixing 18 mm thick gang saw cut, mirror polished granite , premoulded and prepolished, machine cut for kitchen platforms, vanity counters, doors and windows cladding , sills, shelf, facias and similar locations at any floor of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 fine sand) or in neat cement as required, joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels. b) area of slab over 0.5 m2	30.00	Sqm
1.16	Providing and laying nonskid ceramic tiles at any floor of Johnson & Johnson /Nitco/ Kajaria/ Orient Bell/ Somani for flooring approved by IITB required size upto 300mm x 300mm quality, brand and shade as available in market on cement mortar 1:4 bedding using white cement pigments finished to levels slope or plumb as required including cutting of tiles. Curing, acid washing etc. all complete.	100.00	sqm
1.17	Providing and fixing 1st quality ceramic glazed wall tiles not less than 300 mm x 200 mm conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, including 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	100.00	sqm

1.18	Providing and laying in situ plain cement concrete M-20 of trap metal for foundation and bedding including bailing out water manually, wherever required , formwork, compacting and curing.as directed.	10.00	Cum
1.19	Disposing debris, loose stones, boulders, concrete pieces broken and dry leaves etc. collected and stacked as directed including loading in trucks, transporting out of IIT Campus including obtaining all approval of BMC competant authorities for disposing off on to their approved location. The debris are to be removed from site within 48 hours from stacking (30% voids will be deducted from actual stack measurement/ truck measurement for debris, loose stones, boulders etc.).	50.00	Cum
1.20	Dismantling plain cement concrete work at any height & any floor including breaking concrete by chiselling, wedging etc., lowering down debris, stacking the serviceable materials and stacking the debris upto a distance of 50 metres from building or spreading as directed.	2.00	Cum
1.21	Providing second class burnt brick masonry at any height & any floor 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 25 mm X 1.6 mm at every third course properly bent and bonded at ends, steel double scaffolding , racking out joints and watering etc. Complete.	10.00	Sqm
1.22	Providing and fixing Kadappa stone slab for kitchen platform/cladding/tank platform of 25 to 30 mm thick in cement mortar 1:4 including providing and fixing border patti on front edge, filling joints, curing, cleaning etc. Complete.	10.00	sqm
1.23	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20 mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3 kg/sqm including grouting the joints with white cement and matching pigments etc., complete.	500.00	Sq.m
1.24	P/L vitrified tiles for flooring of size not less than 600x600mm (thickness to be specified by the manufacturer) of approved shade and pattern ,with required finish (mirror / Mat) and decorative type of approved make as available in market Fixing with cement based high polymer modified quick set tile adhesive like fevimate(water based) conforming to IS: 15477, using 5kg adhesive per sqm of tile area, in average 5mm thickness. white cement pigments finished to levels slope or plumb as required including cutting of tiles. Curing, acid washing etc. all complete as directed. (Floor tiles basic cost up to Rs. 70 per sft.)	400.00	Sq.m
1.25	Providing and laying vitrified tiles for skirting / dado of approved shade and pattern with required finish and quality laid on a plaster surface with neat cement, filling joints, curing and clearing etc. complete as directed	50.00	Sq.m
1.26	Excavation for foundation in earth, soil of all types, sand, gravel and soft mureum including removing the excavated materials upto a distance of 50 meters beyond the building area and lift upto 1.50 meters, stacking and spreading as directed including dewatering unless provided elsewhere, preparing the bed for the foundation and necessary back filling, ramming, watering complete excluding shoring and strutting.	10.00	Cum
1.27	Providing dry trap/ rubble stone soling 150mm to 200 cm thick including hand packing and compacting etc complete.	4.00	cum
1.28	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.	4.00	Cum
1.29	Mirror polishing on marble work/stone work wher ever required to give high gloss finish complete.	10.00	Sq.m
1.30	Hand polishing to dado, skirting including cleaning, washing etc. complete as directed.	10.00	Sq.m
1.31	Drilling straight and inclined holes upto 300mm depth and upto 20mm dia in concrete / masonry using electrically operated drilling machine and fixing nipple for grouting, conducting water test all complete etc. as directed	20.00	Nos

1.32	Grouting existing RCC / brickwork structure as per following operations including 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 1.00 kg in one bag of cement of 50 kg with adequate water. 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, & beam if necessary. 4) After through grouting sealing the holes with cement slurry. (Note : For external work steel double scaffolding will be paid in respective item)	30.00	Kg
1.33	Providing and sealing hairline / minor cracks in plaster by Paste formed out of polymer (S.B.R.) and cement in the proportion of (1:1 by volume) & adding extra cement for workable hand filling mix, leveling with neat cement float, cleaning and wetting the surface, curing etc. including cutting, demarcating grooves at any height with electrically operated cutter machine for cracks on external wall, separation cracks etc. with the help of steel double scaffolding. (Note : For external work steel double scaffolding will be paid in respective item)	20.00	Rmt
1.34	Silicone sealants around window frames / window frame joints and drill holes for water outlet when the rain water on the glass fall into the channel and overflows (wherever required) including steel double scaffolding etc. Complete.	10.00	Rmt
1.35	Providing and filling separation crack of 75mm width and 25mm deep with polymer modified cementitious mortar. a) Demarcating groove, removing plaster / concrete carefully, washing with potable water. b) Filling polymer modified cementitious mortar in layers of 20mm thick (applying bond coat at every layer) upto profile of concrete in vicinity (composition of mortar: cement 1Kg.: polymer (SBR) of approved manufacturer 15% by wt. of cement : 3Kg silica sand (grading IS 383, zone II, silt content = 0%) over a polymer + cement bond coat including applying making tape on both side of groove, cleaning, finishing to match the plaster in vicinity, disposing of debris anywhere in IITB campus, cleaning as directed etc. complete. c) Proportion d) Bond coat e) SBR polymer + cement in the ratio 1:1 by volume f) Polymer modified cementitious mortar g) SBR polymer 150ml. h) Cement 1 Kg. i) Silica sand 3.0 kg. (Note: - Demarcating groove, breaking Plaster / concrete shall be paid under respective items). (Note : For external work steel double scaffolding will be paid in respective item)	10.00	Rmt
1.36	Grouting in any RCC structure with low viscosity Monomer manufactured by M/s. CICO, SIKKA, MC Bouchmey, Sunanda Chemicals, Roffee etc. or any other approved brand epoxy based product of similar properties, as per manufacture's specification by providing suitable arrangement for grouting at pressure 2 to 3 kg / sqm. for all lift and leads. The grouting is to be done after cement grouting is completed etc. as directed.	20.00	Kg
1.37	Providing and erecting steel tubular H Frame scaffolding with bracing to all height all around the building as directed by engineer in charge before commencement of work for multipurpose use including working platform wherever required, stiffened with wall supporting to be done with anchor & fastener for all types of work and removing the same after completion of all external work like chipping of plaster, structural repair if any, sand face plaster, curing, external painting, waterproof coating, SEP to grills, windows and cleaning the glasses etc. requiring double scaffolding.(payments will be made for elevational plain area once irrespective of duration or till completion of all external activities as directed no supporting will be done with window and window guard bars.)	20.00	Sqm
1.38	Providing and laying white/colour veined marble slabs 18mm thick in one piece stone for claddings,platform,treads and risers of steps and stair cases with rounded nosing and grooves for the treads laid on bed/ plaster of cement mortar 1:4 including cement float, filling joints with neat cement slurry, curing, polishing and cleaning complete.	10.00	Sq.m
1.39	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. work 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 etc. all complete as directed by Engineer In-charge.	10.00	Nos

1.40	Dismantling existing kitchen platform top and support carefully and lowering down the debris at ground level and stacking up to 50 meters beyond the building area for tacking out the same all complete as directed. (size approximately 3.5mt X 0.75 mt)	2.00	Job
1.41	Providing & levelling the undulation/ sagging of floor with cement mortar 1:4 upto 30 thk to make proper base for floor tiling including levelling, curing, and cleaning etc. complete at any floor	5.00	Sqm
1.42	Providing and laying super fluid micro concrete of approved manufacturer (Dr. Fixit, Ultratech, Chembond etc.,) at any floor after reinforcement treatment coat including mixing with 10mm to 5mm size quartz aggregate in ratio of 1 part to 0.75 part of quartz aggregate by weight providing marine plywood formwork in line and level, sealing the joints/ gaps with POP & cleaning, curing etc. complete. The compressive strength of super fluid micro concrete should not be less than 20N/mm ² . (reinforcement treatment coat shall be paid under respective items). (Consumption of weight of super fluid micro concrete powder shall be measured for payment ; Tax Invoice of authorized dealer will be verified) etc. Complete. (Note : For external work steel double scaffolding will be paid in respective item)	1000.00	kg
1.43	Providing internal cement plaster 12mm thick in a single coat in Cement mortar 1:4 without neeru finish to concrete or brick surface in all positions at any floor and at any height including stepladder/platform and curing complete.	100.00	Sq.m
1.44	Providing internal cement plaster 20mm thick in Single coat in cement mortar 1:4 without neeru finish to concrete or brick surface in all positions at any floor and at any height including stepladder/platform curing complete.	100.00	Sqm
1.45	Providing and fixing in position tor steel bar having grade Fe-500 or more for reinforcement of various diameters for R.C.C. footings, foundations, slabs, beams, columns, canopies, staircases, chajjas, lintels, pardies, coping, fins, dowel bars with sleeve, tie bar, any other required work etc. as per detailed designs, drawings and schedules including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required completed as directed.	100.00	Kg
1.46	Providing and laying in position ready-mixed or machine batched and machine mixed design mix M-25 (1:1:2) grade cement concrete (with minimum cement content 330Kg/Cum) for all work above plinth level upto any floor level for reinforced cement concrete work, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge including compacting, roughening the surface if special finish is to be provided, casting cubes and testing etc. completed as directed.	5.00	Cum
1.47	Providing and fixing new tarpaulin sheet on window area while repairing, plastering, painting work to protect window shutter area and removing this tarpaulin sheet after completion of the work including scaffolding taking care of necessary safety precautions at site etc. complete. (Note : For external work steel double scaffolding will be paid in respective item)	50.00	Sq.m

