	BILL OF QUANTITIES FOR ADDITION, A	LTERA	TION	& RENOVATION (	DF BACHELOR FLAT [GRO	UND & FIRST FLOOR] AT
	NATIONAL IN	STITUT	EOF	<u> TECHNOLOGY, RO</u>	URKELA. (FOR 3 BLOCKS	<u>.)</u>
	SECTION-A, CIVIL WORKS					
SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
1	Demolishing brick work including stacking of serviceable materials and disposal of unserviceable materials within 50mt lead.in all floor level. Care should be taken in case dismentling of load bearing Brick wall : Adjustable steel props supported to the roof slab before/ at the time of dismentling of the total wall and steel joists inserted then props removed after insertion of steel joist.					
		30	Cum			
2	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50m lead in all floor level.	450	Sqm			
3	Demolishing R.C.C. work (Lintel, RCC shelves, kitchen platform etc) including stacking of steel bars and disposal of unserviceable material within 50m lead.	12	Cum			
4	Dismentling of Terrace with grading plaster from roof slab & chajja and removal of unserviciable material with in 50mtr lead.in all floor level	1800	Sqm			
5	Taking out doors, windows and clerestory windows shutter including chowkhats/ frame , architrave, holdfasts etc. complete and stacking within 50m lead of area 3 sqm and below.	21	Each			
6	Taking out fixed glazed ventilators including holdfasts, frames etc. complete and stacking within 50m lead of area 3 sqm and below.	15	Each			

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
7	Taking out fixed glazed ventilators including holdfasts, frames etc. complete and stacking within 50m lead of area 3 sqm above.	6	Each			
8	Taking out of existing MS grill from window & stacking the same within 50mt lead making good the damages	45	Sqm			
9	Dismentling of existing AS flooring & disposal of debris within 50mt lead making good the damages	600	Sqm			
10	Dismantling C.I. pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes, lead at site within 50m lead. Pipes upto 200mm dia.	200	Mtr			
11	Scrapping old cement paints with scrapper in all floors at all heights, sand papering, washing with soap or soda water and applying cement putty and primer as per requirement wherever necessary and finally applying two coats of weather coat painting with 100% acrylic emulsion paints exterior grade (1st. quality) of approved shade over a coat of wall priming in all floors and all height including cleaning the surface by mechanical means and applying putty wherever necessary including cost, conveyance and taxes of all materials and cost of all labour, scaffolding, sundries and T&P etc. required for the work complete as directed by the Engineer in charge.	4200	Sqm			

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No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
12	Scrapping old paints with scrapper in all floors at all heights, sand papering, washing with soap or soda water and applying cement primer as per requirement wherever necessary and finally applying two coats of acrylic distemper (emulsion paints) interior grade (1st. quality) of approved shade over a coat of wall priming in all floors and all height including cleaning the surface by mechanical means applying putty wherever necessary including cost, conveyance and taxes of all materials and cost of all labour, scaffolding, sundries and T&P etc. required for the work complete as directed by the Engineer in charge.		Sqm			
13	Applying two coats of acrylic distemper (emulsion paints) interior grade (1st. quality) of approved shade over a coat of wall priming in all floors and all height including cleaning the surface by mechanical means applying putty wherever necessary including cost, conveyance and taxes of all materials and cost of all labour, scaffolding, sundries and T&P etc. required for the work complete as directed by the Engineer in charge.		Sqm			

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
14	Applying two coats of weather coat painting with					
	100% acrylic emulsion paints exterior grade (1st.					
	quality) of approved shade over a coat of wall					
	priming in all floors and all height including cleaning					
	the surface by mechanical means and applying					
	putty (exterior grade) wherever necessary including					
	cost, conveyance and taxes of all materials and					
	cost of all labour, scaffolding, sundries and T&P					
	etc. required for the work complete as directed by					
	the Engineer in charge.	750	Sqm			
15	Earth work in excavation in foundation trenches in					
	hard soils within initial lift 1.50 mt including					
	breaking clods, rough dressing to the sides of					
	trench, getting out the excavated soil & disposal of					
	surplus excavated soil in layers not exceeding 0.20					
	mt within 50mtr 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.	90	Cum			
16	Back Filling by available excavated earth in					
	foundation including ramming after watering for					
	compacting laying in layers not exceeding 20 cm					
	including cost of labour, T&P etc. to complete					
	the work in all respect as per the direction of the	<u> </u>	0			
17	Engineerin-charge.	60	Cum			
17	Filling the foundation & plinth with approved quality					
	good river sand including ramming after watering					
	for compacting laying sand in layers not exceeding 20 cm including cost of material, lead,					
	labour, royality, T&P, tax etc. to complete the work					
	in all respect as per the direction of the Engineer	15	Cum			
	in-charge.	15	Cum			

