



**UNDER
Ministry of Health & Family Welfare
(GOVERNMENT OF INDIA)**

**Tender For
Upgradation of Cold Chain Facilities at GMSD Karnal**

Volume – IV-Karnal

Financial Bid & BOQ



December, 2012

**HLL Lifecare Limited
B – 14A, Sector – 62,
NOIDA – 201301.**

SUMMARY PRICE BID GMSD KARNAL

S.NO.	DESCRIPTION OF WORK	TOTAL TENDERED COST AS QUOTED BY BIDDER (IN RS.)
1.	CIVIL WORKS	
2.	ELECTRICAL WORKS	
3.	AIR CONDITIONIG & FIRE FIGHTING WORKS	
	TOTAL (1+2+3) in words & figure	

<u>PRICE BID</u> <u>CIVIL WORKS</u> <u>GMSD KARNAL</u>		
Sub Head No.	ITEM/ WORKS	TOTAL TENDERED COST AS QUOTED BY BIDDER (IN RS.)
1	CARRIAGE OF MATERIALS	
2	EARTH WORK	
3	CONCRETE WORK	
4	REINFORCED CEMENT CONCRETE	
5	BRICK WORK	
6	FLOORING	
7	FINISHING	
8	DISMANTLING AND DEMOLISHING	
9	CONCRETE PAVEMENT	
10	ALUMINIUM WORK	
11	ROOFING	
12	EXTERIOR GRADE METALLIC FALSE CEILING, FOR CANOPY	
13	INTERIOR METALLIC FALSE CEILING.	
14	CANOPY	
	Total in Figure	
	Total in words	

<u>Schedule of Quantities</u> <u>CIVIL WORKS</u> <u>GMSD KARNAL</u>						
Item No.	DSR. No.	Description of Items	Qty.	Unit	Rate Rs.	Amount Rs.
SubHead:1		<u>CARRIAGE OF MATERIALS</u>				
1.1	1.1	Carriage of material by mechanical transport including loading, unloading and stacking				
	1.1.2	Earth				
		Excavated Earth				
	(a)	Lead upto 2 Km	18	cum		
	1.1.1	Lime, murum, building rubbish-Lead upto 2Kms	177	cum		
				SubHead Total		
SubHead:2		<u>EARTH WORK</u>				
2.1	2.8	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means or drains(not exceeding 1.5m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift up to 1.5m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50m.				
2.1.1	2.8.1	All kinds of soil	160	cum		
2.2	2.25	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.	142	cum		
2.3	2.27	Supplying and filling in plinth with sand under floors including, watering, ramming consolidating and dressing complete.	28	cum		
				SubHead Total		
SubHead: 3		<u>CONCRETE WORK</u>				
3.1	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
	4.1.10	1:5:10 (1 Cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size).	42	cum		
3.2	4.1.4	1:2:4 (1 cement : 2 coarse sand :4 graded stone aggregate 40mm nominal size)	3	cum		
3.3	4.11	Providing and laying damp-proof course 50mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size).	18	sqm		
3.4	4.13	Applying a coat of residual petroleum bitumen of penetration 80/100 of approved quality using 1.7kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	18	sqm		
				SubHead Total		
SubHead:4		<u>REINFORCED CEMENT CONCRETE</u>				
4.1	5.1	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :				
	5.1.2	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 40 mm nominal size).	8	cum		
4.2	5.3	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15 deg landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases upto floor five level excluding the cost of centering, shuttering, finishing and reinforcement with 1:2:4(1 cement : 2 sand : 4 graded stone aggregate 20mm nominal size).	11	cum		

