BILL OF QUANTITES FOR	
CONSTRUCTION OF RENOVATION	
LADIES HOSTEL BLOCK A - B & C	- D
FOR	
NATIONAL INSTITUTE OF TECHNOL	OGY.
ROURKELA.	
	CONSULTANT.
	M/S Design Techno
	PLOT NO-N-6 /515, Jyadev bihar
	Bhubaneswar-12

ABSTRACT							
SL.NO		ESTIMATE COST					
SECTION-I							
EARTHWORK IN EXCAVATION	Rs.						
SECTION-II PLAIN/REINFORCED CEMENT CONCRETE WORK	Do						
	Rs.						
SECTION-III	D.						
BRICK WORK	Rs.						
SECTION-IV	_						
WOOD WORK	Rs.						
SECTION-V							
STEEL WORK	Rs.						
SECTION-VI							
FLOORING	Rs.						
SECTION-VII							
PLASTERING	Rs.						
SECTION-VIII							
ALLUMINIUM WORK	Rs.						
SECTION-IX							
FINISHING	Rs.						
SECTION-X							
WATER PROOFING	Rs.						
SECTION - XI							
DISMANTLING WORKS	Rs.						
TOTAL	Rs.						

	SECTION - I EARTHWORK IN EXCAVATION				
SL.NO	DESCRIPTIONS OF ITEM	QTY	UNIT	RATE Rs.	AMOUNT Rs.
1	Surface dressing of the ground including, removing vegetation				
	and inequalities not exceeding 15cm depth and disposal of				
2	rubbish, lead up to 50mtr & lift up to 1.5 mtr.In all kinds of soil. Earth work in excavation in all type of soil, morrum, hard,	350.00	100Sqm		
	compacted or soft rock, mica schist quartz etc. in foundation of				
	structure, sewer line, drain pits, etc. to required level and grade				
	and dressing complete as per the specification and direction of				
	the engineers, in both dry and wet condition including				
	necessary pumping, bailing out of water, slush removal etc.				
	and transporting the excavated material to soil dump /fill area/				
	excavated pit with a lead of 200mtr. at all heights and descent				
	including dozing, leveling at site of filing all as directed by the				
	engineer, all tools, plants, and labour complete, Authorised				
	working space benching and sick slope for the excavation will				
	be measured and paid under this items up to 3mtr depth below				
	finished Ground Level.				
i)	All kind of soil.	170.00	Cum		
3					
	rocks i.e. Disintegrated rock (blasting prohibited) by crowbar,				
	pick axe etc. within initial lift 3.00 mtr , rough dressing to the sides of trench , getting out the excavated rock & disposal of				
	surplus excavated material within 200 mtr of lead including cost				
	of dewatering, shoring, labour T & P tax etc complete in all				
	respect as per the direction of the Engineer -in-charge.	30.00	Cum		
4	Extra for disposal of earth for a lead of 100mt or part there of.	30.00	Cum		
5	Back filling in all positions and height and descent in foundation				
	pits, pipe trench sewer line around foundation and structure in				
	plinth etc. with approved excavated material obtained from a				
	lead of 200mtr including reclaiming from spoils heaps at all				
	height or reclaiming from dumps at all depth cost includes				
	transporting, depositing, filling in layers of 200mm thick				
	dressing watering and ramming complete with tools , plant & labour.	246.00	Cum		
6	Plinth filling in layers of 150mm thick good quality river sand including watering and consolidating by mechanical means as				
	per direction of engineer.	40.00	Cum		

2 0 6 j k	Providing and injecting Chemical emulsion chloropyrophos 20% E.C. for pre-constructional anti-termite treatment and creating chemical barriers as per I.S. 6313 Part-C (of latest edition) in wall trenches, foundation, top surface of plinth, filling, function of walls and floors along the external perimeter of the			
c e j k	creating chemical barriers as per I.S. 6313 Part-C (of latest edition) in wall trenches, foundation, top surface of plinth, filling, function of walls and floors along the external perimeter of the			
j k	edition) in wall trenches, foundation, top surface of plinth, filling, unction of walls and floors along the external perimeter of the			
j k	unction of walls and floors along the external perimeter of the			
k				
ϵ	building, surrounding of pipes etc complete. The work shall be			
	execute through approved agency/agencies and with			
(guarantee of 10 years. The rate shall be as per plinth area			
-	including as directed below.			
	a) Using Chemical Emulsion @ 7.5 Ltr/sqm for			
i	. Back filling immediate contact with masonry foundation.			
	masonry foundation.			
	ii. Junction of walls and floors.			
	iii External perimeter of building. b) Using Chemical Emulsion @ 5.0 Ltr/sqm			
	i. Bottom of side trenches.			
	ii. Top surface plinth filling.	3120.00	Sam	
	Providing and injecting Chemical emulsion chloropyrophos	3120.00	Sqiii	
	20% E.C. for post-constructional anti-termite treatment and			
	•			
	creating chemical barriers as per I.S. 6313 Part-C (of latest			
	edition) in wall trenches, foundation, top surface of plinth, filling,			
- 1	function of walls and floors along the external perimeter of the			
	building, surrounding of pipes etc complete. The work shall be			
	execute through approved agency/agencies and with	0400.00		
	guarantee of 10 years. The rate shall be as per plinth area.	2100.00	Sqm	
	using chemical emulsion @2.25 liters along external wall			
	below concrete or masonary apron including drilling and plugging holes.			
	using chemical emulsion @1 liter/hole 300mm c/c below			
	existing floor or masonary apron including drilling 12mm			
(diameter hole and plugging holes.			
c) (using chemical emulsion @1 liter/hole 300mm c/c below			
6	existing masonary including drilling 12mm diameter holes at			
1	45degreeand plugging holes full depth with cement mortar (1:2)			
	using chemical emulsion in kerosene) @0.5 liter/hole 150mm			
- 1	c/c at 45 degree downward angle			
ŀ	below existing masonary including drilling 6mm diameter holes			
	at points of contact of wood work and plugging holes full			
	depth with cement mortar (1:2)			
			TOTAL	·
			=	

	SECTION - II PLAIN/REINFORCED CEMENT CONCRETE WORK					
SL.NO	DESCRIPTIONS OF ITEM	QTY	UNIT	RATE Rs.	AMOUNT Rs.	
1	Supplying, laying and compacting plain cement concrete of following graded aggregate in all foundation, floor, roof screening etc. and at all heights and depth above and below finished ground level to required levels, slope etc. including curing but excluding the cost of shuttering all as per drawing and direction of engineer, with all material, tools plant and					
a	labour. Below finished ground level 1:4:8 with 40mm down graded aggregate.	100.00	Cum			
b	Above finished ground level 1:2:4 with 20mm down graded aggregate.	215.00				
2	Plinth protection:-Providing and making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement :3 part sand : 6 part 40mm down size aggregate) over 75mm thick bed of dry brick ballast 40mm nominal size well rammed and consolidated and					
3	grouted with fine sand including finishing the top smooth. Providing, laying in position nominal mix(1:1.25:2.5) cement	350.00	Sqm			
	concrete for reinforced cement concrete work including carrying of concrete to site of laying but excluding cost of centering, shuttering, reinforcement, including admixtures in					
	setting of concrete , improve workability without impairing strength and durability as per the direction of Engineer in charge. M20 grade reinforced cement concrete by using 410kg					
	of cement per cum of concrete all work up to floor V level. R.C.C work as defined by the latest IS 456 in all members like					
	foundation, superstructure, slab, column, beam, lintel,chajja,shelves,windows sills, facia, floor/roof slab, fins, stair, footing, drains, encasing of pipe line etc. including curing					
	but excluding form work and reinforcement. All as per drawing					
	and direction of engineer, all materials ,tools plant and labour complete, in plumb line & level with plastering in cement mortar					
a	1 cement: 3 coarse sand at no extra cost as required. Below finished ground level (1:1.25:2.5) concrete with 20mm					
b	down graded aggregate. Above finished ground level (1:1.25:2.5) concrete with 20mm	10.00	Cum			
	down graded aggregate.	50.00	Cum			

SL.NO	DESCRIPTIONS OF ITEM	QTY	UNIT	RATE Rs.	AMOUNT Rs.
4	Supplying and fixing ply and or steel shuttering for all type of				
	R.C.C work at any location in provision with necessary				
	centering, bracing ,propping staging (if required) etc. and				
	striking including curved shuttering fine and facia for all plain &				
	reinforced cement concrete works including all chamfer splays,				
	filler keys, wedges proof, mails bracing bracket, cutting holes				
	for embedment etc. and applying shuttering oil on shuttering				
	surface in contact with concrete all as per drawing and				
	direction of engineer, all tools plant and labour complete. Rate				
	including providing and laying plastic sheet to make water tight				
	shuttering and removing the same for all type of R.C.C work.				
a	At all depth & any location below finished Ground Level .	3175.00	Sqm		
b	At all heights & any location above finished Ground Level .				
		1000.00	Sqm		
5	Supplying , loading , unloading transporting , straightening,				
	decoiling, cutting, bending cranking tack welding as necessary				
	placing and fixing in position steel reinforcement including				
	angle /pins provided for approved welded joints at all level				
	above and below finished G.L. for R.C.C and Precast R.C.C				
	work including supplying approved 20 SW annealed black				
	binding wire, cover block etc. including all as per drg. and				
	direction of engineer , all material, tools plants and labour				
	complete. High yield strength deformed bars of Grade Fe 500				
	of all diameters of cold twisted steel / T.M.T of TATA/ SAIL	34.00	M.TON		
6	Providing precast cement concrete slab				
	1:2:4(1Cement:2Sand:4Coarse aggregate 6mm nominal				
	size)reinforced with 6mm dia mild steel including cenetring and				
	shuttering roughening and cleaning fixing and finishing in cement motar 1:3(1Cement:3Sand)etc complete excluding				
	plastering of jambssill and soffits				
а	50mm thick precast slab.				
	·	100.00	Sqm		
b	25mm thick precast slab	500.00	Sqm		
			TOTAL		
			TOTAL		

