

## BILL OF QUANTITIES

**NAME OF THE WORK: CONSTRUCTION OF SECOND FLOOR WITH ROOF OF THE KANGRA CO-OP PRIMARY AGRICULTURE AND RURAL DEVELOPMENT BANK AT DHARAMSALA, DISTT KANGRA HIMACHAL PRADSEH**

			<b>ESTIMATED COST</b>		<b>4549967</b>
			<b>EARNEST MONEY</b>		
			<b>TIME LIMIT</b>		
	<b><u>ISSUED TO</u></b>				
<b>S.No.</b>	<b>Description of items.</b>	<b>Quantity</b>	<b>Rates</b>	<b>Unit</b>	<b>Amount</b>
1	Dismantling steel work in built up sections in angles, tees, flats and channels including all gusset plates, bolts, nuts, cutting rivets, welding etc including dismembring and stacking within 50 meters lead.	6592.00		kg	
2	Removal of G.I sheet including vertical/curved surface fixed with polymer coated J Or L hooks, bolts and nuts 8 mm dia with bitumen and G.I limpet washers or with G.I limpet washers filled with white led, excluding the cost of purlins, rafters & trusses and including cutting to sides and shape wherever required. sheet of 0.65 mm thick	262.50		squaremeter	
3	Demolishing brick work manually/by mechanical means including stacking of serviceable material and disposal of unserviceable material with in 50 meter lead as per direction of engineer-in-charge in cement mortar	18.98		cubic meter	
4	Removing mortar from bricks and cleaning bricks including stacking within a lead of 50 m (stack of clean bricks shall be measured) in cement mortar	9490.00		Nos	
	<b>Carriage of material</b>				

	By Manual Labour Including Loading, Unloading and Stacking for Lead Less Than 50 m (These rates are inclusive of contractor's profit and overheads but exclusive of GST.				
5	Sand, stone aggregate below 40 mm nominal size	173.07		cubic meter	
6	Bricks	29370.00		Nos	
7	Cement	375.00		Bags	
8	Steel	3575.00		kg	
9	Timber	88.37		cubic meter	
<b>Construction Of Second Floor</b>					
10	Centering and shuttering including strutting, propping etc and removal of form for Columns	13.72		square meter	
11	R.C.C. work in columns above plinth level upto floor five level excluding cost of centering, shuttering, finishing. 1:1.5:3 ( 1 cement : 1.5 coarse sand: 3 graded stone aggregate 20 mm nominal size)	6.17		cubic meter	
12	Brick work with common burnt clay (non modular) bricks of class designation 7.5 in superstructure above plinth level upto floor five level in all shapes and sizes in cement mortar 1:4 ( 1 cement : 4 coarse sand)	58.78		cubic meter	
13	Providing wood work in frames of doors and windows fixed in position with hold fast lugs or with dash fastners of req. dia and length ( hold fast lugs ordash fastners shall be paid separately) Sal wood	8.37		cubic meter	
14	Toughened glass 12 mm thickness	18.39		Square meter	

15	Providing and fixing wire gauge shutters using stainless steel grade 304 wire gauge with wire of dia 0.5 mm and average width of aperture 1.4 mm in both directions for doors, windows and clerestory windows with necessary screws, 35 mm thick shutters With ISI marked stainless steel butt hinges of required size Second class teak wood	24.59		Square meter	
16	Providing and fixing stainless steel ( Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in- charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	573.00		kg	
17	Providing 20mm thick cement plaster in a two coat on fair side of brick/concrete/stonewalls for interior plastering upto floor two level including arrises, internal rounded angles not exceeding 80 (eighty) millimeters in girth and finished even and smooth in cement mortar 1:4 (One cement : four sand).	440.89		square meter	
18	Precast terrazo tiles 22 mm thick with graded marble chips of size upto 12 mm, laid in floors, and landings, jointed with neat cement slurry mixed with pigment to match the shade of the tiles, including rubbing and polishing complete, on 20 mm thick bed of cement mortar 1:4 (1 cement:4 coarse sand) Light shade pigment using white cement	180.55		Square meter	
19	Providing and fixing plain jaffri door and window shutters including bright or/and black enamelled M.S. butt hinges with necessary screws 35x10 mm laths placed 35 mm apart (frames to be paid separately), including fixing 50x12 mm beading complete with Second class teak wood	32.50		square meter	

