

BILL OF QUANTITIES
FOR
RENOVATION OF ROOMS
OF
HALL OF RESIDENCE-02
FOR
NATIONAL INSTITUTE OF TECHNOLOGY
AT
ROURKELA
ORISSA

CONSULTANT:-

**M/S. DESIGN TECHNO
Koustuv Tower, 2nd Floor
Bikash Nagar, Badambadi,
Cuttack- 753012
ORISSA**

ABSTRACT FOR HALL-2
(FOR CIVIL WORKS)

1	CIVIL WORK.	
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<u>SL.NO</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u> Rs
1	<u>SECTION:1</u> EARTH WORK IN EXCAVATION	
2.	<u>SECTION:II</u> PLAIN/REINFORCED CEMENT CONCRETE WORK	
3	<u>SECTION-III</u> BRICK WORK	
4.	<u>SECTION-IV</u> WOOD WORK	
5.	<u>SECTION-V</u> STEEL WORK	
6.	<u>SECTION-VI</u> FLOORING	
7.	<u>SECTION-VII</u> PLASTERING	
8.	<u>SECTION-VIII</u> ALUMINUM WORK	
9	<u>SECTION-IX</u> FINISHING WORK	
10	<u>SECTION-X</u> ROOFING	
11	<u>SECTION-XI</u> WATER PROOFING TREATMENT	
12	MISCELLANEOUS ITEMS <u>SECTION-XII</u>	
13	<u>SECTION-XIII</u> REPAIRING WORKS	
	TOTAL	

SECTION-1
EARTH WORK EXCAVATION

SL.NO	DESCRIPTION	UNIT	QUANTITY	RATE Rs	AMOUNT Rs
1.	Clearing site including removal of grass, bush and saplings of girth up to 3cm. measured at height of 1m. above ground level and remove of rubbish up to distance of 50m. out side the area cleared.	Sqm	100.00		
2	Earth work in excavation in foundation trenches or drains(not exceeding10sqm. on plan) dressing of sides and ramming of bottoms , lift up to 1.5m including getting out the excavation soil & disposal of surplus excavated soil as directed, within lead of 50m.				
i)	All kind of soil.	Cum	4.0		
ii)	Hard Rock (without blasting) stack measurement will be followed.	Cum	4.0		
3.	Extra over excavating earth exceeding depth 1.50m but not exceeding 3.0m	Cum	4.0		
ii)	Extra over excavating earth in hard rock exceeding 1.5m depths up to 3.0m depths. (Rate is over corresponding basic item for Depth up to 1.5m).	Cum	2.0		
4.	Filling available excavated earth (excluding rock) in trenches, plinth,sides of foundations etc. in layers not exceeding 15cm. in depth with watering Lead up to 50m and lift up to 1.5m (Payment to be made on measured of finished quantity).	Cum	4.0		
5.	Filling in plinth by fine sand in layers not exceeding 150mm. and up to 750mm. as directed & consolidating same by thorough saturation with water ramming complete including the cost of supply of sand (Payment to be made on measured of finished quantity).	Cum	10.0		
6. i)	Supplying chemical emulsion in sealed containers including delivering, diluting and injecting chemical emulsion for post constructional anti-termite treatment and creating a continuous chemical barrier at junction of wall and floor, along the external perimeter of building,expansion joints over the top surface of consolidated earth on which apron is to be laid and surroundings of				

SL.NO	DESCRIPTION	UNIT	QUANTITY	RATE Rs	AMOUNT Rs
	conduits, pipes etc. complete (Plinth area of the building at ground floor approx 100sqm) using Chlorpyriphos/ Biflex emulsifiable concentration. The entire work is to be carried out as per specification laid down in relevant. IS code of latest edition. 15-6313 (part-III) in para 4.3.1.1 The agency has to give guarantee for a period 7 years in bond paper for this work.	Sqm.	3365.00		
6. ii)	<p>Supplying chemical emulsion in sealed Containers including delivering, diluting and injecting chemical emulsion for preconstruction anti-termite treatment and creating a continuous chemical barriers and all round the column pits, wall treatment, under basement excavation, top surface, of plinth filling , junction of wall & floor,along the external perimeter of building, expansion joints, over the top surface of consolidated earth on which apron is to be laid, surroundings of pipes and conduits etc, complete (plinth area of the building at ground floor approx 50 Sqm) Chloropyrophos / Biflex emulsifiable concentration. The entire work is to be carried out as per laid down in para 4.3.1.1 of I.S.code 15 – 6313 (part – III) of latest edition.</p> <p>The agency has to give guarantee for a period of minimum 7 years in bond paper for the antitermite work.</p>	Sqm	50.0		