	SECTION-III BRICK WORK						
SL.NO	DESCRIPTIONS OF ITEM	QTY	UNIT	RATE Rs.	AMOUNT Rs.		
1	Supplying and construction brick work at any location using						
	best quality locally available bricks of compressive strength not						
	less than 75 Kg/ sqcm as defined in IS 1077 in cement sand						
	mortar (1:6) in foundation, superstructure, main hole duct drain						
	etc. including fiar cutting, wastage, bounding, plumbing line						
	level, flushing, racking joint, scaffolding and curing all as per						
	drg. and as per direction of the engineer, with all material tools						
	plant, labour complete. all up to floor V level.						
a	At and all depth below finished ground level.	60.00	Cum				
b	At and all heights above finished ground level	255.00	Cum				
2	Brick work at any location in 1:4 cement mortar in half brick						
	masonry with locally available bricks of compressive strength						
	not less than 75 Kg/ sqcm as defined in IS 1077 at any location						
	including supplying and placing in position 2nos 6mm dia m.s						
	bar at every third layer.	250.00	Sqm				
	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	10.00	Noc				
	level and heights. Providing and laying 75mm thick brick work in cement mortar	10.00	INOS				
	1:3(1 cement: 3 coarse sand) in plain or curved wall etc						
	complete in all respects including laying 1 no 6 mm bar at						
	every alternate layers in all floors and heights as per						
	drawing and specification complete. Reinforcement cost	40.00					
	included.)	10.00	Sqm				
			TOTAL				

	SECTION-IV WOOD WORK	······································			
SL.NO	DESCRIPTIONS OF ITEM	QTY	UNIT	RATE Rs.	AMOUNT Rs.
1	Providing & fixing in position at any location well dressed				
	naturally well seasoned sal wood of finished cross section				
	(65mm x 125mm), rebated frame to door including 2 coats of				
	hot bitumen applied to rear of frame in contact of masonary /				
	concrete surface complete in all respects as per the direction of				
	Engineer.	2.50	Cum		
2	Providing and fixing 35 mm thick flush door shutter , ISI				
	marked non decorative type solid block board construction				
	with frame of first class hard wood and well matched 3ply				
	commercial veneering with vertical or cross bands on both				
	faces of shutter finished as per specifications mentioned in				
	drawing . (Excluding the cost of fittings.) .	260.00	Sqm		
3	Providing and fixing wooden moulded beading to door				
	and window frames with iron screws, plugs and priming				
	coat on unexposed surface etc. complete. second class teak				
	wood 50x20 mm.	800.00	Rmt		
4	Providing 40x5 mm flat iron hold fast 40 cm long including				
	fixing to frame with 10 mm diameter bolts, nuts and wooden				
	plugs and embeddings in cement concrete block 30x10x15 cm				
	1:3: 6mix(1 cement: 3 coarse sand:6 graded stone aggregate				
	20mm nominal size) .	1350.00	Each		
5	Providing and fixing S.S butt hinges with necessary				
	screws etc Complete 125 x 65 x 2.5 mm (heavy type) IS				
	12017 marked wolded to deer frame where required	1230.00	Fach		
6	12817 marked welded to door frame where required. Providing and fixing 50 mm bright finished stainless	1230.00	Lacii		
ľ	Troviding and fixing 50 min stright infished stanness				
	steel cup board or ward robe knob with necessary				
	(, , , , , , , , , , , , , , , , , , ,	20.00	Гоор		
,	screws (best make of approved quality). Providing and fixing stainless steel handles 150 mm	20.00	Each		
·					
	x16 mm conforming to IS: 4992 with necessary screws.	740.00	Noc		
0	etc complete. Providing and fixing 75mm special quality bright finished	740.00	INUS		
ľ					
	stainless steel cupboard or wardrobe locks with four				
	levers including necessary screws etc. complete (best	00.00			
	make of approved quality.)	20.00	Each		

SL.NO	DESCRIPTIONS OF ITEM	QTY	UNIT	RATE Rs.	AMOUNT Rs.
9	Providing and fixing bright finished alluminium hanging				
	type floor double door stoppe r with necessary screws				
	etc. Complete	195.00	Each		
10	Providing and fixing IS3564 marked Aluminium die cast				
	body /extruded section body tubular type universal				
	hydraulic door closer with necessary accessories and				
	screws etc complete.	4.00	Each		
11	Providing and fixing stainless steel tower bolt with				
	necessary screws etc. complete				
	150 x 10 mm	510.00			
	300 x 10 mm Providing and fixing bright finished brass 100mm	470.00	Each		
12	Providing and fixing bright finished brass roomin				
	Mortise latch and lock with six levers and a pair of				
	lever handles with necessary screws etc complete (Best				
	make of approved quality)	4.00	Each		
13	40mm dia. Rubber buffer fixed to wall with M.S. Screws.				
		510.00	Each		
14	Providing and fixing curtain rod 20 mm dia of 1.25 mm				
	thick made of chromium plated brass pipe with chrome				
	plated brass bruckets(2nos) wall with stainless steel				
	screw all complete.	525.00	Mtr		
15	Providing and fixing factory made UPVC door made of				
	UPVC extruded, section having an overall dimension,as				
	below (tolerence ± 1mm) with all thickness 2mm ±				
	0.2mm .Corners of the door frame to be jointed with				
	galvanized brackets and stainless steel screws,jointed				
	and mitred and plastic wilded. The hinge side vertical of				
	the frame reinforced by galvanised M.S tube of size				
	19mmx19mm and 1mm ± 0.1mm wall thickness and 3				
	nos stainless steel hinges fixed to the frame complete				
	as per manufacture specification and direction of				
	Engineer in charge.				
	Extruded section profile size 42x50mm				
		330.00	Mtr		

SL.NO	DESCRIPTIONS OF ITEM	QTY	UNIT	RATE Rs.	AMOUNT Rs.
16	30mm thick factory made panel PVC door shutter consisting of				
	frame made out of M.S tubes of 19gauge thickness and size of				
	19mmx19mm for styles and 15mmx15mm for top and bottom				
	rail,M.S frame shall have a coat of steel primers of approved				
	make and manufacture .M.S frame covered with 5mm thick				
	head moulded PVC 'C' channel of size 30mm thickness,70mm				
	width out of which 50mm shall be flat and 20mm shall be				
	tapered in 45degree angle on either side forming styles and				
	5mm thick,95mm wide PVC sheet out of which 75mm shall be				
	flat and 20mm shall be tapered in 45degree on the inner side to				
	form top and bottom rail and 115mm wide PVCsheet on both				
	sides to form lock rail,top,bottom and lock rail shall be provided				
	either side of the panel 10mm (5mmx2mm)thick, 20mm wide				
	cross PVC sheet be provided as gap insert for top rail and				
	bottom rail ,panelling of 5mm thick both side PVC sheet be				
	provided as gap insert for top rail and bottom rail ,panelling of				
	5mm thick both side PVC sheet to be fitted in the M.S. frame				
	welded/sealed to the				
	styles and rail with 7mm (5mm+2mm) thickx15mm wide PVC				
	sheet beading on inner side ,and joined together with solvent				
	cement adhesive. An additional 5mm thick PVC strip of 20mm				
	width is to be stuck on the interior side of the 'C' channel using				
	PVC solvent adhesive etc.complete as per direction of				
	Engineer-in-charge. Manufacturer's specification and drawing				
	(for W.C and bathroom door shutter.)	120.00	Sqm		
17	Renewing 4.0mm float glass in wooden Windows and Ventilaters as per drawing and designing complete to satisfaction of Engineer-in-Charge/Architect.Rate include cost	5 <u>2</u> 2 በበ	Sam		
18	of glass ,glass fixing putty,nails etc. Providing and fixing wooden panelling for doors , windows & clerestory windows (Area of opening for panel inserts	582.00	Sqiii		
	excluding portion inside grooves or rebates to be				
	measured). Panelling for panneled shutters 25 mm				
	thick, kiln seasoned chemically treated second class hard (150.00	Sam		
	kasi, tentra, piasal) wood.	150.00	Sqiii		

SL.NO	DESCRIPTIONS OF ITEM	QTY	UNIT	RATE Rs.	AMOUNT Rs.
19a	Removal of existing sal wood chaukatha forrepairing and				
	refixing (excluding cost of repair,holdfasts) complete including				
	making good the wall cuttings complete. (door / Window				
)ventilator) complete to satisfaction of Engineer-in-				
	Charge / Architects .	(0.00	Caala		
	Doors with ventilaters Windows with ventilaters	60.00			
	Removal of existing sal wood chaukatha including making good	00.00	Eacii		
D	the wall cuttings complete.(doors, windows & ventilaters)				
	handing over to department to satisfaction of engineer in				
		80.00	Each		
	charge/Architect. Removal of existing wooden shutter for repairing and refixing	00.00	Eacii		
20	excluding cost of repair but including cost of screws				
	necessarycomplete to satisfaction of Engineer - in -Charge /				
	Architects.				
	door shutters		Each		
	window shutters	220.00			
	ventilators	135.00	Each		
21	Providing all material and labour for repairing of panelled or				
	panelledand glazed shutterers for doors, windows and				
	clerestorey windows usingkiln seasoned and				
	chemically treated second class hard (Kasi, Tentra piasal				
) wood 40mm thickshutter frame .(panelling will be paid				
	for separately)	1.50	Cum		
22	Providing and fixing stainless door (Aldrop) 300mm x 150mm x				
	16mm	390.00	Each		
23	Providing all material and labour for repairing existing door,	0,0.00			
	window chaukatha by removing the damaged members and				
	replaceing suitable member from existing chaukatha after				
	minor repairing complete fixing in position including two coats				
	of wood preservative to rear of frame in contact with masonry &				
	concrete surface (IS 12896 : 1990)	40.00	Each		
			TOTAL		
			TOTAL		

	SECTION-V STEEL WORK	(
SL.NO	DESCRIPTIONS OF ITEM	QTY	UNIT	RATE Rs.	AMOUNT Rs.
1	Providing & fixing pressed steel door frames conforming to 4351 manufactured from commercial mild steel sheet of 1.25mm thickness including hinges ,jambs,lock jamb,bead and if required angle threshold of mild steel angle section of 50x25mm or base tie of 1.25mm pressed mild steel welded or rigidly fixed together by mechanical means adjustable lugs with split end tail to each jamb including steel butt hinges				
	2.5mm thick with motar gards ,lock strike plate and shock absorbers as specified and applying a coat of approved steel primer after pre-treatment of the surface as directed by Engineer in charge.				
	Profile 'B' Confirming IS 4351 Providing and fixing ISI marked steel glazed doors, Windows	630.00	Rmt		
	and ventilators of standard rolled steel section as per IS 1038 with Z or L section joints mitred and welded with 15x3mm lugs, 10 cm. Long, embedded in cement concrete blocks 15 x 10 x 10 cm Of 1:3:6 (1cement : 3 coarse sand : 6 graded aggregate20mm nominal size) or with wooden plugs and screws or rawl plug and screws 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 applying priming coat of approved steel primer, and also including oxidized M.S casement stays (straight peg type) with necessary screws etc(300mm weighing not less than 200 gms.)all complete as per direction of engineer in charge Windows-side hung.	155.00	Sqm		
3	Providing and fixing M.S grill of required pattern in frames of windows etc.with M.S flat ,square or round bars etc,all complete. Fixed to steel windows by welding .				
	Fixed to openings with rawl plugs screw etc.	2800.00			