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
18	Providing and Laying of Plain Cement Concrete of proportion (1 cement : 4 coarse sand: 8 graded metal 40mm down size) including mixing by mechanical mixer, laying in position, compacting,curing etc. including cost of all materials, labour, lead, royality,T & P etc. complete in all respect as per the direction of the Engineer in-charge.	15	Cum			
19	Providing & constructing Brick masonary using Locally available K.B. bricks of size (23cm x 12cm x 8cm) with tolerance +/-8% having crushing strength not less than 55Kg/sqcm in cement sand mortar (1cement: 6 coarse sand) in foundation & plinth including cost of all materials, labour, testing charges of material, lead, royality, curing,pointing, T&P etc. complete in all respect as per the direction of Engineerin-charge					
		42	Cum			
20	Cutting, Straightening, bending, binding cold drawn Tor Steel of High Yield Strength Deformed / TMT bars confirming to IS-1786 (Grade Fe 415/ 500) of approved manfacture (TATA-TISCON / VIZAG / SAIL), tying Tor steel in Grill and placing in position as per the requirement for R.C.C. work shown in structural drawing including cost of steel and binding wire (20 gauge black anealed) at every intersection, testing charges of steel, labour, lead,royality, tax etc. complete in all respect as per the direction of the Engineerin-charge. (weight shall be calculated as per standard table & wastage shall not be accounted) in all floors	1.2	MT			

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
21	Providing & constructing Brick masonary using					
	Locally available K.B. bricks of size (23 cm x 12					
	cm x 8 cm) with tolerance +/- 8% having crushing					
	strength not less than 55 Kg/sqcm in cement sand					
	mortar (1 cement : 6 coarse sand ) in					
	superstructure including cost of all materials,					
	testing charges of material, labour, lead, royality,					
	curing, pointing, scaffolding, T&P, tax etc. complete					
	in all respect as per the direction of Engineerin-		_			
	charge. in all floors,	48	Cum			
22	Providing & constructing half brick masonary for					
	partition wall using locally available K.B. bricks of					
	(23cmx 12cm x 8cm) +/- 8% size using Cement					
	sand Mortar in proporation (1cement: 4 coarse					
	sand) in superstructure crushing strength of bricks					
	not less than 55kg/sqcm, hoop iron ( 2nos 6mm dia					
	MS bar) at an interval of three layer cost includes					
	all materials & testing charges, labour,					
	lead,royality, steel in every 3rd course, scaffolding					
	, T&P, tax, curing etc. complete in all respects as					
	per direction of Engineer /in-charge. in all floors	405	0			
		165	Sqm			

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
23	Providing & Laying Reinforced Cement Concrete in					
	proporation (1 cement : 1 .5 coarse sand : 3					
	graded coarse aggregates 20mm down graded /					
	nominal size ) in foundation, plinth and					
	superstructure including cost of all materials,					
	testing charges of material, labour, lead, royality, tax,					
	scaffolding, mixing by mechanical mixer, hoisting,					
	laying, compacting by needle & plate vibrator as					
	required, concreting by suitable means and curing					
	etc. complete in all respects as per the direction of					
	Engineer /in-charge. (excluding cost of steel,					
	centering & shuttering). in all floors, The surface of					
	concrete should have finished surface with out					
	undulation & honeycomb. The unfinished surface					
	shold be plastered with 6mm thk cement mortar					
	(1:3) and no extra payment will be paid for plastering, chisseling etc.					
	plastering, chisseling etc.	48	Cum			
24	Rigid & smooth centering & shuttering of steel /	40	Cum			
27	marine plywood confirming to IS- 710/ 76 of					
	Century/ Green ply or any other approved brand for					
	all type R.C.C. Works including strutting, proping,					
	bracing, staging, fitting, fixing, striking etc. cost					
	includes materials, labour, T&P, tax, removal of					
	form after reach the required strength /					
	casting, complete in all respects as per direction of					
	Engineer-in-charge .cost including providing &					
	laying plastic sheet to make water tight shuttering					
	& smooth surface .( only area of contact to concrete					
	shall be measured for payment) in all floors					
		360	Sqm			

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
25	Providing and laying approved type 20mm thick Kota stone flooring & dado with 20 mm thick 1:3 (1 cement : 3 sand) mortar with neat cement slurry mixed with pigments to match the shade of the tiles including filling the joint scrubbing and polishing complete including cost of all materials and labour and instruction of Engineer-in-charge. (in Kitchens, common corridore, stair case steps and landling)					
		600	Sqm.			
26	Supplying, fixing and laying anti-skid ceramic tiles in all floors at all heights of (300mm x 300mm) size of approved make to floor surface conforming to drawings and designs set in cement mortar of proportion 1:3 to proper line and plumb including cutting to required size and shape and fixing at corners splays and chambers etc. and the joints are to be properly finished with white cement with required pigment and curing complete with cost of all labour, materials, taxes, T&P, conveyance etc. as directed by the Engineer / Architect.					
		120	Sqm.			

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
27	Providing & fixing ceramic glazed tile of approved size, make, shade & quality to dado of toilet over a base course of cement mortar (1cement : 3 coarse sand) / as per manfactures specification with white cement grouting with mixed matched pigment of approved manfacture etc. as specified & directed laid to required slope, cutting in required size to corners cost includes all labours, materials, testing charges,T & P, lead, royality, tax, curing etc. complete in all respects as per direction of Engineer /in-charge.	250	Sqm.			
28	Providing & Laying minimum 18mm (3/4") thick Green Marble stone with machine edge mouding (half round) in kitchen platform (over RCC slab) & sills of window in all floors with minimum cement mortar 15mm thick of proporation (1 cement : 3 coarse sand). The joints shall be filled with cement slurry mixed with required pigment to match the colour of granite including polishing to the marble, all labour, material, tax, lead, T&P ,curing etc. Complete in all respects as per direction of Engineer /in-charge.	120	Sqm			

