

National Institute of Technology Durgapur

B.O.Q. - Annual Maintenance Contract (Civil) for Quarters, Administrative Buildings, Guest Houses, Academic Bldgs, Market Complex, Adjoining Areas in the Campus

Sl. No.	Description of items	Unit	Quantity	Rate	Amount
1	Brick work with 1st class bricks in cement mortar (1:4) (a) In foundation and plinth	m3	35		
2	Earth work in Excavation of foundation trenches or drains, in all sorts of soil (including mixed soil but excluding laterite or sandstone) including removing, spreading or stacking the spoils within a lead of 75 m. as directed. The item includes necessary trimming the sides of trenches, levelling, dressing and ramming the bottom, bailing out water as required complete. (a) Depth of excavation not exceeding 1,500 mm.	m3	85.5		
3	Plaster (to wall, floor, ceiling etc.) with sand and cement mortar including rounding off or chamfering corners as directed and raking out joints including throating, nosing and drip course, scaffolding/staging where necessary (i) With 1:6 cement mortar (a) 15 mm thick plaster	m2	3000		
	(b) 20 mm thick plaster	m2	1500		
4	Neat cement punning about 1.5 mm. thick in wall, dado, window, sills, floor, drain etc. NOTE : Cement 0.152 cu.m. per 100 sq.m.	m2	650		
5	Ordinary Cement concrete (mix 1:2:4) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement if any, in ground floor as per relevant IS codes.	m3	67.5		
6	Reinforcement for reinforced concrete work in all sorts of structures including distribution bars, stirrups. Binders etc initial straightening and removal of loose rust (if necessary), cutting to requisite length, hooking and bonding to correct shape. Placing in proper position and binding with 16 gauge black annealed wire at every intersection. Complete as per drawing and direction.	kg.	650		
7	Hire & Labour charge for shuttering with centering and necessary staging upto 4 m using approved stout props and thick hard wood planks of approved thickness with required bracing for concrete slabs, beams and columns, lintels curved or straight including fitting, fixing and striking out after completion of works (upto roof of ground floor) (a) 25 mm to 30 mm thick wooden shuttering as per decision & direction of Engineer-in-charge.	m2	150		
	(b) 25 mm to 30 mm thick shuttering without staging in foundation	m2	100		
8	Single brick flat soling of picked jhama bricks including ramming and dressing bed to proper level and filling joints with local sand.	m2	68		
9	Supplying & laying 20 mm designer chequered tiles of any shade and of approved quality as per IS: 1237: 1980 laid in patterns as directed In pavement, footpath including necessary underlay 25 mm thick average cement mortar (1:3) complete in all respect with all labour and materials [using cement slurry @ 4.4 kg/Sq.m at back side of tiles.	m2	12.5		
10	Supplying, fitting & fixing granite, tiles 10mm to 12mm . Thick in columns, wall, fascia etc. with 15 thick [avg] cement mortar (1:2) including making suitable arrangements to hold the stones properly by brass / copper hooks including pointing in cement mortar (1:2) (1white cement : 2 marble dust) with admixture of pigment matching the stone shades all complete as per direction of the Engineer-incharge including cost of all materials, labours, scaffolding. staging curing and roughening of concrete surface complete. [Using cement slurry at back side of tiles@ 4.4 kg.sq.m & white cement slurry for joint filling @1.8 kg/sq.m] Area of each slab upto 0.2 sq.m	m2	15		