2) Extenal/Internal Painting work

2.01	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	2000.00	Sq.m
2.02	Providing and applying white cement based Birla make wall care putty with uniform thickness upto 1.5mm over the existing internal cement plaster in proper line / level including preparing the wall surface for the application of wall care putty etc. including scaffolding all complete as directed.	100.00	Sqm
2.03	Providing and applying one coat of seal cement primer over the prepared surface of walls / ceiling, including stepladder / scaffolding and cleaning the surface as directed.	2000.00	Sq.m
2.04	Distemping with 1st quality acrylic distemper (ready mixed) of one or more coats having VOC (Volatile Organic Compound) content less than 50 gram/ litre, of approved brand and manufacturer including applying additional coats wherever required to achieve even shade and colour	500.00	Sqm
2.05	Wall painting of two coats with acrylic emulsion paint , having VOC (Volatile Organic Compound) content less than 50 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and colour.	1000.00	Sq.m

2.06	Wall painting of one coats with acrylic emulsion paint , having VOC (Volatile Organic Compound) content less than 50 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and colour.	500.00	Sq.m
2.07	Providing and applying two coats of synthetic enamel paint of IITB approved brand (Asian, Berger, ICI, Dulux, Jenson & Nicholson, Goodlass Nerolac) & desired shade to new structural steel work / grill work/ wood work with the help of steel double scaffolding if necessary. (Note : For external work steel double scaffolding will be paid in respective item)	400.00	Sqm
2.08	Providing and applying zink priming coat over steel and other metal surfaces including preparing of the surface by thoroughly cleaning oil, grease, dirt and other foreign matter with wire brushing, fine fire steel wool, and sand paper, scaffolding/stepladder etc. Complete.	200.00	Sqm
2.09	Applying priming coats with primer of approved brand and manufacture, having low VOC Volatile Organic Compound) content, With ready mixed pink or grey primer on wood work (hard and soft wood) having VOC content less than 50 grams/ litre	200.00	Sqm
2.10	Providing and applying two coat of synthetic enamel paint of IITB approved brand (Asian, Berger, ICI, Jenson & Nicholson, Goodlass Nerolac) and shade to ceiling fans with the use of step ladder including scrapping cleaning etc. Complete.	30.00	Nos
2.11	Providing and applying one coat of acrylic primer and two coats of pure Acrylic exterior paint of IITB approved manufacturer as per manufacturer's specification on old/new plastered surface/painted surface stone work surface at any height & any floor , including cleaning the surface thoroughly with coir brush, watering the surface etc..levelling the undulation if any with external wall care putty etc. complete and as directed by this office. (only plain area will be measured)	400.00	Sqm
2.12	Providing and applying exterior coating for wall by providing steel double scaffolding including Cleaning the surface, removing the laitance, greese, old paints, contaminants, curing compound with wire brushing with water pressure wash. Fine hair line cracks more than 0.50 mm must be widened up to 5 mm minimum in V shape and then fill cracks with Dr. Fixit Crack-X Paste on masonry plaster surface. Apply primer coat prepared with Dr. Fixit Crack-X Paste and water in 1:1 proportion over the crack. Fill Dr. Fixit Crack-X Paste when the surface is tacky and not dried completely. Press Dr. Fixit Crack-X Paste firmly into the crack with a spatula or putty knives and level with the surface. Care must be taken to avoid formation of cavities or bubbles during application. Allow it to set for 24 hours and then apply another coat of Dr. Fixit Crack-X Paste. Apply one coat of Dr. Fixit Primeseal with water in proportion of 2:1 and stir well until a uniform consistency is achieved. Apply a single coat of diluted Primeseal on the cleaned substrate. Allow it to dry for 2 to 3 hours. Apply Base coat of undiluted Dr. Fixit Raincoat Waterproof Coating over the primed surface. Allow the Dr. Fixit Raincoat Waterproof Coating to dry for 4 – 6 Hrs of approved colour. Apply using brush / roller / airless spray. Apply top coat of undiluted High Build durable exterior waterproof wall coating Dr. Fixit Raincoat Select Top coat over the Dr. Fixit Raincoat Waterproof Coating at applied areas of approved colour. Apply using brush / roller / airless spray to achieve DFT of 170 – 180 microns.Allow the Dr. Fixit Raincoat Select Top coat to dry for 6 – 8 Hrs. Allow the coated surface to air cure fully for 7 days. Work Shall be got executed through certified applicator of the product manufacturing company only and work shall be guaranteed for 03 years by the contractor on requisite stamp paper including submitting written guarantee from said certified applicator. Contractor to submit re-counsellment statement along with challans for work done. (Note : For external work steel double scaffolding will be paid in respective item)	50.00	sqm

3) Waterproofing work

3.01	Removing the existing loose damaged brick bat coba waterproofing treatment by manually / mechanical means from the top of the terrace /w.c/bath at any floor or sunk surface upto any thickness without making any damages to the roof slab with the use of sharp chisels,levelling and cleaning the roof surface for providing new specialised waterproofing treatment without causing dust nuisance stacking the debris upto 50m distance from building as directed.	20.00	Cum
3.02	Providing waterproof plaster in w. c. bath, 20mm thick for dado at any floor 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.	20.00	Sqm

3.03	Providing waterproofing in W.C. and bath including brickbat coba in all position at any floor including all lead,lifts wherever required including providing and laying 12mm bedding in cement mortar 1:3 on concrete slab & sides of sunken portion with waterproofing compound @ 1kg/per bag of cement laying brick bat coba of required thickness in cm 1:5 with waterproofing compound 1 kg/bag of cement grouting and finishing the top layer with 20mm thick bedding in cm mortar 1:3 with waterproofing compound 1 kg/per bag of cemenr and testing the treated portion for 48 hours by pond test and covering ten years guarantee on requisite stamp paper etc. Complete.	20.00	Cum
3.04	Providing waterproof bedding 25 mm thick for flooring of bath and W.C. at any floor, In cement mortar 1:3 using 1 kg of waterproofing compound of approved make and manufacturer per bag of cement including leveling curing etc. complete.	20.00	Sqm
3.05	Providing and laying water proofing cement concrete flooring to terrace to average 50mm thick with 1:1.5:3 cement concrete laid to proper level and slope using silt free clear river sand including compaction, filling joints, adding recommended waterproofing admixtures @ 2% by weight of cement, marking lines 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 roof by ponding with water for 14 days, including all lead and lift wherever required etc. complete.	20.00	Sq.m
3.06	Providing and applying three coats of Dr. Fixit Roof seal coating including preparing surface by pressure washing the surface to remove all algae, mould, dirt, dust, chalking and waste products. All visible hairline cracks more than 0.50mm and not giving hollow sound on the IPS/screed or at the junctions of flat roof & vertical parapet wall, pipe joints, should be cut and widen V shape with mechanical cutter in the size (6mm W x 6mm D) and fill with Dr. Fixit PU Sealant covering the entire area uniformly with suitable gun. Allow sealant to cure a minimum 24 hours. Apply minimum 50mm - 100 mm width 45 GSM Glass Fibre Mesh / non-woven geo textile fleece with the coat of Dr. Fixit Roofseal Select along the length of crack. Apply one coat of Dr. Fixit Primeseal primer dilute with water in the ratio 2:1. Allow it to dry for 2 to 3 hours. Apply 1st coat of Dr. Fixit Roofseal Select at the rate of 2.0 sqmt / litre / coat. An open 45 Gsm glass fibre mesh of 2.5 mm x 2.5 mm must be sandwiched between the first and second coat. While the 1st coat is still wet, place the fibre mesh on it. Allow the first coat to dry for 6-8 hours. Apply second coat of Dr. Fixit Roofseal Select with the same application coverage. Application direction of second coat should be perpendicular to that of the first coat. Allow second coat to dry for 6-8 hours Apply third coat of Dr. Fixit Roofseal Select at an application direction that is perpendicular to that of the second coat with same application coverage rate. Check to see no void surface is left untreated / uncoated. Allow the system to air cure for 7 days minimum. A total thickness of 1 mm must be achieved when Dr. Fixit Roofseal Select is dry. Work Shall be got executed through certified applicator of the product manufacturing company only and work shall be guaranteed for 03 years by the contractor on requisite stamp paper including submitting written guarantee from said certified applicator.Contractractor to submit re-counsillation statement along with challans for work done.	50.00	sqm