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
29	Providing 15mm thick cement plaster in cement					
	sand mortar in proporation (1cement: 6 coarse					
	sand) over Brick masonary surface after racking					
	out of joints, fixing wiremesh 6" wide in case of					
	Concrete & Brick work joints such that half on each					
	surace fixed by help of nails cost includes of all					
	materials, labour,lead, royality, T & P, scafolding,					
	curing, tax, testing charges etc. complete in all					
	respect as per the direction of Engineer /in -					
	charge.in all floors	240	Sqm.			
30	Providing 12mm thick cement plaster in cement					
	sand mortar in proporation (1cement : 4 coarse					
	sand) over concrete surface such as Beam, Roof					
	slab, columns, chajja etc. includes of all					
	materials, labour, lead, royality, T & P, scafolding,					
	curing, tax, testing charges etc. complete in all					
	respect as per the direction of Engineer /in - charge.in all floors	120	Sam			
31	Repair to plaster of thickness 12mm to 20mm in	120	Sqm.			
51	patches of area 2.5 sq meter and under including					
	cutting the patch in proper shape and preparing and					
	plastering the surface of the walls complete					
	including disposal of rubbish to the dumping ground					
	within 50mtr lead. with cement mortar 1:4 (1					
	cement : 4 coarse sand)	450	Sqm			

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
32	Supplying & Fixing window frame / chowkath of					
	cross section (100mm x 75mm) well seasoned sal					
	wood in existing opening including embedding					
	chowkath in floors or walls cutting masonary for					
	holdfasts, embedding hold fasts in cement concrete					
	blocks with cement concrete 1:3:6 (1 cement: 3					
	coarse sand : 6 graded stone aggregate 20mm					
	nominal size), taking out existing chowkath if					
	required, painting two coats of coal tar to sides of					
	chowkath and making good the damages to walls					
	and floors as required complete including disposal					
	of rubbish to the dumping ground within 50 metres					
	lead as per the direction of Engineer in charge.					
		1.5	Cum			
33	Supplying & Fixing of (50mm x 50mm x 6mm) size					
	MS angle as door frame with necessary hold fast,					
	fixing in position with 15cm x 15cm x 15cm					
	including making holes 3 nos in each side of frame required positions and fixing the frame in position.					
	Filling the holes with cement concrete 1:3:6 (1					
	cement : 3 coarse sand : 6 aggregates of 20mm					
	nominal size), making good the damages to walls &					
	floor, painting with metal primer & synthetic enamel					
	paint 2 coats to get an even shade, fabrication					
	charges, welding rod, fixing in proper level cost					
	includes all material, labour, tax, lead, T&P etc.					
	complete in all respects.Cost also includes					
	fabrication of 3nos hinges with the frame to hold					
	down the shutter.					
		300	Kg			

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No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
34	Repairing the existing door shutter includes					
	removal of door shutter from the existing MS /					
	wooden frame, necessary repairing to the shutter					
	including change of wooden members (rails, styles,					
	panels) if required to appropriate / required size to					
	match the existing shutter, wooden cleats, hinges,					
	fabrication charge to fix the door shutter with MS					
	angle frame/ wood frame as required, cost includes					
	all material, labour, tax,lead,scafolding charge,					
	T&P,making good the damages etc. complete in all					
	respects as per the direction of Engineer-in -charge.					
		45	Sqm			
35	Repairing the existing window shutter includes					
	removal of shutter from the existing wood frame,					
	necessary repairing to the shutter including change					
	of wooden members (rails, styles,panels) required					
	size to match the existing shutter, wooden cleats,					
	hinges, fixing the shutter with wood frame as					
	required,cost includes all material, labour,					
	tax,lead,scafolding charge, T&P, making good the					
	damages etc. complete in all respects as per the					
	direction of Engineer-in -charge.					
		75	Sqm			

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
36	Providing and fixing panelled shutters for doors					
	made of locally available well seasoned secondary					
	hard wood as per detailed drawings (single leaf)					
	with panel 12mm thick BWR grade ply of approved make including stainless steel aldrop, stainless					
	steel tower bolt 250mm long -1no,stainless steel					
	handle-2no, door stopper-1no, stainless steel butt					
	hinges- 4nos 100mm size with necessary screw					
	including panel made of with secondary hard wood					
	well seasoned complete in all respects.					
		120	Sqm			
37	Providing and fixing panelled shutters for windows					
	made of locally available well seasoned secondary					
	hard wood as per detailed drawings with panel					
	9mm thick BWR grade ply of approved make including stainless steel tower bolt 100mm long -					
	2no per shutter ,stainless steel handle (100mm) -					
	1no per shutter, stainless steel butt hinges- 3nos-					
	75mm size per shutter with necessary screw					
	including panel made of with secondary hard wood					
	well seasoned complete in all respects.					
		120	Sqm			

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
38	Providing, fitting and fixing steel casement windows & ventilators with built in window grills made out of M.S. flat/square bars conforming to IS 1038 with pressed steel galvanised fitting viz two points handles 300mm long peg stay etc. as required with extruded side hung type coupling members glazing					
	bars, GI handles, plates washers bars and fixing of 4mm thick pin head glass panes cut to required sizes with glazing clips, cleaning the glass with cleaning solvent and placing the window in proper position in wall with cement concrete (1:3:6) using granite chips of 12mm down as per the approved design and drawing including cost of all labour, materials, hold fasts, taxes and conveyance to the					
	site of work as per the direction of the Engineer-in Charge.					
		12	Sqm			