SECTION-II
PLAIN/REINFORCED CEMENT CONCRETE WORK

SL.NO	DESCRIPTION	UNIT	QUANTITY	RATE Rs	AMOUNT Rs
1.	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering- All work up to plinth level.				
a	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size).	Cum	50.00		
b.	1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size)..	Cum	4.0		
2	Providing and laying damp proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size)..	Sqm	10.00		
3.	Extra for providing & mixing water proofing material in cement concrete work in the proportion recommended by the manufacturers (Sika latex power)	Per bag of 50kg cement used in the mix	10.00		
4.i)	Providing and laying in position specified graded of reinforced cement concrete in foundation, footing, bases of columns, tie beam, suspended floors, roofs having slope up to 15 degree, landing, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases, fillets walls (any thickness) including attached pilasters, buttresses, plinth and string courses columns, pillars, piers, abutments, posts and struts, etc. up to floor five level excluding cost of centering, shuttering, finishing and reinforcement				
a	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20mm nominal size).	Cum.	20.00		

SL.NO	DESCRIPTION	UNIT	QUANTITY	RATE Rs	AMOUNT Rs
5	Precast reinforcement cement concrete in shelves including setting in cement mortar 1:3(1 cement : 3 coarse sand) cost of required centering , shuttering and finishing with neat cement punning on exposed surface (excluding the cost of reinforcement) with 1:2:4 (1 cement :2 coarse sand: 4 graded stone aggregate 12.5mm nominal size)				
a)	50mm thick before finishing.	Sqm	20.00		
b)	25 mm thick before finishing	Sqm	10.00		
6	Providing and laying cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone chips 20mm nominal size) at all levels to windowsills, coupling etc. including cost of centering & shuttering etc complete.				
		Cum	2.00		
7	Providing and fixing centering and shuttering including strutting, propping etc including providing and laying waterproof paper to make watertight shuttering & removal of form for concrete work at all levels above plinth level. (only the area in contact with concrete to be measured)9 to 12mm. thick approved quality ply board shuttering in any concrete work.				
		Sqm	55.00		
8	Providing & fixing centering & shuttering including strutting, propping etc, providing & laying water proof paper to make watertight shuttering & removal of form for concrete work at all levels above plinth. (only the area in concrete to be measured) 9 to 12mm. thick approved quality ply board shuttering in any concrete work.				
		Sqm	110.00		

SL.NO	DESCRIPTION	UNIT	QUANTITY	RATE Rs	AMOUNT Rs
9	Extra for shuttering for additional height over 4mtr up to 5.5 mtr	Sqm	10.00		
10	Reinforcement (grade Fe 415/ 500) for R.C.C. work including straightening, cutting, bending ,posting and binding all complete (Binding wires cost including) SAIL / TATA				
i)	T.M.T. bars (Grade Fe415/500)	Mt	1.0		
ii)	Mild steel (Grade Fe 250)	Mt	0.20		

SECTION-III
BRICK WORK

SL.NO	DESCRIPTION	UNIT	QUANTITY	RATE Rs	AMOUNT Rs
1	Brick work with (brick of class designation 75) in foundation and plinth in cement mortar 1:6 (1 cement: 6 coarse sand).	Cum	2.00		
2	Brick work (brick of class designation 75) (1:6) in superstructure above plinth level up to floor V level.	Cum	20.00		
3	Half Brick masonry with class designation 75 in superstructure above plinth level up to floor V level cement mortar 1:4 (1 cement :4 coarse sand), including supplying and laying two 6mm ms steel bar in every three layers in all floors and height as per drawing and specification complete . (Reinforcement cost to be included).	Sqm	40.00		
4	Providing & laying single brick flat soling with bricks with class designation 75, including preparing the sub grade to proper level including ramming dressing, & filling joints with locally available sand complete in all respect.	Sqm	10.00		
5	Extra over item no.1 above for forming circular hole in wall for fixing exhaust fans including cement plaster 1:4 to inner faces (approximately 300mm dia to 375mm dia)at all level and height)	Each	10.00		
6 a)	Providing and laying 75mm thick brick work with brick of strength not less than 75kg/sqcm laid in cement mortar 1:3(1 cement: 3 coarse sand) inplinth or curved wall etc complete in all respects including laying 1 nos 6mm bar at every alternate layers in all floors and height as per drawing and specification complete	Sqm	10.00		
b)	Extra for 6mm.steel..	Sqm	10.00		