Item No.	DSR. No.	Description of Items	Qty.	Unit	Rate Rs.	Amount Rs.
		FORM WORK				
4.3	5.9	Centering and shuttering including strutting, propping etc. and removal of form for :				
	5.9.1	Foundations, footings, bases of columns, etc. for mass concrete.	21	sqm		
	5.9.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers.	67	sqm		
	5.9.15	Small lintels not exceeding 1.5m clear span, moulding as in cornices, window sills, string courses, bands, copings, bed plates, anchor blocks and the like.	3	sqm		
4.4	5.22	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.				
	5.22.6	Thermo-Mechanically Treated bars.	2760	Kg		
4.5	5.19	Encasing rolled steel sections, in beams and columns, with cement concrete 1:2:4(1 cement:2 coarse sand:4 4graded stone aggregate 12.5mm nominal size) including centering and shuttering complete but excluding cost of reinforcement.	1	cum		
				SubHead Total		
SubHead:5		BRICK WORK				
5.1	6.1	Brick work with F.P.S. bricks of class designation 75 in foundation and plinth in:				
	6.1.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	81	cum		
5.2	6.4	Brick work with F.P.S. bricks of class designation 75 in superstructure above plinth level up to floor V level in all shapes and sizes in :				
	6.4.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	60	cum		
				SubHead Total		
SubHead:6		FLOORING				
		KOTA STONE FLOORING				
6.1	11.26	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :				
6.1.1	11.26.1	25 mm thick.	165	sqm		
		VITRIFIED FLOOR TILES				
6.2	11.41	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption's less than 0.08% and conforming to IS : 15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including grouting the joints with white cement and matching pigments etc., complete.				
6.3.1	11.41.2	Size of Tile 60x60 cm	118	sqm		
6.3	11.36	Providing and fixing 1st quality ceramic glazed wall types conforming to IS:15622 (thickness to be specified by manufacturer) of approved make in all colours, shades except burgundy, bottle 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 coarse sand) and jointing with grey cement slurry @ 3.3Kg per sqm including pointing in white cement mixed with pigment of matching shade complete.				
6.8.1	(i)	Of size 600x600mm	313	sqm		
				SubHead Total		

Item No.	DSR. No.	Description of Items	Qty.	Unit	Rate Rs.	Amount Rs.
SubHead:7		FINISHING				
		CEMENT PLASTER				
7.1	13.12	18mm cement plaster in two coats under 12mm thick cement plaster 1:5 (1 cement : 5 coarse sand) and a top layer 6mm thick cement plaster 1:3 (1 cement : 3 coarse sand) finished rough with sponge.	227	sqm		
7.2	13.45	Finishing walls with textured exterior paint of required shade :				
	13.45.1	New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including base coat of water proofing cement paint applied @ 2.20kg/10 sqm.	228	sqm		
7.3	13.48	Finishing walls with Deluxe Multi surface paint system for interiors and exteriors using primer as per manufacturers specification:				
	13.48.3	Painting steel work with Deluxe Multi-surface Paint to give an even shade. Two or more coat applied@0.9Lts/10sqm over an under coat of primer applied @0.75lrs/10sqm of approved brand or manufacturer.	204	sqm		
7.4	22.12	Supplying and applying bituminous solution primer on floors and wall surface at 0.24 litre per sqm.	61	sqm		
				SubHead Total		
SubHead:8		DISMANTLING AND DEMOLISHING				
8.1	15.2	Demolishing lime concrete manually/ by mechanical means and disposal of material within 50 metres lead as per direction of Engineer in charge.				
	15.2.1	1:3:6 or richer mix	2	cum		
8.2	15.2	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.				
	15.2.2	1:4:8 or leaner mix	25	cum		
8.3	15.3	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in- charge.	1	cum		
8.4	15.7	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.				
	15.7.4	In cement mortar	150	cum		
8.5	15.12	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead :				
	15.12.1	Of area 3 sq. metres and below	3	each		
	15.12.2	Of area beyond 3 sq. metres	2	each		
8.6	15.18	Dismantling steel work in built up sections in angles, tees, flats and channels including all gusset plates, bolts, nuts, cutting rivets, welding etc. including dismembering and stacking within 50metres lead.	6612	kg		
8.7	15.28	Dismantling roofing including ridges, hips valleys and gutters etc., and stacking the material within 50 metres lead of:				
	15.28.2	Asbestos sheets	169	sqm		
8.8	15.25	Dismantling stone slab flooring laid in cement mortar including stacking of servicable material and disposal of unserviceable material withing 50 metres lead.	151	sqm		
				SubHead Total		
SubHead:9		CONCRETE PAVEMENT				

