

### Schedule of Items

N/W: Annual Rate Contract for Repair and Maintenance to Residential and Non- Residential Buildings at Panvel & Colaba Campuses & Staff Quarters at Belapur during 2023-24.				
PART - A (ITEMS OF WORK)				
SLNo	Description	Qty	Unit	Rate
1	EARTH WORK			
1.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, for all lift, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.			
1.1.1	All kinds of soil.	As per requirement	cum	269.65
1.2	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, by mechanical / manual means ramming of bottoms, for all depth, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m:			
1.2.1	All kinds of soil			
1.2.1.1	Pipes, cables etc, not exceeding 80 mm dia. But not exceeding 300mm dia	As per requirement	metre	361.90
2	CEMENT CONCRETE (CAST IN SITU)			
2.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :			
2.1.1	1:2:4 (1 Cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 40 mm nominal size derived from natural sources)	As per requirement	cum	8913.90
2.1.2	1:5:10 (1 cement : 5 coarse sand (zone-III) derived from natural sources : 10 graded stone aggregate 40 mm nominal size derived from natural sources)	As per requirement	cum	7463.05
3	MASONRY WORK			
3.1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 3.5 in foundation and plinth in:			
3.1.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	As per requirement	cum	8212.45
3.2	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 3.5 in superstructure above plinth level up to floor V level.			
3.2.1	Cement mortar 1:4 (1 cement :4 coarse sand)	As per requirement	sqm	1255.70

SLNo	Description	Qty	Unit	Rate
4	WOOD AND P. V. C. WORK			
4.1	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters:			
4.1.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	As per requirement	sqm	2486.30
4.1.2	30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	As per requirement	sqm	2321.25
5	STEEL WORK			
5.1	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.			
5.1.1	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	As per requirement	kg	175.50
6	FLOORING			
6.1	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand), Jointing with grey cement slurry @ 3.3 kg/sqm including pointing the joints with white cement and matching pigment etc., complete.	As per requirement	sqm	1154.00
6.2	Providing and fixing 1st quality ceramic glazed floor tiles 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 over 12 mm thick bed of cement Mortar 1:3 (1 cement: 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete.	As per requirement	sqm	1157.55
6.3	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, 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. The tiles must be cut with the zero chipping diamond cutter only . Laying of tiles will be done with the notch trowel, plier, wedge, clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily.			
6.3.1	Glazed vitrified floor tiles polished finish of size			
6.3.1.1	Size of Tile 600 x 600 mm	As per requirement	sqm	1650.95

SLNo	Description	Qty	Unit	Rate
7	FINISHING			
7.1	Distempering with 1st quality acrylic distemper (ready mixed) having VOC content less than 50 gms/litre, of approved manufacturer, of required shade and colour complete, as per manufacturer's specification.			
7.1.1	Two or more coats on new work	As per requirement	sqm	114.40
7.2	Applying priming coat:			
7.2.1	With ready mixed pink or Grey primer of approved brand and manufacture on wood work (hard and soft wood)	As per requirement	sqm	75.80
7.2.2	With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron/ steel works	As per requirement	sqm	68.45
7.3	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :			
7.3.1	Two or more coats on new work	As per requirement	sqm	162.15
7.4	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	As per requirement	sqm	146.65
7.5	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	As per requirement	sqm	20.15
7.6	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :			
7.6.1	One or more coats on old work	As per requirement	sqm	106.75
7.7	Distempering with 1st quality acrylic distemper (ready made) having VOC content less than 50 gm per ltr. of approved manufacturer and of required shade and colour complete. as per manufacturer's specification.			
7.7.1	One or more coats on old work	As per requirement	sqm	62.40
8	REPAIRS TO BUILDING			
8.1	Cleaning of terrace/loft water storage tank (inside surface area) upto 2000 litre capacity at all heights with coconut brushes, duster etc., removal of silt, rubbish from the tank and cleaning the tank with fresh water disinfecting with bleaching powder @ 0.5gm per litre capacity of tank including marking the date of cleaning on the side of tank body with the help of stencil and paint and disposing of malba all complete as per direction of Engineer-in-Charge. (The old date already written on tank should be removed with paint remover or black paint and if date is not written with the stencil or old date is not removed deduction will be made @ Rs. 0.10 per litre) (if during cleaning any GI fittings or ball cock is damaged that is to be repaired by contractor at his own cost and nothing extra will be paid on this account)	As per requirement	litre	0.50

