

**DPR**  
(Detailed Project Report)  
for  
**Phase II work**  
of  
Primary Teacher Education College  
**(PTEC)**  
Campus at  
**Chandwara, Muzaffarpur**

*Estimated Cost : Rs. 406.577 Lac*

Submitted to:

*Education Department,  
Government of Bihar, Patna*

***Bihar State Educational Infrastructure Development Corporation Ltd.  
Siksha Bhawan, Bihar Rashtrabhasha Parishad, Saidpur, Patna - 800004***

# **REPORT**

## ***Project : Phase II Work of PTEC Campus at Chandwara, Muzaffarpur***

Government of Bihar has decided to have progressive and quality improvement of Education in Bihar and has sanctioned the construction of PTEC Buildings in the 1st phase. The construction of the sanctioned work is completed complete. To run the Institute smoothly, Campus development, Boundary wall & gate, Furnishing etc. are essential. Considering above work, project proposal of Phase II work has been prepared. A team of Engineers and Architect has visited the campus and has collected the required data to make the proposal more authentic.

**Provisions :** In the proposed project work, following provision has been made.

- ▶ Construction of Boundary wall with safety grill.
- ▶ Construction of a simple but attractive main gate.
- ▶ Construction of a Principal Quarter and Staff Quarters.
- ▶ Construction of a Guard Room.
- ▶ Campus development work i.e. Earth filling, Landscaping (plantation), Wrought iron Garden benches, Earthen stepped lawn, a separate Tube well and pipe line work to maintain the plantation, which work also as standby Tube well and Pump for other buildings.
- ▶ Development of Approach Road, Pathways and Open Parking area using Interlocking Paver tiles and PCC as per necessity.
- ▶ Construction of Portico for required buildings using MS pipe truss and coloured translucent sheet.
- ▶ Provision for campus lighting including garden light.
- ▶ Provision for Signage's, Fire fighting arrangement (sand filled buckets type).
- ▶ Provision for cycle / motor cycle stand using MS pipe truss and GCI sheet.
- ▶ Provision for Acoustic panel in existing double height multipurpose hall.
- ▶ Provision for Furnishing (Furnitures, ceiling fans, Wall bracket fan, fress air fan, Water filter and Water coolar, CCTV for campus, TV's for Hostel, Play equipments) for all buildings.
- ▶ Provision for Solar Hybrid Power Plant (For Both the Hostels & Institutional Building)

**Specifications :** Specifications of all Items of work will be as per standard building specifications and the relevant IS codes. Other materials (fixtures) will be as per ISI and standered reputed make.

**Rates:** Rates has been taken as per BCD (Building Construction Deptt.) Schedule of Rate 2016 (effective from 17.10.16), BCD Electrical SOR 2016, Delhi Schedule of Rate (DSR-2016). Provision for Non-scheduled items or materials are as per market rate.

The total project cost is Rs. 406.577 Lac. In views of utility and essentiality of proposed work, sanction of the project may kindly be accorded.

Junior Engineer  
BSEIDC, Patna

Assistant Engineer  
BSEIDC, Patna

Executive Engineer  
BSEIDC, Patna

## GENERAL ABSTRACT OF COST

### Phase II Work of PTEC Campus at Chandwara, Muzaffarpur

Sl. No.	Particulars	Estimated Amount
1.	Construction of Boundary wall	: Rs. 3741601.00
2.	Construction of Main Gate	: Rs. 514593.00
3.	Construction of Principal & Staff Quarters	: Rs. 11296231.00
3.	Construction of Guard Room.	: Rs. 426909.00
4.	Campus Development and Landscaping	: Rs. 3668790.00
5.	Construction of Portico and Cycle/Motor cycle stand	: Rs. 1038436.00
6.	Development of Campus Lighting	: Rs. 1548757.00
7.	Provision for Furnishing (Furniture)	: Rs. 12192527.00
8.	Provision for Solar Hybrid Power Plant	: Rs. 2100000.00
9.	Miscellaneous Work (Signage, Fire fighting, Acoustic paleling in conference hall, Earthen Seating platform, Wrought iron Garden Bench, PCC paver block parking area, etc.)	: Rs. 1470039.00
	<b>Total</b>	: Rs. <b>37997883.00</b>
10.	Add Centage @ 7% (Supervision charge for BSEIDC)	: Rs. 2659817.00
	<b>Grand Total</b>	: Rs. <b>40657700.00</b>
		<b>Say Rs. 406.577 Lac</b>