20	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete	440.89		Square meter	
21	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade : Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture	440.89		Square meter	
22	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require: White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps	3.00		Each	
23	Providing 10 mm thick plaster of Paris (gypsum anhydrous) ceiling up to a height of 5 m above floor level, over first class kail wood strips 25x6 mm with 10 mm gap in between and reinforced with rabbit wire mesh fixed to wooden frame (frame work to be paid separately): Curved surfaces	180.55		Square meter	
24	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	6592.00		Kg	
25	Providing corrugated G.S. sheet roofing including vertical / curved surface fixed with polymer coated J or L hooks, bolts and nuts 8 mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead, including a coat of approved steel primer and two coats of approved paint on overlapping of sheets complete (up to any pitch in horizontal/ vertical or curved surfaces), excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required. 0.63 mm thick with zinc coating not less than 275 gm/ m <sup>2</sup>	262.50		Square meter	
	<b>DNIT FOR ELECTRICAL INATALLATIONS</b>				

26	(Item Code : 207) Wiring for light point / fan point / exhaust fan / call bell point with 1.5 Sq. mm. PVC insulated heat resistant flame retardant (HRFR) and low smoke single core (flexible) copper conductor cable in surface/recessed PVC conduit with modular switch, modular plates,suitable G.I. box and earthing the light point with 1.5 Sq.mm. HRFRLS/PVC insulated single core copper conductor cable asrequired.Group A.	45.00		P/Point	
27	(Item Code : 210) Wiring for twin control light point with 1.5 Sq. mm. PVC insulated heat resistant flame retardant (HRFR) and low smoke single core (flexible) copper conductor cable in surface/recessed PVC conduit with 2-way, 5/6 amps. modular switch, modular plates, suitable G.I. box and earthing the light point with 1.5 Sq.mm. HRFRLS/PVC insulated single core copper conductor cable as required.Group-A	4.2		P/Point	
27	(Item Code : 213) Wiring for light plug with 2x1.5 Sq. mm. PVC insulated heat resistant flame retardant (HRFR) and low smoke single core (flexible) copper conductor cable in surface/recessed PVC conduit along with 1 No.1.5 Sq.mm. HRFRLS/PVC insulated single core copper conductor cable for earthing as required	33	229	P/meter	7557.00
28	(Item Code : 215) Wiring for power plug with 2x4 Sq. mm. PVC insulated heat resistant flame retardant (HRFR) and low smoke single core (flexible) copper conductor cable in surface/recessed PVC conduit along with 1 No.4 Sq.mm. HRFRLS/PVC insulated single core copper conductor cable for earthing as required.	52		P/meter	
29	Wiring for circuit/sub-main with following size PVC insulated heat resistant flame retardant (HRFR) and low smoke single core (flexible) copper conductor cable in surface/recessed PVC conduit along with 1 No.HRFRLS/PVC insulated single core copper conductor cable of same size for earthing as required.				
i	(Item Code : 216) 2x1.5 Sq. mm.	25		P/meter	
ii	(Item Code : 217) 2x2.5 Sq. mm.	25		P/meter	
iii	(Item Code : 218) 2x4 Sq. mm.	25		P/meter	
iv	(Item Code : 219) 2x6 Sq. mm.	12		P/meter	