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
39	Supplying & Fixing Factory made FRP (alternately					
	called GRP) doorframe of size 75mmx100mm					
	fabricated using E-glass.Each Chopped Strand Mat					
	(CSM) U.V stabilised Inopthalic Gel coat and					
	impregnated with Inopthalic resin. The running					
	thickness of the GRP skins shall not be less than					
	2.00mm. The doorframe consists of four segments,					
	which are provided with plug-in-socket arrangement					
	in-situ in the mould. The segments are plugged in					
	and are joined together by means of screw. The					
	GRP frame shall be provided with wooden					
	reinforcement on six locations for high screw					
	holding capacity for fixing metallic hold fast and					
	shall be consolidated by filling with medium density					
	foam/plaster of paris with fibre reinforcement, Six					
	numbers of 260mm x 25mm x 5mm size 'S' shaped					
	M.S flat hold fast shall be provided with the frame.					
	The material and process for manufacturing the					
	doorframes shall conform to RV-TIFAC composites					
	Design Centre's standards and specifications.					
	The finish of door frame will be plain colour white/					
	Ivory/ Beige/ Light grey/ Golden brown/ Mahogany/					
	Teak wood/sand stone/ Champagne/ Pastel blue or					
	any other colour using high quality pigments					
	complete in all respect as per specification and					
	direction of the Engineer in charge					
		90	Rmt			

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
40	Supplying & Fixing Factory made single leaf rigid					
	FRP(alternately called GRP) sandwich composite					
	door shutter of 32mm thick laminated with two					
	GRP skins with wood grain finish fabricated using					
	UV-stabilised Isopthalic Gel coat and one layer of					
	450 gsm E-glass Chopped Strand Mat (CSM)					
	impregnated with orthopthalic meter polyester resin.					
	The thickness of the skins shall not be less than					
	1.50mm Expanded Polystyrone (EPS) structural					
	foam panel of 29mm thickness and a density of					
	20kg/cu.mtr shall be used as core material. Wooden reinforcements made of seasoned sal					
	wood block of cross section not less than					
	28mmx32mm and also necessary sal wood					
	reinforcements for fitting the metal fittings such as					
	tower bolts, aldrops, handles etc shall be provided.					
	A structural adhesive compatible with (EPS) foam					
	shall be used for bending the core material, the sal					
	wood reinforcements and the skins.					
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	The material and process for manufacturing the					
	door shutters shall conform to RV-TIFAC					
	composites Design Centre's standards and					
	specifications and the door shutters tested in					
	conformation to IS: 4020-1998. The finish of door					
	shutter will be plain colour.	27	Sqm			

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
41	Providing and applying Two coats of synthetic					
	enamel paint of approved make and shade form					
	ASIAN PAINTS -APCOLITE PREMIUM GLOSS					
	ENAMEL / BERGER PAINTS - LUXOL HI GLOSS					
	SYNTHETIC ENEMAL / SUPER PAINTS / ICI					
	DULUX / NEROLAC PAINTS" over new surfaces					
	/existing painted wooden/ steel surfaces minor					
	repairs including sealing of cracks with suitable					
	putty of approved brand, scaffolding, cleaning of					
	dirt, removal of oil etc, preparation of surfaces wherever required including sand papering,					
	cleaning etc. complete as directed by the Engineer.					
	Item includes cost of all materials, transportation,					
	labour, etc. in all floors.					
		1350	Sqm			
42	Cleaning the roof and chajja with wire brush and					
	water jet and repairing pot holes with cement					
	mortar (1:4) with sika latex or equivalent including					
	providing and laying two coats of sika latex or					
	equivalent with cement on top surface of roof					
	@150gm/sqm per coat. Making hallers in the					
	junction of parapet and roof slab, wall and chajja in					
	cement mortar (1:4).	1650	Sqm			
43	Providing & laying screed concrete on the top of					
	the roof in 1:2:4 (1 cement : 2 sand : 4 stone chips					
	12.5mm down gauge) with waterproofing admixture					
	plasto crete plus @ 100gm/ bag of cement					
	confirming to IS-2645 with slope and necessary					
	huntering as per direction of Engineer in charge average thickness 75mm.	1350	Sqm			
	average unioniess / Stillin .	1330	Jun			

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
44	Providing & Making Plinth Protection all round the building with bricks of class designation 55 laid on edge in cement mortar 1:6 (1 cement : 6 coarse sand) with 12mm thick bed of cement mortar 1:6 ( 1 cement: 6 coarse sand) over 75mm thick bed of dry brick aggregates 40mm nominal size well rammed & consolidated & grouted with fine sand & the top of the bricks pointed with cement mortar 1:3 (1 cement : 3 fine sand) including cost of all materials, labour, lead, royality, tax, T&P, curing etc.complete in all respects as per direction of Engineer /. in charge.					
		450	Sqm			
45	Repairing of existing collapsible gate which includes taking out the existing collapsible gate with hold fast, reparing the collapsible gate with vertical channel , flat iron diagonals, top & bottom rail , steel pully with bolts,nut, locking arrangement, stpooer, handles as required with fabrication charge, fixing the same & making good the damages to walls/floor, cost includes all material, labour, tax,lead, T&P etc. complete in all respects.	21	Sqm			
46	Repairing of existing MS grill which includes taking out the existing MS grills with hold fast, reparing the grill with MS flat/ square bar of required size as per the existing grill condition as required with fabrication charge, fixing the MS grill with necessary screws / holdfast & making good the damages caused to walls/floor, cost includes all material, labour, tax,lead, T&P etc. complete in all respects.	90	Sqm			