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Item No.	DSR. No.	Description of Items	Qty.	Unit	Rate Rs.	Amount Rs.
9.1	16.1	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earth lead upto 50 metres.	76	sqm		
9.2	16.3	Supplying and stacking at site :				
	16.3.1	90mm to 45mm size stone aggregate.	13	cum		
	16.3.7	Stone screening 11.2mm nominal size (Type B).	3	cum		
	16.3.9	Good earth.	3	cum		
9.3	16.4	Laying spreading and compacting stone aggregate of specified sizes to WBM specifications including spreading in uniform thickness, hand picking, rolling with 3 wheeled road/vibratory roller 8-10 tonne in stages to proper grade and camber, applying and brooming requisite type of screening/binding material to fill up interstices of coarse aggregate watering and compacting to the required density.	19	cum		
9.4	16.7	Brick edging in full brick width and half brick depth including excavation, refilling and disposal of surplus earth lead upto 50 metres.				
	16.7.1	With F.P.S. bricks of class designation 75	27	metre		
9.5	16.43	Providing and laying design mix cement concrete in roads, taxi tracks and runways having a minimum works test beam flexural strength of 30kg per cm ² at 28 days using not less than 340kg of cement per cum of finished concrete, coarse sand and graded stone aggregate of 40mm nominal size in appropriate proportions as per specified design criteria approved by Engineer-in-charge mechanically vibrated using needle and surface vibrators including steel form with sturdy M.S. channel sections including curing and providing and filling construction joints and dummy joints with approved joint filler and primer including rounding of the edges and filling the grooves 10x25mm deep at top for construction joints and 10mmx50mm deep at top for dummy joints with joint sealing compound (conforming to grade B of IS:1834) including making necessary arrangements for expansion joints etc. all complete.	12	cum		
			SubHead Total			
SubHead:10		ALUMINIUM WORK				
10.1	21.1	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS : 1285, fixed with rawl plugs and screws or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with required PVC/neoprene felt etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing and paneling to be paid for separately) :				
a)	21.1.1	For fixed portion				
	21.1.1.3	Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron)	271	kg	395.00	107045
b)	21.1.2	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of PVC / neoprene gasket required (Fittings shall be paid for separately).				
	21.1.2.3	Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron)	170	kg	443.80	75446

Item No.	DSR. No.	Description of Items	Qty.	Unit	Rate Rs.	Amount Rs.
10.2	21.2	Providing and fixing 12mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge.				
	21.2.2	Pre-laminated particle board with decorative lamination on both sides.	19	sqm		
10.3	21.3	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with PVC/ neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item) :				
	21.3.2	With float glass panes of 5.50 mm thickness	47	sqm		
10.4	21.4	Providing and fixing double action hydraulic floor spring of approved brand and manufacture IS : 6315 marked, for doors including cost of cutting floors as required, embedding in floors and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge.				
	21.4.1	With stainless steel cover plate	7	each		
10.6	21.13	Providing and fixing 100mm brass locks (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	7	each		
10.7	21.16	Providing and fixing aluminium round shape handle of outer dia 100mm with SS screws etc. complete as per direction of Engineer-in-charge				
	21.16.3	Polyester powder coated minimum thickness 50 micron aluminium.	6	each		
			SubHead Total			
SubHead:11		ROOFING				
11.1	N.S	GALVALUME STEEL ROOFING.				
		Design, supply & installation Tracdek Cliplock, Lloyd or any other approved equivalent make Klippon profiled sheeting, 406mm cover width, 41 mm high Crests at 203mm center, in lengths up to 12m to suit site requirements, in gavalume steel. Sheets to have wide pans with stiffening ribs for efficient water shedding and special male/ Lap. Galvalume steel (AZ-150gsm/sq.mtr. total of both sides/275 Mpa yield stress as per AS-1397/ASTM446) in 0.58mm TCT with hot - dip metallic coating of aluminium zinc alloy. Exterior coat of Silicon Modified Polyester paint system, 20 microns top coat applied over 5 micron Primer and conversion coat and a 5 micron polyester back coat applied over 5				
		Flashing, cappings, Ridge etc. in required girth for similar material up to the length of 2.5 mtr. with self-drilling self-stitching fasteners at max.500mm centers along the length of the capping / flashing.				
		Insulation: 50 mm thick aluminium foil faced fibreglass insulation of 24 Kg density to be fixed under Roofing sheet with welded wire mesh of size 75 x 75 x1.6 mm	341	Sq.M		
11.2	10.2	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:	16660	kg		
			SubHead Total			
SubHead:12		EXTERIOR GRADE METALLIC FALSE CEILING. FOR CANOPY				
12.1	N.S	PRECOATED STEEL FALSE CEILING SYSTEM:				