4) Plumbing and sanitary work			
4.01	Taking out C.I. / PVC nahani trap with connecting pieces from floor carefully and taking away the same out of IIT campus etc. Complete.	10.00	Nos
4.02	Providing and fixing white urinal parryware or equivalent make including necessary fittings such as L shaped hooks, spreader and flushing system and bottle trap of Jaquar, Click Clack Waste coupling of jaquar, connection pipe upto trap or pipe etc. complete as directed.	10.00	No
4.03	Providing and fixing 1/2" dia CP push tap of Jaquar with wall flange with stainless steel pipe upto urinal pot including necessary fittings and fixtures etc. complete as directed.	10.00	No
4.04	Providing and fixing ISI 1729/2002 grade 75mm dia. cast iron waste water pipes (Neco or equ.) with lugs 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 praportion and two coats of anti corrosive paint including fixing the pipe on walls by means of nails driven through lugs in wooden holders / battens including removing the existing pipe if necessary and conveying and stacking taking away the same out of IIT campus , necessary complete or as directed. (Recovery of the removed damaged pipe will be done @ Rs. 20 per Rmt)	20.00	Rmt

4.05	Providing and fixing ISI 1729/2002 grade 100 mm dia. cast iron soil pipes (Neco or equ.) 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 anti corrosive paint including fixing the pipe on walls by means of nails driven through lugs in wooden holders / battens including removing the existing pipe if necessary and conveying and stacking taking away the same out of IIT campus complete or as directed. (Recovery of the damaged pipe will be done @ Rs. 25 per Rmt)	20.00	Rmt
4.06	Providing and laying 15 mm diameter I.S.I. make TATA / Jindal/ Zenith heavy type C class galvanized iron pipes having weight as per IS specification to walls, ceilings, floors etc. with screwed sockets, backnuts, elbows, tees, reducers, enlargers, plugs, clamps/ GI clamp etc. including necessary drilling in holes in walls / slabs etc, connecting the lines with old / new pipe lines / fittings / fixtures etc as required and remaking good the demolished portion to restore the same in original condition neatly and applying Zinc primer and two coats of oil painting etc. or as directed with the help of steel double scaffolding Complete. (steel double scaffolding will be paid in separate item if required)	40.00	Rmt
4.07	Providing and laying 20mm diameter I.S.I. make TATA / Jindal/ Zenith heavy type C class galvanized iron pipes having weight as per IS specification to walls, ceilings, floors etc. with screwed sockets, backnuts, elbows, tees, reducers, enlargers, plugs, clamps/ GI clamp etc. including necessary drilling in holes in walls / slabs etc, connecting the lines with old / new pipe lines / fittings / fixtures etc as required and remaking good the demolished portion to restore the same in original condition neatly and applying Zinc primer and two coats of oil painting etc. or as directed with the help of steel double scaffolding Complete. (steel double scaffolding will be paid in separate item if required)	40.00	Rmt
4.08	Providing and laying 25mm diameter I.S.I. make TATA / Jindal/ Zenith heavy type C class galvanized iron pipes having weight as per IS specification to walls, ceilings, floors etc. with screwed sockets, backnuts, elbows, tees, reducers, enlargers, plugs, clamps/ GI clamp etc. including necessary drilling in holes in walls / slabs etc, connecting the lines with old / new pipe lines / fittings / fixtures etc as required and remaking good the demolished portion to restore the same in original condition neatly and applying Zinc primer and two coats of oil painting etc. or as directed with the help of steel double scaffolding Complete. (steel double scaffolding will be paid in separate item if required)	40.00	Rmt
4.09	Providing and laying 40mm diameter I.S.I. make TATA / Jindal/ Zenith heavy type C class galvanized iron pipes having weight as per IS specification to walls, ceilings, floors etc. with screwed sockets, backnuts, elbows, tees, reducers, enlargers, plugs, clamps/ GI clamp etc. including necessary drilling in holes in walls / slabs etc, connecting the lines with old / new pipe lines / fittings / fixtures etc as required and remaking good the demolished portion to restore the same in original condition neatly and applying Zinc primer and two coats of oil painting etc. or as directed with the help of steel double scaffolding Complete. (steel double scaffolding will be paid in separate item if required)	40.00	Rmt
4.10	Providing and laying 50mm diameter I.S.I. make TATA / Jindal/ Zenith heavy type C class galvanized iron pipes having weight as per IS specification to walls, ceilings, floors etc. with screwed sockets, backnuts, elbows, tees, reducers, enlargers, plugs, clamps/ GI clamp etc. including necessary drilling in holes in walls / slabs etc, connecting the lines with old / new pipe lines / fittings / fixtures etc as required and remaking good the demolished portion to restore the same in original condition neatly and applying Zinc primer and two coats of oil painting etc. or as directed with the help of steel double scaffolding Complete. (steel double scaffolding will be paid in separate item if required)	20.00	Rmt
4.11	Providing and laying 40mm diameter I.S.I make heavy type C Class galvanized iron pipes of TATA / Jindal / Zenith make having weight as per IS specification in trenches etc. with elbows, tees, reducers, enlargers, plugs, etc. including connecting the lines with old / new pipe lines / fittings / fixtures etc as required and filling trench with excavated soil and applying metal primer and two coats of oil painting including removing the existing pipe if necessary and as directed etc. Complete.	20.00	Rmt
4.12	Providing and laying 50mm diameter I.S.I make heavy type C Class galvanized iron pipes of TATA / Jindal / Zenith make having weight as per IS specification in trenches etc. with elbows, tees, reducers, enlargers, plugs, etc. including connecting the lines with old / new pipe lines / fittings / fixtures etc as required and filling trench with excavated soil and applying metal primer and two coats of oil painting including removing the existing pipe if necessary and as directed etc. Complete.	20.00	Rmt
4.13	Providing and fixing ISI approved heavy type 15 mm dia brass stop tap(seiko, techno make) including socket, union nut etc. Complete. Including removing the existing damaged tap. (5% cost will be deducted for taking away the removed material outside IIT campus)	10.00	each

4.14	Providing and fixing screw down 20mm gun metal Gate Valve of techno or uttam make bearing I.S.I. Mark including socket, union nut etc. including removing the old damaged gate valve & depositing Complete. (5% cost will be deducted for taking away the removed material outside IIT campus)	10.00	each
4.15	Providing and fixing screw down 25mm gun metal Gate Valve of techno or uttam make bearing I.S.I. Mark including socket, union nut etc. including removing the old damaged gate valve & depositing Complete. (5% cost will be deducted for taking away the removed material outside IIT campus)	10.00	each
4.16	Providing and fixing new sanitary fittings with new fixtures , removing old broken fittings wherever existing. ¼" Flexible pipe – 3 feet long	50.00	No
4.17	Providing and fixing new sanitary fittings with new fixtures , removing old broken fittings wherever existing. ½" PVC connection 2 feet long	40.00	No
4.18	Providing and fixing new sanitary fittings with new fixtures , removing old broken fittings wherever existing. ½" PVC connection 1½ feet long	40.00	nos
4.19	Providing and fixing new sanitary fittings with new fixtures , removing old broken fittings wherever existing. S.S. Grating 4" dia	10.00	No
4.20	Providing and fixing new sanitary fittings with new fixtures , removing old broken fittings wherever existing. S.S. Grating 5"dia	10.00	nos
4.21	Providing and fixing new sanitary fittings with new fixtures , removing old broken fittings wherever existing. 1 1/4" Nirali Sink coupling set	10.00	Nos
4.22	Providing and fixing 40 mm dia Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes removing old damaged pipe, jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. Exposed on wall, (steel double scaffolding will be paid in separate item if required) (5% cost will be deducted for taking away the removed material outside IIT campus)	20.00	Rmt
4.23	Providing and fixing 25 mm dia Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes removing old damaged pipe, jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. Exposed on wall, (steel double scaffolding will be paid in separate item if required) (5% cost will be deducted for taking away the removed material outside IIT campus)	20.00	Rmt
4.24	Providing and fixing 20 mm dia Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes removing old damaged pipe, jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. Exposed on wall, (steel double scaffolding will be paid in separate item if required) (5% cost will be deducted for taking away the removed material outside IIT campus)	20.00	Rmt
4.25	Providing and fixing 15 mm dia I.S.I. approved heavy type C class galvanized iron pipes TATA / Jindal / Zenith make in concealed plumbing having weight as per IS specification complete with G.I. fittings and clamps, including painting with anti corrosive bitumastic paint , cutting chases in walls for fixing concealed pipe and making good the wall by means of leveling with cement plaster and testing of joints complete as per direction of Engineer in Charge.	30.00	Rmt