11	18 mm. to 22 mm. thick, kota stone slab set in 20 mm thick (avg) cement mortar (1:4) in floor, stair & lobby including pointing in cement slurry with admixture of pigment matching the stone shade, including grinding & polishing as per direction of Engineer - in charge to match with the existing work. [Slurry for bedding @ 4.4 kg/Sq.m and pointing @2.0 kg/Sq.m]	m2	62.5		
12	Supplying, fitting & fixing glass reinforced polyster translucent fiber glass sheet to match with GCI Corrugation as per IS.: 12866 - 1989 in roof fitted and fixed with 10 mm dia "1" hook, bolts and nuts,limpet and bitumen washers and putty with 150mm end lap and one corrugation minimum side lap complete. a) 1.6mm + /-0.2mm thick sheet. (2.6kg/sq.m) iv) Special coloured textured tissue	m2	16.5		
13	Grinding to marble / mosaic floor including remaining stone, if necessary, after cutting with manual labour / machine, where necessary	m2	202.87		
14	Supplying, fitting & fixing Fly/Mosquito proof nylon net on any type of window, door shutter/frame with necessary fixing arrangements complete.	M2	37.5		
15	Supplying solid flush type doors of commercial quality, the timber frame consisting of top and bottom rails and side styles of well seasoned timber 65mm wide each and the entire frame fitted with 37.5mm wide battens places both ways in order to make the door of solid core and internal lipping with Garjan or similar wood veneers using phenol formaldehyde as glue etc. complete, including fitting, fixing shutters in position but excluding the cost of hinges and other fittings in ground floor. (a) 35 mm thick shutters (single leaf)	m2	107.5		
16	Taking out shutter of door and window, dismantling by parts (for repair or replacement of damaged parts), reassembling and refitting and rehanging same with old fittings but with new screws as necessary. (Where different parts of same shutter are renewed under different item, payment will be made once only).	m2	87.5		
17	Supplying, fitting & fixing 1st quality Ceramic tiles in walls and floors to match with the existing work & 4 nos. of key stones (10mm) fixed with araldite at the back of each tile & finishing the joints with white cement mixed with colouring oxide if required to match the colour of tiles including roughening of concrete surface, if necessary or by synthetic adhesive & grout materials etc. (A) With sand Cement Mortar (1:4) 20 mm thick & 2 mm thick cement slurry at back side of tiles using cement @ 2.91 kg/Sq.m & Joint filling Using white cement slurry @0.20 kg/Sq.m (a) Area of each tile upto 0.09 Sqm (i) Coloured decorative	m2	275		
18	Rendering the surface of walls and ceiling with white cement based wall putty of approved make and brand (1.5 mm thick)	m2	750		
19	White washing including cleaning and smoothening surface thoroughly. (a) One coats	m2	15000		
	(b) Two coats	m2	20000		
20	Colour washing with any shade with Stainers, as required including cleaning and smoothening surface thoroughly : (i) Internal surface (All floors) (a) One coat of colour wash (i) Other than yellow, pink.	m2	30285		
	(b) Two coats (i) Other than yellow, pink.	m2	475		
21	Rendering the surface of walls and ceiling with white cement based wall putty of approved make and brand(1.5mm thick)	m2	475		
22	Synthetic Distemper to interior wall, ceiling with a coat of solvent based interior grade acrylic primer (as per manufacturer's				

23	Applying decorative cement based paint of approved quality after preparing the surface including scraping the same thoroughly (plastered or concrete surface) as per manufacture's specification. Two coats.	m2	7500		
24	Acrylic Distemper to interior wall, ceiling with a coat of solvent based interior grade acrylic primer (as per manufacture's specification) including cleaning and smoothening of surface.	m2	500		
25	Acrylic Interior grade acrylic primer of approved quality and brand on plastered or concrete surface old or new surface to receive distemper/ acrylic emulsion paint including scraping and preparing the surface thoroughly, complete as per manufacturer's specification and as per direction of the EIC. (a) One Coat i) Water based interior grade Acrylic Primer	m2	500		
26	Priming one coat on timber or plastered surface with synthetic oil bound primer of approved quality including smoothening surfaces by sand papering etc.	m2	1500		
27	Priming one coat on steel or other metal surface with synthetic oil bound primer of approved quality including smoothening surfaces by sand papering etc.	m2	1000		
28	Painting with best quality synthetic enamel paint of approved make and brand including smoothening surface by sand papering etc. including using of approved putty etc. on the surface , if necessary : (a) On timber or plastered surface : (Super gloss) Two coats (with any shade except white)	m2	750		
	(b) On steel or other metal surface with super gloss Two coats (with any shade except white)	m2	500		
29	Painting with superior quality aluminium paint of approved make and brand including smoothening surface by sand papering etc. on steel surface : a. One coats	m2	195.05		
30	Painting block letters or digits in Black Japan or any approved paint as per direction. Size above 15 cm. and upto 20 cm.	nos	352.5		
31	Scraping of moss, blisters etc. thoroughly from exterior surface of walls necessitating the use of scraper, wire brush etc.	m2	4500		
32	M.S. round or square bar grating of windows etc. fitted and fixed in holes of window frame and with intermediate flat bar stiffener (with necessaryholes for the grating bars and with the ends turned and fixed to timer frame with necessary screws) complete, as directed.	kg.	184.64		
33	Anodised aluminium barrel / tower / socket bolt (full covered) of approved manufactured from extruded section conformig to I.S. 204/74 fitted and fixed with cadmium plated screws: (i) 15 cm long X 10mm dia bolt.	nos	125		
34	Supplying bubble free float glass of approved make and brand conforming to IS: 2835-1987. i) 5 mm thick clear glass.	m2	10		
35	Iron door handle of approved quality fitted and fixed complete: (i) 150mm X 5.5mm.	nos	120		
36	Iron hasp bolt of approved quality fitted and fixed complete (oxidised) with 16 mm dia rod with centre bolt and round fitting. (a) 250 mm long.	no	75		
37	Iron butt hinges of approved quality fitted and fixed with steel screws, with ISI mark. (i) 100mm X 75mm. X 3.50mm	nos	125		
38	Iron socket bolt of approved quality fitted and fixed complete. (d) 225mm long X 10mm dia bolt.	nos	87.5		