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
47	Providing & Fixing MS grill made of MS flat/					
	square bar of required size as per the detailed					
	drawings with fabrication charge, fixing the MS					
	grill with necessary screws / holdfast & making					
	good the damages caused to walls/floor, making holes of size (15cm x 15cm x15cm) & filled up with					
	plain cement concrete (1:2:4) after fixing the grill in					
	position ,cost includes all material, labour, tax,lead,					
	T&P etc. complete in all respects.					
		75	Sqm			
48	Supplying and Fixing clear glass panes of 5.5mm	_				
	thick glass (MODI FLOAT/ ASAHI/SAINT GOBAIN)					
	with metal sash putty, glazing clips, removal of					
	steel panels, breaked glass, painting the putty,					
	necessary fabrication if required, cost includes all					
	material, cutting glass in required size , labour,	90	Sam			
10	tax,lead,T&P, scaffolding etc.	90	Sqiii			
49	Providing anchoring for 8mm / 10mm dia steel bars (FISHER / HILTI) including drilling, necessary					
	chemical treatment as per manfacturer					
	specification, complete in all respects, including					
	scaffolding,T&P, material, labour, making good the					
	damages.	570	Each			
50	Providing & applying Nitobond <sup>(R)</sup> EP (a product of					
	Fosroc Chemicals (India ) Pvt. Ltd. ) or Epoxy					
	bonding agent ( 2 part solvent free epoxy based					
	bonding agent as jointing material as a bonding					
	agent for jointing of new & old concrete of roof					
	slab / concrete member as per manfacture's					
	specification as construction joint cost includes all					
	material, labour , T&P, Scafolding charges etc.					
	complete	30	Sqm			

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
51	Providing 40mm thick Artificial Stone Flooring as per proper level in cement concrete of proporation of (1cement:2 coarse sand :4 graded coarse aggregates of 12.5mm nominal size) with a floating coat of neat cement punning, fixing of glass strip in the joints of new & old flooring cost including making good the damages, materials,labour, tax, T&P, lead,curing complete as per the direction of Engineerin-charge. in all floors					
		600	Sqm			
	TOTAL					
	carried over to general summary					

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
	SECTION-B, WATER SUPPLY & SANITAR	RY WO	RK			
1	Removal of existing Orissa Pan, flushing cistern					
	and all existing necessary fixtures, pipes etc. Supplying and Fixing Indin type water closet I.S.I.					
	Marked (confirming to IS : 7231) of (Parryware/					
	Hindware/Cera) make with integral foot rest white					
	vitrious ware with P / S trap (C I ) with 10.0 ltr					
	capacity low level flushing cistern (Parryware					
	slimline) in white plastic with all internal fitting.					
	etc. with all fittings & fixtures complete including					
	making good the damages including cost of all					
	materials, labour,tax, T&P, lead,lead joint, royality					
	etc.complete in all respects as per direction of					
	Engineer. in charge. White vitreous china orissa					
	pattern WC pan size ( 580mm x 440mm ) with					
	integral type footrest, 32mm dia flush pipe					
		9	No			

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
2	Removal of existing Pan, Flushing cistern with necessary fixtures, pipes etc. Supplying and Fixing white vitreous china pedestal type water closet (European type WC pan) confirming to IS :7231 with lid & seat I.S.I. marked of (Parryware/ Hindware/Cera) with P / S trap (C.I.), PVC flush bend 40mm, overflow arrangement with specials of standard make and mosquito proof coupling of approved design, 10.0 ltr capacity low level flushing cistern (Parryware/Hindware) in white plastic with manual controlled device (IS :7231) all internal fitting. etc. with all fittings & fixtures complete including cutting & making good the damages the walls & floor including cost of all materials, labour,tax, T&P, lead, royality etc.complete in all respects as per direction of Engineer. in charge.					
		9	No			
3	Providing and fixing wash basin size (550 x 400mm) white colour of Johnson Peddar code - 8316 as per drawing complete with all accessories like waste pipe, necessary piping, waste pipe, brass coupling, PVC connecting pipe from stop cock to pillar cock etc complete as directed.					
		18	No			

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
4	Providing & fixing salem stainless steel kitchen					
	sink A ISI 304 (18/8) (Make- Nirali / Parryware)					
	with drainboard 460mm x 915mm x bowl depth					
	178mm (IS: 13983) with CI bracket and stainless					
	steel plug 40mm including painting of fittings &					
	bracket, waste water pipe regular swinging spout					
	etc. cutting & making good the damages to walls					
	and floor whereever required including cost of all					
	materials, labour, lead, royality,tax,T&P					
	etc.complete in all respects as per direction of					
	Engineer. in charge.	18	No			
5	Providing and fixing PVC nahani floor trap with CP					
	jalli 100 /150mm dia on top of the trap complete as					
	directed	36	No			
6	Providing and fixing CP Towel Rail (24") - Jaquar					
	Continental CAT No. 1111 complete as directed.					
		18	No			
7	Providing and fixing CP Towel Ring - Jaquar					
	Continental CAT No. 1121 complete as directed.	36	No			
8	Providing and fixing Angular Stop Cock - Jaquar					
	Continental CAT No. 053 complete as directed.	54	No			
9	a) Providing and fixing CP Bib Cock - Jaquar					
	Continental CAT No. 037 complete as directed.	36	No			
	b) Providing and fixing CP Bib Cock (long body) -					
	Jaquar Continental complete as directed.	18	No			
10	Providing and fixing CP Pillar Cock - Jaquar					
	Continental CAT No. 011 complete as directed.	18	No			
11	Providing and fixing Double Coat Hook - Jaquar					
	Continental CAT No. 1161complete as directed.	36	No			
12	Providing and fixing soap dish - Jaquar Continental					
	CAT No. 1131complete as directed.	36	No			