Item No.	DSR. No.	Description of Items	Qty.	Unit	Rate Rs.	Amount Rs.
		Supply & Fixing of equilent make- Trac , luxalon, Sonex, Armstrong Coil Coated Steel False Ceiling system manufactured out of 0.5mm thick Galvanised Sheet (Z-180gms /Sq.Mtr. zinc coating mass total of both sides, 275Mpa yield stress) with Polyester coat of 20 micron on the face side and 5 micron on the back side. The ceiling system shall comprise panels of 150mm wide panels of 150mm width x 17mm deep roll formed out of 0.50mm thick polyester coated galvanised steel fixed on steel runner in size of 34.5mm wide x 48mm deep manufactured out of 0.60mm thick Pre-coated galvanised steel with rigid suspension arrangement consisting of G.I. angles, bracket, clamps etc. including all hard ware required for fixing the ceiling. The runner shall be fixed at 1 mtr. c/c and suspension angle at 1 mtr.c/c. The panel shall be factory cut in max length of 6 mtr. The panel shall be jointed after 6mtr.with special G.I. Solice in between two panel. The work shall be	152	Sq.M		
				SubHead Total		
SubHead:13		INTERIOR METALLIC FALSE CEILING.				
13.1	N.S	FALSE CEILING SYSTEM- STEEL (WITH LAY IN SUSPENSION)				
		Supply of TRAC , luxalon, Sonex, Armstrong or any other approved make lay in Tile Steel Coated False Ceiling System (600mm X 600mm) manufactured out Of 0.50mm thick Regular Modified Polyester Coated Galvanised Steel (Z-180gms Zinc coating mass Total of both sides, 275Mpa yield strength) on the exposed side and primer coating on the back coil Coated on both the sides in manufacturer's standard colour shades, with square or bevelled edges and Flanges, produced on advanced equipment, which includes several levelling stages in the manufacturing Process. Exposed side of tile shall have 20 micron coil coated polyester finish and 5 micron back coat of				
		All tiles to be installed on a standard 600mm x 600mm module 24mm table exposed metal Grid and are precision made to within plus or minus 0.25mm. Suspension system would be standard 24mm Table exposed metal grid features main runners and cross tees roll formed from galvanised steel to BS 2989Z-18 zinc coating, minimum tensile strength 270 Mpa.				
		Grid system to be designed to satisfy ASTM C635 loading and deflection criteria. The main and cross runner to be provided with bayonet couplings For quick installation and shall have a height of 38mm. The grid is suspended from the roof with G. I. Wire rods or quick adjustment suspension hangers at maximum 1200mm along the main runners. The Tiles would be designed for lay- in mounting from below into the standard grid. The main runner shall Normally be fixed at 1200mm and shall be in filled with 1200mm / 600mm cross tees. Hangers to be fixed to roof by expansion fasteners. Wall angle to be 25 x 25 x 0.6mm thick coil coated steel matching the colour of tile.	237	Sq. M		
				SubHead Total		
SubHead:14		CANOPY				
14.1	N.S	GALVALUME STEEL ROOFING. FOR CANOPY				

Item No.	DSR. No.	Description of Items	Qty.	Unit	Rate Rs.	Amount Rs.
		Design, supply & installation Tracdek Cliplock, Lloyd or any other approved equivalent make Klippon profiled sheeting, 406mm cover width, 41 mm high Crests at 203mm center, in lengths up to 12m to suit site requirements, in galvalume steel. Sheets to have wide pans with stiffening ribs for efficient water shedding and special male/ Lap. Galvalume steel (AZ-150gsm/sq.mtr. total of both sides/275 Mpa yield stress as per AS-1397/ASTM446) in 0.58mm TCT with hot - dip metallic coating of aluminium zinc alloy. Exterior coat of Silicon Modified Polyester paint system, 20 microns top coat applied over 5 micron Primer and conversion coat and a 5 micron polyester back coat applied over 5	76	Sq.M	1119	
				SubHead Total		

<u>PRICE BID</u> <u>Internal Electrical Works</u> <u>GMSD KARNAL</u>		
SI. No	ITEM/ WORKS	TOTAL TENDERED COST AS QUOTED BY BIDDER (IN RS.)
A.	<u>Internal Electrical Works</u>	
1	WIRING	
2	EARTHING	
3	FANS & FITTINGS	
4	COMPUTER POINT	
5	TELEPHONE POINT	
	TOTAL (IN FIGURES)	
	TOTAL (IN WORDS)	