39	Collapsible gate with 40mm X 40mm X 6mm Tee as top and bottom guide rail, 20mm X 10mm X 2mm vertical channels 100mm apart in fully stretched position 20mm X 5mm M.S. flats as collapsible bracings properly rivetted and washered including 38mm steel rollers including locking arrangements, fitted and fixed in position with lugs set in cement concrete and including cutting necessary holes, chasing etc. in walls, floors etc. and making good damages complete. (Add extra @ 1% for each addl. floor upto 4th floor and @ 1.25% for each addl. floor above 4th floor) In ground floor. (Payment will be made on the area of the gate covered by two guard rails and two extreme channels)	m2	25		
40	Labour charge for fabrication and installation of composite door, window , partitions made from anodized extruded alloy aluminium sections for the following units:- Partly glazed partly panelled or fullyglazed single leaf aluminium swing doormade of extruded and anodized alloy aluminium sections, fabrication includingcutting to proper shape and size, drilling and aligning, fitted with heavy duty hydraulicaction floor sping placed in the floor with mending damages,with top pin assembly of approve make and brand, fitted with in builtlocking arrangement, flush bolt, glazing clipsand all other necessary fittings, fixtures, adhesives and joineries, cutting glass of approved make to requisite shape and sizefitting with dry set neoprene or EPDM gasketing, cutting to requisite shape and sizepanel board (prelaminated particle block)fixing them with glazing clips as per drawing, specification and direction of Engineer in charge.	m2	23.5		
41	Supplying, fitting and fixing 10 litre P.V.C. Low-down conforming to I.S. specification with P.V.C. fittings complete, C.I. brackets including two coats of painting to bracket etc.	nos	100		
42	Best quality sink in mosaic in silver grey colourwith C.P. waste and other fittings, rubber plug and chain, C.I. heavy brackets with two coats of approved paint. (i) 600mm X 450mm X 200mm	nos	50		
43	Supplying, fitting and fixing Peet's valve fullway gunmetal standard pattern best quality of approved brand bearing I.S.I. marking with fittings (tested to 21 kg per sq. cm.). (i) 25 mm	nos	18		
44	Supplying, fitting and fixing with cement jointing (3:1) salt glazed stoneware pipe including excavation of earth upto 1.50 metre depth in all sorts of soil both mixed or unmixed and refilling (but excluding concreting at bottom and sides). (i) 100 mm	nos	45		
45	Supplying, fitting and fixing Orissa pattern water closet in white glazed vitreous chinaware of approved make in position complete excluding 'P' or 'S' trap (excluding cost of concrete for fixing). (i) 580 mm X 440 mm	nos	18		