Junior Engineer

Assistant Engineer

Executive Engineer



**Detailed Estimate and Abstract of Cost for Phase II work of PTEC Campus at Chandwara, Muzaffarpur**

**BOUNDARY WALL**

**Based on Schedule Rate : BCD Bihar -2016 & DSR - 2016**

Sl. No.	SOR Item No.	Item of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
1	2	3	4	5	6	7
		Total Length of Boundary Wall = 456.00 m.				
		New Construction : 416.00 m. Raising & Repair : 0.00 m.				
		<b>Civil Work</b>				
1	2.8.1	Earth work in excavation in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All Kinds of soil	cum	182.88	230.50	42154.00
2	2.26	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth: consolidating each deposited layer by ramming and watering.	cum	182.88	74.50	13625.00
3	2.28	Supplying and Filling in plinth with local sand and under floors including watering, ramming consolidating and dressing complete.	cum	10.82	204.40	2212.00
4	11.72	Providing designation 100A one brick flat soling joints filled with local sand including cost of watering taxes royalty all complete as per building specification and direction of E/I.	sqm	212.19	253.80	53854.00
5	4.1.5	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering-all work upto plinth level. 1:3:6 (1 Cement: 3 coarse sand:6 graded stone aggregate 20mm nominal size)	cum	10.82	2775.70	30033.00
6	5.1.1	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing & reinforcement - all work upto plinth level. 1:1:2 (1cement: 1 coarse sand : 2 graded stone aggregate 20mm nominal size)	cum	33.99	6035.20	205136.00
7	5.2.1	Reinforced cement concrete work in wall (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts, etc. up to floor five level excluding cost of centering, shuttering, finishing and reinforcement ; 1:1:2 (1cement: 1 coarse sand : 2 graded stone aggregate 20mm nominal size)	cum	58.48	6644.60	388576.00
8	5.22	Reinforcement for RCC work including straightening, cutting, bending, placing in position and bonding all complete.				
9	5.22.7A	TMTC-500 8mm dia	kg	5600	56.00	313600.00
9.1	5.22.7b	TMTC-500 10mm dia	kg	2950	54.70	161365.00
9.2	5.22.7C	TMTC-500 12mm dia	kg	6200	53.40	331080.00
10.2	5.9.1	Centering and shuttering including strutting, propping etc. and removal of form for foundation, footings, bases of columns etc. for mass concrete.	sqm	108.08	169.00	18266.00
11.2	5.9.6	Centering and shuttering including strutting, propping etc. and removal of form for Columns, pillars, piers, abutments, posts and struts	sqm	398.15	357.60	142378.00

Sl. No.	SOR Item No.	Item of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
10	5.9.5	Centering and shuttering including strutting, propping etc. and removal of form for Lintel, beams, plinth beams, girders, bressumers and cantilevers.	sqm	312.00	261.70	81650.00
11.3	6.1.14A + 6.3A	Brick work with bricks of class designation 100A in foundations and plinth in : Cement mortar 1:6 (1 cement: 6 coarse sand ) Extra for Brick work in superstructure above plinth level upto floor V level	cum	156.00	5003.90	780608.00
12.3	13.11.4	12mm thick Cement plaster of mix 1:6 (1 cement : 6 coarse sand)	sqm	1476.80	101.20	149452.00
10.2	9.48.1	Providing and fixing M.S. grills of requirement pattern in frames of windows etc. with M.S. flat square or round bars etc all complete fixed to steel windows by welding.	kg	6240.00	86.00	536640.00
13.3	13.46.1	Finishing walls with Acrylic Smooth exterior paint of required shade :New work (Two or more coat applied @ 1.67 ltr/ 10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm)	sqm	1476.80	71.10	105000.00
14.3	13.81.3	Applying priming coat with ready mixed zinc chromate yellow primer of approved brand and manufacture on steel galvanized iron/steel work.	sqm	249.60	22.80	5691.00
15.3	13.93.1	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade two or more coats on new work (wood & steel)	sqm	249.60	54.10	13503.00
16.3		<b>CARRIAGE OF MATERIALS (Rates inclusive of CESS)</b>				
16.4		Local Sand	cum	15.06	181.48	2733.00
16.5		Coarse Sand	cum	107.10	967.90	103662.00
16.6		Stone Chips	cum	88.77	1658.60	147234.00
16.7		Bricks	%o no.	83913	531.00	44558.00
16.8		Cement	MT	55.400	282.30	15639.00
16.9		Steel	MT	14.750	282.30	4164.00
17.3		Add extra cost of material for Muzaffarpur Zone w.r.t Gaya Zone (as per BCD SOR)				
17.4		Bricks	%o no.	83913	370.80	31115.00
17.5		Cement	MT	55.400	319.00	17673.00
		<b>Grand Total</b>				<b>3741601.00</b>