v	(Item Code : 220) 2x10 Sq. mm.	12		P/meter	
vi	(Item Code : 220) 2x16 Sq. mm.	12		P/meter	
30	(Item Code : 228) Wiring for circuit / sub-main with 3x25+1x16 Sq. mm. PVC insulated heat resistant flame retardant (HRFR) and low smoke single core (flexible) copper conductor cable in surface/recessed PVC conduit along with 2 No.16 Sq.mm. (3x25+3x16) HRFRLS/PVC insulated single core copper conductor cable for earthing as required.	3		P/meter	
31	(Item Code : 438) Supplying and drawing One pair of Fire Retardant, PVC insulated 0.5 sq.mm. (FR-Flexible) copper conductor, flat, unarmoured, telephone cable in existing surface / recessed, steel / PVC conduit as required.(4 pair)	75		P/meter	
32	(Item Code : 439) Supplying and drawing coaxial TV cable, RG-6 grade, 0.7mm (75 Ohms) copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface / recessed, PVC conduit as required.	32		P/meter	
33	(Item Code : 440) providing and laying data transfer LAN cable CAT-6 in recessed PVC conduit 2 mm thick 25 mm dia crimping at both ends as required of approved quality.	115		P/meter	
34	(Item Code : 602) Supplying and fixing of 25 mm dia of PVC conduit along with the accessories in surface / recess including cutting the wall and making good the same in case of recessed conduit as required:-	32		P/meter	
35	(Item Code : 806) Supplying & fixing of G.I. modular boxes of 2 modules (78mmx78mmx50mm) along with modular base and cover plate for modular switches in recess as required:-	2		each	
36	Supplying and fixing following rating Moduler switch /socket on the existing switch box / cover including connections etc. as required.				
i	(Item Code : 915) Telephone socket outlet, Modular.	2		each	
ii	(Item Code : 916) TV. Socket outlet, modular.	4		each	

37	(Item Code : 927) Supplying and fixing G.I. Modular box of (140mmx78mmx50mm) size with modular plate and cover in recess including providing and fixing 5 pin 5/6 amps modular socket outlet and 5/6 amps, modular switch, connections etc. as required	8		each	
38	(Item Code : 928) Supplying and fixing G.I. Modular box of (140mmx78mmx50mm) size with modular plate and cover in recess including providing and fixing 6 pin 15/16 amps modular socket outlet and 15/16 amps, modular switch, connections etc. as required	11		each	
39	(Item Code : 937) Supplying and fixing Ding-Dong / Electronic musical bell, suitable for D.C./A.C. single phase,230 volts complete as required:-	6		each	
40	(Item Code : 1002) Supplying and erection of wall mounted metal boards for switch gear mounting of suitable size, with permissible variation in size of plus minus 5mm, welded frame work made of M.S. angle iron 35 mm x 35 mm x 6 mm thick duly welded complete with 2.80mm thick M.S. sheet fixed with hinges as open able front, complete with locking arrangement including painting and bonding to the existing earth as required:-	1		each	
41	Supplying and fixing of following way, single pole and neutral sheet steel MCB distribution board, 240 volts, on surface / recess, complete with tinned copper bus- bar, wire-set, neutral link, earth bar, din-bar, detachable gland plate, blanking plate, cable, identification labels interconnections, phosphatized and powder painted, including earthing etc. as required:				
i	(Item Code : 1809) Double door-12 way	1		each	
ii	(Item Code : 1810) Double door-16 way	4		each	

42	Providing and installation of stationary storage type Electric water heater (Geyser) of various sizes by means of Expansion-bolts with nuts and washers, including embedding of expansion-bolts in the wall, providing and fixing of Non-return valve, Dead weight safety valve, 2 No C.P. connection rods 18" long, making good the damages, electrical connections, safety valve connections, testing and commissioning etc. as required:-				
i	(Item Code : 1810) 15 Litre capacity water heater (Cat-A)	3		each	
43	Providing, Installation, testing and commissioning of ceiling fan with Step type electronic regulator, including wiring the down rods of standard length (up to 30 cm) with 16/0.20 mm twin twisted flexible, cotton braided, copper cable, including providing and fixing phenolic laminated sheet cover on the fan box and earthing etc. as required:-				
i	(Item Code : 2501) Ceiling Fan 1200 mm sweep, Category-A	6		each	
ii	(Item Code : 2502) Ceiling Fan 1400 mm sweep, Category-A	2		each	
44	Providing and installation of exhaust fan of following sizes in the existing opening, including making the hole to suit the size of the above fan, making good the damages, connections, testing and commissioning etc. as required:-				
i	(Item Code : 2502) Exhaust Fan, Light duty, (Domestic) 300 mm sweep	4		each	
45	Providing and fixing following type of surface mounting decorative mirror optics luminaire with powder coated CRCA sheet steel housing, low glare aluminium mirror reflector, pre-wired with 110 V starter & 36/40 w copper ballast for housing CFL (but excluding the cost of CFL), complete with all accessories, connections, testing and commissioning etc. as required. Providing and fixing following type of surface mounting decorative mirror optics luminaire with powder coated CRCA sheet steel housing, low glare aluminium mirror reflector, pre-wired with 110 V starter & 36/40 w copper ballast for housing CFL (but excluding the cost of CFL), complete with all accessories, connections, testing and commissioning etc. as				