46	<p>P.V.C. Door shutter -37mm thick</p> <p>Supplying fitting and fixing P.V.C. door shutter of approved quality & shade in position, the style & rail of the P.V.C. door shutter will be made of rigid P.V.C. multicavity hollow chamber of suitable size and section with 2.0mm (+/- 0.2mm) wall thickness, the section will have 2nos. built in beads. horizontal & vertical section shall be fixed to each other by self tapping screws and 2 nos. of solid plastic or M.S. tubular galvanised brackets of length 200mm X 80mm and other 100mm X 100mm both 1.20 mm in each corner of the shutter frame for placing hinges. Polymer based multicavity hollow section of 105mm X 37 mm with 2.0mm (+/-0.2mm) wall thickness will be fitted in the middle as lock rail reinforced by solid polymer bnr of 200mm long at both ends & screws for both sides. The section frame will then be fitted in by prepanels of size 100mmX20mm, with wall thickness 1.2mm (+/-0.2mm) and 2 nos. of 6mm dia bright rod will be inserted horizontally with both side check and nut system and stretches where fixing of hinges / hasp bolt / tower bolt / door ring are required to be strong enough to withstand wear and tear. The rate is inclusive of cost of all materials, labour, and hire of tools and plants and appliances. Carriage of all materials taxes and all other incidental charges complete. The rate is exclusive of cost of hinges, hasp bolt, tower bolt, door ring etc.</p>	m2	50		
47	<p>Supplying fitting and fixing in position approved P.V.C. door frame (matt finish) made of extruded P.V.C. multichamber hollow section having dimensions 60mm X 50mm X 2mm (+/-0.2mm) horizontal section will be joined with vertical section by galvanised steel screws after inserting two number steel brackets as reinforcement making suitable space for placing hinges, one steel tube 40mm X 20mm X 1.20mm will be inserted on one full vertical side of the frame (hinge side) as reinforcement. the frame will then be fixed in the opening with the help of P.V.C. expandable fastener wooden gutties and galvanised steel screws including cost of all materials and labour, hire charges of tools and appliances, carriage of all materials, taxes and all other incidental charges complete.</p>	Mtr.	125		
48	<p>Wash basin white vitreous china of approved make (without fittings) supplied, fitted and fixed in position on 75mm X 75mm X 75mm wood blocks and C.I. brackets including two coats of painting of C.I. brackets.</p> <p>(i) 630 mm X 450 mm size</p>	each	20		
49	<p>Supplying, fitting and fixing Stainless steel sink complete with waste fittings and two coats of painting of C.I. brackets. (i) 630 mm X 550 mm X 180 mm</p>	each	10		
50	<p>Supplying, fitting and fixing white vitreous china best quality approved make wash basin with C.I. brackets on 75 mm X 75 mm wooden blocks, C.P. waste fittings of 32 mm dia., one approved quality brass C.P. pillar cock of 15 mm dia., C.P. chain with rubber plug of 30 mm dia., approved quality P.V.C. waste pipe with C.P. nut 32 mm dia., 900 mm long approved quality P.V.C. connection pipe with heavy brass C.P. nut including mending good all damages and painting the brackets with two coats of approved paint.</p> <p>(i) 550 mm X 400 mm size</p>	each	20		
51	<p>Supplying profiles of required section made of Aluminium Alloy Extrusions conforming to IS: 732-1983 and IS: 1285- 1975; Anodized (with required film thickness and specified colour / natural) matt finished conforming to IS: 1868-1983 for fabrication of composite door, sliding & casement windows, partitions, formed of basic sections of any ISI embossed / certified make and brand as per direction of Engineer - In- Charge. (Payment will be made on finished length of the work).</p> <p>(A) In 10-12 Micron thickness Anodizing film</p> <p>i) Natural white</p> <p>i) Fixed partitions. (Unsupported length of vertical member upto 1.5 mtr. Height of both ends of vertical member restrained but panels within 0.9 sq.m.)</p> <p>ii) Top, bottom & side member.</p>	m	97.65		
	ii) Intermediate member.	m	105.21		
	iii) Glazing clip.	m	395.46		