SLNo	Description	Qty	Unit	Rate
8.2	Cleaning of under ground sump, Over Head R.C.C. Tank (independent staging) including disposal of slit and rubbish, all as per direction of Engineer-in-Charge. The cleaning shall consist following operations:- Tank shall be emptied of water by pumping & bottom shall be cleaned of silt and other deposits. Entire surface area of the sump shall then scrubbed thoroughly with wire brush etc. and pressure washed with water. (iii) Chlorination of RCC internal surface by liquid chlorine. The treated surface shall be dried using air jetting and all loose particles shall be removal from the surface. Finally the surface shall be treated with ultraviolet radiation etc. as per direction of Engineer-in-Charge.	As per requirement	sqm	87.95
8.3	Dismantling 15 to 40 mm dia G.I. pipe including stacking of dismantled pipes (within 50 metres lead) as per direction of Engineer- in-Charge.(a) Internal Work- Exposed on wall	As per Requirement	metre	3.50
9	Dismantling and Demolishing			
9.1	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.			
9.1.1	Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	As per requirement	cum	2475.60
9.1.2	Nominal concrete 1:4:8 or leaner mix (i/c equivalent design mix)	As per requirement	cum	1528.95
9.2	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.			
9.2.1	In cement mortar	1	cum	1698.45
9.3	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead :			
9.3.1	Of area 3 sq. metres and below	As per requirement	each	373.35
9.4	Taking out doors, windows and clerestory window shutters (steel or wood) including stacking within 50 metres lead :			
9.4.1	Of area 3 sq. metres and below	As per requirement	each	145.90
9.5	Dismantling C.I. or asbestos rain water pipe with fittings and clamps including stacking the material within 50 metres lead :			
9.5.1	75 to 80 mm dia pipe	As per requirement	metre	76.95
9.5.2	100 mm dia pipe	As per requirement	metre	79.30
9.6	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	As per requirement	sqm	55.55

SLNo	Description	Qty	Unit	Rate
9.7	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	As per requirement	cum	270.55
10	SANITARY INSTALLATIONS			
10.1	Providing and fixing water closet squatting pan (Indian type W.C.pan ) with 100 mm sand cast Iron P or S trap, 10 litre low level whiteP.V.C. flushing cistern, including flush pipe, with manually controlleddevice (handle lever) conforming to IS : 7231, with all fittings andfixtures complete, including cutting and making good the walls andfloors wherever required:			
10.1.1	White Vitreous china Orissa pattern W.C. pan of size580x440 mm with integral type foot rests	As per requirement	each	7130.90
10.2	Providing and fixing white vitreous china pedestal type water closet(European type W.C. pan) with seat and lid, 10 litre low level whiteP.V.C. flushing cistern, including flush pipe, with manually controlleddevice (handle lever), conforming to IS : 7231, with all fittings andfixtures complete, including cutting and making good the walls andfloors wherever required :			
10.2.1	W.C. pan with ISI marked white solid plastic seat and lid	As per requirement	each	6833.85
10.3	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brasspillar taps, 32 mm C.P. brass waste of standard pattern, includingpainting of fittings and brackets, cutting and making good the wallswherever require:			
10.3.1	White Vitreous China Flat back wash basin size 550x400 mm with single 15 mm C.P. brass pillar tap	As per requirement	each	2071.65
10.3.2	White Vitreous China Flat back wash basin size 450x300 mm with single 15mm C.P. brass pillar tap	As per requirement	each	1626.10
10.4	Providing and fixing white vitreous china water closet squatting pan(Indian type) :			
10.4.1	Orissa pattern W.C. pan of size 580x440 mm	As per requirement	each	3402.05
10.5	Providing and fixing white vitreous china pedestal type (Europeantype/ wash down type) water closet pan.	As per requirement	each	2964.75
10.6	Providing and fixing P.V.C. low level flushing cistern with manuallycontrolled device (handle lever) conforming to IS : 7231, with all fittingsand fixtures complete.			
10.6.1	10 litre capacity - White	As per requirement	each	1261.85
11	WATER SUPPLY			
11.1	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, i/c cutting and making good the walls etc. Internal work - Exposed on wall			
11.1.1	25 mm dia nominal bore	As per requirement	metre	605.85
11.2	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :			