i	(Item Code : 2602) 2 x18 watt-LED (Category-A)	2		each	
ii	(Item Code : 2604) 3 x36 watt-LED (Category-A)	2		each	
46	(Item Code : 2611) Providing and fixing ultra slim decorative extruded box fixture with domestic electronic ballast, snap-on installers, suitable for 28 watt FTL (T5), complete with all accessories (including one No. T-5 Tube), connections, testing and commissioning etc. as required. 1 x28 watt-FTL(T5) (Category-A)	35		each	
47	Supplying and erection of Voltmeter & Ameter( Digital Panel Meter ), ASS + VES, C T , indicator as required. Complete in all respects	1		each	
48	Supply and fixing of Bell Indicator-20 way electronic type standard or equivalent good quality as per approved By the Engineer incharge	4		each	
49	(Item Code : 1212) SUPPLYING AND FIXING ARMOURED CABLE 120 sqmm- 3.5 core ISI marked.	11		p/meter	
<b>ESTIMATE OF WATER SUPPLY AND SANITARY INSTALLATION</b>					
50	Providing and fixing to wall ceiling and floor PPR tubes (heavy grade) tube fitting and clamps including making good the wall, ceiling and floor:				
i	20mm nominal bore	75		p/rmeter	
ii	25mm nominal bore	22		p/rmeter	
iii	32mm nominal bore	14		p/rmeter	
iv	40mm nominal bore	12		p/rmeter	
51	Providing and fixing stainless steel kitchen sink of approved standard ISI make with drain board and C.P. waste with C.I. or M.S. Brackets painted white including cutting holes and making good the same but excluding fitting jaquar/nirali/anupam make				
i	610 x460 mm with bowl depth 200 mm	1		each	

52	Providing and fixing vitreous China wash basin with single hole for pillar tap with C.I. or M.S. brackets painted white including cutting holes and making good the same but excluding fittings:- jaquar/cera/hindawre make 600mmx480mm	1		each	
52	Providing and fixing vitreous China pedestal for wash basin complete recessed at the back for the reception of pipes and fittings jaquar/cera/hindawre make	6		each	
53	Providing and fixing water closet squatting pan (Indian type W.C. pan ) with 100 mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, 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 wherever required:jaquar/cera/hindawre make	1		each	
	White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests				
i	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I.brackets, 40 mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :jaquar/cera/hindawre make. W.C. pan with ISI marked black solid plastic seat and lid	5		each	
ii	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I.brackets, 40 mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :jaquar/cera/hindawre make. wall mounted seat with designer cover	4		each	