4.26	Providing & fixing 40mm dia. PVC pipe for outlet of wash basin , sink etc. (heavy duty) with all fittings & fixtures making connection to old & new pipe line etc. complete as directed by Engineer.	20.00	Rmt
4.27	Providing and fixing white glazed earthenware wash hand basin of approved brand (Hindware/Cera/ parryware) of 55cm x 40cm size including one cold water pillar tap of jaquar , brackets, rubber plugs and brass chain, stop tap of jaquar and necessary pipe connection including polyethylene waste water pipe and trap	2.00	No
4.28	Providing and fixing coloured glazed earthenware wash hand basin of approved brand (Hindware/Cera/ parryware) of 55cm x 40cm size including one cold water pillar tap of jaquar , brackets, rubber plugs and brass chain, stop tap of jaquar and necessary pipe connection including polyethylene waste water pipe and trap	2.00	No
4.29	Providing and fixing white glazed earthenware wash hand basin of approved brand (Hindware/Cera/ parryware) of 45 x 30 cm size including one cold water pillar tap of jaquar , brackets, rubber plugs and brass chain, stop tap of jaquar and necessary pipe connection including polyethylene waste water pipe and trap	2.00	No
4.30	Providing and fixing coloured glazed earthenware wash hand basin of approved brand (Hindware/Cera/ parryware) of 45 x 30 cm size including one cold water pillar tap of jaquar , brackets, rubber plugs and brass chain, stop tap of jaquar and necessary pipe connection including polyethylene waste water pipe and trap	2.00	No
4.31	Providing and fixing 100 mm dia chromium plated brass shower rose of Jaquar brand to 15 mm dia. Supply pipe including necessary SS Bend and socket complete.	10.00	Nos
4.32	Providing and fixing white solid plastic seat (Hindware/Cera/ parryware) with lid for european type W.C. pan complete with require fittings and fixtures etc. and including removing existing damaged plastic seat complete as directed.	25.00	each
4.33	Providing and fixing good quality 32mm Nelson flush valve to water closet all complete as directed including removing the old damaged /unserviceable flush valve and taking out IITB campus. (5% cost will be deducted from Item of work for material taken outside campus)	2.00	nos
4.34	Providing and fixing Low / high level 10 liters capacity PVC flushing cistern of parryware / hindware / cera make with all fittings as inlet G.I. pipe with stop tap, brass chromium plated waste coupling and providing and fixing 32mm or required heavy duty PVC outlet bend pipe from flushing cistern upto the pan, 12mm dia PVC connection to the tank etc. all complete. as directed. (5% cost will be deducted from Item of work for material taken outside campus)	10.00	each
4.35	Providing and fixing white color Low level 3/6 liters capacity PVC Dual flushing cistern parryware / hindware / cera make with all fittings as approved by IITB inlet G.I. pipe with stop tap, brass chromium plated waste coupling and providing and fixing 32mm or required heavy duty PVC outlet bend pipe from flushing cistern upto the pan, 12mm dia PVC connection to the tank etc. all complete. as directed. (5% cost will be deducted from Item of work for material taken outside campus)	10.00	No
4.36	providing and fixing Stainless Steel sink of size 615mm x 460mm x 255mm (Approximate internal size of sink) of approved make and design(Nirali Make) including all connections of G.I. Supply and PVC waste outlet pipe and coupling , making good damaged surface etc. complete.	2.00	Nos
4.37	Providing and fixing stainless steel kitchen sink nirali make with drain board of size 510x915mm bowl depth 200mm approved brand (nirali or equant) as per IS 13983 with C1 brackets and stainless steel plug 40mm including painting of fittings and brackets, cutting, and making good the walls wherever required	2.00	Nos.
4.38	Removing the old damaged / worn out plastic water storage tank of any size and capacity from the roof of the building carefully with out damaging any structural members of the building by using chainpulley arrangement and depositing in Estate stores etc. Complete. (5% cost will be deducted for old damaged tank from item of work)	10000.00	Ltr
4.39	Providing and fixing in position best quality salt glazed stone ware gully trap with 150mm x 150mm square inlet and 100 mm n.b. outlet conforming to IS 651 including embedding the trap in M-20 (1:1.5:3) cement concrete, construction of brick masonry chamber 300mm x 300mm internal in 230mm thick brick masonry, plastering, finishing with neat cement floating coat, providing and fixing C. I. cover and frame weighing not less than 7 kg. etc including removing the old damaged gully trap, connecting all old and new inlets and out let pipes including running lines, jointing etc. all complete as directed.	3.00	each

4.40	Providing and laying temporary loop connection to main water supply inlet and outlet of water tank with 'C' class pipe 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. For B Type Building (G+2)	3.00	Per Job
4.41	Providing and laying temporary loop connection to main water supply inlet and outlet of water tank with 'C' class pipe 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. For B Type Building upto (G+6)	3.00	Per Job
4.42	Providing and fixing P.V.C. rain water pipes 'A' Type 160mm 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 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.	15.00	Rmt
4.43	Providing and fixing P.V.C. rain water pipes 'A' Type 110mm 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 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.	15.00	Rmt
4.44	Arresting leakages from PVC / Plastic storage tank by making necessary welding to cracked portion with all tools and plants etc. completed as directed.	3.00	per job
4.45	Providing and fixing 110mm(ID) dia.ISI approved HDPE pipes manufactured by ARHAM Engineering/ BERLIA /NOCIL / PIL with wall thickness of 6 mm to 8mm for taking sewage waste water with all required fittings such as bend, 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 In-charge.	15.00	Per Rmt
4.46	Providing and fixing 160mm(ID)dia ISI approved HDPE pipes manufactured by ARHAM Engineering/ BERLIA /NOCIL / PIL with wall thickness of 6 mm to 8mm for taking sewage waste water with all required fittings such as bend, 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 In-charge.	15.00	Per Rmt
4.47	Providing and fixing health faucet jet spray set with SS tube upto 1.5m length of approved Jaquar make including necessary socket/ union etc. complete as directed.	25.00	No
4.48	Providing and fixing SS towel ring upto 9 inch dia round flange of approved jaquar make etc. Complete.	3.00	No
4.49	P/F ½" dia CP Bib Cock / Angle Cock of jaquar (continental series) including necessary fitting and fixtures etc. complete as directed	10.00	No
4.50	Providing & fixing ISI approve heavy type Angle Cock (Cavier make Rienza series) including extension Pipe, C.P Double nippal etc.complete.	10.00	No
4.51	Providing and fixing ISI approve two way Wall mixture (cavier / Jaquar make) system with provision for only overhead shower complete with 115mm long bend pipe including fixtures etc. Complete.	2.00	No
4.52	Providing and fixing ISI approve three in one Wall mixture (Jaquar make) system with provision for both hand shower and overhead shower complete with 115cm long bend pipe, including fixtures (Excluding hand shower)etc. Complete.	2.00	No
4.53	Providing & fixing jaquar make telephonic hand shower 80mm round with 1.5m long jaquar make flexible chrome tube which connected to three way mixer including fixtures etc. Complete.	2.00	No

4.54	Providing & fixing Cera make Platform top white wash hand basin of size 602mm x 433mm including vertical pillar cock, Stop Cock, of approved jaquar / Cavier brand), SS Waste Coupling, Waste Pipe, Connection Pipe, etc complete as directed.	2.00	No
4.55	Providing hoisting and fixing in position MCGM approved plastic storage water tank on roof of buildings at any height with all fitting, fixtures viz 1" PTMT ball cock, extension nipple, 1" dia coupling and plug for washout and 1" dia coupling and bend for overflow 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 MCGM, using required fitting / fixtures including hoisting till any height using manual/mechanical means without damaging the structure and making good the damaged structure if damaged during hoisting at contractors risk and cost all complete as directed by Estate office.	10000.00	Ltr
4.56	Providing and fixing hindware make white glazed earthenware pedestal wash hand basin of size 56cm x 43cm , pedestal height 68cm including one cold water contentail series 450mm long swan neck tap of jaquar , brackets, rubber plugs and brass chain, stop tap of jaquar and necessary pipe connection including jaquar make bottle trap etc. Complete as directed	2.00	No
4.57	Providing & fixing hindware / cera make Platform top wash basin of size 630 mm x 500 mm including one cold water contentail series 450mm long swan neck tap of jaquar, Stop Cock, Waste Coupling, jaquar make bottle trap, Connection Pipe, etc complete or as directed.	2.00	No.
4.58	Providing and fixing European type wall hung white glazed earthenware water closet pan as per existing size of Parryware, Hindware, Cera make with P.V.C seat and lid with chromium plated brass hinges and rubber buffers including PVC heavy type flush pipe with fittings and clamps, cutting and making good walls and floors etc. complete as directed.	2.00	No.
4.59	Providing & fixing ISI approve long swan neck pillar tap jaquar make including necessary fixtures etc. complete as directed	5.00	No
4.60	Providing & fixing ISI approve SS bottle trap below wash basin including necessary fixtures etc. complete as directed	10.00	nos
4.61	Providing & fixing ISI approve heavy type Kitchen sink cock with swinging casted spout (wall mounted) jaquar make including necessary fixtures etc. complete as directed	10.00	No
4.62	Providing & fixing ISI approve heavy type two way bib cock jaquar make including necessary fixtures etc. complete as directed	10.00	No
4.63	Remvoing & taking out the wash basin with connecting pieces from floor/wall carefully without disturbing base floor/wall and taking away the same out of IIT campus etc. Complete.	10.00	Nos
4.64	Remvoing & taking out the European WC with connecting pieces from floor/wall carefully without disturbing base floor/wall and taking away the same out of IIT campus etc. Complete.	10.00	No
4.65	Remvoing & taking out the Flush tank with connecting pieces from floor/wall carefully without disturbing base floor/wall and taking away the same out of IIT campus etc. Complete. (5% cost will be deducted for taking away the removed material outside IIT campus)	10.00	No
4.66	Removing the existing toilet fittings while the other cement related activities are in progress and refixing the same after the work gets completed. 1) Wash basin	10.00	Nos
4.67	Removing the existing mirror & glsss shelf with screws while the other cement related activities are in progress and refixing the same with new coach screw after the work gets completed.	10.00	Nos