SECTION-IV
WOOD WORK

SL.NO	DESCRIPTION	UNIT	QUANTITY	RATE Rs	AMOUNT Rs
1.	Providing & fixing pressed cold steel door frame of size 80mmx55mm made with 1.25mm thick CR steel plate bend to shape as per drawing fixed to wall with M.S Holdfast welded to frame , all complete including making good the wall & floor as per direction of engineer-in-charge.(Cost of hold fast and cost of concrete to be paid separately). Frame shall be coated of Coaltar paint & to be filled with cement concrete (1:2:4) mix.	RM	15.00		
2	Providing kiln seasoned & chemically treated sal wood in frames of doors and fixing in position including two coats of wood preservative applied to rear of frame in contact with masonry & concrete surfaces IS 12896 :1990))	Cum	5.00		
3	Providing and fixing 35mm thick flush door shutter , ISI marked non decorative type with solid block board construction with frame of first class hard wood and well matched, commercial veneering on both faces of shutter, (grains and cross bands on face veneers)bondedwithphenolformaldehyde synthetic resin finished as per specification mentioned (Drawing) with teak wood lipping out of 6mm thick. (Excluding the cost of fittings)	Sqm	10.00		
4	Providing and fixing wooden panelled or panelled and glazed shutterers for doors , windows and clere storey windows including black enameled M.S butt hinges with necessary screws , (panelingwhichwillbepaidforseparately) kiln seasoned and chemically treated secondclasshard(kasi.,tenra,piasal,Gambhari) wood 38mm the shutter frame.	Sqm	385.0		
5	Providing and fixing wooden paneling fordoorswindowandclerestory windows (Areaofopeningfopanelinsertsexcluding portion inside grooves or rebates to be measured) .Paneling for paneled shutters 25mm thick kiln seasoned chemically treated second-class hard (kasi,tenra,piasal,Gambhari) wood.	Sqm	290.0		

SL.NO	DESCRIPTION	UNIT	QUANTITY	RATE Rs	AMOUNT Rs
6	Providing and fixing wooden moulded beading to door and window frames with iron screws, plugs and priming coat on unexposed surface etc.complete.				
a	Second class teak wood 50x20mm	Mtr	200.00		
7	Providing 40mm X3mm flat iron hold fast 25cm long including fixing to frame with 10mm diameter bolt,nuts,& wooden plugs and embeddings in cement concrete (cost excluding) block 30cmx10cmx15cm 1:2:4 mix (1 cement:2coarse sand:4 graded stone aggregate 20mm nominal size	Each	900.0		
8	Providing and fixing bright finished M.S butt hinges with necessary screws etc.complete125mmx80mmx4mm(ordinary type)welded to door frame where required.	Each	500.0		
9	Providing and fixing 50mm bright finished stainless steel cup board or ward robe knob with necessary screws.Etc complete..	Each	5.00		
10	Providing and fixing stainless steel handles 150mmx10mm conforming to IS:4992 with necessary screws.Etc complete.	Each	3092.00		
11	Providing and fixing 75mm special quality bright finished stainless steel cupboard or wardrobe locks with four levers including necessary screws etc.complete(best make of approved quality)	Each	6.00		
12	Providing and fixing bright finished stainless steel hanging type floor double door stopper with necessary screws etc. complete .	Each	530.0		
13	Providing and fixing bright finished Hydraulic door closer (Best make of approved quality) with necessary accessories and screws etc. complete.	Each	3.00		
14	Providing and fixing stainless steel tower bolt with necessary screws etc.complete.	Each	4120.0		
a	150mmx10mm				
b	300mmx12mm	Each	540.0		

SL.NO	DESCRIPTION	UNIT	QUANTITY	RATE Rs	AMOUNT Rs
15	Providing and fixing bright finished stainless steel 100 mm mortise latch and lock with six levers and a pair of anodised (anodic coating)not less than grade AC 10 as per IS :1868 aluminum lever handles with necessary screws etc complete (Best make of approved quality).	Each	2.00		
16	40mm dia. Rubber buffer fixed to wall with m.s screws. .	Each	530.00		
17	Providing and fixing Godrej make door bolt having integrated locking arrangements (Kaadi Tala) with nuts and screws etc complete 250mmx10mm	Each	270.0		
18	Providing and fixing m.s. Curtain hooks with coiled wire with end hooks over wooden plugs in wall to be fixed over window and cupboard.	Each	4.00		
19	Providing and fixing curtain rod 20mm dia of 1.25mm thick chromium plated stainless steel plate with wooden brackets fixed to the wall with stainless steel screws all complete.	Meters	4.00		
20	Providing and fixing 30mm moulded P.V.C./fiber door with solid second class seasoned & chemically treated hard wood for fixing required fixtures, top moulding layer should be minimum 2mm. thick hot pressed over the core . Design, shade & quality (Dura sleek or equivalent make) should be approved by Architect.	Sqm	10.00		
21	Providing and fixing 4.0mm clear glass in wooden window and ventilators as per drawing and design complete to satisfaction of Engineer-in-charge/Architects rate include cost of glass, glasss fixing putty, nails etc.	Sqm	1015.0		