54	providing and fixing 600mm x 120 mm glass shelf with C.P. Brass bracket and guard rail complete, fixed to wooden plugs with C.P. Brass screws jaquar/cera/hindawre make	5		each	
55	Providing and fixing C.P. brass angle valve 15mm without Nuts and pipe jaquar/cera/hindawre make	12		each	
56	P/F CP brass Bib cock of approved quality : 15 mm nominal bore. jaquar/cera/hindawre make. 15mm dia	12		each	
57	P/F unplasticised PVC connection pipe with approved quality and colour: 15mm nominal bore with 45cm length. 15 mm nominal bore	12		each	
58	Providing and fixing 600mm x 450 mm bevelled edge mirror of superior glass mounted on 6mm thick A.C. Sheet or plywood sheet and fixed to wooden plugs with C.P. Brass screws and washers.	4		each	
59	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete. Semi rigid pipe 32 mm dia	4		each	
60	P/F PTMT swivelling shower 15 mm nominal bore, weighing not less than 40 gms. jaquar/cera/hindawre make	4		each	
61	Providing and fixing chromium plated brass soap dish with C.P. Brass brackets fixed to wooden cleats with C.P. Brass screws jaquar/cera/hindawre make	6		each	
62	Providing and fixing C.P. Brass Towel rail complete with C.P. Brass brackets fixed to wooden plugs with C.P. Brass screws 750mm x 20mm	6		each	
63	Providing and fixing PTMT wall mixture of approved quality and colour jaquar/cera/hindawre make	6		each	
64	Providing and fixing Mixer for kitchen sink with casted swinging spout at top jaquar/cera/hindawre make	1		each	

65	Providing and fixing PTMT liquid soap container of approved quality and colour with steel screws and rawal plugs etc jaquar/cera/hindawre make	4		each	
66	Providing and fixing recessed Roll type toilet paper holder (Vitreous China) jaquar/cera/hindawre make	4		each	
67	Providing and fixing stoneware gully trap grade 'A' complete with C.I grating, brick masonry chamber in cement mortar 1:5 and water tight C. I. cover with frame of 300mmx300mm size (inside) the weight of cover to be not less than 4.53kg and frame to be not less than 2.72kg	4		each	
	Square Mouth Traps : (i) 100mmx100mm size P type				
68	Providing and fixing cast iron floor trap of self cleaning design with sand cast iron screwed down or hinged grating without vent arm complete including cost of cutting and making goods the walls and floors. 100mm nominal diameter	12		each	
69	Providing and fixing PVC water storage tank of ISI : 12701 marked, G.I. inlet and outlet connection, 15mm nominal bore ball valve and mosquito proof PVC cover with locking arrangement including hoisting up to all heights above ground level :- 1000 litres net capacity tank	3		each	
70	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete : 20 mm nominal bore each. 20mm nominal bore	3		each	
71	P/f C. P. brass stop cock (concealed) of standard design and of approved make JAQUAR/ESS ESS/HINDAWARE Make 15 mm nominal bore	4		each	
72	P/f C. P. brass stop cock (concealed) of standard design and of approved make JAQUAR/ESS ESS/HINDAWARE Make 20 mm nominal bore	5		each	
73	Providing and fixing PTMT grating round of approved quality and colour 100 mm nominal dia.	9		each	

74	Providing and fixing PPR Union in PPR pipe including cutting and threading the pipe and making long screws etc. complete (New work) : 20 mm nominal bore	18		each	
75	Providing and fixing PVC door bend with oval access door, insertion rubber washer 3 mm thick bolts and nuts ISI marked complete including fixing with approved adhesive etc. complete.				
i	110 mm dia	5		each	
ii	75 mm dia	5		each	
76	Providing and fixing PTMT towel ring trapezoidal shape 215 mm long, 200 mm wide with minimum distances of 37 mm from wall face with concealed fittings arrangement of approved quality and colour, weighing not less than 88 gms	4		each	
77	P/f single equal plain junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.				
i	110 x 110 x 110 mm PVC	4		each	
ii	75x75x75 mm	4		each	
78	Providing and fixing PVC collars ISI marked including fixing with approved adhesive etc. complete.				
i	110 x 110 x 110 mm PVC	9		each	
ii	75x75x75 mm	9		each	
79	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete. Twin rubber stopper	6		each	
80	Providing and fixing oxidised M.S. hasp and staple (safety type) conforming to IS : 363 with necessary screws etc. complete. 115 mm	6		each	
<b>Sewage &amp; External Water Supply</b>					
81	Providing and fixing PPR Union in PPR pipe including cutting and threading the pipe and making long screws etc. complete (New work)				
i	25 mm dia. nominal bore	5		each	
ii	20 mm dia. nominal bore	10		each	
82	Providing and fixing PPR gate valve with C.I. wheel of approved quality (screwed end) 25 mm dia. nominal bore	5		each	

