

BILL OF QUANTITIES

**NAME OF THE WORK: CONSTRUCTION OF NEW BUILDING OF THE KANGRA CO-OP
PRIMARY AGRICULTURE AND RURAL DEVELOPMENT BANK AT DHARAMSALA, DISTT
KANGRA HIMACHAL PRADSEH**

DNIT FOR ELECTRICAL INATALLATIONS

				ESTIMATED COST	576455.00	
				EARNEST money		
				TIME LIMIT		
<u>ISSUED TO</u>						
S.NO	ITEM CODE	DESCRIPTION	QTY	RATE	UNIT	AMOUNT
1	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 as required.Group A.	90		P/POINT	
2	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	9		P/POINT	
3	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.	86		P/Mtr	

4	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.	118		P/Mtr	
5		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	216	2x1.5 Sq. mm.	75		P/Mtr	
ii	217	2x2.5 Sq. mm.	75		P/Mtr	
iii	218	2x4 Sq. mm.	75		P/Mtr	
	219	2x6 Sq. mm.	25		P/Mtr	
	220	2x10 Sq. mm.	20		P/Mtr	
	221	2x16 Sq. mm.	20		P/Mtr	
6	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.	5		P/Mtr	
7	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)	190		P/Mtr	
8	439	Supplying and drawing co-axial 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.	84		P/Mtr	
9	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.	300		P/Mtr	
10	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:-	84		P/Mtr	
11	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:-	4		Each	
12		Supplying and fixing following rating Moduler switch /socket on the existing switch box / cover including connections etc. as required.				
i	915	Telephone socket outlet, Modular.	2		Each	

ii	916	TV. Socket outlet, modular.	4		Each	
13	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.	17		Each	
14	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.	23		Each	
15	937	Supplying and fixing Ding-Dong / Electronic musical bell, suitable for D.C./A.C. single phase,230 volts complete as required:-	6		Each	
16	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		SgMtr	
17		Supplying and erection of following depth sheet metal cubical pedestal of suitable dimensions with plus-minus 5 cm variation, made from 1.6 mm thick M.S. sheet duly fabricated in a segregated manner for housing of switch fuse units, by welding each compartment on five sides & front side hinged, complete with locking arrangement, with sufficient No. vertical and horizontal intermediate switchgear housing compartments. The cubical pedestal shall have cable entry box at one or two sides, with epoxy powder coated approved paint and bonding to the existing earth etc. The same shall be erected in the 1:2:4 cement concrete plat-form of suitable dimensions 15 cm high from ground level and 45 cm thick. The cubical pedestal shall be 15 cm from the top of cement concrete plat-form:-				
	1013	450 mm deep (nominal)	1.1		Sq. mtr. of face area	
18	1204	Supplying and fixing sheet metal bus-bar chamber suitable for 100 Amp. 415 volts capacity with 4 No. copper strip bus-bars each of length 450mm & cross-sectional area (25.4mmx3.17mm), enclosure made from 1.6 mm thick M.S. sheet having overall dimensions (530mmx400mmx150mm) nominal with all accessories including connections, earthing the body etc. as required:-	3		Each	

19	1312	Supplying and fixing copper strip bus-bars suitable for 300 Amp. 415 volts capacity 4 No. each of cross-sectional area (31.75mmx6.35mm),in the existing enclosure with all accessories including connections etc. as required:-	1		Per/mtr.	
20		Providing and fixing following rating and breaking capacity MCCB(THERMAL AND MAGNETIC RELEASE) in the existing cubical panel board including drilling holes in the cubicle panel, making connections, etc. as required.				
i	1606	MCCB 200A-25KA -4 pole	1		Each	
ii	1602	MCCB (4 pole) 100A-16KA Cat-A	3		Each	
iii	MR	MCCB (4 pole) 320/800A-50KA Cat-A	1		Each	
21		Supplying and erection of 6 amps. to 32 amps. rating, 10 KA breaking capacity, 240 volts, 'C' curves, miniature circuit breaker of following poles in the existing MCB DB complete with connections etc. as required:-				
	1701	Single pole. Cat-A.	33		Each	
23	1709	Supplying and erection of 40 amps rating, 10 KA breaking capacity, 240 volts, 'C' curves, miniature circuit breaker of following poles in the existing MCB DB complete with connections etc. as required:-	2		Each	
24	1709	Supplying and erection of 63 amps rating, 10 KA breaking capacity, 240 volts, 'C' curves, miniature circuit breaker of following poles in the existing MCB DB complete with connections etc. as required:-	4		Each	
25		Supplying and fixing following rating, double pole (single phase & neutral) 240 volts, residual current circuit breaker (RCCB), having a sensitivity current up to 300 miliampers in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
i	1728	40 Amps. Cat-A.	2		Each	
ii	1730	63 Amps. Cat-A.	4		Each	
26	1740	Supplying and fixing 20 Amps, 240 volts, SPN industrial socket outlet, 2-pole & earth, metal enclosed plug top, sheet steel enclosure, suitable to accommodate a 20 Amp SPN-MCB/DP, on surface or in recess, with chained metal cover for the socket outlet, complete with connections, testing and commissioning etc. as required.	6		Each	
27		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	1809	Double door-12 way	1		Each	
ii	1810	Double door-16 way	4		Each	
28	1905	Earthing with chemical earthing electrode including accessories and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. (but without charcoal or coke and salt) complete as required.	4		p/set	
29	1908	Supplying and laying 8 SWG Copper wire at 0.50 mtr. below ground level for earth electrode conductor, including soldering etc. as	25		P/Mtr	
30	2001	Providing and fixing of lightning conductor finial, made of 25 mm dia. 300 mm long copper tube, having single prong at top, with 85 mm dia 3 mm thick copper base plate including holes etc. complete as required.	2		Each	
31	2005	Supplying and fixing copper tape 20mmx3mm thick on parapet or surface of wall for lightning conductor as required (for vertical run)	40		P/Mtr	
32		Providing and installation of stationary storage type Electric water heater (Geysler) 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	2403	15 Litre capacity water heater (Cat-A)	2		Each	
33		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	2501	Ceiling Fan 1200 mm sweep, Category-A	10		Each	
ii	2502	Ceiling Fan 1400 mm sweep, Category-A	4		Each	
34		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:-				
ii	2504	Exhaust Fan, Light duty, (Domestic) 300 mm sweep	6		Each	
35		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.				