SL.NO	DESCRIPTION	UNIT	QUANTITY	RATE Rs	AMOUNT Rs
22 a)	Removal of existing sal wood chauktha for repairing and refixing (excluding cost of repair & holdfasts) including making good the wall cuttings complete .(door/window, ventilator) to satisfaction of Engineer-in-charge/Architects	Each	320.0		
b)	Removal of existing sal wood chauktha for repairing (excluding cost of repair & holdfasts) including making good the wall cuttings complete .(window) to satisfaction of Engineer-in-charge/Architects	Each	120.0		
23	Removal of existing shutter for repairing , reaffixing (excluding cost of repair & fittings) including making good the wall cuttings complete .(door/window, ventilator)complete to satisfaction of Engineer-in-charge/Architects .				
i.	Door shutters	Each	160.00		
ii.	Window shutters	Each	530.00		
iii.	Ventilators.	Each	320.00		
24	Providing all materials and labour for repairing of panelled or paneled and glazed shutters for doors, windows and clerestory windows using kiln seasoned and chemically treated second class hard (Kasi,Tentra,Piasal) wood 40mm thick shutter frame(paneling will be paid for separately)	Cum	8.0		
25	Providing and fixing stainless steel door bolt (Aldrop) 300mmx150mmx10mm	Each	40.00		
26	Providing all material and labour for repairing existing door, window chaukatha by removing the damaged members and replacing suitable member from existing chaukatha after minor repairing complete fixing in position including two coats of wood preservative applied to rear of frame in contact with masonry &concrete surface(IS 12896 : 1990)	Each	33.00		

Note:-All fittings are to be approved by Architect / site Engineer – in – charge

SECTION-V
STEELWORK

SL.NO	DESCRIPTION	UNIT	QUANTITY	RATE Rs	AMOUNT Rs
1.	Providing and fixing ISI Marked steel glazed doors,Window and ventilator of standard roller steel section joints mitred and welded with 15mmx3mm lugs, 10cm.Long,embedded in cement concrete blocks 15cmx10cm of 1:3:6 (1 cement :3 coarse sand: 6 graded aggregate 20mm nominal size) or with wooden plug and screws or rawl plugs and screw or with fixing clips or with bolts and nuts as required, including providing and fixing of 4mm thick glass panes plain/pin headed with glazing clips & special metal sash putty of approved make complete including two point nose handle of approved pattern with aplting primer coat of approved steel primer, and also including oxidized m.s. casement stays straighty peg type) with necessary screws etc (300mmm weighing not less than 200gms)all complete as perdirection of engineer in charge Windows –side hung (As per IS 1038 using z or L section)	Sqm	20.0		
2	Providing and fixing M.S.grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. all complete.				
a	Fixed to wall and sill.	Kg	1000.00		
3	Providing and fixing M.S.railing of required pattern with flats, square or round bars etc.along with floor shoe all complete.	Kg	75.00		
4	Providing and fixing M.S.hand rail made with 50 dia M.S. pipe fixed to M.S. balustrades (cost excluded) by means necessary welding ,including mm length (exposed) post &base plate including two coats of synthetic paint luxol/Dulux of approved shade over a coat of zinc chromate primer to m.s. hand rail at all height & level all complete as in drawing and direction Engineer-in-charge	Meters	40.00		

SL.NO	DESCRIPTION	UNIT	QUANTITY	RATE Rs	AMOUNT Rs
5	Providing and fixing in position collapsible steel shutter with vertical channels 20mmx10mmx2mm and braced with flat iron diagonals 20mmx5mm size with top and bottom rail of T-iron 40mmx40mm x6mm with 40m m dia Steel pulleys complete with bolts, nuts, locking arrangement, stoppers, handles, including applying a priming coat of approved steel primer.	Sqm	5.00		
6	Providing and fixing openable and foldable grill gates/shutter with m.s. handle, locking system (sliding bolt and floor bolt) necessary screws and hinges. Fixed to wall by welding with 15mmx3mm lugs, 10cms length embedded in P.C.C. of 1:3:6: (1 cement 3 coarse sand : 6 graded stone aggregate 20mm nominal size),necessary nuts & m.s. parliament hinge or pivots as required complete including applying priming coat of approved steel primer.	Kg	500.00		
7	Providing and fixing m.s. door shutter (16gauge) sheet with angle frame and angle chaukatha (matching existing pattern) including butt hinges complete Welded with 6nos iron holdfast 40mmx3mmx250mm embedded in cement concrete block. At size 30cmx10cmx15cm, complete including cutting holes for hold fast & mending good the damages.	Kg	1100.00		