4.68	Providing and fixing Orrisa type white glazed earthenware 580mm x 440 mm water closet pan of approved make and brand (Cera, Hindware or equivalent) including trap, cast iron soil and vent pipes upto the outside face of the wall including 100mm. diameter cast iron plug bend, cement concrete bedding, 10 litres capacity H.D.P.E. approved flushing cistern with fittings, inlet pipe with brass stop tap(Cico), brackets, 32mm. diameter galvanised iron heavy type flush pipe with fittings and clamps, painting to the exposed pipes and cutting and making good the walls and floors etc. complete. (excluding waterproof brick bat coba)	7.00	each
4.69	Providing and fixing European type white glazed earthenware 580mm water closet pan of approved make and brand (Cera, Hindware or equivalent) with PVC seat and lid with chromium plated brass hinges and rubber buffers including cast iron soil and vent pipes upto the outside face of wall and 100mm. diameter cast iron plug bend, 10 litres approved low level white PVC flushing cistern with all fittings, pipes and stop tap, brackets for fixing the low level flushing cistern, 32mm dia galvanised iron / PVC heavy type flush pipe with fittings and clamps, 20mm dia. PVC galvanised iron overflow pipe with mosquito proof coupling, and exposed pipes and cutting and making good walls and floors etc. complete as directed.	7.00	each
4.70	Providing & fixing Techno / Sicko bib tap (Min weight 400gm) with new fittings & new screws, removing old broken fittings & taps wherever existing. (5% cost will be deducted for taking away the removed material outside IIT campus)	20.00	nos
4.71	Providing & fixing Jaquar make corner glass shelf set with new fittings & new screws.	10.00	per no
4.72	Providing & fixing Jaguar make sink cock with new fittings & new screws, removing old broken sink cock wherever existing. (5% cost will be deducted for taking away the removed material outside IIT campus)	15.00	per no
4.73	Providing & fixing Jaguar make SS soap dish holder with new fittings & new screws, removing old broken seap dish holder wherever existing. (5% cost will be deducted for taking away the removed material outside IIT campus)	7.00	per no
4.74	Carefully removing the existing G.I. pipe 12mm to 50mm diameter from floor / walls / slab etc. with out damaging the structures and taking out the same outside campus including scaffolding etc. completed as directed. (5% cost will be deducted from item of work for material taken outside IIT Campus)	50.00	Rmt

5) Wooden joinery / Aluminium / Roofing work

5.01	Removing door and windows of any size and any height type with frame, mild steel / wrought iron grill work and stacking the same and depositing to Estate stores if required. (scaffolding will be paid in separate item if required) (Recovery of wood scrap will be done @ Rs. 25 per kg, aluminium scrap will be done @ Rs. 120 per kg and structural steel will be done @ Rs. 20 per kg from Item of work against actual weight if material taken outside campus)	10.00	each
5.02	Removing flush door and glazed windows shutters carefully without damaging wooden frame of any size and stacking the same and depositing to Estate stores if required. (Recovery of wood scrap will be done @ Rs. 25 per kg, aluminium scrap will be done @ Rs. 120 per kg and structural steel will be done @ Rs. 20 per kg from Item of work against actual weight if material taken outside campus)	10.00	each
5.03	Modification of existing door shutter by removing the door shutter and cutting the door shutter from bottom side up to 1/2" to 1 1/2" thick and refixing the same shutter after rectification with new beading patti, painting work with new brass hinges, screws etc. Complete.	20.00	each
5.04	Providing and fixing M.S. grills of required pattern in frames of windows etc. fixed to openings / wooden frames with rawl plugs screws etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.	100.00	kg
5.05	Providing and fabricating structural steel works in rolled sections like joints, channels, angles, tees etc. as per details designs & approved pattern including fixing in position with connecting plates, braces and welding, riveting, bolting as necessary including zinc primer coat & two coats of synthetic enamel paint etc. (steel double scaffolding will be paid in separate item if required)	100.00	Kg
5.06	Providing and fixing 35mm FRP door manufactured by M/s. Advance Company including brass hinges, both side brass handles, brass aldrops, tower bolt, brass tadi patti etc. complete at any location in residential building as directed.	20.00	Sqm

5.07	Providing and fixing 3" Anchor Fastener wherever necessary etc. Complete.	10.00	nos
5.08	Supplying fabricating and fixing in position fully glazed aluminium openable window using aluminium section 42 x 30 x 1.5mm (0.526kg/rmt) size aluminium single border outer frame of window shutter, 42 x 37 x 1.5mm size (0.724kg/rmt), aluminium Z section for window shutter, 28 x 14.5 x 1.5mm (0.286kg/rmt) size, aluminium clip for window shutter 45 x 45 x 1.5mm (0.762kg/rmt) (size, Z aluminium center patti for mullion & intermediate section, 37mm x 37mm (0.820kg/rmt) aluminium 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, provision for fixing AC with teak wood members inside box, (if required) etc. Complete. (all aluminium section should be 15 micron anodized or as directed and of Jindal make.	10.00	Sq.m
5.09	Providing and fixing aluminium louvered ventilators using 50mm x 25mm x 16 gauge (not less than 0.593 kg/mtr) aluminium box frame anodized to 15 microns for outer frame and intermediate vertical members as directed including 5mm thick plain or frosted glass (Make Modi Guard/Saint-Gobain) 125mm wide for louvers at proper inclination including P/F glass on adjustable aluminium louvered of approved size and making provision of fixing exhaust fan etc. all complete (Aluminium section anodized to 15 microns, Jindal make or as directed.	10.00	Sqm
5.10	Providing and fixing in position fixed glazing using 63mm x 38mm x 1.65mm (0.942 kg/rmt) 15 micron / powder coated anodized aluminium partition section for frame with screws and providing 5mm thick clear plain glass (Make Modi Guard/Saint-Gobain) fixed to the above frame using glazing clip with rubber gaskets, filling all gaps with appropriate fillers etc. all complete. (Jindal Make)	10.00	sqm
5.11	Providing and fixing in position two track aluminium sliding windows using track section of size 61mm x 45mm x 1.3mm (1.055kg/rmt) thick for bottom, section of size 61mm x 31mm x 1.3mm (0.659kg/rmt) for side & top. The shutter should be of bearing bottom of size 40mm x 18mm x 1.25mm (0.417kg/rmt) thick, top member of size 40mm x 18mm x 1.20mm (0.475kg/rmt) thick, Interlocking section of size 43mm x 27mm x 1.30mm (0.558kg/rmt) thick, handles section of size 43mm x 18mm x 1.30mm (0.424kg/rmt) thick including providing and fixing SS304 grade flyproof mesh in the shutter using aluminium U clip, approved quality minimum two nos. PVC rollers for each shutter, necessary locks, handles, PVC lining and other required fitting s etc. complete as directed by engineer in charge. (all aluminium section should be 15 micron anodized/ section of Jindal make or as directed.)	10.00	Sq.m
5.12	Providing and fixing in position two track aluminium sliding windows using rectangular box section of size 63mm x 38mm x 2.00mm (1.054kg/mtr) for outer frame, bottom section of size 61 mm x 45 mm x 1.3 mm (1.055kg/mtr) thick for bottom, sections of size 61 mm x 31mm x 1.3 mm (0.659kg/mtr) thick for sides and top. The shutter should be of bearing bottom of size 40 mm x 18 mm x 1.25 mm (0.417kg/mtr) thick, top member of size 40 mm x 18 mm x 1.20 mm (0.475kg/mtr) thick, Interlocking section size of 43 mm x 27 mm x 1.30 mm (0.558kg/mtr) thick and handle section of size 43mm x 18 mm x 1.30 mm (0.424kg/mtr) thick including providing and fixing S.S. 304 Jali flyproof mesh in the shutter using u channel approved quality minimum two nos. PVC rollers for each shutter, necessary locks, handles, PVC lining and other required fittings, shutter width should not be more than 0.6m etc. complete as directed by Engineer in charge. (Note: All aluminium sections and fitting are 15 micron anodized Jindal make or as directed).	10.00	Sq.m
5.13	Providing and fixing in position two track aluminium sliding windows using drain bottom section or equivalent of size 61 mm x 45 mm x 1.3 mm (1.055kg/rmt) thick for bottom, sections of size 61 mm x 31mm x 1.3 mm (0.659kg/rmt) thick for sides and top. The shutter should be of bearing bottom of size 40 mm x 18 mm x 1.25mm (0.417kg/rmt) thick, top member of size 40 mm x 18 mm x 1.20 mm (0.475kg/rmt) thick, Interlocking section size of 43 mm x 27 mm x 1.30 mm (0.558kg/rmt) thick and handle section of size 43mm x 18 mm x 1.30 mm (0.424kg/rmt) thick including providing and fixing 5mm thk. glass (plain or frosted) (Make Modi Guard/Saint-Gobain) 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 Jindal make or as directed).	10.00	Sq.m