52	Shutters of 2/3 rd panel and 1/3rd glazed of doors and windows as per design (each panel consisting of a single plank without joint and with ordinary glass of 7.4kg. Per sq.m./3mm thick) fitted with putty bed and teak wood beads and nalls including fitting and fixing shutters in position but excluding the cost of glass, putty, teak bead, nails, hinges etc.and other fittings, in ground floor. (iii) 35mm thick shutters with 19mm thick panel. (a) Sishu, Gamar, Champ, Bhola, Mogra, Hallak.	m2	57.50		
53	Renewing hinged Cleate with old hinge and new screws. (i) Local Sal.	nos	7.5		
54 A	Supplying P.V.C. water storage tank of approved quality with closed top with lid (Black) - Multilayer				
(i)	(a) 500 litre capacity	each	5		
(ii)	(b) 1000 litre capacity	each	3		
(iii)	(d) 2000 litre capacity	each	2		
B	Labour for hoisting plastic water storage tank.				
	(i) Upto 1500 litre capacity.				
	(a) Upto 1st story from G.L.	each	8		
	(b) Extra for each additional story	each	8		
	(ii) Above 1500 litre upto 5000 litre capacity.				
	(a) Upto 1st story from G.L.	each	2		
	(b) Extra for each additional story	each	2		
C	Labour for lowering plastic water storage tank and stacking in places as directed.				
	(i) Upto 1500 litre capacity				
	(a) From 1st floor to G.L.	each	8		
	(b) Extra for each additional story	each	8		
	(ii) Above 1500 litre upto 5000 litre capacity				
	(a) From 1st story to G.L.	each	2		
	(b) Extra for each additional story	each	3		
D	Labour for punching hole in plastic water storage tank upto 50 mm dia.	each	41		
55	Supplying. Fitting, fixing G.I chain link fencing 75 mm x 75 mm mesh 12 g wire to the R.C.C or wooden posts with galvanised hooks of staples etc. complete as per direction.	m2	172		
56 A	Supplying, fitting and fixing maruti Lock (100mm)	Pair	3		
56 B	Supplying, fitting and fixing PVC roller for sliding windows as per direction of Engineer in charge.	nos	12		
57	Godrej Hydraulic door closer fitted and fixed complete. (a) Medium type	nos	18		
58	Supplying 4 lever mortice lock of any approved make and brand as per direction of the Engineer-in-charge. (i) 150 mm.	nos	13		
59	Wash basin white vitreous china of approved make (without fittings) supplied, fitted and fixed in position on 75mm X 75mm X 75mm wood blocks and C.I. brackets including two coats of painting of C.I. brackets. (i) 550 mm X 400 mm size	each	15		
60	Surface Dressing of the ground in any kind of soil including removing vegetation inequalities not exceeding 15 cm depth and disposal of the rubbish within a lead upto 75 m as directed.	m2	500		
61	Earth work in filling in foundation trenches or plinth with good earth, in layers not exceeding 150 mm. including watering and ramming etc. layer by layer complete. (Payment to be made on the basis of measurement of finished quantity of work) (a) With earth obtained from excavation of foundation.	m3	75		
62	Dismantling all types of masonry excepting cement concrete plain or reinforced, stacking serviceable materials at site and removing rubbish as directed within a lead of 75 m.				

63	Dismantling all types of plain cement concrete works, stacking serviceable materials at site and removing rubbish as directed within a lead of 75 m (a) upto 150 mm. thick	m3	3.75		
64	Dismantling artificial stone flooring upto 50 mm. thick by carefully chiselling without damaging the base and removing rubbish as directed within a lead of 75 m.	m2	225		
65	Stripping off worn out plaster and raking out joints of walls, ceilings etc. upto any height and in any floor including removing rubbish within a lead of 75m as directed.	m2	3500		
66	Ordinary Cement concrete (mix 1:1.5:3) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement if any, in ground floor as per relevant IS codes.	m3	17.5		
67	125 mm. thick brick work with 1st class bricks in cement mortar (1:4) in ground floor.	m2	35		
68	Artificial stone in floor, dado, staircase etc with cement concrete (1:2:4) with stone chips, laid in panels as directed with topping made with ordinary or white cement (as necessary) and marble dust in proportion (1:2) including smooth finishing and rounding off corners including raking out joints or roughening of concrete surface and application of cement slurry before flooring works using cement @ 1.75 kg/sq.m all complete including all materials and labour. In ground floor. 3 mm. thick topping (High polishing grinding on this item is not permitted with ordinary cement). Using grey cement (ii) 25 mm. thick	m2	225		
69	Taking out Mirzapur or glazed porcelain tiles carefully by chiselling from walls or floor including stacking serviceable material as directed.	m2	250		
70	M.S. or W.I. Ornamental grill of approved design joints continuously welded with M.S., W.I. Flats and bars of windows, railing etc. fitted and fixed with necessary screws and lugs in ground floor. (i) Grill weighing above 10 Kg./sq. mtr. and up to 16 Kg./sq. mtr.	kg	500		
71	Supplying, fitting and fixing steel rolling shutter profile type with 18 B.G. of approved type steel latch section 75mm wide, fitted with coil wire spring to necessitate the fitting of required Nos. of C.I. Pulleys on heavy type solid drawn seamless steel tube complete with locking arrangements both inside and outside specially built up side guide channels including providing a hood for the steel rolling shutter in the room, painting two coats of approved aluminium paint over a coat of red lead primer complete.	m2	7.25		
72	Renewing one point steel (oxidised) handle of steel door and windows as directed including painting complete.	Each	400		
73	Renewing hinge of steel shutter including taking out old one by cutting and fixing new hinges by welding and mending good damages complete.	Each	150		
74	Supplying, fitting and fixing windows and ventilators with or without integrated grills conforming to IS 1038-1975 and manufactured from rolled steel sections conforming to IS 7452-1974 with non-friction projecting type, box type hinges, glazing clips, lugs locking bracket, handle plate etc, including hoisting in position, straightening if required, fixing lugs in cement concrete (1:2:4) with stone chips 20 mm down cutting holes and mending good damages to match with existing surface complete in all respect excluding glazing. Openable steel windows as per IS sizes with side hung shutters and horizontal glazing bars with/without fixed type ventilators.	m2	25		
75	Supplying fitting fixing two point nose alluminum handle	mt	300		
76	Supplying fitting fixing alluminum peg stay 300 mm long	mt	350		
77	Repairing collapsible gate by cutting out all rivets as necessary re-assembling all members including welding pieces of channels, straightening bent bars and rivetting with new rivets and fitting in position and painting two coats.	m2	20		
78	Wood work in door and window frame fitted and fixed in position complete including a protective coat of painting at the contact surface of the frame excluding cost of concrete, Iron Butt Hinges and				