Schedule of Quantities Internal Electrical Works GMSD KARNAL						
Sr.No.	DSR Item	Description	Unit	Qty.	Rate	Amount
A.		ELECTRICAL				
Sub Head: 1		WIRING				
1.1	1.1	Point wiring in steel conduit of 20mm dia, with modular type switch (NORMAL) Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required.				
1.1.1	1.3.3	Group C	Point	47		
1.2	1.5	Power plug wiring in steel conduit of 20mm dia. Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 1 No 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	Meter	350		
1.3	1.31	S/F light plug point modular type accessories:- Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection, painting etc. as required.	Each	19		
1.4	1.32	S/F power plug point modular type accessories:- Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 15/16 & 5/6 amps modular socket outlet and 15/16 amps modular switch, connection, painting etc. as required.	Each	14		
1.5	1.7	Circuit/ sub main wiring in steel conduit: Wiring for circuit/ sub main wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required				
1.5.1	1.7.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	Meter	200		
1.5.2	1.7.2	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	Meter	150		
1.5.3	1.7.3	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	Meter	150		
1.5.4	1.7.4	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	Meter	0		
1.5.6	1.7.11	4 X 16 sq. mm + 2 X 16 sq. mm earth wire	Meter	50		
1.5.7	N.S	4 X 25 sq. mm + 2 X 16 sq. mm earth wire	Meter	90		
1.6	1.21	S/F PVC conduit : Supplying and fixing of following sizes of PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.(For TV, Internet, Telephone)				
1.6.1	1.21.1	20 mm	Meter	200		
1.6.2	1.21.2	25 mm	Meter	120		
1.7	1.22MB	S/F metal boxes : Supplying and fixing metal box of following sizes (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including painting etc as required.				
1.7.1	1.22.2	100 mm X 100 mm X 60 mm deep	Each	12		
1.7.2	1.22.5	180 mm X 100 mm X 60 mm deep	Each	8		
1.8	N.S	Supply & Laying 3.5 Core 70mmSq. XLPE Insulated Armoured Underground Cable Including excavation, sand cushioning Protective covering & refilling trenching etc. as reqd. (as per CPWD Specification)	Meter	200		
SWITCHES & ACCESSORIES						
1.9	1.24	S/E modular type switch/socket: Supplying and fixing following modular switch/socket on the existing modular plate and switch box including connections but excluding modular plate etc. as required.				
1.9.1	1.24.1	5/6 amps switch	Each	47		
1.9.2	1.24.6	Telephone	Each	2		

Sr.No.	DSR Item	Description	Unit	Qty.	Rate	Amount
		Erection of wall bracket/ceiling fittings of all sizes and shapes containing up to two CFL lamps per fitting, complete with all accessories including connection etc. as required .	Each	34		
1.10	1.35	Erection of incandescent light fittings.				
1.11	1.41	ITC fluorescent fitting directly on surface :				
		Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting of all types, complete with all accessories and tube etc. directly on ceiling/ wall, including connection with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required.	Each	5		
1.12	1.50.1	ITC exhaust fan up to 450 mm sweep :				
		Installation of exhaust fan up to 450 mm sweep in the existing opening, including making the hole to suit the size of the above fan, making good the damage, connection, testing, commissioning etc. as required.	Each	4		
1.13	1.51	Fixing louvers/ shutters for exhaust fan:				
		Extra for fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	Each	4		
		PRE-WIRED MCB DISTRIBUTION BOARDS				
		MCB.s				
1.14		S/F 'B' series, SP MCB :				
		Supplying and fixing 5 amps to 32 amps rating, 10KA 240 volts, 'B' series, miniature circuit breaker suitable for lighting and other loads of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
1.14.1	N.S	Single pole	Each	22		
1.14.2	N.S	63 A RCCB	Each	1		
1.15	2.11	S/F 'B' series, SP MCB blanking plate :				
		Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	Each	2		
1.16	N.S.	S/F 20A SPN MCB prewired industrial socket outlet :				
		Supplying and fixing 20amps, 240 volts, SPN prewired industrial type, socket outlet, with 2 pole and earth, metal enclosed plug top along with 20 amps 'C' series, SP, MCB, in CRCA steel sheet, phosphatised Powder painted enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required as per Adhunik catalogue No. APOBTP 020 or equivalent of Havell's Legrand.	Each	3		
1.17	N.S	PRE-WIRED MCB DISTRIBUTION BOARDS				
		S/I/T/C Prewired MCB Distribution Board, 4+24, 8 Way TPN Double door.	Set	1		
1.18	N.S	Fabrication supplying installion testing & commissioning of cubical type fully enclosed compartmentalized electrical panel of suitable size for three phase 50HZ 415 volt AC supply made out CRCA sheet duly strengthened with suitable size of MS channel members and base weather proof, dust and vermin proof, ventilated with louvers at sides removable gland plates at the bottoms, earthing studs at both ends, duly painted with powder coated finish of approved shade and two coats of anti corrosion paint i/c providing and fixing of following accessories -/Switches/MCB's/MCCBs complete with four strip main and auxillary Aluminum conductors as required. (MCCB 25/36 KA, MCB's 10KA incoming 4 pole outgoing TP)				
		Incomer :-				
		Incomer :- 100A 4 PMCCB (Main) - 1 No.				
		Incomer :- 100A 4 PMCCB (D.G Set) - 1 No.				
		Bus Coupler :- 100A - 1 No.				
		Outgoing:-				
		60A TPN MCCB - 3 Nos.				
		32A DP MCCB - 3 Nos.				
		32A TPN MCCB - 3 Nos.				
1.19		S/F 600 mm stiff pendent with wiring:				