SLNo	Description	Qty	Unit	Rate
11.2.1	25 mm nominal bore	As per requirement	each	656.60
11.3	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :			
11.3.1	25 mm nominal bore	As per requirement	each	492.30
11.4	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work) :			
11.4.1	25 mm nominal bore	As per requirement	each	455.55
11.5	Cutting holes up to 30x30 cm in walls including making good the same:			
11.5.1	With common burnt clay F.P.S. (non modular) bricks	As per requirement	each	447.00
11.6	Cutting holes up to 15x15 cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including finishing complete so as to make it leak proof.	As per requirement	each	465.15
12	DRAINAGE			0.00
12.1	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete :			
12.1.1	100 mm diameter	As per requirement	metre	463.45
12.2	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W. pipes including bed concrete as per standard design :			
12.2.1	100 mm diameter S.W. pipe	As per requirement	metre	1104.55
12.3	Providing and fixing in position pre-cast R.C.C. manhole cover and frame of required shape and approved quality			
12.3.1	L D- 2.5			
12.3.1.1	Rectangular shape 600x450 mm internal dimensions	As per requirement	each	1548.25
13	ALUMINIUM WORK			
13.1	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item):			
13.1.1	With float glass panes of 4.0 mm thickness (weight not less than 10kg/sqm)	As per requirement	sqm	1257.85

SLNo	Description	Qty	Unit	Rate
13.2	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge.			
13.2.1	With stainless steel cover plate minimum 1.25 mm thickness	As per requirement	each	3020.50
13.3	Providing and fixing stainless steel (SS 304 grade) adjustable friction windows stays of approved quality with necessary stainless steel screws etc. to the side hung windows as per direction of Engineer- in-charge complete.			
13.3.1	255 X 19 mm	As per requirement	each	406.05
13.4	Providing and fixing aluminium casement windows fastener of required length for aluminium windows with necessary screws etc. complete.			
13.4.1	Anodized (AC 15) aluminium	As per requirement	each	90.70
14	NEW TECHNOLOGIES AND MATERIALS			
14.1	Providing an fixing factory made single extruded WPC (Wood Polymer Composite) solid wood/ window/ clerestory window frames/ chowkhat comprising of virgin PVC polymer of K value 58- 60 (Suspension Grade), calcium carbonate and natural fibers (wood powder/ rice husk/ wheat husk) and nontoxic additives (maximum toxicity index of 12 for 100gms) fabricated with miter joints after applying PVC solvent cement and screwed with full body threaded star headed SS screws having minimum frame density of 750kg/cum, screw withdrawal strength of 2200N (face) & 1100N (edge), minimum compressive strength of 58N/mm <sup>2</sup> and modulus of elasticity 900N/mm <sup>2</sup> and resistance of spread of flame of class A category with property of being termite/ borer proof, water /moisture proof and fire retardant and fixed in position with M.S. hold fast/ lugs/ SS dash fasteners of required dia and length complete as per direction of Engineer in Charge, (M.S. hold fast/lugs or SS dash fasteners shall be paid for separately) Note: For WPC (Wood Polymer Composite) solid wood/ window frames minus 5mm tolerance to dimensions i.e. depth and width of profile shall be acceptable. Variation in profile dimensions on plus side shall	As per requirement		
14.1.1	Frame size 50 x 100 mm	As per requirement	metre	1052.10
14.1.2	Frame size 65 x 125 mm	As per requirement	metre	1538.95