SECTION-VI
FLOORING

SL.NO	DESCRIPTION	UNIT	QUANTITY	RATE Rs	AMOUNT Rs
1.	Cement concrete flooring 1:2:4 (1 cement 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement including, cement slurry, but excluding the cost of nosing of steps etc. complete 40mm thick with 12mm nominal size stone aggregate.	Sqm	100.00		
2	Cement plaster skirting (up to 30cm height) with cement mortar 1:3 (1 cement :3 coarse sand) finished with a floating coat of neat cement 18mm thick.	Sqm	15.0		
3	Providing & laying ceramic tiles conforming to IS: 13755 and of approved design approx 300mmx300mmx8mm size to floor at all level over minimum 20mm thick cement mortar base 1:4 (1 cement: 4 sand) laid with grey cement slurry & joints finished with approved grouting materials (Sika/Laticrete)	Sqm	15.0		
4	Providing and fixing glazed ceramic tiles conforming to IS 13753 and of approved design/shade approx 200mmx300mmx5.5 to skirting and dado with tile fixing adhesive of approved make including cost there of and providing and laying minimum 10mm thick cement plaster 1:3 (1 cement :3 sand) as leveling course and jointed with white cement slurry including racking out joints in brick wall close, & deep chipping of concrete surfaces	Sqm	223.0		
5a)	Kota stone slab flooring over 25mm thick C.M.1:4 (1 cement:4 Coarse sand) (average) base and jointed with grey cement slurry mixed with pigment to match the shade of slabs including rubbing and polishing complete 20mm minimum thick. (550mmx550mm nominal size)	Sqm	1610.00		

SL.NO	DESCRIPTION	UNIT	QUANTITY	RATE Rs	AMOUNT Rs
b)	Kotta stone in skirting/dado over 12mm C.M. (1:3). (20mm minimum thick)	Sqm	241.0		
6	Kota stone slabs 20mm thick in risers of steps, treads on 20mm (average) thick cement mortar 1: 3 (1 cement : 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing & polishing complete (Single piece of size 1800mmx300mm and 1800mmx150mm).	Sqm	214.0		
7	Providing & fixing 40mm wide and 4mm thick plain glass strips in joints of flooring with cement mortar 1:3 complete in all respects as per drawing.	Meter	20.00		
8	Providing and laying minimum. 18mm to 20mm thick plain white marble strip border of approved design & quality laid in conjunction with kota stone flooring over a bed of 25mm(minimum) thick sand cement mortar 1:3 (1 cement :3 coarse sand) including pointing with white cement mortar 1:2 (1 cement :2 marble dust),rubbing & polishing complete in all respects.Approx 50mm to 100mm wide border.				
a)	Rajnagar white plain marble	Sqm	81.0		
b)	Udayapur Green marble	Sqm	81.0		

SL.NO	DESCRIPTION	UNIT	QUANTITY	RATE Rs	AMOUNT Rs
9	Providing and fixing joints less vitrified porcelain tile 10mm thick Naveen/Kajaria or equivalent make of approved shade & brand to floor with cement slurry over a bed of minimum 25 mm thick 1:4 (1 cement :4 coarse sand) sand cement mortar including necessary P.C.C. 1:2:4 (1 cement 2 coarse sand :4 graded stone aggregate 12mm nominal size)cement concrete backing for adjustment of floor level, finishing joints with white cement mixed with pigment to match the shade of tiles all complete in all respect as per drawing and direction (Mirror polish) size600mmx600mm.	Sqm	1850.0		
10	Providing and fixing 10mm thick vitrified porcelain tile Naveen/Kajaria or equivalent make of approved shade to wall with cement slurry over a bed of minimum 12mm thick 1:4 (1 cement :4 coarse sand) sand cement mortar including finishing the joints with white cement mixed with pigment to match the shade of tiles all complete in all respect as per drawings and direction (Mirror Polish) size 600mmx600mm(approx)	Sqm	277.0		

Note:- All materials are to be approved by Architect/site Engineer-in-charge.

SECTION-VII
PLASTERING

SL.NO	DESCRIPTION	UNIT	QUANTITY	RATE Rs	AMOUNT Rs
1	Providing and laying cement plaster to interior surfaces of walls, column and beams along walls with sand cement mortar complete in all respects as required for completion the work in all floors. Cement plaster 1:6 with cement mortar (1 cement:6 sand)				
a)	16-mm thick plaster for out side	Sqm	610.00		
b)	12-mm thick plaster for inside.	Sqm	845.0		
2	Providing minimum 6mm thick cement plaster (1:4) to ceiling beams, soffit of stair case,chajja projection and isolated column projected beams etc in all floors complete as directed but excluding the cost of forming drip course which will be paid under separate item.	Sqm	675.0		
3	Providing and forming drip course of 30mm widex12mm. Projection in plaster to soffit of projection slab like chajja etc. in all floors at edges with cement mortar1:3complete as directed for completion of work	Meter	20.00		
4	Providing and mixing water proofing compound sika plastocrete or similar approved quality to the cement plaster work as per manufacturers Specification.	Ltr	55.0		
5	Providing and laying white cement based wall putty thickness over a plastered surface to prepare the surface even and smooth complete (Birla, JK,Sika)	Sqm	5600.00		