SL.NO	DESCRIPTIONS OF ITEM	QTY	UNIT	RATE Rs.	AMOUNT Rs.
4	Supplying, fitting and fixing of Stainless steel of 316				
	grade in hand railing using 50mm dia of 2mm thick				
	circular pipe with Balustrade of size 32mm x 32mm				
	solidsquare bar @ 0.90mtr. C/C and square bar bracing				
	of size 32mm x 32mm in stair case as per approved				
	design and specification, buffing, polishing etc with cost,				
	conveyance, taxes of all materials, labour, T&P etc.				
	required for the complete in all respect. (Cost includes				
	S.S. railing only ,cost of balustrads will be paid extra)				
	only length of railing will be taken for payment.	80.00	Mtr		
5	Providing & fixing in position collapsible steel shutters with				
	vertical channels 20x10x2mm and braced with flat iron diagonals 20 x 5 mm size with top and bottom rail of T-iron 40 x				
	40 x 6mm with 40mm dia. Steel pulleys complete with bolts,				
	nuts locking arrangement, stoppers handles, including applying				
	a priming coat of approved steel primer.	10.00	Sqm		
6	Providing & fixing openable and foldable grill gates / shutter		•		
	for entrances made of flats, square or round with M.S.				
	handle, locking system (sliding bolt and floor bolt), necessary				
	screws and hinges, fixed to walls by welding with 15x3mm				
	lugs, 10cms long in P.C.C.1:3:6(1 cement:3 coarse sand : 6				
	graded stone aggregate20 mm nominal size), necessary nuts				
	& M.S. parliament hinge or pivots as required complete	000.00	17		
	including applying priming coat of approved steel primer.	900.00	Kg		

	SECTION-VI FLOORING				
SL.NO	DESCRIPTIONS OF ITEM	QTY	UNIT	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 slurry, but excluding the cost of nosing of stone and cost of glass strip fixing complete 40mm thick				
2	steps and cost of glass strip fixing , complete 40mm thick with 20 mm nominal size stone aggregate.	120.00	Sqm		
2	Cement plaster skirting (up to 30 cm height) with cement mortar 1:4 (1 cement: 4 coarse sand) finished with a floating coat of neat cement (18 mm thick).	25.00	Sqm		
3	Supplying, laying and fixing anti-skid tiles (300mm x 300mm) size first quality confirming to IS 15622 in toilet floor heights, to floor surface conforming to drawings and designs set in 20mm thick cement mortar of proportion 1:4 to proper line and slope including cutting to required size and shape and fixing at corners etc. and the joints are to be properly finished with epoxy grout of matching colour and curing complete with cost of all labour, materials, taxes, T&P, conveyance etc. as directed by the Engineer. (all colours) Minimum Basic cost of tile Rs.400/sqm.	530.00	Sqm		
4	Providing & fixing ceramic glazed tile (300x200mm) sizefirst quality confirming to IS:15622 of approved shade & quality to dado at all heights over a base course of 12mm thick cement mortar (1cement: 3 coarse sand) jointing with grey cement slurry @3.3kg per sqm. joints filled with epoxy grouting of matching colour and approved manufacture etc. as specified & directed laid to proper line and plumb, cutting in required size to corners, cost includes all labours, materials, T & P, lead, royalty, tax, curing etc. complete in all respects as per direction		- 1		
	of Engineer(any colour excluding bottlegreen,burgund&black colour). Minimum Basic cost of tile =Rs 35.00/ sift	1770.00	Sqm		
5 a)	Kota stone slab flooring over 25 mm thick C.M. 1:4 (1 Cement : 4 Coarse sand) base and jointed with grey cement slurry mixed with pigment to match the including rubbing and polishing complete 20 mm minimum thick. (550				
	mm x 550 mmx25mm minimum thick.	550.00	Sqm		
b)	Kota stone in skirting/dado over 12mm C.M.(1:3)	80.00	Sqm		
6	Kota stone slabs 25mm thick in risers and treads of steps on 20mm (average) thick cement mortar 1: 3(1cement : 3coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing & polishing complete Single piece of size1800mm x 300mm and				
	1800 mm x150mm or less).	170.00	Sqm		

SL.NO	DESCRIPTIONS OF ITEM	QTY	UNIT	RATE Rs.	AMOUNT Rs.
7	Supplying & Fixing concrete designer's tile of ultra make polka				
	shade over 20mm thick cement mortar (1 cement : 4 coarse				
	sand) including pointing the joints with white cement and matched pigment in ratio (1:1) complete in all respect including				
	all material, labour, tool plant, tax, lead etc. as per the direction				
	of Engineer in charge.	720.00	Sqm		
8	Providing and fixing 40 mm wide and 4 mm thick plain				
	glass strips in joints of flooring with cement mortar 1:3				
	complete in all respects as per drawing.	220.00	Mtr		
9	Providing & laying minim. 16 to 18mm thick plain marble				
	strip border of approved design & quality laid in conjunction				
	with kota stone flooring over a bed of 20mm(minimum) thick				
	sand cement mortar 1:4 (1 cement: 4coarse sand) including				
	pointing with white cement mortar 1:2(1cement : 2marble				
	dust) / (adding pigment where required) rubbing & polishing				
	complete as per pattern shown in drawings and direction				
	complete in all respectsApprox 50mm to 100mm wide border.				
a)	Rajnagar white plain marble		_		
10	Complete and Colored McCondition to flooring and the Account	40.00	Sqm		
10	Supplying , fixing vitrified tile in flooring of size 600mm				
	x600mm, 10mm thick water absorption less than 0.08%				
	confirming to IS:15622 of approved colour & make at all				
	heights laid over cement mortar 20mm thick of proportion (1				
	cement : 4 coarse sand). The joints shall be filled with grout				
	matching the colour of tile .Cost includes all labour, material,				
	Tools plants, curing etc. complete in all respects as per	3900.00	Sqm		
11	direction of Engineer.(glossy/mat finish) Supplying fixing vitrified tile in skirting / dado using 600mm x	3700.00	Sqiii		
- ''	600mm, 10mm thick tile, water absorption less than 0.08%				
	confirming to IS:15622 of approved colour & make at all				
	heights laid over cement mortar 12mm thick of proportion (1				
	cement : 3 coarse sand). The joints shall be filled with grout of				
	matching colour of tile .Cost includes all labour, material, Tools				
	S .				
	plants ,curing etc. complete in all respects as per direction of	700.00	Sam		
12	Engineer.(glossy/mat finish) Extra for prefinished nosing in tread of steps	700.00	Sqiii		
12	Extra for prefittistied flosting in fread of steps	500.00	Sqm		
			TOTAL		