79	Supplying solid flush type doors of commercial quality, the timber frame consisting of top and bottom rails and side styles of well seasoned timber 65mm wide each and the entire frame fitted with 37.5mm wide battens placed both ways in order to make the door of solid core and internally lipping with Garjan or similar wood veneers using phenol formaldehyde as glue etc. complete, including fitting, fixing shutters in position but excluding the cost of hinges and other fittings in ground floor. (a) 35 mm thick shutters (single leaf)	m2	22.5		
	(b) 32 mm thick shutters (single leaf)	m2	27.5		
80	Plaster (to wall, floor, ceiling etc.) with (1:4) sand and cement mortar including rounding off or chamfering corners as directed and raking out joints including throating, nosing and drip course, scaffolding/staging where necessary. (a) 15 mm thick plaster	m2	500		
	(b) 10 mm thick plaster	m2	80		
81	Extra for each additional floor over the rate for ground floor of item 3 & 80 i) External plaster a) up to 4th floor	m2	750		
82	Supplying best Indian sheet glass panes set in putty and fitted and fixed with nails and putty complete. (In all floors for internal wall & upto 6 m height for external wall) sheet glass panes (i) 3 mm thick (weighing 7.4 kg/Sq.m)	m2	50		
83	Supplying best Indian Reinforced white safety glass 6 mm thick including cutting to required sizes, setting on putty bases and fitted and fixed with teak glazing bead (19mm X 12mm) including putty and nails as necessary complete. (in all floors for internal wall & upto 6 m height for external wall)	m2	10		
84	Supplying, fitting & fixing UPVC pipes A- Type and fittings conforming to IS:13592- 1992 with all necessary clamps nails, including making holes in walls, floor etc. cutting trenches in any soil through masonry concrete structures etc if necessary and mending good damages including joining with jointing materials (Spun Yarn, Valamoid/Bitumen/M-Seal etc) complete. (a) 110 mm. Dia.	m	62.5		
	(b) 75 mm. Dia.	m	40		
85	Supplying, fitting & fixing UPVC pipes A- Type and fittings conforming to IS:13592- 1992 with all necessary clamps nails, including making holes in walls, floor etc. cutting trenches in any soil through masonry concrete structures etc if necessary and mending good damages including joining with jointing materials (Spun Yarn, Valamoid/Bitumen/M-Seal etc) complete. Bend 87.5 degree (a) 110 mm. Dia.	Each	15		
	(b) 75 mm. Dia.	Each	10		
86	Supplying, fitting and fixing brass ferrule including connection with G.I. pipes of TATA make of following dia. and upto 450 mm long with screw, jamnut, sockets etc., complete in all respect, including cutting trenches in all sorts of soil and filling up the trenches as per direction of the Engineer - in - Charge. (a) 20 mm dia.	Each	2		
	(b) 15 mm dia.	Each	3.5		
87	Supplying, fitting and fixing G.I. pipes of TATA make with all necessary accessories, specials viz. socket, bend, tee, union, cross, elbo, nipple, long screw, reducing socket, reducing tee, short piece etc. fitted with holder bats clamps, including cutting pipes, making threads, fitting, fixing etc. complete in all respect including cost of all necessary fittings as required, jointing materials and two coats of painting with approved paint in any position above ground. (Payment will be made on the centre line measurements of total pipe line including all specials. No separate payment will be made for accessories, specials. Payment for painting will be made separately) (a) 15 mm dia. medium quality	Mt	150		
	(b) 20 mm dia. medium quality	Mt	75		
	(c) 25 mm dia. medium quality	Mt	30		
	(d) 32 mm dia. medium quality	Mt	30		