SLNo	Description	Qty	Unit	Rate
14.2	Providing and fixing factory made single extruded WPC (Wood Polymer Composite) solid plain flush door shutter of required size comprising of virgin polymer of K value 58-60 (Suspension Grade), calcium carbonate and natural fibers (wood powder/ rice husk/wheat husk) and non toxic additives (maximum toxicity index of 12 for 100 gms) having minimum density of 650 kg/cum and screw withdrawal strength of 1800 N (Face) & 900 N (Edge), minimum compressive strength 50 N/mm <sup>2</sup> , modulus of elasticity 850 N/mm <sup>2</sup> and resistance to spread of flame of Class A category with property of being termite/borer proof, water/moisture proof and fire retardant and fixing with stainless steel butt hinges of required size with necessary full body threaded star headed counter sunk S.S screws, all as per direction of Engineer-In-Charge. (Note: stainless steel butt hinges and necessary S.S screws shall be paid separately)	As per requirement		
14.2.1	30 mm thick	As per requirement	sqm	4876.95
14.2.2	35 mm thick	As per requirement	sqm	5619.55
15	<b>NON SCHEDULE</b>			
15.1	Providing and plastering with premixed polymerized readymade cement mortar of approved brand / make, manufactured in automated dry mix batching plant where Cement, sand and polymer additive are mixed in pre-determined ratio (as per manufacturer specification). In one coat. 6 to 7 liter potable water (as per manufacturer specification) shall be added to 40 kg of readymix dry mortar on mortar mixing G.I tray and shall be mixed well for 4-5 minutes. The mortar shall be left undisturbed for 3-5 minutes to dissolve additive and shall be mixed once again to form cohesive and consistent mix.			
15.1.1	6 mm average thickness	As per requirement	sqm	375.15
15.1.2	15 mm average thickness	As per requirement	sqm	642.15
15.2	Providing and plastering with premixed readymade cement mortar of approved brand / make, manufactured in automated dry mix batching plant where Cement, sand and polymer additive are mixed in pre-determined ratio (as per manufacturer specification). 18 mm average thickness in two coats under layer 12 mm thick cement plaster and top layer 6 mm thick cement plaster finished rough with spong 6 to 7 liter potable water (as per manufacturer specification) shall be added to 40 kg of readymix dry mortar on mortar mixing G.I tray and shall be mixed well for 4-5 minutes. The mortar shall be left undisturbed for 3-5 minutes to dissolve additive and shall be mixed once again to form cohesive and consistent mix.	As per requirement	sqm	782.15



SLNo	Description	Qty	Unit	Rate
15.3	<p>Repairing shutter of existing aluminium sliding windows of area 2.5 sq. metres and below for renewing broken glass panes, damaged stainless wire gauge and replacing damaged bearing, consisting of following operation as per direction of the Engineer-in-Charge. ( Cost of glass panes/wire gauge/ bearing roller will be paid in separate item )</p> <ol style="list-style-type: none"> <li>1. Demounting aluminium window frame from its position</li> <li>2. Opening joints of frame</li> <li>3. Removing shutter from aluminium frame and repairing damaged wire mesh/glass pens/bearing etc.</li> <li>4. Inserting the repaired shutter in the frame</li> <li>5. Refixing the frame in position with necessary screws</li> </ol>	As per requirement	Each	475.15
15.4	<p>Providing and fixing fly proof stainless steel grade 304 wire gauge, to the aluminium sliding windows and clerestory windows using wire gauge with average width of aperture 1.4 mm in both directions with wire of dia. 0.50 mm with necessary aluminium beading and screws etc all complete, as per directions of engineer-in-charge (Cost of aluminium beading shall be paid in separate item)☒</p>	As per requirement	sq.m	1307.95
15.5	<p>Replacing damaged ceramic glazed floor tiles of any size upto 450X450 mm conforming to IS : 15622 of approved make at all floors including disposal of rubbish to the dumping ground as directed by Engineer-in-charge, consisting of</p> <ol style="list-style-type: none"> <li>1. Dismantling damaged floor tiles carefully without damaging adjacent tile using electrical cutter machine to isolate the damaged tiles at joint from the adjacent tiles.</li> <li>2. Chipping of old, set cement mortar bed upto the top of old CC flooring using electrical cutter machine and sharp chisel and cleaning with water and shall be allowed to touch dry condition.</li> <li>4. Providing and fixing glazed ceramic floor tiles of same size, color and shade on the bed of ready mix mortar, jointing with grey cement slurry including grouting the joints with white cement and matching pigments etc complete.</li> </ol>	As per requirement	Each	298.05
15.6	<p>Extra for providing and mixing Latex SBR of approved brand and manufacturer @ 160 gm per bag of RMP of 40 Kg as per direction of Engineer-in-charge.☒</p>	As per requirement	kg	439.50