PLASTERING	ì			
DESCRIPTIONS OF ITEM	QTY	UNIT	RATE Rs.	AMOUNT Rs.
Inside plaster:-Providing 20mm thick cement plaster at any location in cement sand mortar proportion (1 cement: 6 coarse sand) after racking out of joints, roughening the concrete surface, filling portrayed surface, fixing wire mesh 200mm wide in case of concrete & brick work joints such that half on each surface fixed by help of nails cost includes of all materials, labour, lead, royalty, T & P, scaffolding, curing etc. complete in all represented as por the direction of Engineer.	2600.00	Sam		
External plaster:-Cement plaster in two coats-18mm CP in two coats under layer 12mm CP 1:5 (1 cement: 5 coarse sand) & top layer 6mm thick CP (1:3) (1cement: 3 coarse sand) at any location finished rough with sponge after racking out joints, roughening the concrete surface, filling portrayed surface, fixing wire mesh 200mm wide in case of concrete & brick work joints such that half on each surface fixed by help of nails cost includes of all materials, labour lead royalty T & P scaffolding labour, lead, royalty, T & P, scaffolding, curing, etc. complete in all respect as per the direction of Engineer . (Recron 3S @ 125gm / 50Kg of cement to be added for preparing cement mortar) Payment will be made after producing invoice of the polyester construction fiber.				
cement sand mortar in proportion (1 cement : 4 fine sand) to ceiling of roof, beams, columns , chajja, soffit of stair case etc. after roughening the surface by proper chiseling ,surface preparation, filling portrayed surface etc. cost includes of all materials, labour, lead, royalty, T & P, scaffolding, curing etc. complete in all respect as per the direction of Engineer .(Recron 3S @ 125gm / 50Kg of cement to be added for preparing cement mortar) Payment will be made after	750.00	C		
producing invoice of the polyester construction fiber. Providing and forming drip course of 30 mm wide x 12 mm. Projection in plaster to soffit of projected slab like chajja etc. in all floors at edges with cement mortar 1:3	750.00	Sqm		
complete as directed for completion of work. Providing & mixing integral water proofing compound confirming to IS -2645 to the cement plaster work as per manufacturers Specification. (payment will be made after producing invoice of materials).		Per bag of 50kg cement used in the		
		TOTAL		
	Inside plaster:-Providing 20mm thick cement plaster at any ocation in cement sand mortar proportion (1 cement: 6 coarse sand) after racking out of joints, roughening the concrete surface, filling portrayed surface, fixing wire mesh 200mm wide in case of concrete & brick work joints such that half on each surface fixed by help of nails cost includes of all materials, abour, lead, royalty, T & P, scaffolding, curing etc. complete in all respect as per the direction of Engineer. External plaster:-Cement plaster in two coats-18mm CP in two coats under layer 12mm CP 1:5 (1 cement: 5 coarse sand) & top layer 6mm thick CP (1:3) (1 cement: 3 coarse sand) at any ocation finished rough with sponge after racking out joints, roughening the concrete surface, filling portrayed surface, fixing wire mesh 200mm wide in case of concrete & brick work oints such that half on each surface fixed by help of nails cost includes of all materials, labour lead royalty T & P scaffolding abour, lead, royalty, T & P, scaffolding, curing, etc. complete in all respect as per the direction of Engineer . (Recron 3S @ 125gm / 50Kg of cement to be added for preparing cement mortar) Payment will be made after producing invoice of the colyester construction fiber. Providing 10mm thick plaster at any location cement plaster in cement sand mortar in proportion (1 cement : 4 fine sand) to ceiling of roof, beams, columns , chajja, soffit of stair case etc. after roughening the surface by proper chiseling, surface preparation, filling portrayed surface etc. cost includes of all materials, labour, lead, royalty, T & P, scaffolding, curing etc. complete in all respect as per the direction of Engineer . (Recron 3S @ 125gm / 50Kg of cement to be added for preparing cement mortar) Payment will be made after producing invoice of the polyester construction fiber. Providing and forming drip course of 30 mm wide x 12 mm. Projection in plaster to soffit of projected slab like chajja etc. in all floors at edges with cement mortar 1 : 3 complete as directed f	Inside plaster:-Providing 20mm thick cement plaster at any ocation in cement sand mortar proportion (1 cement: 6 coarse sand) after racking out of joints, roughening the concrete surface, filling portrayed surface, fixing wire mesh 200mm wide n case of concrete & brick work joints such that half on each surface fixed by help of nails cost includes of all materials, abour, lead, royalty, T & P, scaffolding, curing etc. complete in all respect as per the direction of Engineer. External plaster:-Cement plaster in two coats-18mm CP in two coats under layer 12mm CP 1:5 (1 cement: 5 coarse sand) & top layer 6mm thick CP (1:3) (1 cement: 3 coarse sand) at any ocation finished rough with sponge after racking out joints, oughening the concrete surface, filling portrayed surface, fixing wire mesh 200mm wide in case of concrete & brick work oints such that half on each surface fixed by help of nails cost notludes of all materials, labour lead royalty T & P scaffolding abour, lead, royalty, T & P, scaffolding, curing, etc. complete in all respect as per the direction of Engineer. (Recron 3S @ 125gm / 50Kg of cement to be added for preparing cement mortar) Payment will be made after producing invoice of the polyester construction fiber. Providing 10mm thick plaster at any location cement plaster in cement sand mortar in proportion (1 cement: 4 fine sand) to ceilling of roof, beams, columns, chajja, soffit of stair case etc. after roughening the surface by proper chiseling, surface preparation, filling portrayed surface etc. cost includes of all materials, labour, lead, royalty, T & P, scaffolding, curing etc. complete in all respect as per the direction of Engineer. (Recron 3S @ 125gm / 50Kg of cement to be added for preparing cement mortar) Payment will be made after providing and forming drip course of 30 mm wide x 12 mm. Projection in plaster to soffit of projected slab like chajja etc. in all floors at edges with cement mortar 1: 3 complete as directed for completion of work. Providing & mixing integral water pro	DESCRIPTIONS OF ITEM OTY UNIT Inside plaster:-Providing 20mm thick cement plaster at any ocation in cement sand mortar proportion (1 cement: 6 coarse sand) after racking out of joints, roughening the concrete surface, filling portrayed surface, fixing wire mesh 200mm wide in case of concrete & brick work joints such that half on each surface fixed by help of nails cost includes of all materials, abour, lead, royalty, T & P, scaffolding, curing etc. complete in all respect as per the direction of Engineer. External plaster:-Cement plaster in two coats-18mm CP in two coats under layer 12mm CP 1:5 (1 cement: 5 coarse sand) & top layer 6mm thick CP (1:3) (1 cement: 3 coarse sand) at any ocation finished rough with sponge after racking out joints, roughening the concrete surface, filling portrayed surface, fixing wire mesh 200mm wide in case of concrete & brick work oints such that half on each surface fixed by help of nails cost includes of all materials, labour lead royalty T & P scaffolding abour, lead, royalty, T & P, scaffolding, curing, etc. complete in all respect as per the direction of Engineer. (Recron 3S @ 125gm / 50Kg of cement to be added for preparing cement mortar) Payment will be made after producing invoice of the bodyester construction fiber. Providing 10mm thick plaster at any location cement plaster in cement sand mortar in proportion (1 cement: 4 fine sand) to celling of roof, beams, columns, chajja, soffit of stair case etc. after roughening the surface by proper chiseling, surface preparation, filling portrayed surface etc. cost includes of all materials, labour, lead, royalty, T & P, scaffolding, curing etc. complete in all respect as per the direction of Engineer. (Recron 3S @ 125gm / 50Kg of cement to be added for proper providing and forming drip course of 30 mm wide x 12 mm. Projection in plaster to soffit of projected slab like chajja etc. in all floors at edges with cement mortar 1:3 complete as directed for completion of work. Providing & mixing integral water proofing compound	DESCRIPTIONS OF ITEM Inside plaster:-Providing 20mm thick cement plaster at any ocation in cement sand mortar proportion (1 cement: 6 coarse sand) after racking out of joints, roughening the concrete surface, filling portrayed surface, fixing wire mesh 200mm wide n case of concrete & brick work joints such that half on each surface, fixed by help of nails cost includes of all materials, abour, lead, royalty, T & P, scaffolding, curing etc. complete in all respect as per the direction of Engineer. 2600.00 Sqm 2600.00

SECTION-VIII
ALLUMINIUM WORK

	ALLUMINIUM WORK						
SL.NO	DESCRIPTIONS OF ITEM	QTY	UNIT	RATE Rs.	AMOUNT Rs.		
1	Providing and fixing powder coated (50micron thick mat /satin						
	finish) aluminum windows, ventilators of required colour						
	using extruded sections of 34 series conforming to IS: 733						
	and IS: 1285, fixed with rawl plugs and screws etc. at all						
	levels including the cost of coupling members 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 all-round on both faces between work / lintel						
	and windows with silicon sealants of approved make provision						
	for fixing glass panes from inside and EPDM / Neoprene						
	weather seats etc all as per drawing at all levels and heights.						
i)	Fixed (Overall portion treated as fixed.)	10.00	Sam				
ii)	Extra over above for (extra rate admissible for the	10.00	<u> </u>				
	openable portion only) : side hung shutters	40.00	Sqm				
2	Providing and fixing twin style door complete with fixed						
	glazed portion manufactured from Bronze or any other						
	approved colour anodised (50 micron thickness) extruded						
	aluminum alloy section complete with 5 mm thick clear float						
	glass for fixed portions, Neoprene dry set glazing gasket,						
	snap in beveled metal glazing strips on both sides, top and						
	bottom styles of extruded aluminum alloy sections of special						
	design for twin style door, 12 mm thick plate glass for doors,						
	necessary hardware fixtures viz. double action floor spring,						
	mortise lock flush bolt, chromium plated brass tubular						
	handle as per drawing on both faces all complete at all						
	levels and heights.						
i)	~	20.00	Sam				
ii)	Openable portion	20.00					
<u> </u>			- dir.				
			<u> </u>				

SL.NO	DESCRIPTIONS OF ITEM	QTY	UNIT	RATE Rs.	AMOUNT Rs.
3	Providing and Fixing Structural Glazing with provision for				
	opening (top hung) as per detailed drawing at any location				
	fabricated from roll formed sections made of galvanized steel				
	colour coated/power coated (Base Steel as per IS 513 'D'				
	qualitycoated (Base Steel as per IS 513 D quality galvanized				
	thickness of 0.72mm. The Glass holding section made of 304				
	grade stainless steel of 0.6mm thick. CRCA sections with				
	Polyurethane Coating are to be used as stiffeners inside the				
	CCS section as per the design requirement. Paint				
	Specifications : Coated Sections should be with Primer Coat of				
	Epoxy Primer of 5-7 microns thick, finish painted with a				
	Polyester Paint of 12-16 microns thick and back coated with				
	Alkyd backer of 5-7 microns, or Powder Coated with pure				
	Polyester Powder up to 50-60 microns thick. Dimensions of				
	Sections :The sections are to be of 33x58 mm or 50x100 mm				
	for frame verticals, 33x59 mm for frame horizontals, section for				
	reinforcement should be of 31x55 mm / 48x98 mm (CRCA).				
	Glass holding section should be of 32.5x37 mm for top and bottom grids, in between should be of 32.5 x 18mm Fixing Details: The sections are to be cut to length, joined by means of powder coated CRCA brackets. The above Frame should be fixed to brick/ concrete masonry by using Nylon self-expanding caps and driving MS electroplated 80mm long screws into the caps through frames. Glazing: Glass of 6mm thick one side reflective of approved make & colour to be fixed with the help of sealant. (Only finished area will be taken in account for payment)				
		150.00	Sqm		
			TOTAL		

	SECTION-IX FINISHING				
SL.NO	DESCRIPTIONS OF ITEM	QTY	UNIT	RATE Rs.	AMOUNT Rs.
1	Providing and laying white cement based wall putty of 1.5mm thickness over a plastered surface to prepare the surface even and smooth complete (Birla, JK, Sika).	4800.00	Sqm		
2	White washing with lime to give an even shade (two coats) mixed with approved adhesive complete to	0000 00	C		
3	the satisfaction of engineer-in-charge Painting two and more coats at any location with Acrylic	8000.00	Sqm		
	distemper of Asian/ Nerolac, of approved shade to get an even shade over plastered wall & ceilings over one coat				
	of primer as per manufacturers specification at any				
	location cost includes all material ,repairing cracks, scaffolding , lead, T&P etc. complete in all respect as per				
	the direction of the Engineer, at all heights and any				
4	location of new work. Applying one coat of cement primer of approved quality	3900.00	Sqm		
5	and manufacture on wall surface. Finishing walls with water proofing cement paint of	5000.00	Sqm		
	approved brand & manufacture and of required make to				
	give an even shade new work (three coats) @ 3.84 Kg				
	/10 Sqm(snowcem plus or equivalent complete up to the satisfaction of Engineer-in-charge.	200.00	Sqm		
6	Applying priming coat with ready mixed zinc chromate yellow primer of proved brand and manufacture on steel /				
7	galvanised steel works. Applying ready mixed pink or grey primer of approved	1475.00	Sqm		
		1100.00			
8	and manufacture on wood work (hard and soft wood) Painting with ready mixed synthetic enamel paint of	1100.00	Sqm		
	approved brand manufacture in all shades to give an even shade. All complete up to the satisfaction of				
2)	engineer in charge. steel work (two coats)	1900.00	Sam		
	wall surface(two coats)	1000.00			
c)	wood work(two coats)	1250.00	Sqm		