SECTION-VIII
ALUMINIUM

SL.NO	DESCRIPTION	UNIT	QUANTITY	RATE Rs	AMOUNT Rs
1.	Providing and fixing anodized aluminum windows, ventilators of bronze or approved colour and 15 micron thickness (mat satin finish)and of extruded sections of 34 series conforming to IS: 733 and IS: 1285, anodized transparent or dyed to IS: 1868,(Minimum anodic coating of grade AC15) fixed with rawl plugs and screws etc. at all levels including the cost of coupling member between windows and necessary fittings viz. aluminum handles. friction hinges etc, including providing and fixing 5mm thick clear/obscured float glass panes,gaskets,glazing beads and sealing joints around on both faces between work/lintel and windows with silicon sealants of approved make, provision for fixing glass panes from inside and EDPM/Neoprine weather seats etc all as per drawing at all level sand heights.				
i)	Fixed (Overall portion treated as fixed.)	Sqm	2.0		
ii)	Extra over above for (extra rate admissible for the openable portion only) : side hung shutters..	Sqm	10.0		
2	Providing and fixing twin style door complete with fixed glazed portion manufactured from Bronze or any other approved colour/ anodized (15micron thickness) extruded aluminum alloy section complete with 5mm thick clear float glass for fixed portions, Neoprene dry set glazing gasket, snap in beveled metal glazing clips on both sides, top and bottom styles of extruded aluminum alloy sections of special design for twin style door. 12mm thick plate glass for doors, necessary hardware fixtures, viz,double action floor spring, mortice lock, flush bolt, chromium plated brass tubular handle as per drawing on both faces all complete at all levels and heights.				
i)	Fixed portion				
ii)	Openable portion	Sqm	5.0		
		Sqm	10.0		

SL.NO	DESCRIPTION	UNIT	QUANTITY	RATE Rs	AMOUNT Rs
3	Providing and fixing structural glazing with openings using aluminium section 75mmx50mm power coated (15 micron thick) of OEL or equivalent make fixed to walls /R.C.C. slab using 125mm long HILTI/ FISHER screws 5mm glazing glass (Ocen blue colour) fixed to frame work with adhesive tape & sealed with silicon as per drawing & designing, friction stay of heavy quality (Ebco or equivalent make) to be used for openings. The entire work to be tested for water tightness as directed by Engineer- in -charge/Architect	Sqm	5.0		

SECTION-IX
FINISHING

SL.NO	DESCRIPTION	UNIT	QUANTITY	RATE Rs	AMOUNT Rs
1.	White washing with lime to give an even shades Old/New work (two coats) mixed with approved adhesive complete to the satisfaction of engineer-in-charge.	Sqm	16,150.00		
2	Distempering with 1st quality acrylic washable distemper (ready made of approved manufacturer and of required shade and colour complete as per manufacturer specification. Two coats on old/new work all complete up to the satisfaction of engineer- in –charge..	Sqm	4341.00		
3	Applying one coat of cement primer of approved and manufacture on wall surface.	Sqm	5,000.00		
4	Finishing walls with water proofing cement paint of approved brand & manufacture and of required make, to give an even shade. New work (three coats)@.3.84 kg/10Sqm (snowcem plus or equivalent complete up to the satisfaction of Engineer-in-charge).	Sqm	40.00		
5.	Applying primer coat with ready mixed zink chromate yellow primer of proved brand and manufacture on steel/ galvanized steel works.	Sqm	200.00		
6	With ready mixed pink or grey primer of approved and manufacture wood work (hard and soft wood).	Sqm	1,160.00		
7	Painting. with ready mixed synthetic enamel paint of approved brand and manufacture on wood work (hard and soft wood)/Steel work (two coats)				
a)	Steel work (two coats)	Sqm	932.00		
b)	Wood work (two coats)	Sqm	6410.00		
c)	Over wall putty work.	Sqm	2240.0		