SLNo	Description	Qty	Unit	Rate
15.7	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq.meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground, all complete as per direction of Engineer-in-Charge. With premixed readymade cement mortar cement mortar of approved brand / make, manufactured in automated dry mix batching plant where Cement, sand and polymer additive are mixed in pre-determined ratio (as per manufacturer specification). 6 to 7 liter potable water (as per manufacturer specification) shall be added to 40 kg of readymix dry mortar on mortar mixing G.I tray and shall be mixed well for 4-5 minutes. The mortar shall be left undisturbed for 3-5 minutes to dissolve additive and shall be mixed once again to form cohesive and consistent mix. "□"	As per requirement	sqm	751.05
15.8	Applying one or more coat alkaline rust converting primer 'Feo Vert' of Krishna Conchem or equivalent on reinforcement bar (cleaned off loose rust) with paint brush as per manufacturer specification. The chemical shall be allowed to be cured for 8 hours after application. The work shall carried out as per direction of the Engineer-in-charge (The area of RCC surface wherein bar to be treated shall be measured for payment)□	As per requirement	sqm	73.65
15.9	Providing and laying in position cement concrete in sunken floors at all floors at all levels excluding the cost of centring and shuttering - 1:5:10 (1 cement : 5 coarse sand : 10 graded brick aggregate 40 mm nominal size)	As per requirement	CUM	8471.20
15.1	Providing and placing in position square mouth S.W gully trap class SP-1 without C.I grating and cover including jointing to existing SW pipe with cment mortar: as per the direction of Engineer - in - charge. P-type, size150 x 100 mm	As per requirement	Each	307.75
15.11	Providing and erecting single scaffold with mature and strong bamboo of minimum girth of 250 mm, maintaining minimum spacing @1.20 mtr c/c on the exterior side of a building, upto five storey height, joining with coir rope for very short duration as approved and removing it thereafter. The scaffold shall be make stable by stiffening with ties, runners, connection with building etc wherever required for the purpose of attending external seepage, leakage and plumbing or similar complaint as per direction and approval of Engineer- in-Charge. (The elevation area of the scaffold shall be measured for payment purposed.)	As per requirement	sqm	73.45

SLNo	Description	Qty	Unit	Rate
15.12	<p>Providing and applying 'Polyfill AR', an auto suction elastomeric acrylic crack filler of Sunanda Chemicals or equivalent on external wall in following steps as directed by Engineer – in – charge. Cleaning cracks using wire brush lightly over cracks to remove oil, dirt and loose particles. a) Moistening the surface with clean water. b) Filling the crack will 'Polyfill AR' using spatula or a putty knife. After applying, the chemical is allowed to be sucked in the cracks. Second and consecutive layers of 'Polyfill AR' shall be applied at the interval of 5 hrs till the cracks is saturated with chemical. Finally, the chemical shall be allowed to dry dried for 24 hrs after application last layer.</p>	As per requirement	kg	317.30
15.13	<p>Providing and applying one or more coats of white cement slurry admixed with acrylic polymer based waterproofing chemical consisting of following operations:</p> <p>i) Removing all loose materials, dust fungus, moss, oils and grease etc. using mechanical means like wire brush, hard brooms, chisel</p> <p>ii) Thoroughly cleaned surface shall be wetted by water jet one hours prior to the application of polymer modified slurry.</p> <p>iii) The polymer modified cement slurry shall be prepared by taking measured quantity of RESI - POLYPROOF of Anuvi Chemical or equivalent in a plastic bucket/small drum and subsequently adding white cement slowly under continuous stirring using electric operated paddle mixer for few minutes to avhieve homogeneous lump free slurry. The polymer and white cement shall be mixed in the ratio 1:1 (1 Polymer: 1 white cement) by weight. If required, the slurry can be diluted with very little quantity of water just enough to get brushable consistency. Slurry shall be used within 30 minutes after it is prepared.</p> <p>iv) Polymer modified slurry shall be applied by painting brush. First coat shall be applied in vertical direction and allowed to dry for 30 minutes. Subsequently second coat shall be applied in horizontal direction. Theoretical consumption of RESI-POLYPROOF is 0.358 kg/sqm for two coats.</p> <p>The treated surface shall be protected by polyethylene sheets or damp gunny bags to avoid fast drying of the coating. Cuing shall be done with damp gunny bags or sprinkling water for about 5-7 days and then the coating can be</p>	As per requirement	sqm	206.80
15.14	<p>Uprooting of small trees/plants, wild growth on vertical external faces of building walls, terrace, chajjas, parapet, walls etc of any size including removal of roots and applying concentrated copper sulphate solution over the entire foot print of root area of tree by handheld spray machine etc. complete as per direction of the Engineer-in-Charge.</p>	As per requirement	each	123.50