SL.NO	DESCRIPTIONS OF ITEM	QTY	UNIT	RATE Rs.	AMOUNT Rs.
9	Providing and applying two coats of premium quality				
	exterior acrylic emulsion paint 'weather shield max' of ICI				
	India Ltd./Apex Ultima or equivalent of approved shade over				
	a coat of approved primer of same manufacturer at all levels				
	including sand papering, cleaning and preparation of surface. Providing and applying Acrylic emulsion paint (two	6000.00	Sqm		
	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 heights complete.	400.00	Sqm		
11	Painting (two or more coats) on rain water soil and vent				
	pipes and fittings with Synthetic enamail paints of				
	approved brand and manufacture and required colour				
	over a priming coat approved steel primer on new work.				
	100mm dia.pipe	200.00	Rm		
				TOTAL	
				TOTAL	

	SECTION-X WATERPROOFING						
SL.NO	DESCRIPTIONS OF ITEM	QTY	UNIT	RATE Rs.	AMOUNT Rs.		
1	Providing and applying SIKA TOP SEAL107 hi (priming coat with 0.01kg/sqm &two coats using 2.5kg/sqm using glass fiber as intermediate layer between two coats) in terrace and after making the surface free from loose particles, oil, grease, or any other contaminants by using wire brush, acid wash and water jetting. The whole treatment must be continued upto a height						
1a)	of 300mm of parapet wall from roof slab. Providing and laying screed concrete on the top of the roof in 1: 2: 4 (1 cement:2 sand:4 stone chips 10mm down gauge) with water proofing admixture Conforming to IS:2645, and crack resistance fiber like RECRON 3S equivalent with slope of 1in 100and nessary hollering as per direction of Engineer- in charge. (minimum thickness of 75mm) up to 300mm height of	1175.00					
2	parapetwall. Providing and Filling the Expansion joint with joint sealing compound on polyeurathane based or equivalent including a backup material like Thermocole/Celatex board inside the groove of expansion joints. The width to depth ratio of sealant	1175.00	Sqiii				
3	should be 2:1 Providing and applying SIKA TOP SEAL107 hi (priming coat with 0.01kg/sqm &two coats using 2.5kg/sqm using glass fiber as intermediate layer between two coats.) in over R.C.C sunken slab of toilet immediately when concrete is still green (after two days of casting of roof) covered with 12mm thick cement plaster (1:4) admixed with integral water proofing liquid sika plastocrete super confirming to IS 2645. The hole treatment should continue up to height of 600mm above toilet floor level.	120.0 1580.00					
	Notes-All the water profing work should be carried out through specilised application agency of sika or equivalent)						

	SECTION-XI DISMANTLING V				
SL.NO	DESCRIPTIONS OF ITEM	QTY	UNIT	RATE Rs.	AMOUNT Rs.
1	Dismantling of existing plinth protection/AS flooring in all				
	floors including costs 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.	1330.00	Sqm.		
2	Dismantling of existing R.C.C work at all height in all	1000.00	Jqiii.		
	floors including cost of all labour T & P complete with				
	removal of debris from site up to lead of 100mtr and				
	stacking the necessary materials as per instruction of site				
	Engineer-in-charge/Architect	20.00	Cum.		
3	Dismanting of existing plaster, raking out the joints in all				
	floors including cost of all scaffolding T & P complete with				
	noors including cost of all scandiding 1 & 1 complete with				
	removal of debris from site up to a lead of 100mtr and				
	stacking the necessary materials.	3750.00	Sqm.		
4	Dismantling of existing brick work in all floors including				
	costs 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.	50.00	Cum.		
5	Transportations of earth debris construction materials by				
	mechanical means including loading unloading & leveling				
	at specific location up to load EVm boyand initial load	400.00	Cum.		
6	at specific location up to lead 5Km beyond initial lead. Dismantling of existing P.C.C (1:4:8) in all floors including	400.00	Cuin.		
	cost of all scaffolding & labour T & P complete with				
	removal of debris from site up to lead of 100 mtr and				
	stacking the necessary materials as per instruction of site				
	Engineer/Architect.	15.00	Cum.		
7	Removal of old paints/flakes of paint from the surface	. 3.03	2 90.111		
	with wire brush for application of new paint complete to	15000	Sqm.		
	the satisfaction of engineer-in-charge/Architect				

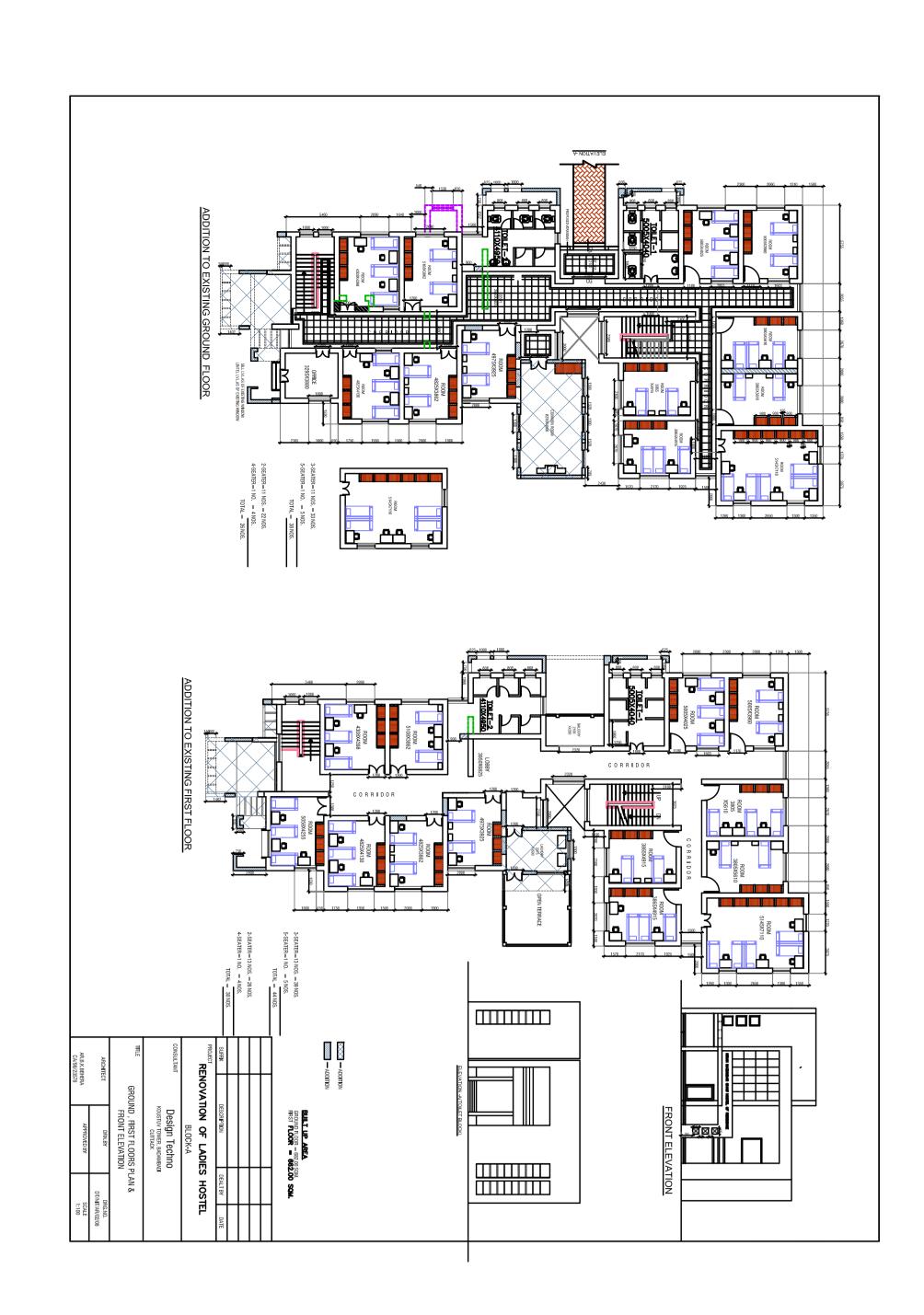
SL.NO	DESCRIPTIONS OF ITEM	QTY	UNIT	RATE Rs.	AMOUNT Rs.
9	Removal of old paints from wood/iron work by using sand paper to make the surface ready to for application of new paint complete to the satisfaction of engineer-incharge/Architect Removal of existing iron doors windows grills etc.	3000.00	Sqm.		
	complete including cost of all labour & material ,making	50.00	Each		
10	good the damages. Dismantling of existing tile flooring & dado in all floors	30.00	Lacii		
	including cost of all scaffolding & labour T & P complete				
	with removal of debris from site up to lead of 100 mtr and				
	stacking the necessary materials as per instruction of site				
	Engineer/Architect.	1000.00	Sqm.		