88	Supplying, fitting and fixing in position G.I.pipes of TATA make for underground works with all necessary accessories, specials viz. socket, bend, tee, union, cross, elbow, nipple, short piece etc. including cost of all materials, jointing materials, cutting pipes, making threads, cutting trenches upto 1.5 metre below surface in all sorts of soil and refilling the same as directed with two coats of painting on G.I. pipes and specials with bituminous paint complete in all respect. (Payment will be made on the centre line measurement of the total pipe line including all specials No separate payment will be made for accessorise, specials. payment for painting will be made seperately) (a) 15 mm dia. medium quality	Mt	95		
	(b) 20 mm dia. medium quality	Mt	115		
	(c) 25 mm dia. medium quality	Mt	50		
	(d) 32 mm dia. medium quality	Mt	50		
89	Supplying, fitting and fixing shower of approved brand and make. (d) Polythene of approved make (i) 15 mm X 125 mm	Each	100		
90	Supplying, fitting and fixing peet's valve fullway gunmetal standard pattern best quality of approved brand bearing I.S.I. marking with fitting (tested to 21 kg per sq. cm.).				
	(a) 25 mm	Each	8		
	(b) 20 mm	Each	4		
	(c) 15 mm	Each	6		
91	Supplying, fitting and fixing bib cock or stop cock. (i) Polythene Bib Cock / Stop Cock (HD) with metal inlet (EMCO / ATLAS or equivalent) (a) 15 mm	Each	80		
92	Supplying, fitting and fixing approved brand P.V.C. CONNECTOR white flexible, with both ends coupling with heavy brass C.P. nut, 15 mm dia. (a) 450 mm long	Each	42.5		
	(b) 600 mm long	Each	57.5		
93	Supplying, fitting and fixing approved brand 32 mm dia P.V.C. waste pipe, with PVC coupling at one end fitted with necessary clamps. (a) 750 mm long	Each	75		
	(b) 900 mm long	Each	100		
94	Supplying, fitting and fixing Waste fiffings complete. C.P. over brass (a) 32 mm	Each	22.5		
95	Supplying, fitting and fixing piller cock of approved make. PTMT Pillar Cock - 15 mm. (Prayag or equivalent).	Each	45		
96	Supplying, fitting and fixing cast iron 'P' or 'S' trap conforming to I.S. 3989 / 1970 and 1729 / 1964 including lead caulked joints and painting two coats to the exposed surface. (Painting to be paid seperately). (a) 100 mm 'P' Trap	Each	7.5		
	(b) 100 mm 'S' Trap	Each	15		
97	Supplying fitting and fixing cast iron extension pipes for using in Traps only (connector) conforming to I.S.3989/1970 and 7229/1964 including lead caulked joints complete and painting two coats to the exposed surface with approved paint complete. (Payment of Painting will however be paid seperately). (a) 100 mm X 150 mm	Each	15		
98	Supplying, fitting and fixing C.I. round grating. (a) 150 mm	Each	30		
99	Supply of UPVC pipes (B Type) & fittings conforming to IS-13592-1992 (A) Single socketed 3 Meter Length (i) 75 mm	mt	75		
	(ii) 110 mm	mt	110		
100	Supply of UPVC pipes (B Type) & fittings conforming to IS-13592-1992 (B) Fittings (i) Door Bend (T.S.)				