SLNo	Description	Qty	Unit	Rate
15.15	Cleaning bottom channel of frame of aluminium window with hard nylon brush, cloth etc. and lubricating track of friction hinges with approved lubricant for smooth functioning of window shutter including cleaning dust from the window sill complete complete as per direction of the Engineer-in-Charge.	As per requirement	each	34.45
15.16	Providing and laying water proofing treatment in sunken portion of WC, bathroom etc by applying two component acrylic polymer modified cementations coating in two coat (stroke) of approved manufacture consisting of following operations. i) Polymer modified slurry shall be prepared by taking measured quantity of liquid in a plastic bucket/small drum and subsequently adding measured quantity of powders (as per manufacturer specification) slowly under continuous stirring of electric operated paddle mixer for few mimes to achieve homogeneous lump free slurry. ii) The slurry shall be left undisturbed for 5-6 minutes to release entrapped air. iii) First coat shall be applied by paintbrush in vertical direction, which will be allowed to air cured for 4 to 6 hrs. iv) Second coat shall be applied in horizontal direction, which will be allowed to air cured for 4 hours followed with water curing by sprinkling water for 48 hours. Overlaying of 12 mm cement plaster of ready mixed mortar must be done on base within 24 to 48 hrs after application of 2nd coat. (Cost of 12 mm cement plaster with be paid in separate item.) By applying 'Smartcare damp blok 2K' of Asian paint in ration 2:1 (2 powder : 1 liquid) by weight (consumption is 1.435kg/ sqm for two coats as per manufacturer specification) Or By applying 'Sika top seal 107' in ratio 4:1 (4 powder : 1liquid) by weight (consumption is 3 kg/sqm for two coats as per manufacturer specification). Or By applying 'Roff Hygaurd' of ROFF in ratio 3.5:1 (4 powder :	As per requirement	sqm	686.45
15.17	Repairing Aluminium glass door shutter at any location sizes up to 2.4 sqm to operate smoothly and noiselessly consisting of following operations complete as directed by Engineer-in-Charge. i) Demounting the existing Aluminium glass door shutter from its position with all hardwares 2) Replacing embedded damaged 'Double action floor spring' with new floor spring 3) Refixing the same Aluminium glass door shutter in position with all existing hardwares (Cost of 'Double action floor spring' will be paid seperately)	As per requirement	each	2036.50
15.18	Credit for taking away the dismantled materials ( unserviceble) received from work such as reinforcement bars, G.I. pipes, C.I. or SCI pipes, M.S tanks, C.I. flushing cistern, M.S. grills etc. as per direction of Engineer-in-Charge.	As per requirement	kg	-29.00

SLNo	Description	Qty	Unit	Rate
15.19	Credit for taking away the dismantled unserviceable material like wooden door / window frame and shutter etc.	As per requirement	kg	-24.00
15.20	Credit for taking away the dismantled brass/C.P brass unserviceable materials received from work as per direction of Engineer-in-Charge.	As per requirement	kg	-335.80
16	MISCELLANEOUS			
16.1	Cleaning the gully traps by taking out sludge silt & vegetation from gully trap of the building of the colony & disposal of the same within 50 metres lead. (Initially all the gully traps are to be cleaned completely & any chock up / blockage occurs subsequently to be attended & cleaned through out the period of agreement.) as per the direction of Engineer - in - charge.	As per requirement	each	207.35
16.2	Cleaning of manhole by taking out sludge, silt and vegetation from inside the manholes of the colony and disposed to the same within 50 m lead.Depth upto 2.0 m. (Initially all the manholes are to be cleaned completely & any chock up / blockage occurs subsequently to be attended & cleaned through out the period of agreement.) as per the direction of Engineer - in - charge.	As per requirement	each	588.95
16.3	Cleaning of chocked sewer lines / covered drains including dragging, pushing to chocked silt, clay and sludge etc. to the nearest manhole by using krait machine / flexible sewer line cleaning rods, bamboo splits and passing of ropes tied with gunny bags etc. completed as per direction of Engineer-in-Charge. Sewer line 300 mm dia & below. (Initially all the manholes are to be cleaned completely & any chock up / blockage occurs subsequently to be attended & cleaned through out the period of agreement.) as per the direction of Engineer - in - charge.	As per requirement	each	109.85
16.4	Providing services of Carpenter at any time of a working day (excluding weekly and public Holidays) for attending the all sorts of carpentry related complaints lodged in the complaint Register or any other similar work as per direction of Engineer -in- charge .(Material, if any required for attending complaint including T&P shall be arranged by the agency and the cost of material shall be paid separately)	As per requirement	each per hour	140.15