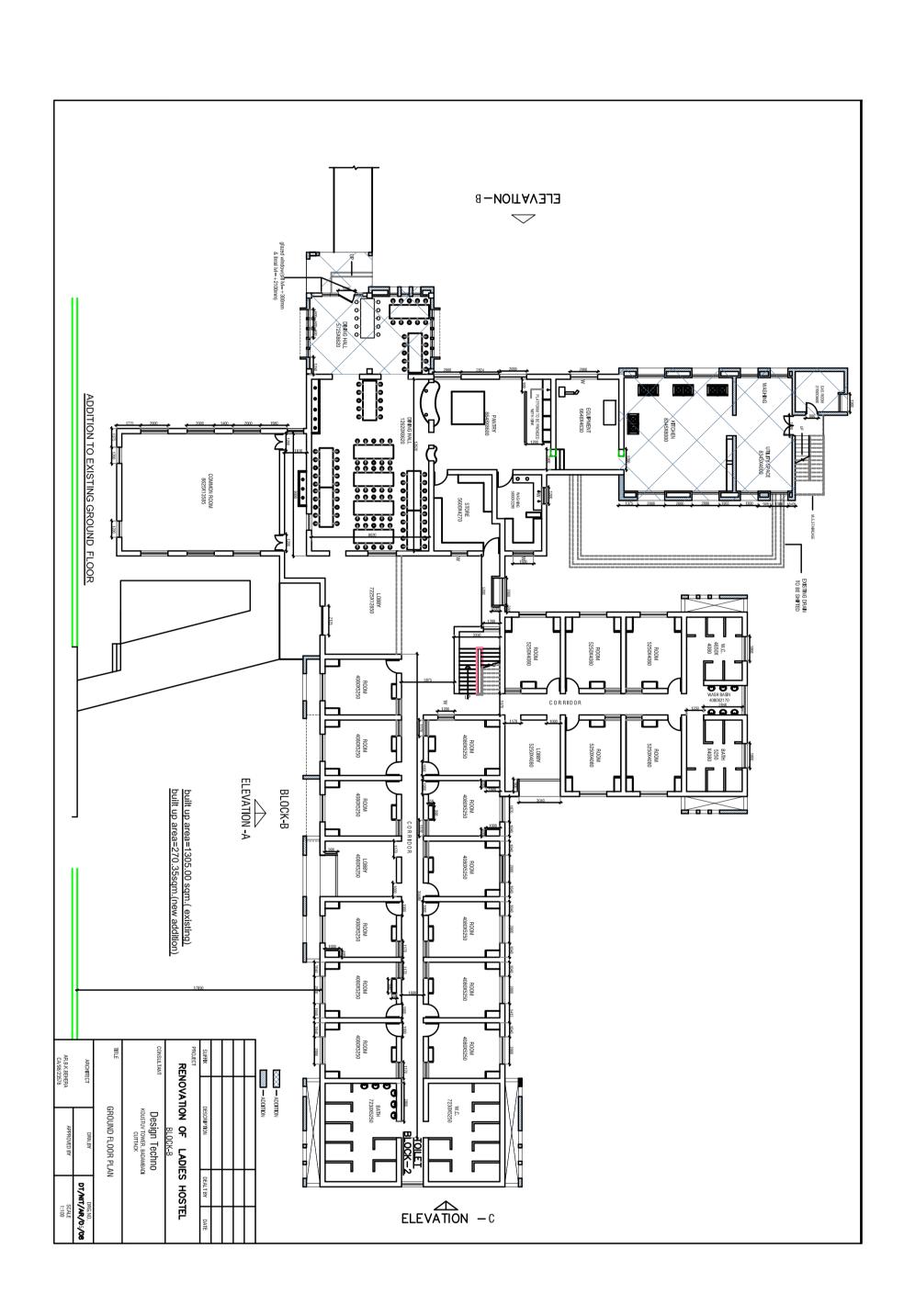
Approved List Manufacturers/ Brand for Civil Works

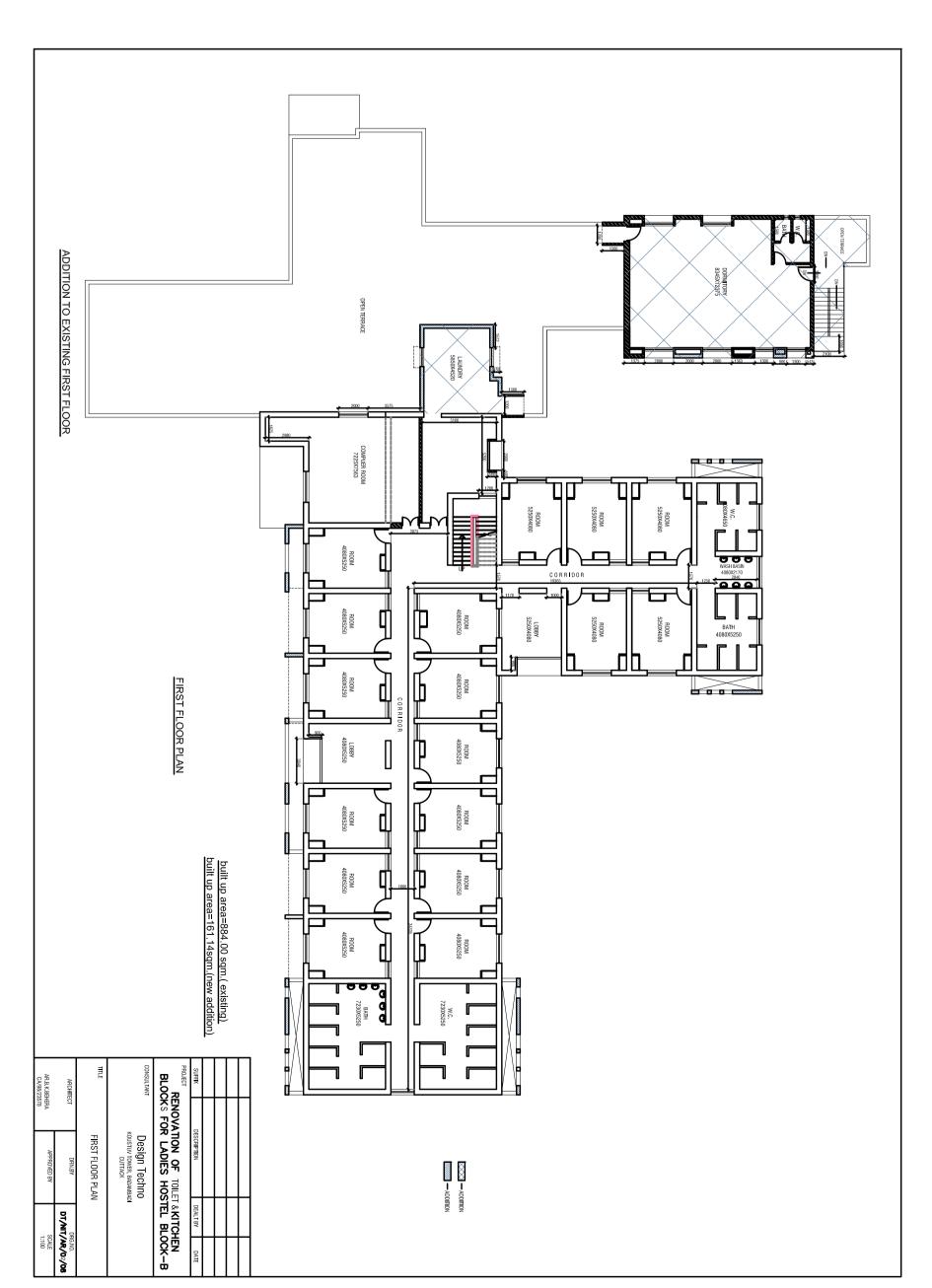
Approved List to be used in works shall conform to Indian Standards Specification as published from time to time (and in the absence thereof as approved by Engineer – in –charge) in general the mode of measurement of Civil engineering works shall be guided by I.S. I CODE No- 1964 (Revised) for Indian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

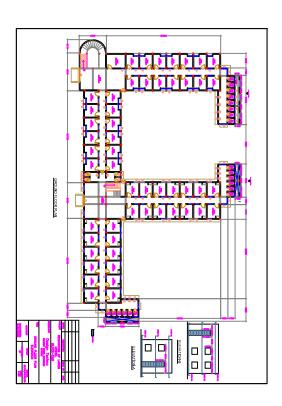
Dallall	lg work.		APPROVED
SL.NO	DESCRIPTION	I.S CODE	MAKE
1	Cement : Ordinary port land cement 43 grade	269 :1967	ACL
2	Steel:		
	a) mild steel :	432 (Part 1) 1982	TATA/SAIL
	b) High strength deformed steel:	1786: 1985	TATA/SAIL
3	Sand:	383: 193 or 515 (Revised)	
4	Coarse Aggregate	383.00	
5	Lime:	792 :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:		Euro/Kajaria/ Nitco/Somany/Regency
11	Vitrified porcelain tile		Euro/Kajaria/ Nitco/Somany/RAK
12	Vinyl flooring		Tuskar/polyfioor Armstrong
13	Aluminum section : For door window	1984 : 1961	Indal/Beco/OEL
14	Wooden Flush door:	2202 (part2): 1983	Greenply/Century/Aeon
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/Chowksy/Laticrete
20	Glass/Glazing glass		Modiguard/saintgobain

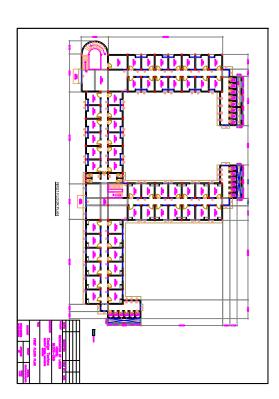
21	Designer concrete tile.			Ultra / Mu	Itiwyn /Eurocon	
	Specification of Materials					
1	Sanitary Fitting : Hindware/ParryWare					
2	2 CI pipe & fitting :3989 of Jayaswals/NECO Ltd/Similar approved					
3	C.P fitting :Jaquar/ESSESS/GEM brand					
4	G.I Pipes:Tata make (medium quality)					
5	G.i. Fittings "R"/HB/KS brand with ISI marked					
6	G.M Valves : Leader/zoloto brand					
7	SW pipes :Sonall/Hind brand					
8	CI Cover &frame: Local brand /Asian Paint					
9	CI Cover &frame: Local brand /Asian Paint					
10	Kitchen Sink: Nirali or similar approved.					
11	Mirror: Golden flush or similar approved.					
12	Sluice Valve: Upadhya or similar approved.					
13	Specification for Materials, Measurement & Workmanship	as per CPW	D & BSI			











Bill of Quantities for Addition, Alteration & Renovation of <u>B-Type Quarter including</u> <u>Construction of Garage</u> for National Institute of Technology, Rourkela.