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
13	Providing & Fixing overhead shower (ABS chrome					
	plated) with rubit cleaning system of Jaquar					
	continental. (Cat- 491)	18	No			
14	All pipe lines shall be concealed in the wall/floor. All					
	G.I. pipes shall be TATA make & medium quality (					
	Class 'B' ) and fitting must be 'R' brand heavy					
	quality and these shall be supplied as per					
	specification . All G.I. pipes shall be laid as per					
	specification and drawing . The rates quoted shall					
	include cost of cutting holes and chasing through					
	floors and walls and repairing the same and					
	necessary scaffolding charges etc. as may be					
	necessary. All G.I.pipes wherever exposed to					
	surface shall be painted with two coats of synthetic					
	enamel paint over a coat of primer. The rate					
	therefore should include expenditure on this					
	accounts. The rate quoted shall include for cutting					
	the pipes to required length, making thread, coast					
	of hangers and clamps earth work wherever					
	necessary . The testing of the pipe lines after					
	erection as per specification etc. complete in all					
	respect . No extra payment shall be entertained on					
	above accounts .All brass chromium plated fittings					
	should be of best quality as mentioned in the					
	specification .					
	G.I. Pipes (TATA) for following dia with all					
	necessary G.I. Fittings such as bends, tees,					
	elbows, reducers, sockets, caps, clamps,					
	plugs, union etc. & making good the damages as					
	per drawing including cost of all materials, labour,					
	lead, royality,tax,T&P etc.complete in all respects					
	as per direction of Engineer. in charge.					

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
а	25mm	75	Rmt.			
b	20mm	105	Rmt.			
С	15mm	105	Rmt.			
15	Concealing the existing GI pipes inside wall surface including cutting grooves in the the wall, relaying the pipe with necessary clamps and fittings required, plastering the groove in cement mortar ( 1:4), necessary scafolding, making good the damages caused, cost incudes dismentle of winting pipe.					
	existing pipe & concealing the same. Care should be taken at the time of dismentling that the pipe should not be damaged due to mishandle. for GI pipes 15mm to 20mm	150	Rmt.			
16	Removal of existing C.I. pipe 150mm / 100mm dia for soil waste & vent pipe including lead joint, all fittings and specials such as Bends, junctions, offsets, access pieces (plain or door) & vent cowl and making good the damages to walls / floors /					
	others caused complete.	145	Rmt.			

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
17	Providing, fixing, jointing, testing and commissioning C.I. pipe (heavy duty type) for soil, waste & vent installation conforming to IS:1729 cut to required lengths including all necessary fittings and specials such as Bends, junctions, offsets, access pieces (plain or door) & vent cowl. Fixing at wall/ceiling level supported by steel clamps & hangers etc. painting of pipe as per IS codes in case of exposed pipe). Making proper connection with refined pig lead joint of required depth as per BIS / manufacturer. Cutting, chases/holes in floors / walls / slab and making good the same after pipes have been duly laid and testing complete.					
a)	150 mm dia	120	Rmt.			
b)	100 mm dia	90	Rmt.			
18	Providing and laying 1:2:4 cement concrete all round the pipe including bed concrete for the following M.S./C.I./C.I. class L.A. pipes and specials below floor including necessary shuttering and necessary steel reinforcement etc. complete as required.					
a)	For 150 mm dia pipe, 150 mm thick bed conc. and 150 mm thick alround.	60	Rmt.			
b)	For 100 mm dia pipe, 100 mm thick bed conc. and 100 mm thick alround.	30	Rmt.			

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
19	Painting of Exposed C.I. pipes and fittings					
	(after installation) of following sizes with two					
	coats of synthetic enamel paint of approved shade					
	over a coat of primer, all as per pipe colour code					
	including painting of legends with direction arrows					
	are per the approval of consultant. for both old &					
	new pipes.		N 41-			
a)	100mm dia	90	Mtr			
b)	150mm dia	120	Mtr			
20	Providing, cutting & chasing in walls & floor for 25					
	mm dia to 50 mm dia waste pipes & fittings. And					
	making good the same by using 1:1 cement mortar.	240	Mtr			
21	Providing & fixing in position CI full bore P / S trap	240	IVILI			
21	with 50 mm water seal (IS:1729) of following sizes					
	for the embedded areas. Making proper connection					
	with refined pig lead joints, cutting chase / hole in					
	floors /slabs and bringing the same in proper					
	condition and shape after placing the trap in right					
	position complete as required.100mm inlet &					
	100mm outlet.	18	No			
22	Providing and fixing thick CP brass hinged grating					
	(cockorach trap) with rim of approved design					
	including setting floor with cement mortar (as per					
	approved by Consultant's design).100mm dia					
		18	No			