5.14	Providing & fixing in position extruded modular aluminium section two track sliding window mounted on rectangular frame of size 63mm x 38mm x 2.00mm thick (1.054 kg/Rmt) made up of two track drain bottom section of size 61mm x 45mm x 1.3mm thick (1.055 kg/Rmt) and top and sides sections of size 61mm x 31mm x 1.3mm thick (0.659 kg/Rmt) The shutter should be of bearing bottom of size 40mm x 18mm x 1.25 mm (0.417 kg/Rmt) top member of size 40mm x 18mm x 1.20mm thick (0.475 kg/Rmt) Interlocking section size of 43mm x 27mm x 1.30mm thick (0.558 kg/Rmt) and handle section of size 43mm x 18mm x 1.30 mm thick (0.424kg/Rmt),selected quality 5mm thick clear glass (plain or frosted) (Make Modi Guard/Saint-Gobain) to be fixed in shutter with neoprene gasket with approved quality PVC rollers, necessary locks, handles PVC lining and wooden encasement wherever necessary etc. Complete. (All aluminium sections and fitting should be 15 micron anodized and Jindal make or as directed).	10.00	sqm
5.15	Providing and fixing in position three track aluminium sliding windows using track sections of size 92 mm x 31mm x 1.3 mm (0.933kg/mtr) thick for bottom, 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 S.S 304 grade flyproof mesh in the shutter using aluminium U clip, approved quality minimum two nos.PVC rollers for each shutter, necessary locks, handles, PVC lining and other required fittings, provision for fixing A.C. units (if required) etc. complete as directed by Engineer in charge.(Note: All aluminium sections and fitting are 15 micron anodized and of Jindal make)	10.00	Sq.m
5.16	Providing and fixing in position three track aluminium sliding windows using rectangular box section of size 100mmx40mmx1.30mm (0.976kg/mtr) for outer frame, drain bottom section of size 92 mm x 45 mm x 1.05 mm (1.659kg/mtr) thick for bottom, sections of size 92 mm x 31mm x 1.3 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 S.S. 304 Jali flyproof mesh in the shutter using a channel approved quality minimum two nos PVC rollers for each shutter, necessary locks, handles, PVC lining and other required fittings, shutter width should not be more than 0.6m etc. complete as directed by Engineer in charge.(Note: All aluminium sections and fitting are 15 micron anodized and of Jindal make)	10.00	Sq.m
5.17	Providing & fixing in position extruded modular alluminium section three track sliding window made up of three track drain bottom section of size 92mm x 45mm x 1.05mm thick (1.659 kg/Rmt) three track and top and side sections of size 92mm x31mm x 1.30mm thick (0.933 kg/Rmt) The shutter comprising of bottom and top member of size 40mm x 18mm x 1.25mm thick (0.417 kg/Rmt) interlocking section of size 40mm x18mm x 1.10mm thick (0.469 kg/Rmt)handles section of size of 40mm x 18mm x1.25mm thick (0.417 kg/Rmt) with 5mm thick glass (plain or frosted) (Make Modi Guard/Saint-Gobain) fixed in shutter with approved quality neoprene, gasket, P.V.C lining etc. Complete. (excluding frame.(Note: All aluminium sections and fitting are 15 micron anodized and Jindal make)	10.00	Sq.m
5.18	Supplying, fabricating and fixing in position partly openable and partly fixed aluminium window using aluminium sections 42 x 30 x 1.5mm (not less than 0.526 kg/mtr) size aluminum single border outer frame of window shutter, 42 x 37 x 1.5mm (not less than 0.724 kg/mtr) size aluminum Z section for window shutter, 28 x 14.5 x 1.5mm size (not less than 0.286 kg/mtr), aluminum clip for window shutter, 45 x 45 x 1.5mm size (not less than 0.764 kg/mtr) Z aluminum center patti for mullion, 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, aluminum tower bolt 100mm size 1 Nos on each leaf, 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 window shutter on the aluminium single side partition section for outer frame and intermediate section of size 63x38x1.47mm thick (not less than 0.781 kg/mtr)etc. complete.(all aluminium sections should be 15 micron anodized / powder coated section)	10.00	Sq.m

5.19	Providing & fixing in position extruded modular aluminium section three track sliding window mounted on rectangular frame of size 100mm x 40mm x 1.30mm thick (wt 0.933 kg/Rmt) made up of three track drain bottom section of size 92mm x 45mm x 105mm thick (1.659 kg/Rmt) three track top and side of size 92mm x 31mm x 1.3mm thick (0.933 kg/Rmt) The shutter comprising of bottom and top member of size 40mm x 18mm x 1.10mm thick (0.469 kg/Rmt) handle sides of size 40mm x 18mm x 1.25mm thick (0.417 kg/Rmt) with 2 shutter of 5.0mm thick glass (plain or frosted) fixed in shutter with approved quality neoprene gasket, PVC rollers, locks, handles, PVC lining and one shutter with S.S. 304 Jali flyproof mesh in the shutter using u channel approved quality minimum two nos PVC rollers for each shutter, necessary locks, handles, PVC lining and other required fittings, shutter width should not be more than 0.6m etc. complete as directed wherever necessary etc. Complete. (Note: All aluminium sections and fitting are 15 micron anodized and of Jindal make)	10.00	Sq.m
5.20	Providing & fixing in position extruded modular aluminium section three track sliding window made up of three track drain bottom section or equivalent of size 92mm x 45mm x 105mm thick (1.659 kg/Rmt) three track top and side of size 92mm x 31mm x 1.3mm thick (0.933 kg/Rmt) The shutter comprising of bottom and top member of size 40mm x 18mm x 1.10mm thick (0.469 kg/Rmt) handle sides of size 40mm x 18mm x 1.25mm thick (0.417 kg/Rmt) with 2 shutter of 5.0mm thick glass (plain or frosted) (Make Modi Guard/Saint-Gobain) fixed in shutter with approved quality neoprene gasket, PVC rollers, locks, handles, PVC lining and one shutter with S.S. 304 Jali flyproof mesh in the shutter using u channel approved quality minimum two nos PVC rollers for each shutter, necessary locks, handles, PVC lining and other required fittings, shutter width should not be more than 0.6m etc. complete as directed wherever necessary etc. Complete. (Note: All aluminium sections and fitting are 15 micron anodized and of Jindal make)	10.00	Sq.m
5.21	Providing and fixing in position aluminium 15 micron anodized openable window with stainless steel flyproof mesh of 304 grade having aluminium powder coated "L" pipe section 38mm x 25mm (0.45kg/rmt) for frame and shutter frame of 38mm x 18mm (0.45kg/m) aluminium section and fixing the stainless steel mesh with U channel with screws including necessary fitting and fixtures such as two numbers stainless hinges, stainless steel handle one number and magnet one number or tower bolt etc. complete as directed. (All aluminium section of Jindal make)	15.00	Sq.m
5.22	Providing and fixing openable shutter made up of aluminium anodized 15 micron handle section 38mm x 18mm(0.45kg/rmt) or near available sections on top, bottom and sides, P/F 4mm thick hardner sheet of Bckelite of desire shead and pattern, P/F stainless steel hinges 75mmx35mm(2 nos.) for each shutter, 1nos. of S.S tower bolt on each shutter, 1no handle(S.S) for each shutter, magnet etc. including fixing the shutter over the L pipe section of 38mmx25mmx1.5mm (45kg/rmt) with screws in line and level, rectification of all damages etc. complete as directed. (All aluminium section of Jindal make)	15.00	Sq.m
5.23	Providing and fixing with anodising or powder coating aluminium section for door frame, windows, partitions and any other require work etc. of required size 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 (if required) etc. completed as directed.	100.00	kg
5.24	Providing and fixing bright finished brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles of approved quality (Godrej make or equivalent) with necessary screws etc. Complete	20.00	each
5.25	Providing and fixing 18mm thick commercial plywoods for drawer, panelling, shutters, partition and any other work with necessary fittings and fixtures etc. complete as per the directions of Engineer-in-charge .	15.00	Sq.m
5.26	Providing and fixing 18mm thick marine plywood for drawer, panelling, shutters, partition and any other work with necessary fittings and fixtures etc. complete as per the directions of Engineer-in-charge .	10.00	Sq.m
5.27	Providing and fixing magnetic catcher of approved quality in cupboard / ward robe shutters, including fixing with necessary screws etc. complete a) Triple strip vertical type	15.00	each
5.28	Providing and fixing magnetic catcher of approved quality in cupboard / ward robe shutters, including fixing with necessary screws etc. complete b) Double strip (horizontal type)	15.00	each