SL.NO	DESCRIPTION	UNIT	QUANTITY	RATE Rs	AMOUNT Rs
8	Providing and applying two coats of exterior acrylic. Emulsion paint "weather shield" of ICI India Ltd .or equivalent of approved shade over a coat of primer of same material with 2:1 mix(2 paint :1 water) by volume at all level including sand papering, clearing and preparation of surfac	Sqm	6800.00		
9	Painting (two coats) synthetic enamel paint of approved brand & of required shade on rainwater, soil waste and pipes and fittings with a coat of zink. Chromate yellow primer to new work as per direction and satisfaction of Engineer-in-charge..				
i)	100mm dia (external).	Mtr	30.00		
ii)	150mm dia.(external)..	Mtr	15.00		
10	Providing and applying Acrylic emulsion paint (two coats complete to satisfaction of engineer-in-charge) of approved brand and manufacturer over a coat of primer as required to wall, ceiling etc.all complete in all floors and height complete.	Sqm	500.00		

SECTION-X
ROOFING

SL.NO	DESCRIPTION	UNIT	QUANTITY	RATE Rs	AMOUNT Rs
1.	Supply fitting, fixing cast iron down pipes of approved quality in position with necessary clamps, nails including making hole in wall floor etc. and cutting trenches in any soil through masonry & concrete structure etc. if necessary & mending good the damages including jointing materials(lead) complete . 100 mm dia (external).				
a)		Mtr	86.4		
2	Supplying fitting, fixing C.I. Specials of down pipes in position with clamps nails etc.with jointing materials including cutting holes in masonry or concrete, mending good damages complete.				
a)	C.I Bend of down pipes 100 mm dia(external)	Each	17.00		
b)	C.I shoe of down pipes 100mm dia (external)	Each	17.00		
c)	C.I. Bend pipes 150mm dia.	Each	16.00		
d)	C.I shoe 150mm dia.	Each	16.00		

SECTION-XI
WATER PROOFING

SL.N O	DESCRIPTION	UNIT	QUANTITY	RATE Rs	AMOUNT Rs
1.	Applying & grouting slurry of cement using 2.75kg/Sqm of cement admixed with proprietary water proofing compound sika latex or equivalent confirming to relevant I.S.mixed as per manufacture specification over the R.C.C. slab including the cleaning the surface before treatments.	Sqm	70.00		
2	Applying and laying screed concrete on the top of the roof in 1:2:4 (1 cement :2 sand :4 stone chips 12.5mm.down) water proofing admixture SIKALATEX or equivalent confirming to revelent I.S. mixed as per manufacturers specification with slope of 1in and necessary haul ring as per direction of engineer-in-charge.Average thickness 50mm.	Sqm	70.00		
3	Filling the expansion joints with SIKAFLEX as one component PU sealant including a backup material like Thermo cool inside the groove of expansion joints. The width to depth ratio of sealant should be 2:1. for 50mm .Gap .	RM	36.00		
4	Water proofing treatment to toilet slabs with elastic two pack acrylic polymer based water proofing system with glass fibre as intermediate member by using approved brand to existing surfaces etc (work should be carried out through specialized agency.)	Sqm	60.00		
a)	Applying & grouting a slurry of cement using 2.75kg/Sqm of cement admixed with proprietary water proofing compound sika latex or equivalent confiming to relevant I.S.mixed as per manufacturers specification over the R.C.C. slab including the cleaning the.				
b)	Laying cement concrete using broken bricks/brick bats 25mm to100 mm size with 50% cement mortar 1:5 (1 cement:5				

SL.NO	DESCRIPTION	UNIT	QUANTITY	RATE Rs	AMOUNT Rs
	course sand) admixed with proprietary waterproofing compound & conforming IS : 2645 to required slope and treating similarly junction of walls up to 300mm height including rounding the junctions of walls and slabs.				
c)	After two days of proper curing applying the second coat of cement slurry admixed with proprietary water proofing compound conforming to propriety I.S 2645..				
d)	Finishing the surface with 20mm thick joints less cement mortar of mix 1:4 water proofing compound confirming to I.S 2645 and finally finishing the surface with broken ceramic tiles close jointed in cement mortar (1:4) pointed with cement slurry and finished with proper slope etc. .				
e)	The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test . All above operation to be done in order and as directed and specified by the engineer in charge. With avg. thickness at khurra as 65mm (Work should be carried out through specialized agency.) water proof chemical to be used must be SIKA LATEX OR SIKA Rain tight.	Sqm	3365.00		

SECTION-XII
MISCELLANEOUS WORK

SL.NO	DESCRIPTION	UNIT	QUANTITY	RATE Rs	AMOUNT Rs
1.	Providing all material and labour for average 125mm thick plinth protection made out of with 25mm thick 1:2:4 cement concrete on top of mm thick P.C.C.1:4:8 laid in proper slope and compaction after dressing the surface & ramming the earth around the building perimeter, complete as per direction of Engineer-in-charge/Architect.	Sqm	50.00		
2	Lettering with Black japan of approved brand and manufacture 2cm letter..	Per Letter Per Cm height	1500.00		