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
23	Providing, laying, jointing and testing in position					
	the following glazed stone ware pipes grade `A'					
	with stiff mixture of cement mortar in the					
	proportion of 1:1 (1 cement : 1 fine sand) laid					
	below ground level in trenches upto required depth					
	including excavation in all kind of soil (hard / soft),					
	dewatering, refilling, watering, ramming & removing					
	the surplus excavated material and making good					
	the same complete as required.					
a)	150mm dia	90	Mtr			
b)	100mm dia	50	Mtr			
	Providing and laying 150 mm thick cement concrete					
	1:4:8 (1 cement:4 fine sand:8 graded stone					
	aggregate 40mm nominal size) alround pipes					
	including 150 mm thick bed concrete as per					
	approved design.					
a)	150mm dia	90	Mtr			
b)	100mm dia	50	Mtr			
25	Dismentling of existing inspection chamber with all					
	brick work, bottom concrete, top RCC slab with					
	reinforcement, taking out CI / RCC manhole cover					
	etc. refilling the pit with earth including ramming &					
	compacting complete in all respects.	10	No			
		12	No			

SI. No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
26	Providing, fixing, jointing, testing and commissioning HCI Rain water downtake pipe ( 100mm dia) conforming to IS:1729 cut to required lengths including all necessary fittings and required specials. Fixing at wall/ceiling level supported by steel clamps & hangers etc. painting of pipe as per IS codes in case of exposed pipe). Making proper connection with refined pig lead joint of required depth as per BIS / manufacturer. Cutting, chases / holes in floors / walls / slab and making good the same after pipes have been duly laid and testing complete.	360	Rmt.			
27	Providing & Constructing Inspection pit/ chamber of internal size (0.75mt x 0.75 mt x 0.90 mt) in 230mm thick brick wall using locally available KB bricks strength not less than 55 Kg/sqcm & cement sand mortar in proporation (1 cement : 6 coarse sand) over 150mm thick bed of plain cement concrete in proporation (1cement: 4 coarse sand: 8 graded stone aggregates of 40mm down size ),inside plastering of 20mm thick in cement mortar of proporation of (1cement : 3 coarse sand) including neat cement punning, top slab of 12cm thick RCC slab in proporation (1cement: 1.5 coarse sand : 3 graded stone aggregates 20mm nominal size)	360	KIIIL			

SI.						_
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
	forming a channel in floor & supplying, fixing					
	455mm dia -8mm thick cast iron water seal type					
	man hole cover & frame (weight 52 kg) set in 10cm					
	thick R.C.C top slab cost includes earth work in					
	excavation, back filling, Tor steel for RCC work,					
	shuttering & centering for RCC work, as per					
	detailed working drawing including cost of all					
	materials, labour, lead,tax,curing, royality					
	etc.complete in all respects as per direction of					
	Engineer in charge.	12	No.			
	TOTAL					
	TOTAL					
	carried over to general summary					

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
	SECTION-C, INTERNAL CC ROAD.					
1	Dismentling the existing cement concrete road by					
	means of manually or mechanical concrete breaker					
	including disposal of debris within 100mt intial lead,					
	cost includes T& P, labour etc. all complete.					
		25	Cum			
2	Preparation of subgrade (average 22.5cm depth)					
	including dressing to camber, levelling, preparing					
	sub grade & consolidating with road roller including					
	making good the undulations to proper camber, in					
	all kinds of soil, allow for necessary earth work in					
	filling as required & spread & level surplus earth					
	within 50mtr lead the site as per direction of Engineer in charge.	400	Sqm			
3	Providing and Laying of sand including levelling by	400	Sqm			
5	proper camber, compacting by watering including					
	cost of all materials, labour, lead, royality,T & P etc.					
	complete in all respect as per the direction of the					
	Engineerin-charge.	45	Cum			
4	Providing Dummy Groove joints @ 5mtr c/c interval					
	including cost of material (premoulded joint filler					
	20mm thick, painting with primer), labour for fixing					
	etc.complete.	90	Mtr			
5	Providing and Laying of Plain Cement Concrete of					
	proportion (1 cement: 4 coarse sand: 8 graded					
	metal 40mm down size hard Black Granite Metal)					
	of approved quality including mixing by mechanical					
	mixer, laying in position, compacting, curing etc.					
	including cost of all materials, labour, lead,					
	royality,T & P etc. complete in all respect as per the					
	direction of the Engineerin-charge.	45	Cum			
		40	Cum			

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
6	Providing 100mm thick Reinforced Cement Concrete in proporation (1 cement: 1 1/ 2 coarse sand : 3 graded coarse aggregates 20mm nominal size ) including cost of side shuttering,all materials & testing charges, labour,lead,royality,tax, mixing by mechanical mixer, hoisting, laying, compacting by needle & plate vibrator as required, concreting by suitable means and watering for curing ,forming rough texture top & filling the same by bitumen mixed sand in proporation [1:2] etc. complete in all respects as per the direction of Engineerin-					
	charge. (excluding cost of Steel).					
-		45	Cum			
1	Extra for providing and mixing hardcrete of approved quality as per manfacture's specification	360	Ltr			
8	Cutting, Straightening, bending, binding cold drawn Tor Steel of High Yield Strength Deformed / TMT bars confirming to IS-1786 (Grade Fe 415/ 500) of approved manfacture (TATA-TISCON / VIZAG / SAIL), tying Tor steel in Grill and placing in position as per the requirement for R.C.C. work including cost of steel and binding wire ( 20 gauge black anealed) at every intersection,cover block, testing charges of steel, labour, lead,royality, tax etc. complete in all respect as per the direction of the Engineerin-charge. ( weight shall be calculated as per standard table & wastage shall not be accounted) 8mm # @ 150mm c/c both ways in single row.	2	MT.			