5.29	Providing and fixing 600 x 450mm x 6mm thk 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.	5.00	each
5.30	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.	5.00	each
5.31	Providing and fixing chromium plated SS towel rod 20 mm dia and 75 cm. in length including all accessories complete.	5.00	No
5.32	Providing and fixing cement bonded wood particle board (bison panel) of 20mm thick to chajja at any floor, providing suitable hole for fixing nuts and bolts including making suitable groove in walls providing plaster and vatta with proper slope complete as directed. (steel double scaffolding will be paid in separate item if required)	10.00	Sqm
5.33	Providing Second class teak wood in wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately).	2.00	Cum
5.34	Shifting all the material inside the flats to any where at the required location (vacant flat) in IITB campus & relocating the same to the original flats as per original arrangement, removing all fitting like Auqa gard, geyser and carpentry work and refixing the same in alternate as well as reallocated accomendation after realloiment including vehicle (tempo/truck) all Complete as directed	5.00	per job
5.35	Providing and fixing solid core flush door in single or double leaf 35mm thick of commercial type of exterior grade, approved commercial plywood facing both side without glazing and venetians, all necessary beads, moulding and lipping, 300mm long 2 nos. decorative type S.S handles for each shutters, 8" long stainless steel tower bolt 1 no for each shutter etc. complete (without frame). (fittings will be approved by Engineer in charge before fixing)	10.00	Sq.m
5.36	Providing and fixing solid core flush door in single or double leaf 35 mm thick of commercial type of exterior grade, approved commercial plywood facing both side without glazing and venetians, all necessary beads, moulding and lipping, 300mm long 2 nos. decorative type S.S handles for each shutters, 8" long stainless steel tower bolt 1 no for each shutter, 6 lever Godrej mortise lock with triplicate keys and other required fittings etc. complete (without frame). (fittings will be approved by Engineer in charge before fixing)	10.00	Sq.m
5.37	Providing and fixing country teakwood 2nd class fully glazed single / double leaf windows / ventilators rectangular in shape adopting section of 70mm x 32mm for styles and rails as per drawing including providing and fixing 5 mm thick plain / bajiri glass (Make Modi Guard/Saint-Gobain) with teakwood beading, fixing the window / ventilator shutters with 75mm size butt hinges (Brass oxidized) 2 Nos. for each shutter, aluminium towerbolt 100mm size one for each shutter, aluminium handle 125mm one for each shutter, hooks & eyes 200mm one for each shutter, applying two coats of synthetic enamel paint of approved brand and shade over a coat of wood primer including removing the existing shutter etc. Complete.	10.00	sqm
5.38	Providing and fixing single leaf or double leaf panelled door shutters 35mm thick as per detailed drawings consisting of country cut teak wood styles, top rail, frieze rail of 95mm x 35mm, lock rail of 145mm x 35mm and bottom rail of 245mm x 35mm and insert panels of 12mm thick, marine plywood generally conforming to IS: 710 with heavy duty M.S. pressed butt hinges bright finished of required size with necessary screws, P/F 300mm long heavy duty stianless steel aldrop, other require fittings and fixtures etc. complete.	10.00	sqm
5.39	Providing & fixing solid core flush door in single leaf 35mm thick commercial plywood facing both side without glazing and venetians, all necessary beads, moulding and lopping, with 1mm thk laminate on both sides including 6" long 2 nos S.S. handle, 8" long S.S. tower bolt 1nos, 4" long brass hings (heavy type), 6 lever Godrej mortise lock with triplicate keys and other required fittings etc. complete (without frame)	10.00	Sq.m
5.40	Providing and fixing 16mm dia. mild steel round bars at 100mm c/c to windows / ventilators / fanlights, fixing mild steel Flats 40 x 6mm in frame, cutting a recess to fit the flat exactly including drilling the holes to flats to pass the bars through it 25mm inside in wooden frame including providing one central mild steel flat of 40 x 6mm by drilling holes (when bar length exceeds 75cm) etc. Complete.	20.00	kg

5.41	Providing and laying 6mm thick plain glass fibre sheet of translucent top side tissue material as per IS 12866, resin with U.V stablized isophthalic base , light, transmission approved manufacture and desired shade including laying on surface , cleaning etc. All directed.	10.00	Sq.m
5.42	Providing & replacing in position Godrej night latch without damaging door & frame with automatic locking arrangement, triplicate keys etc. complete as directed.	10.00	No
5.43	Providing and Replacing 5 mm thick plain/bajri glass (Modi Guard/Saint-Gobain make)of doors and windows etc. including teakwood beading etc. Complete.	10.00	sqm
5.44	Providing and fixing fly proof stainless steel mesh of approved quality SS 304 grade to windows, doors and any other location using teak wood or aluminium anodised section of require size with necessary fittings and fixtures etc. complete as directed.	10.00	Sq.m
5.45	Making the wooden doors, windows etc. and all the fittings and fixtures in easily operational condition in all type of quarteres by providing necessary screws, oiling the fixtures, removing rust etc. from fittings planing the frames etc. all complete as directed.	20.00	Jobs
5.46	Easying the aluminium sliding windows by means of making freely operationable condition including cleaning the tracks, providing and fixing PVC rollers/ bearing (Heavy quality), concealed locks – 02 Nos etc. all required fittings for window of two track or three track etc. all complete as directed.	20.00	Per window
5.47	Removing the existing kitchen trolly & refixing existing sliding channels with oiling and greasing, welding existing broken SS round bars. Providing new screws after that refixing to original place including cleaning site etc. Complete	10.00	Per job.
5.48	Replacing by providing and fixing 6 mm thick toughen plain glass of doors and windows etc. including removing existing damaged glass neatly without damaged structure etc. Complete.	10.00	Sq.m
5.49	Providing and applying French polishing to new wood work including knotting, preparing the surface including step ladder etc. complete as directed.	10.00	Sqm
5.50	Providing and applying French polishing for required polish on previously polished wood including knotting, preparing the surface, step ladder etc. complete as directed.	10.00	Sqm
5.51	Providing and fixing colour coated Galvalume profile precoated sheet for roofing and cladding having thickness 0.50mm TCT of Jindal Make with required colour along with necessary accessories like self drilling and tapping screws with weather cap with all leads and lift etc. complete as directed. (steel double scaffolding will be paid in separate item if required)	25.00	Sq.m
5.52	Providing & fixing hydraulic door closer of approved quality and approved make (ISI Marks) to door shutter including making proper adjustment for smooth operation etc. Complete.	5.00	Nos
5.53	P/F 25mm dia aluminum powder coted heavy duty (58.33gram/ft) approved draftery curtain rod with decorative side holders including required fittings and screws (length upto 1.5m) all complete	15.00	Rmt
5.54	P/F 25mm dia aluminum powder coted heavy duty (58.33gram/ft)approved draftery curtain rod with decorative side holders and middle brackets including required fittings and screws(length beyond 1.5m) all complete	15.00	Rmt
5.55	P/F Stainless steel SS grade 304, curtain rod 25 mm dia 1.20 mm thick upto 1.5 meter with Stainless steel SS grade 304, brackets (curtain rod) 25 mm dia 1.20 mm thick including required fittings and screws, all complete.	15.00	Rmt
5.56	P/F Stainless steel SS grade 304, curtain rod 25 mm dia 1.20 mm thick more than 1.5 meter with Stainless steel SS grade 304, brackets (curtain rod) 25 mm dia 1.20 mm thick including required fittings and screws, all complete.	15.00	Rmt