Sr.No.	DSR Item	Description	Unit	Qty.	Rate	Amount
	1.37	Supply and fixing stiff pendent with 600 mm long, 20 mm dia X 1.6 mm thick steel conduit, aluminium cast back plate and brass holder complete, including wiring the down rod with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable and painting etc. as required.	each	13		
		SubHead				
	Sub Head: 2	EARTHING				
2.1	5.6	Copper earth plate electrode:				
		Earthing with copper earth plate 600mm x 600mm x 3mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. (with charcoal or coke and salt) as required.	Set	4		
2.2	5.14	P/F 25mm X 5mm copper earth strip in surface/ recess				
		Providing and fixing 25mm X 5mm copper strip on surface or in recess for connections etc. as required.	Meter	80		
23	5.1	P/F 25mm X 5mm copper earth strip in pipe:				
		Providing and fixing 25mm X 5mm copper strip in 40 mm dia GI pipe from earth electrode, as required.	Meter	30		
			SubHead Total			
	Sub Head: 3	Fans & Fittings				
3.1		Supply and installation of following luminaires comprising of electronic ballast with power factor ≥ 0.95 and THD $< 10\%$ complete with click fix lamp holders made out of ABS to impart strength including all control and internal wiring & hanging arrangement with G.I. chain - Fastners etc. as required for recess mounted fittings from approved manufacturers.				
	N.S.	Surface mounted decorative luminaire to match Philips Catalogue No. FCS 350/136 M1 HF with 1 x 36 Watt PLL CFL or approved equivalent make.	Each	5		
3.2	N.S.	Recess mounted 2x36 Watt CFL decorative wide spread mirror optic luminaire having glare control with OLC technology to match Philips Catalogue No. FBS 450/236 D6 HF or approved equivalent make complete with 2 Nos. PLL 36 Watt CFL lamp.	Each	34		
3.3	N.S.	Exhaust fan Heavy duty				
	(A)	380mm 1400 RPM with louvers of Crompton / Bajaj/ Usha make	Each	4		
			SubHead			
	Sub Head: 4	Computer Point				
4.1	N.S.	Providing and fixing computer outlet (RJ-45) in M.S. flush box complete with all accessories connection etc. complete as required as per Legrand catalogue No. 689007, 74280, 674551 or approved equivalent.	Each	6		
4.2	N.S.	Providing and fixing wiring for LAN cable coaxial copper conductor cable (CAT-6 (E)) in existing conduit with all accessories connection etc. as per Legrand catalogue No. 032755 or approved equivalent.	Meter	130		
			SubHead			
	Sub Head: 5	Telephone Point				
5.1	N.S.	Supply, fixing, testing and commissioning of telephone cable 2 pair unarmored type in existing conduit complete with termination at both end.	Meter	50		
5.2	N.S.	Supply and installation of telephone outlets with spring shutter door suitable for terminating telephone cables including face plate with modular jack outlet colored snap-in-icon tab complete as required.	Each	2		
			SubHead Total			
			Total			
All above works shall be executed as per CPWD Specifications						