Sl. No.	Item Description	Qty	Unit	Rate	Amount
1	Dismantling doors windows and clearstorey windows (steel or wood shutter)including chowkaths architrave holdfasts etc. complete and stacking within 50mtr lead" Of area 3 Sq.M and below	4	Each		
	Rate in words:-				
2	Labour for dismantling , fitting and refixing of M.S gates and Grills including cutting into size and welding all complete as per approved design including cost of all materials complete as per direction of Engineer in charge (Cost of materials and such as M.S flats and other consumable items welding machine etc are to be supplied by the contractor ,only power will be supplied free of cost within distance of 100.00mtr)	7	Sq.M		
	Rate in words:-		-		
3	Dismantling old plaster or skirting racking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50mtr lead	450	Sq.M		
	Rate in words:-				

Sl. No. 4	Item Description Earthwork in excavation by mechanical means (Hydraulic excavator)/manual means in foundation trenchs or drains (Exceeding 30Cm in depth 1.5m in width as well as 10 Sq.M on Plan) including dressing of sides and ramming of bottoms including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50Mtr. (All kinds of Soil)	Qty	Unit	Rate	Amount
	Rate in words:-	20	Cum		
5	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering. Cement concrete in 1:4:8 (1 Cement : 4 sand:8 Coarse Aggregate 40mm Down)	3.5	Cum		
	Rate in words:-				
6	Supplying and filling in plinth with river sand under floors including watering ramming consolidating and dressing complete. Rate in words:-	15	Cum		
7	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20Cm in depth, consolidating each deposited layer by ramming and watering, lead upto 50M and lift upto 1.5M Rate in words:-	13	Cum		

Sl. No. 8	Brick work with F.P.S bricks of class	Qty	Unit	Rate	Amount
	designation 75 in foundation and plinth in cement mortar 1:6 (1cement: 6 Sand)	13	Cum		
	Rate in words:-				
9	Brick work with F.P.S bricks of class designation 75 in Super structure above plinth levell upto V floor level in all shapes and size in Cement mortar 1:6 (1cement: 6 sand)	18	Cum		
	Rate in words:-				
10	Half brick masonry with FPS bricks of class designation 75 in superstruacture in Cement mortar 1:4 (1 cement: 4 sand)	3	Sq.M		
	Rate in words:-				
11	Extra for providing and placing in position 2 Nos 6mm dia M.S.Bars at every third layer of half brick work (With F.P.S bricks)	3	Sq.M		
	Rate in words:-				
12	Providing and laying in position Reinforced cement concrete of specified grade excluding the cost of centering and shuttering. Cement concrete in 1:1½:3 (1 Cement : 1½ sand:3 Coarse Aggregate 20mm Down)	6	Cum		
	Rate in words:-				

Sl. No. 13	Item Description Providing and laying damp proof course 40mm thick with cement concrete 1:2:4 (1 cement:2 sand:4 coarse aggregate 12.5mm nominal size)	Qty	Unit	Rate	Amount
	Rate in words:-	6	Sq.M		
14	20mm thick cement plaster of mix 1:6 (1 cement : 6 sand) Rate in words:-	290	Sq.M		
15	15 mm thick cement plaster in CM 1:4 with chemical admixture for water proofing such as PLASTOCRETE PLUS/CICOCRETE/Equivalent as per manufacturers manual for out side plastering including racking out and cleaning the wall surface with wire brush and painting of SIKA LATEX two coats(@ 150ml/Sq.M) before plastering complete as per direction of Engineer In charge. Including all material and labour for racking and plastering.	230	Sq.M		

Rate in words:-

Sl. No. 16	Item Description Providing and plastering 6mm thick cement plaster in CM 1:4 with admixture of plastocrete or equivalent (@100ml/bag of cement) and with painting of two coats of SIKA LATEX or equivalent (150ml/Sq.M) over the plastered surface before plastering including racking out the ceiling and painting two coats of ARMATEX or Equivalent over corroded steel and complete as per direction of Engineer in Charge.	Qty	Unit	Rate	Amount
	-	25	Sq.M		
	Rate in words:-				
17	Extra for prviding and mixing water proofing materials in cement plaster work in proportion recommended by the manufactureres. Rate in words:-	30	Per bag of 50kg cement		
	Rate III words				
18	Providing and fixing of M.S grills of required pattern in frames of windows etc. with M.S flats, Square or round bar etc all complete Fixed to openings / wooden frames with				
	rawl plugs screw etc	55	Kg		
	Rate in words:-				

Sl. No. 19	Item Description Providing and fixing ISI marked steel glazed doors, windows and ventilators of standard rolled steel sections, (as per IS 1038 with Z or L section)joints mitred and welsed with 15x3 mm lugs, 10cm long, embedded in cement concrete blocks 15x10x10 CM of 1:3:6 (1 cement: 3 Sand: 6 graded stone aggregate 20mm nominal size) or with wooden plugs and screw or rawl plugs and screws or with fixing clipsor with bolts and nuts as required, including providing and fixing of glass panes with glazing clips and special metal sash putty of approved make complete including applying a priming coat of approved steel primer, excluding the cost of metal beading and including other fitting (stay ,handle),necessary hinges or Pivots as required.	Qty	Unit	Rate	Amount
		2	Sq.M		
	Rate in words:-				
20	Providing and placing reinforcement for R.C.C. work including straightining cutting bending placing in position and binding allcomplete. Thermo Mechanically Treated Bars Rate in words:-	550	Kg		
21	Centering and shuttering including struting propping etc and removal of forms for:				
a)	Lintels beams plinth beams girders bressumers and cantilevers.	8	Sq. M		
	Rate in words:-				
b)	Weather shades, Chajja, Corbels etc including edges	10	Sq. M		
No of co	rrections:-				

No of corrections:-No of overwrittings:-No of interpolations:-

Sl. No.	Item Description	Qty	Unit	Rate	Amount
	Rate in words:-				
c)	Sloped roof	30	Sq. M		
	Rate in words:-				
22	6 mm cement plaster 1:3 (1 cement : 3 fine sand) Finished with a flooting coat of neat cement and thick coat of lime wash on top of walls when dry for bearing of R.C.C slabs and beams.	6	Sq.M		
	Rate in words:-				
23	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade: Two or more coats on new work	45	Sq.M		
	Rate in words:-				
24	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade: One or more coat over old Work	215	Sq.M		
	Rate in words:-		~ 1		
25	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping sand papering and prepairing the surface smooth including necessary repairs to scratches etc. complete	785	Sq.M		
	Rate in words:-				
	Tate III WOIGO.				

Sl. No. 26	Item Description White washing with KATNI lime to give	Qty	Unit	Rate	Amount
	an even shade Old Work (Two or More coats)	115	Sq.M		
	Rate in words:-				
27	Distempering with 1st quality acrylic distemper (readymade) of approved manufacture and of required shade and colour complete, as per manufacturer's specification.	400	G. M		
	New Work(Two or more coats)	480	Sq.M		
	Rate in words:-				
28	Providing and finishing wall surface with acrylic wall care putty (water based) of approved make (Birla or Equivalent) and finished smooth and even surface to receive painting including cost of scaffolding staging charges with all cost of materials taxes labour T&P etc complete				
		480	Sq.M		
	Rate in words:-				
29	Finishing walls with textured exterior paint of required shade: New work (two or more coat applied @3.28kg/10 Sq.M) over and including base coats of water proofing cement paint applied @ 2.2 Kg/10 Sq.M	255	Sa M		
		233	Sq.M		

Rate in words:-

Sl. No. 30	Item Description Providing and fixing 1mm thick M.S sheet door with frame of 40x40x6mm angle iron and 3mm M.S gusset paltes at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer.	Qty	Unit	Rate	Amount
	Using M.S angle 40x40x6 mm for diagonal braces	7.45	Sq.M		
	Rate in words:-				
31	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3sand:6 Coarse aggregate) over 75mmm thick bed of dry brick ballast 40mm nominal size well rammed and consolidated and grouted with fine sand including finishing the top smooth	55	Sq.M		
	Rate in words:-				
32	cement concrete flooring 1:2:4 (1 cement : 2 sand: 4 coarse 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 20mmm nominal size stone aggregate	22	Sq.M		
	Rate in words:-				
33	cement plaster skirting (Upto 30CM height) with cement mortar 1:3(1 cement: 3 Sand) finished with floating coat of neat cement. 18mm thick	2.5	Sq.M		
	Rate in words:-				

Sl. No. 34	Item Description Taking out the doors and window shutters and refixing them including screws as may be required. Including Cost of repairing of old door shutter of any size as per requirement along with refixing old fittings such as tower bolt, sliding door bolt, handles, (new fittings to be paid separately) with new hinges including painting the new portion with synthetic enamel paint of required shade with one coat of wood primer(cost of wood to be paid separately) including fixing in existing opening complete (Any size of any thickness)as per direction of Engineer in Charge.	Qty	Unit	Rate	Amount
		18	Sq.M		
	Rate in words:-				
35	Supplying of well seasoned piasal wood of appropriate size & thickness for repairing of door & window shutter. (The payment for supply of wood will be on the finished utilised measurement of the wood. No payment will be made for wastage. The contractor will be take the mesurement of this item before painting / polishing of shutter	0.4	Cum		
	Rate in words:-				
36	Providing wood work in framed of doors Windows, clearstorey windows and other frames , wrought framed and fixed in position: Sal Wood Rate in words:-	0.25	Cum		

Sl. No. 37	Item Description Providing and fixing of IS 12817 marked stainless steel butt hinges with stainless steel screw etc complete	Qty	Unit	Rate	Amount
a	100x58x1.90mm	30	Each		
	Rate in words:-				
b	75x47x1.70mm	24	Each		
	Rate in words:-				
38	Providing and fixing bright finished brass tower bolt (barrel type) with necessary screws etc complete:				
a	200x10mm	12	Each		
	Rate in words:-				
b	150x10mm	16	Each		
	Rate in words:-				
39	Providing and fixing bright finished brass handles with screws etc complete:				
a	125mm	12	Each		
	Rate in words:-				
b	100mm	12	Each		
	Rate in words:-				
40	Providing and fixing of Bright finished brass Sliding door bolts with nut and screw etc complete				
a	250x16mm	8	Each		
	Rate in words:-				

Sl. No. b	Item Description 300x16mm	Qty 2	Unit Each	Rate	Amount
	Rate in words:-				
41	Providing and fixing bright finished brass 100mm mortice latch and lock with 6 levers and pair of lever handles with necessary screws etc complete: (best make of approved quality)	2	Each		
	Rate in words:-				
42	Providing and finishing special quality bright finished brass hanging type floor door stopper with necessary screws etc complete	10	Each		
	Rate in words:-				
43	Providing and plastering 6mm thick cement plaster in CM 1:4 with admixture of plastocrete or equivalent (@100ml/bag of cement) and with painting of two coats of SIKA LATEX or equivalent (150ml/Sq.M) over the plastered surface before plastering including racking out the ceiling and painting two coats of ARMATEX or Equivalent over corroded steel and complete as per direction of Engineer in Charge.	55	Sa M		
		55	Sq.M		