SLNo	Description	Qty	Unit	Rate
16.5	Providing services of Plumber at any time of a working day (excluding weekly and public Holidays) for attending the all sorts of carpentry related complaints lodged in the complaint Register or any other similar work as per direction of Engineer -in- charge .(Material, if any required for attending complaint including T&P shall be arranged by the agency and the cost of material shall be paid separately)	As per requirement	each per hour	140.15
16.6	Providing services of Beldar/Helper at any time of a working day (excluding weekly and public Holidays)to assist skilled labour (Mason/Crapenter/Plumber) for attending the complaints lodged in the complaint Register or any other similar work as per direction of Engineer -in- charge .(Material, if any required for attending complaint including T&P shall be arranged by the agency and the cost of material shall be paid separately)	As per requirement	each per hour	126.45
16.7	Providing services of Sewerman at any time of a working day (excluding weekly and public Holidays) for attending the all sorts of carpentry related complaints lodged in the complaint Register or any other similar work as per direction of Engineer -in- charge .(Material, if any required for attending complaint including T&P shall be arranged by the agency and the cost of material shall be paid separately)	As per requirement	each per hour	140.15
16.8	Providing services of Welder equipped with welding machine, welding rod and other necessary materials on a working day (excluding weekly and public Holidays) for attending the all sorts of welding related complaints lodged in the complaint Register or any other similar work as per direction of Engineer -in- charge .(Material, if any required for attending complaint including T&P shall be arranged by the agency )	As per requirement	each per day	1774.05
16.9	Providing services of Key-maker equipped with required tool-kits at any time of a working day (excluding weekly and public Holidays) for making duplicate key of cupboard, drawer, vault, padlock, night latch or similar complaints lodged in the complaint Register including supplying key making material as per direction of Engineer -in- charge .all be arranged by the agency and the cost of material shall be paid separately)	As per requirement	each	497.90
16.10	Cleaning cushion cover of single seated office chair with appropriate cleaning agent and vacuume cleaner etc to the satisfaction of Engineer- in- charge.	As per requirement	each	150.00

SLNo	Description	Qty	Unit	Rate
16.11	Cleaning of storm water drain open / covered including removal of garbages, rubbish mixed with earth and removal of vegetation from the drain and disposal of the same within a lead of 50 m and all lifts etc. complete as per direction of Engineer-In- Charge. The collected garbage/rubbish shall be finally disposed to the approved dumping ground outside the campus by truck which shall be paid in separate item .	As per requirement	m	34.40
16.12	Desludging septic tank/soak pit by Chasis mounted sewer suction machine of 2000 lit capacity including disposal of sludge outside the IIG campus, Panvel etc. complete as directed by Engineer-In-charge.	As per requirement	Trip	150.00

SLNo	Description	Qty	Unit	Rate
<b>PART - B (SUPPLY OF MATERIALS)</b>				
Sr. No.	Item	Qty	Unit	Rate
1	PVC rigid pipe 40 mm dia	As per requirement	metre	78.00
2	P.V.C elbow 40 mm	As per requirement	each	35.00
3	P.V.C coupling 40 mm	As per requirement	each	39.40
4	PVC flexible waste pipe 32 mm dia 750 mm long	As per requirement	each	93.80
5	PVC flexible waste pipe 40 mm dia 750 mm long	As per requirement	each	132.55
6	MS Screw (full thread) upto 25 mm long	As per requirement	each	0.40
7	MS MS Screw (Half thread) upto 50 mm long	As per requirement	each	1.45
8	SS Secrw (full/half thread) upto 35x8 mm	As per requirement	each	1.70
9	CP MS Screw for mirror 50 x 8	As per requirement	each	7.50
10	SS butt hing 100 mm x 58 mm	As per requirement	each	62.55
11	S.S hings 75 mm X 75 mm	As per requirement	each	56.30
12	Cement nail	As per requirement	each	187.60
13	Stainless steel pipe 20 mm dia. for Curtain rod	As per requirement	each	95.75
14	Nickel plated MS Bracket for Curtain rod 20 mm	As per requirement	each	83.80
15	Nylon washer for bib cock	As per requirement	each	1.90
16	Syphon washer for flush tank	As per requirement	each	15.95
17	Telfon tape	As per requirement	each	31.90
18	SS grating of floor trap 100 mm dia	As per requirement	each	43.75
19	SS grating of floor trap 100 mm dia with hole	As per requirement	each	43.75
20	Aluminum door Latch 250 mm	As per requirement	each	268.90
21	Aluminum tower bolt 150x10 mm	As per requirement	each	75.05
22	Aluminium tower bolt 100x10 mm	As per requirement	each	54.40
23	Aluminium Handle 100	As per requirement	each	85.05
24	Aluminium Handle 75	As per requirement	each	68.00
25	Wire Nails	As per requirement	Kg	199.50
26	4 mm thick plane glass of any size	As per requirement	sqm	1055.26
27	Mirror 600 X 450 mm	As per requirement	each	938.00
28	OP Cement	As per requirement	bag	505.35
29	White Cement	As per requirement	Kg.	59.85