	(b) 110 mm	Each	25		
	(ii) Vent Cowl (a) 75 mm	Each	4		
	(b) 110 mm	Each	5		
	(iii) Pipe Clip (a) 75 mm	Each	35		
	(b) 110 mm	Each	55		
101	Supplying, fitting and fixing Shoallow water closet indian pattern (I.P.W.C.) of approved make in white vitreous chinaware in position (excluding cost of concrete for fixing). I) 510 mm long	Each	17		
102	Supplying, fitting and fixing E.W.C. in white glazed vitreous chinaware of approved make complete in position with necessary bolts, nuts etc. (a) With 'P' trap	Each	12		
	(b) With 'S' trap	Each	12.5		
103	Supplying, fitting and fixing Orissa pattern water closet in white glazed vitreous chinaware of approved make in position complete excluding 'P' or 'S' trap (excluding cost of concrete for fixing). (a) 530 mm X 410 mm	Each	12.5		
104	Supplying, fitting and fixing Flat back urinal (half stall urinal) in white vitreous chinaware of approved make in position with brass screws on 75 mm X 75 mm X 75 mm wooden blocks complete. (a) 590 mm X 390 mm X 380 mm	Each	18		
105	Supplying, fitting and fixing squatting plate with integral flushing in white4 vitreous chinaware of approved make in cement concrete (6:3:1) with jhama chips complete. (Payment of concrete will be paid seperately). (a) 450 mmX 350 mm	Each	6		
106	Supplying, fitting and fixing Foot rest for water closet of size 275 mm X 125 mm with (a) Porcelain of approved make.	Each	14		
107	Supplying fitting and fixing Closet seat of approved make with lid and C.P. hinges, rubber buffer and brass screws complete. (i) E.W.C. (a) PLASTIC (HALLOW TYPE) BLACK	Each	37.5		
108	Supplying, fitting and fixing 32 mm dia. Flush Pipe of approved make with necessary fixing materials and clamps complete. (a) Polythene Flush Pipe	Each	72.5		
109	Supplying fitting and fixing 18 mm thick marble partition slab with chawk doongri marbel square cut, both sides polished with two front corners rounded and edges polished.	m2	25		
110	Supplying, fitting and fixing porcelain partition wall of approved make of size 618 mm X 310 mm complete in all respect.	Mtr	25		
111	Supplying, fitting and fixing bevelled edged mirror 5.5 mm thick silver red as per I.S. 3438 / 1965 together with brass C.P. hinges. (a) 600 mm X 450 mm	Each	20		
112	Supplying, fitting and fixing PTMT Smart Shelf of approved make of size 300 mm.	Each	14		
113	Supplying, fitting and fixingtowel rail with two brackets. (a) 25 mm dia. And 600 mm long	Each	19		
114	Taking out old damaged tarfelt from the roof, parapet etc. preparing the roof surfaces by removing all spoils, blisters, moss etc. from the working site and disposal of the same beyond the compound and cleaning the site in all respect as per direction of Engineer-in- Charge. All floor	m2	3800		

115	<p>Supplying and laying standard six course bituminous water proofing treatment as per specification laid down in I.S. 1346 - 1991 to be finished with pea size gravel including necessary preparatory works such as shaping mouth of outlets, cutting chase as and where necessary and refilling with sand and Cement mortar (4:1) or Cement Concrete (4:2:1) with graded stone chips before undertaking the treatment including cutting grooves in parapet and inserting edge of felt and mending good damage complete in all respect as per direction of Engineer - in - Charge including cost of all materials and labours and incidental charges but excluding the cost of Cement Mortar or concrete required for levelling and grading. (In sloped roof Course sand of approved varieties is to be used in place of Pea size gravels as sixth and final course.)</p> <p>i) 1st, 3rd and 5th Course with bonding materials of hot applied industrial blown type bitumen of grade 85/25 or 90/15 conforming to I.S.702 - 1988 @ 12Kg/10Sqm on each course.</p> <p>ii) 2nd and 4th course with Hessian base self finished bitumen type-3 Gr.-I conforming to I.S. 1322-1993 (weighing 23kg/10Sqm gross with bitumen content 12.10kg/10Sqm) tested under the provision of I.S. 13826 - 1993 part VIIIiii) 6th course with washed and clean pea sized gravel or grit @ 0.006 cum/Sqm.</p> <p>A. Over Flat Roof.</p>	m2	3500		
	B. Over Sloped Roof.	m2	300		
116	Scraping and removing greasy soot from walls or ceiling of kitchen or similar smoke affected rooms and preparing the surface.	m2	2500		

Total Amount Rs.

Total Amount Quoted (In words) :

Signature of Bidder With Date & Stamp