SI. No.	Item Description.	Qnty.	Unit	Rate in figures	Rate in words	Amount
9	Supplying & fixing kerb stone in Cement Concrete in proporation (1 cement : 1.5 coarse sand :3 graded stone aggregate 20mm nominal size ) chisel dressed on top and side including fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and pointing with cement mortar 1:4 (1 cement : 4 coarse sand) including making drainage opening where required including necessary excavation & filling side treanches etc. including cost of all materials, labour, tax, lead, T&P etc. complete in all respects as per the direction of Engineerin- charge.Size of kerb stone- (495 x 300x 200mm)		Mtr			
10	Providing and Laying of external cement concrete paving tile of (ULTRA / EUROCON / EQUIVALENT) of approved pattern over base course of average 20mm thick cement mortar (1 cement : 3 coarse sand) including grouting the joints, laying in position, wastage,curing etc. including cost of all materials, labour, lead, royality,T & P etc. complete in all respect as per the direction of the Engineerin-charge.	300	Sqm			
	TOTAL					
	carried over to general summary					

SI. No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
	SECTION-D, INTERNAL DRAIN					
1	Earth work in excavation in foundation trenches in all kinds of soils within initial lift 1.50 mt including breaking clods, rough dressing to the sides of trench, getting out the excavated soil & disposal of surplus excavated soil in layers not exceeding 0.20 mt within 50mtr 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.	90.00	Cum			
2	Back Filling by available excavated earth including ramming after watering for compacting laying in layers not exceeding 20cm including cost of labour, T&P etc. to complete the work in all respect as per the direction of the Engineerin-charge.	15.00	Cum			
3	Filling the foundation with approved quality good river sand including ramming after watering for compacting laying sand in layers not exceeding 20 cm including cost of material, lead, labour, royality, T&P, tax etc. to complete the work in all respect as per the direction of the Engineerin-charge.	16.00	Cum			

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
4	Providing and Laying of Plain Cement Concrete of proportion (1cement: 4 coarse sand: 8 graded metal 40mm down size) by volume in foundation					
	& subfloor using Crusher Broken Hard Black Granite Metal of size 40 mm down of approved					
	quality including mixing by mechanical mixer, laying in position, compacting, curing etc. including					
	cost of all materials, labour, lead, royality,T & P etc. complete in all respect as per the direction of the Engineerin-charge.					
		16.00	Cum			
5	Providing & constructing K.B. Brick masonary using Locally available K.B. bricks of size (23cm x 12cm x 8cm) with tolerance +/- 8% having crushing strength not less than 55Kg/sqcm in cement sand mortar (1cement: 6 coarse sand) in drain walls including cost of all materials & testing charges, labour, lead, royality, curing, pointing, T&P, tax etc. complete in all respect as per the direction of Engineerin-charge		Cum			
6	Providing 15 mm thick cement plaster with neat cement punning in cement sand mortar in proporation (1 cement : 6 fine sand) over Brick. masonary surface after racking out of joints cost includes of all materials, labour,lead, royality, T & P, scafolding, curing, tax etc. complete in all respect as per the direction of Engineer /in -					
	charge.	450.00	Sqm.			

SI. No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
7	Providing & Laying Plain Cement Concrete (1cement: 1 1/ 2 coarse sand : 3 graded coarse aggregates of 12.5 mm nominal size ) in inside of drain Crusher Broken Hard Granite chips of size 12.5mm down & coarse sand including cost of all materials, testing charges, labour, lead, royality, scaffolding,tax, mixing by mechanical mixer, hoisting, laying, compacting by needle & plate vibrator as required, concreting by suitable means and watering for curing etc. complete in all					
	respects as per the direction of Engineerin-charge.	4.00	Cum			

SI.						
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
8	Providing & laying 75mm thk precast ,precured					
	R.C.C. slab (1cement: 1 1/ 2coarse sand : 3					
	graded coarse aggregates 12.5 mm nominal size)					
	as drain cover including finishing top & sides with					
	cement plaster 6mm thick ,steel about 0.80% of					
	concrete volume, shuttering cost of all materials,					
	labour, lead,royality, tax, scaffolding, mixing by					
	mechanical mixer, hoisting, laying, compacting by					
	needle & plate vibrator as required , fixing with					
	cement mortar (1cement:4 fine sand) sealing the					
	joints including pointing in cement mortar					
	(1cement:2 sand) concreting by suitable means					
	and watering for curing etc. complete in all					
	respects as per the direction of Engineerin-					
	charge.	150.00	Sqm			
	TOTAL					
	carried over to general summary					

SI.		_				• · · ·
No.	Item Description.	Qnty.	Unit.	Rate in figures	Rate in words	Amount
	GENERAL SUMMARY					
	SECTION-A, CIVIL WORK					
	SECTION-B, WATER SUPPLY & SANITARY WORK					
	SECTION-C, INTERNAL CC ROAD					
	SECTION-D, INTERNAL DRAIN					
	GRAND TOTAL					
	IN WORDS:-					