<u>PRICE BID</u> <u>AIR CONDITIONING / FIRE</u> <u>GMSD KARNAL</u>		
Sub Head No.	ITEM/ WORKS	TOTAL AMOUNT OF WORK (IN RS.)
1	AIR CONDITIONING	
2	FIRE FIGHTING	
	TOTAL (IN FIGURES)	
	TOTAL (IN WORDS)	

Schedule of Quantities AIR CONDITIONING / FIRE GMSD KARNAL						
Item No.	DSR No.	Description of Items	Qty.	Unit	Market Rate / Non DSR Rate (Rs.)	Non DSR Amount (Rs.)
SubHead: 1		AIR CONDITIONING				
1.1	N.S	Providing & fixing 2 Ton high wall Split with remote complete with indoor & outdoor unit & necessary refrigerant insulated Copper piping, interconnecting power & control cable, Voltage regulator etc. & insulated PVC drain pipe complete in all respect of approved make.	4	Each		
1.2	N.S	Providing & fixing 1.5 Ton high wall Split with remote complete with indoor & outdoor unit & necessary refrigerant insulated Copper piping, interconnecting power & control cable, Voltage regulator etc. & insulated PVC drain pipe complete in all respect of approved make.	1	Each		
				SubHead Total		
SubHead: 2		FIRE FIGHTING				
2.1	N.S	Providing and fixing ABC-HFC-236 clean Agent stored pressure type, having 4 Kg capacity of Cease Fire or any other approved equivalent make Fire Extinguisher as per detail below:- The Fire Fighting content is to be HFC-236 Gas based. Quality of Sheet-				
		Cold Rolled Cold Annealed (EDD Grade) M.S.Sheet (thickness 1.8 mm) it should have following Chemical & Physical Properties - Carbon - 0.08% Maximum, Magnese 0.40% maximum, Sulphur - 0.03% maximum, Phosphorous- 0.03% maximum, Tensile Strength-270-350Mpa., Yield Stress-220 MP a Max., Elongation-32% minimum, Hardness-50 HR				
		Material of Conctruction of FE: CRCA Steel for Cylinder, Brass Assembly made out of Extrusion Brass, EPDM Hose Pipe and EPDM O Rings should only be used.				
		Weight - Gross Wt. 6.9kg, Empty Wt.: 2.9kg				
		Height - 435mm & Diameter : 140mm				
		Discharge : Throw Range - 2.4mtrs, Discharge Time : less than 9 seconds.				
		Manufacturing Process: Cylinder should be made with Deep Drawn Process with no vertical Joint and be welded using Mig CO2 Argon Welding process.				
		Cylinder Surface Treatment : They should be coated with Zink Phosphate and Epoxy Powder Coating Inside & outside with Post office RED, Shade no 538, IS-5:1978				
		Leakage Test : All the Cylinders should be Helium Leakage Test with Certificate of Mass Spectrometer Helium Leakage Detection Test with the SI. No. Mentioned on the Certificate.				
		Pressure Gauge - Should be international Magnetic Pressure Gauge preferably imported from Germany.				
		Special Feature: Insta Alert Inbuilt 85 Decibels Fire Alarm				
		FIRE Rating : 8A, 55B				
		Certifications : CE & ISO 9001 Certified.				
		The Fire Extinguisher is to be supplied with 100% free replacement for 5 years in case of default.	8	Each		
2.2	N.S	Supply, Installation, Testing and Commissioning of Networkable Four Zone 4 PIPE Aspirating type Smoke Detector capable of covering upto 2000 sq. mtrs. similar to with Fire and Fault LEDs, necessary power supply unit and all mounting accessories and alarms as suitable for site installation complete as per the technical specifications of the tender documents and Drawings. Detector shall be UL Listed / EM approved.	1	L.S		
2.3	N.S	Supply, Installation, Testing and Commissioning of Air Sampling Pipe (PVC Smooth bore Conduit - 21mm Internal Dia & 25mm Outer Dia.) with all mounting accessories like bends, joints, junctions etc as suitable for site installation complete as per the technical specifications of the tender documents and drawings suitable for above area complete in all respect as required.	1	L.S		
				SubHead Total		