SECTION-XIII
DISMANTLING & REPARING WORK

SL.NO	DESCRIPTION	UNIT	QUANTITY	RATE Rs	AMOUNT Rs
1.	Dismantling of existing plinth protection /A.S flooring in all floors including all cost of all labour T.P complete with removal of debris from site up to a lead of 100mtr. & stacking the necessary materials as per instruction of site Engineer-in-charge./Architect..	Sqm	100.00		
2	Dismantling of existing R.C.C work at all height in all floors including all cost of all labour T&P complete with removal of debris from site up to a lead of 100mtr. and stacking the necessary materials as per instruction of site Engineer-in-charge-/Architect...	Cum	5.0		
3	Dismantling of existing plaster in all floors including cost of all scaffolding T&P complete with removal of debris from site up to a lead of 100mtr and stacking the necessary materials.	Sqm	765.00		
4	Dismantling of existing brick work in all floors including (external) all cost of all scaffolding and labour T&P complete with removal of debris from site up to a lead of 50mtr and stacking the necessary materials as per instruction of site Engineer/Architect..	Cum	20.00		
5.	Transportations of earth debris construction materials by mechanical means including loading unloading & leveling at specified location up to lead 5km beyond initial lead..	Cum	170.00		
6	Dismantling of existing P.C.C.(1:4:8)in all floors including cost of all scaffolding & labour T&P complete with removal of debris from site up to a lead of 100mtr and stacking the necessary materials as per instruction of site Engineer/Architect.	Cum	16.00		
7	Removal of old paints/flakes of paint/loose plaster from the surface with wire brush for application of new paint complete to the satisfaction of engineer-in-charge/Architect.	Sqm	22,730.00		

SL.NO	DESCRIPTION	UNIT	QUANTITY	RATE Rs	AMOUNT Rs
8	Removal of old paints from wood /iron work by using sand paper to make the surface ready to for application of new paint complete to the satisfaction of engineer –in-charge/Architect...	Sqm	8,272.0		
9.	Removal of existing iron door, window grill etc.	Sqm	300.0		

Approved List Manufacturers/ Brand for Civil Works

Approved List to be used in works shall conform to Indian Standards Specification as published from time to time (and in the absence thereof as approved by Engineer – in –charge) in general the mode of measurement of Civil engineering works shall be guided by I.S.I CODE No- 1964 (Revised) for Indian standard Method of measurement of building work.

SL.NO	DESCRIPTION	IS CODE	APPROVED MAKE
1.	Cement : Ordinary port land cement 43 grade	269 :1967	OCL
2.	Steel : a) mild steel :	432 (Part 1) 1982	TATA/SAIL
	b) High strength deformed steel:	1786: 1985	TATA/SAIL
3.	Sand:	383: 193 or 515 (Revised)	
4	Course Aggregate	383	
5	Lime:	792 :1973	
6	Brick: common brunt building bricks.	1077:1992 (Fifth Revision)	
7	Light Gauge structural steel section	811:1987	
8	Collapsible gate:	10521 :1983	
9	Marble: Block,slab,and tile	1130:1969	
10	Ceramic tile/Glazed tile:	777: 1970	Spartek/Kajaria/Orient/Somany
11	Vitrified porcelain tile		Granamite/diomoite/Kajaria (kerogress)
12	Viny flooring		Tuskar/poly fioor Armstrong
13	Aluminum section : For door window	1984 : 1961	Indal/Beco/OEL
14	Wooden Fiush door:	2202 (part2): 1983	Greenply/Century/Mayer
15	Cement based paint:		Snowcemplus/Durocem
16	Acrylic Emulsion		ICI/Berger/Asian Paints
17	Distemper		ICI/Berger/Asian Paints
18	Synthetic Enamel		ICI/Berger/Asian Paints
19	Water proofing Admixture	2645 and 9103	SIKA/Forsrock/Laticrete
20	Glass/Glazing glass		Modi/guard/saintgobain

RENOVATION OF ROOMS & CORRIDOR FOR HALL-02

A) CORRIDORS

- 1) Flooring – Rajasthan Kota with white marble strip as per design for ground floor only, Vitrified tile over adhesive to other floors.
- 2) Skirting -150mm high Kota stone dado.
- 3) Painting –Enamel Paint over putty up to sill level, Distemper over putty up to ceiling, white washing to ceiling & enamel paint to wood works.

B) ROOMS

- 1) Flooring –Repairing of existing A.S. flooring & dado with glass strips.
- 2) Repairing of existing wooden works.
- 3) Replacement of all iron fittings by S.S. fittings
- 4) Painting- White wash to walls & ceiling & enamel paint to iron & wooden works and weather coat to external plaster surfaces.
- 5) Terrace water proofing.
- 6) Repairing of existing plastering works.
- 7) Provision for Rain water down pipes with surface drainage system.