SLNo	Description	Qty	Unit	Rate
30	Gujrat sand	As per requirement	bag of 40 kg	119.70
31	Brass Spindle for bib cock	As per requirement	each	111.70
32	Unplasticised PVC connection pipe with brass union 45 cm long, 15 mm bore	As per requirement	each	112.55
33	Unplasticised PVC connection pipe with brass union 60 cm long, 15 mm bore	As per requirement	each	137.55
34	6mm thick hard board for mirror size 450x600	As per requirement	each	76.90
35	Sliding door bolt size 250 x 16mm	As per requirement	each	432.50
36	PVC Rawl plug 35x8	As per requirement	each	0.80
37	Anchor fastener size 100x10 mm	As per requirement	each	39.85
38	CP brass Health Faucet of "Kludi" or equivalent	As per requirement	each	854.05
39	Chrome finish 1 Metre long flexibile hose pipe for Health Faucet, 15 mm Nominal bore	As per requirement	each	332.50
40	Seiko Brand C.P. brass bib cock-15 mm nominal bore	As per requirement	each	611.75
41	Seiko Brand C.P. brass angle cock-15 mm nominal bore	As per requirement	each	598.45
42	Seiko Brand Brass Pillar tap 15 mm nominal bore	As per requirement	each	1050.60
43	Aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm),	As per requirement	each	1529.35
44	White vitreous china wash basin including making all connections but excluding the cost of fittings :		each	
44.1	Flat back wash basin of size 550x400 mm	As per requirement	each	1195.00
45	Chlorinated Polyvinyl - chloride (CPVC) pipe 20 mm outer dia	As per requirement	mtr.	103.45
46	Sypohon system for Fiush tank	As per requirement	each	199.50
47	Handle button for Fiush tank	As per requirement	each	133.00
48	PVC ball cock 15 mm diameter	As per requirement	each	199.50
49	Bearing roller of approved quality for aluminium windows shutter	As per requirement	each	33.25
50	SWR UPVC Pipe Selfit of ISI marked of approved brand as per IS 13592			
50.1	75 mm outer diameter (type B)	As per requirement	mtr	133.00

SLNo	Description	Qty	Unit	Rate
50.2	110 mm outer diameter (type B)	As per requirement	mtr	220.75
52	Unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC pipes conforming to IS : 14735 of approved brand			
52.1	COUPLER			
52.1.1	75 mm	As per requirement	each	66.50
52.1.2	110 mm	As per requirement	each	106.40
52.2	Single Equal Plain Junction with Door of Required Degree			0.00
52.2.1	75x75x75 mm	As per requirement	each	133.00
52.2.2	110x110x110 mm	As per requirement	each	232.70
52.3	Bend 87.5 <sup>0</sup>			0.00
52.3.1	75 mm	As per requirement	each	99.75
52.3.2	110 mm	As per requirement	each	166.25
54	Providing and fixing UPVC floor trap confirming to IS 14735 complete, including cost of cutting and making good of wall and floors.			
54.1	UPVC trap 100 mm inlet and 75 mm outlet of Prince or equivalent	As per requirement	each	159.60
55	E.W.C Seat Cover White of Parryware or equivalent	As per requirement	each	678.25
56	PVC/CPVC cement solvent of approved brand	As per requirement	100ml	126.35
57	C.P Brass Waste Coupling 32mm	As per requirement	each	343.10
58	S.S. Kitchen Sink waste coupling 100 mm of Nirali or equivalent	As per requirement	each	1063.90
	<b>Pesticides and Fungicides</b>			
59	Rogar	As per requirement	lit	1068.00
60	Termax	As per requirement	lit	3469.00
61	Blitox	As per requirement	Kg	1310.00
62	Babestin	As per requirement	Kg	1522.00
63	Borax	As per requirement	Kg	98.00
64	Good quality red garden earth free from stones and pebbles	As per requirement	cft.	39.00
65	Well decomposed dry farm yard manure free from grasses and rubbish	As per requirement	cft.	38.00