5.57	Providing ,Fabricating and fixing at all floors, locations and heights stainless steel storage / Service Units / kitchen trolleys below existing granite Kitchen Platform upto depth 24 " to 26" as required made with 304 S.S. (Food grade) Comprising of 19mm square pipes outer frame , sink unit with bottle and bin holders , bottle pull out , utensils and storage unit kit etc. as desired by Engineer incharge and as per approved design consisting of 6mm dia S.S. round bars and 5mm dia distribution S.S. round bars or 1 mm thick perforated S.S. sheet where ever required & fabricated as directed including cost of providing teakwood Frame work , Sliding channel, 18mm waterproof plywood with sunmica facia , handles , screws , nails, cost of materials , transporting , labour, wastage and testing etc complete as directed(weight of the trolley should not be less than 55kg/sqm of elevational area)	10.00	Rmt
5.58	Providing & fixing in position wall unit, overhead storage, made out of using 18mm thick waterproof plywood sides & shutters, 6mm thick waterproof plywood backing, 1 mm thick sunmica for all exposed surfaces , CP teakwood frame work / supports fixing the unit on wall , handles with providing & fixing glass shelf of 12mm thick 1 no at 45 cm including necessary edging, moulding , buffing etc. & locking arrangement , hinges & other hardware & required fitting etc. all complete as directed	10.00	Sq.m
5.59	Supplying fabricating & fixing in position fully galzed aluminium single/double leaf double glass window using 15 micron anodized RZ section 46mm x 33mm x 2mm (0.38 kg//Rft)for window shutter , 46mm x 33mm x 2mm aluminium RZ single border outer frame , 21mm x 15mm x 2mm (0.38 kg//Rft) aluminium RZ clip , 60mm x 34mm x 2mm (0.4 kg/rft)aluminum RZ centre , aluminum angle , 5mm thick plain double glass with jambo rubber gasket, adjustable hinges 2 nos on each shutter, z handle 2nos, window stay 2 nos, P/F aluminium outer hollow box section of size 50mm x 25mm x 1.5mm (0.18 kg/rft) and fixing the shutter on aluminium outer frame etc. complete as directed(All aluminium section Jindhal make)	3.00	Sq.m
5.60	Providing, making and fixing in position 19mm thick marine plywood cabinets (kitply/century make) above/below kitchen platform with using 2" x 1 1/2" finished size teak wood frame properly polished and finished and approved sunmica(Marine/greenlamp) of 1mm on both side, Each shutter shall be provided with 4" stainless steel hinges and 6" stainless steel handles of approved quality. The work shall be executed in all respects as directed by the Engineer-in-Charge, ensuring a neat, durable, and high-quality finish.	10.00	Sq.m
5.61	Providing and fixing in position aluminium 2 track sliding double glass window in heavy anodized section 15 micron with including frame work of aluminium hollow pipe section 75mm x 25mm size with 14 gauge thick weight of 1.036kg/m , aluminium sliding track of size 66.5x50mm of weight 1.329kg/m with shutter section of size 66x26mm of weight 0.774kg/m including gazing clip of size 38.7x 28.5 mm of weight 0.303kg/m including making holes for draining of water fixing 5mm thick clear double glass shutter with rubber gasket, concealed lock, Meeti make heavy quality bearing including all necessary fittings required for double glass window , providing silicon sealent if required all complete as directed.(all aluminium section will be Jindal make)	10.00	sqm
5.62	Providing and fixing in position aluminium 2 track sliding double glass window with top and bottom fixed double glass window in heavy anodized section 15 micron with including frame work of aluminium hollow pipe section 75mm x 25mm size with 14 gauge thick weight of 1.036kg/m , aluminium sliding track of size 66.5x50mm of weight 1.329kg/m , shutter section of size 66x26mm of weight 0.774kg/m ,gazing clip of size 38.7x 28.5 mm of weight 0.303kg/m with single groove section of 89x32mm of 2.75 mm thk of weight of 1.933kg/m for fixed glass above and below of sliding window including fixing 5mm thick clear double glass shutter with rubber gasket, concealed lock, Meeti make heavy quality bearing for sliding window including all necessary fittings required for double glass window, providing silicon sealent if required all complete as directed.(all aluminium section will be Jindhal make)	10.00	sqm
5.63	Providing and fixing in position aluminium 3 track sliding double glass window in heavy anodized section 15 micron with including frame work of aluminium hollow pipe section 100mm x 40mm size with 14 gauge thick of weight 1.469kg/m , aluminium sliding track of size 101.5x50mm of weight 1.798kg/m with shutter section of size 66x26mm of weight 0.774kg/m including gazing clip of size 38.7x 28.5 mm of weight 0.303kg/m including making holes for draining of water fixing 5mm thick clear double glass shutter with rubber gasket, concealed lock, Meeti make heavy quality bearing including all necessary fittings required for double glass window , providing silicon sealent if required all complete as directed.(all aluminium section will be Jindhal make)	10.00	Sq.m

5.64	Providing and fixing in position three track aluminium sliding windows of six shutter using aluminium section of drain bottom of size 116mm x 25mm x 1.35 mm (1.160kg/mtr) thick ,for sides and top section of size 116mm x 25mm x 1.4 mm (1.005kg/mtr) thick . The shutter comprising of bearing bottom section of 60mm x25mm x1.45mm (0.781kg/rmt) and handle aluminium section member of size 50 mm x25mm x 1.5 mm (0.717kg/mtr) thick , interlocking aluminium section with both side interlocking arrangement 44.5mmx25mmx1.06mm(0.637kg/m) and interlocking section with one interlocking arrangement of 45mmx25mmx1.2mm(0.595kg/m) and for central locking providing F section of of section of 40mm x25mm x1.5mm (0.545kg/rmt) including providing and fixing S.S 304 grade flyproof mesh in two shutter using ,aluminium U clip & 6mm toughen glass in four shutter using rubber gasket,. Heavy type of PVC rollers for each shutter, necessary sliding shutter latch, 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 & Jindhal make).	10.00	Sq.m
5.65	Providing and fixing extra shutter of 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 S.S 304 grade flyproof mesh in the shutter using aluminium U clip, 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 & Jindhal make).	10.00	Sq.m
5.66	Providing and fixing extra shutter of 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 (0.40kg/mtr) thick and handle section of size 40mm x 18 mm x 1.25 mm (0.417kg/mtr) thick including providing and fixing 5 mm thick glass (Plain or frosted) in the shutter using neoprene 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 & Jindhal make)	10.00	Sq.m
5.67	Providing & fixing butt hinges heavy aluminium 100mm in brass with new screws, removing old broken hinges wherever existing.	10.00	Nos
5.68	Providing & fixing butt hinges heavy aluminium 75mm in brass with new screws, removing old broken hinges wherever existing.	10.00	Nos
5.69	Providing & fixing 150mm tower bolt in aluminium with new screws, removing old broken tower bolt wherever existing.	10.00	Nos
5.70	Providing & fixing 100mm tower bolt in aluminium with new screws, removing old broken tower bolt wherever existing.	10.00	Nos
5.71	Providing & fixing buffer stopper with new screws, removing old broken buffer stopper wherever existing.	10.00	Nos
5.72	Providing and fixing 300mm long stainless steel heavy duty aldrop with require fittings and fixtures etc. Complete.	10.00	Nos
5.73	Providing & fixing Jaguar make paper holder with new screws, removing old broken paper holder wherever existing.	2.00	Nos
5.74	Providing & fixing Jaguar made towel rack 600mm long with new screws, removing old broken towel rack wherever existing.	2.00	No
5.75	Providing & fixing Sliding channel of kitchen trolley upto 24 inch long with new screws, removing old broken rusted kitchen trolley channel.	25.00	Per pair
5.76	Providing & fixing PVC gasket/ rubber lining with with necessary fitting & fixtures new screws, removing old broken rubber gasket wherever existing.	10.00	Rmt
5.77	Providing and fixing brass Eye glass of approved quality, peep hole type,make,size and shape etc to door shutter complete including removing existing damaged. Contractor will be allowed to take away old peep glass eye glass if available	7.00	No
5.78	Centering and shuttering including strutting, propping etc. and removal of form for all heights : A) Foundations, footings, bases of columns, coping, raft etc.	20.00	sqm

5.79	b) Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc.	10.00	sqm
5.80	c) Suspended floors, roofs, landings, staircase waste slab, balconies, cantilever chajjas and access platform	10.00	sqm
5.81	D) Lintels, beams, plinth beams, girders, bressumers and cantilevers	15.00	sqm
5.82	E) Columns, Pillars, Piers, Abutments, Posts and Struts	15.00	sqm
5.83	Providing 40x5 mm flat iron hold fast 400 mm long including fixing to frame with 10 mm diameter bolts, nuts and wooden plugs and embedding in cement concrete block of approved mix concrete of size 300x100x150 mm etc. complete	20.00	each

Special Condition :

- Recovery of scrap material will be done in respective item at the rates mention below -
 - Wood scrap – Rs. 25.00/kg
 - Aluminium scrap – Rs. 150.00/kg
 - MS Steel / Tor steel & structural steel – Rs. 28.00/kg
 - Kitchen trolley – Rs. 45.00/kg
 - GI / CI Pipe – Rs. 20.00/kg
 - Brass taps of all types – Rs. 120.00/kg
- Existing passenger lifts should not be use for shifting construction materials or debris.
- Manufacturer & brand list for various items should be supplied as per approved list.
- Safety precautions should be strictly followed while repair construction work.
- Quantities mentioned in the schedule are approx. and may vary from zero to indefinite as per site requirements.
- Time required for attending each and every complaint or executing the job will be finalised by the Engineer Incacharge or his representative at the time of giving the job or handing over the complaint, compensation @Rs.250 per day per complaint / per job will be charged against if delayed for completion of item / job.

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.

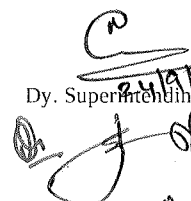
3) This work is to be executed as per the the clauses mentioned in the tender document signed by you. In addition to the existing safety clause of the tender document a penalty of Rs.5,000/- per case will be recovered from the bills of the particular works, in case any such safety violations are noticed.

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.


 Dy. Superintending Engineer
 24/07/26
 23/09
 20/09/26