Rate in words:-

Sl. No. 44	Item Description Providing and fixing water closet squating pan (Indian type W.C.Pan) with 100mm sand cast iron P or S trap, 10litr low level white P.V.C flushing cistern with manually controlled device (handle lever) conforming to IS 7231 with all fittings and fixtures complete including cutting and making good the walls and floors where ever required: White Vitreous china orissa pattern W.C pan of size 580x440mm with integral type foot rests. Rate in words:-	Qty 1	Unit	Rate	Amount
45	Providing and fixing white vitreous china pedestral type water closet s(European typeW.C.Pan)with seat lid, 10litr low level white P.V.C flushing cistern with manually controlled device (handle lever) conforming to IS 7231 with all fittings and fixtures complete including cutting and making good the walls and floors where ever required: W.C.Pan with ISI marked White solid				
46	W.C.Pan with ISI marked White solid plastic seatand lid Rate in words:- Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS 15622 (thickness to be specified by the manufacture of approved make in all colours shade except burgundy, bottole green , black of any size as approved by engineer in Charge in skirting , risers of steps and dados over 12mm thick bed of cement mortar 1:3 (1 cement : 3 sand) and jointing with grey cement slurry @3.3 kg per Sq.M including pointing in white cement mixed with pigment of matching shade complete	1	Each		
		42	Sq.M		

Sl. No.	Item Description	Qty	Unit	Rate	Amount
	Rate in words:-				
47	Providing and fixing 1st quality ceramic glazed wall tiles (Boarder tiles) conforming to IS 15622 (thickness to be specified by the manufacture of approved make in all colours shade with printed series of any size as approved by engineer in Charge in skirting, risers of steps and dados over 12mm thick bed of cement mortar 1:3 (1 cement: 3 sand) and jointing with grey cement slurry @3.3 kg per Sq.M including pointing in white cement mixed with pigment of matching shade complete				
		55	RM		
	Rate in words:-				
48	Providing and laying ceramic glazed floor tiles 300x300mm (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 20mm thick cement mortar 1:4 (1 cement : 4 sand) including pointing the joints with white cement and matching pigment etc complete.	55	Sq.M		
	Rate in words:-				
49	Providing and laying Vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS 15622 of approved make in all colours shade laid on 20mm thick cement mortar 1:4 (1 cement : 4 sand) including pointing the joints with white cement and matching pigment etc complete.				
	Sizes of Tile 60x60Cm	55	Sq.M		
	Rate in words:-				
No of co	prrections:-				

Sl. No.	Item Description	Qty	Unit	Rate	Amount
50	Deduct for not using 20mm thick cement mortar 1:4 (1 cement : 4 sand) bedding in laying of floor tiles Rate in words:-	-152	Sq.M		
51	Fixing glazed /ceramic /vitrified floor tiles with cement based high polymer modified quick set tile adhesive (water based) conforming to IS 15477 using 5 kg Adhesive per Sq.M of tile area in average of 3mm thick ness	152	Sq.M		
52	Dismantling tile work in floors laid in cement mortar including stacking materials within 50mtr lead For thickness of tile above 10mm and upto 25mm Rate in words:-	25	Sq.M		
53	Easing ,oiling and adjusting the door & window including the cost of screws etc complete as per direction of Engineer - in charge. Rate in words:-	5	Each		
54	Repairing wherever required of bibcock pillar cock, stopcock, pvc waste pipe low /high level cistern and other fittings of C.P. brass etc complete including providing and fixing as per requirement	2	Each		

Sl. No. 55	Item Description Cleaning of porcelain WC pan wash basin, and sink with porcelain clean acid with making complete germ free up to get up the white dazzling colour including using M-Seal as and where required to make the joints leakage proof as per direction of the Engineer in charge.	Qty	Unit	Rate	Amount
		2	Each		
	Rate in words:-				
56	Removing and refixing wash basin/KITCHEN SINK including the cost of new CI/MS brackets and making and repairing the wall complete as per direction of Engineer in charge.	3	Each		
	Rate in words:-				
57	Providing and fixing of G.I pipes complete with G.I fittings and clamps including cutting and making good the walls etc. Internal work (Exposed on wall)				
a)	15mm nominal bore	10	RM		
	Rate in words:-				
b)	20mm nominal bore	12	RM		
	Rate in words:-				
c)	25mm nominal bore	10	RM		
	Rate in words:-				

Sl. No. 58	Item Description Concealed pipe including painting with anti corosive bitumastic paint, cutting chases and making good the wall	Qty	Unit	Rate	Amount
a)	15mm nominal bore	10	RM		
	Rate in words:-				
b)	20mm nominal bore	12	RM		
	Rate in words:-				
c)	25mm nominal bore	10	RM		
	Rate in words:-				
59	Providing and fixing of CP Brass Fittings conforming to IS 8931 as per approved quality and direction of Engineer in Charge.				
a)	15mm dia Bib cock	3	Each		
	Rate in words:-				
b)	15mm dia Stop cock	3	Each		
	Rate in words:-				
c)	15mm dia long body bib cock	1	Each		
	Rate in words:-				
d)	15mm dia short body bibcock	4	Each		
	Rate in words:-				

Sl. No. e)	Item Description 15mm dia Swing cock	Qty 2	Unit Each	Rate	Amount
	Rate in words:-				
f)	15mm dia wall mixer with L bend	2	Each		
	Rate in words:-				
g)	15mm dia angle cock	2	Each		
	Rate in words:-				
h)	15mm dia conceal stop cock	2	Each		
	Rate in words:-				
i)	15mm to 20mm dia CP brass shower rose with Arm (150mm dia)	2	Each		
	Rate in words:-				
j)	CP connector pipe for Geysers 60Cm length with CP brass Unions	2	Each		
	Rate in words:-				
60	Providing and fixing of CP towel rail complete with brackcket fixed to wooden cleats with CVp bras screw with concealed arrangement of approved make and brand and quality: 600mm x20mm dia CP Brass	3	Each		
	Rate in words:-				
61	Providing and fixing CP bras Soap case of Approved make and quality Rate in words:-	6	Each		

Sl. No. 62	Item Description Providing and fixing of CP brass Towel ring Circular shape 200mm dia with a minimum distanc eof 37mm from wall	Qty	Unit	Rate	Amount
	face with concealed fitting arrangement of approved quality	3	Each		
	Rate in words:-				
63	Providing and fixing Soil, waste and vent pipes (Centrifugally cast iron PIPE as per IS 3989				
a	100mm dia	6	RM		
	Rate in words:-				
b	75mm dia	8	RM		
	Rate in words:-				
64	Providing lead caulked joints to sand cast iron/ Centrifugally cast (Spun) iron pipes and fittings of diamter				
a	100mm dia	2	Each		
	Rate in words:-				
b	75mm dia	2	Each		
	Rate in words:-				
65	Providing and fixing plain bend of required degree Centrifugal Cast Iron as per IS -3989				
a	100mm dia	2	Each		
	Rate in words:-				
b	75mm dia	2	Each		
	Rate in words:-				

Sl. No.	Item Description	Qty	Unit	Rate	Amount
66	Providing and fixing of 18mm thick gang saw cut mirror polished (pre moulded and pre polished) machine cut for kitchen platform vanity counters window sill facials and similar location of trequired size of approved shade colour and texture laid over 20mm thick base cement mortar 1:4 with joints treated with white cement mixed with matching pigment epoxy touch ups including rubbing curing moulding and polishing to edges to give high gloss finish etc complete at all levels				
	Granite of any colour mirror polished and machine cut edge area of slab upto 0.5 Sq.M	2.5	Sq.M		
	Rate in words:-				
67	Extra for providinh edge moulding to 18mm thick marble stone counters vanities etc including machine polishing to edge to give high gloss finish etc complete as per direction of Engineer in Charge				
	Granite work	5	RM		
	Rate in words:-				
68	Providing and fixing of wash basin with C.I brackets, 15mm Cp brass pillar taps 32mm Cpbrass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls whereever require:				
	White vitreous china wash basin size 630x450mm with pair of 15mm CP Brass	2	Each		
	Rate in words:-				

Sl. No. 69	Item Description Providing and fixing trap of self cleansing design with screwed down or hinged	Qty	Unit	Rate	Amount
	grating with or without vent arm complete, including cost of cutting and making good the walls and floors: Centrifugal Cast iron as per IS 3989				
	100mm inlet 100mm outlet	2	Each		
	Rate in words:-				
70	Providing and fixing 600mm x 450mm bevelled edge mirror of superior glass (of approved quality) complete with 6mm thick hard board ground fixed to wooden cleats with CP brass screws and washers complete				
		3	Each		
	Rate in words:-				
71	Providing and fixing of 600x120x5mm glass shelf with edges round of supported on anodized aluminium angle frame with CP brass brackets and guard rail complete fixed with 40mm long screw, rawl plugs etc complete		F. I		
	D	4	Each		
70	Rate in words:-				
72	Cleaning silt, sapling, dust etc its disposal to outside compound and washing O.H tanks with lime water and disinfecting with bleaching powder using 150 gms of bleaching powder in 1000to 1500 lits. tank keeping it in the tank at least for three hours before flushing and cleaning (at the interval of 1 year)(One tank shall be taken as one job).				
		1	Each		
	Rate in words:-				

Sl. No. 73	Item Description 15 mm thick cement plaster in CM 1:4 with chemical admixture for water proofing such as PLASTOCRETE PLUS/CICOCRETE/Equivalent as per manufacturers manual for out side plastering including racking out and cleaning the wall surface with wire brush and painting of SIKA LATEX two coats(@ 150ml/Sq.M) before plastering complete as per direction of Engineer In charge. Including all material and labour for racking and plastering.	Qty	Unit Sq.M	Rate	Amount
74 75	Rate in words:- Providing and fixing of PVC waste pipe for Sink or wash basin including PVC waste fittings complete: Semirigid pipe 32mm dia Rate in words:- Providing and fixing of kitchen sink with	2	Each		
13	C.I brackets, CP brass chain with rubber plug, 40mm CP brass waste complete, including painting the fittings and brackets, cutting and making good the walls wherever required: White glazed fire clay kitchen sink of size 600x450x250mm Rate in words:-	Rate Only	Each		
	Cost for 1 no quarter			Rs	
	Cost for 22 no of quarter	22	X Rs		
	In words:-				