**Detailed Estimate and Abstract of Cost for Phase II work of PTEC Campus at Chandwara, Muzaffarpur**

**PRINCIPAL QUARTER & STAFF QUARTER**

**Based on Schedule Rate : BCD Bihar -2016 & DSR - 2016**

Sl. No.	SOR Item No.	Item of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
1	2	3	4	5	6	7
<b>Civil Work</b>						
1	2.8.1	Earth work in excavation in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All Kinds of soil	cum	382.11	230.50	88076.00
2	2.29.1	Surface dressing of the ground including removing vegetation and inequalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m	100 sqm	0.00	806.00	0.00
3	2.26	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth: consolidating each deposited layer by ramming and watering.	cum	382.11	74.50	28467.00
4	2.28	Supplying and Filling in plinth with local sand and under floors including watering, ramming consolidating and dressing complete.	cum	101.79	204.40	20806.00
5	11.72	Providing designation 100A one brick flat soling joints filled with local sand including cost of watering taxes royalty all complete as per building specification and direction of E/I.	sqm	253.80	253.80	64414.00
6	4.1.3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering-all work upto plinth level. 1:2:4 (1 Cement: 2 coarse sand:4 graded stone aggregate 20mm nominal size)	cum	12.20	3323.10	40542.00
7	11.37	Providing and laying Ceramic glazed floor tiles 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in all colours, shades, except White, Ivory, Grey, Fume Red Brown laid on 20mm thick bed of Cement Mortar 1:4 (1 cement : 4 Coarse sand) including pointing the joints with white cement and matching pigments etc. complete.	sqm	66.36	799.40	53048.00
8	11.36	Providing and fixing 1st quality Ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacturer) of approved make in all colours, shades, except burgundy, bottle green, black of any size as approved by E/I in skirting, risers of step and dados over 12mm thick bed of Cement Mortar 1:3 (1 cement : 3 Coarse sand) and jointing with grey cement slurry @ 3.3 kg per sqm including pointing in white cement mixed with pigments of matching shade complete.	sqm	239.72	766.30	183697.00

Sl. No.	SOR Item No.	Item of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
9	8.2.1.1	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations, of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels Rajnagar plain white marble /Udaipur green marble/ Zebra black marble Area of slab upto 0.50 sqm	sqm	466.65	1923.90	897790.00
10	5.1.1	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing & reinforcement - all work upto plinth level. 1:1:2 (1 cement: 1 coarse sand : 2 graded stone aggregate 20mm nominal size)	cum	78.29	6035.20	472496.00
7	5.2.1	Reinforced cement concrete work in wall (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts, etc. up to floor five level excluding cost of centering, shuttering, finishing and reinforcement. ; 1:1:2 (1 cement: 1 coarse sand : 2 graded stone aggregate 20mm nominal size)	cum	25.81	6644.60	171497.00
8	5.3.1b	Reinforced cement concrete work in beams, suspended floors, roofs having slope upto 15 degree, landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases upto floor five level excluding the cost of centering, shuttering, finishing and reinforcement with 1:2:4 (1 cement:2 coarse sand:4graded stone aggregate 20 mm nominal size). Add or deduct for providing richer or leaner mixes respectively at all floor levels. Providing M-15 grade R.C.C instead of M-20 grade R.C.C, Providing M-25 grade R.C.C. instead of M-20 grade R.C.C	cum	156.58	5319.10	832865.00
11	6.1.14A	Brick work with bricks of class designation 100A in foundations and plinth in cement mortar 1:6 (1 cement :6 coarse sand)	cum	9.19	4490.60	41269.00
11	6.1.14A + 6.3A	Brick work with bricks of class designation 100A in foundations and plinth in : Cement mortar 1:6 (1 cement: 6 coarse sand ) Extra for Brick work in superstructure above plinth level upto floor V level	cum	190.35	5003.90	952492.00
12	6.18.4A + 6.19A	Half brick masonry with bricks of class designation 100A in foundations and plinth in : Cement mortar 1:4 (1 cement: 4 coarse sand) Extra for half Brick masonry in superstructure above plinth level upto floor V level.	sqm	510.06	608.40	310321.00
12	6.21A	Extra for providing and placing in position 2 Nos, 6 mm dia, MS bars at every third course of half brick masonry (with F. P. S. bricks)	sqm	510.06	55.40	28257.00
13	13.13.4	20 mm cement plaster of mix ; 1:6 (1 cement : 6 coarse sand)	sqm	1012.89	140.40	142210.00



Sl. No.	SOR Item No.	Item of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
13	13.11.4	12mm thick Cement plaster of mix 1:6 (1 cement : 6 coarse sand)	sqm	1952.37	101.20	197580.00
14	13.24.2	6mm thick Cement plaster of Ceiling mix 1:4 (1 cement : 4 coarse sand)	sqm	500.63	87.40	43755.00
14	11.3.1 + 11.8	Cement concrete flooring 1:2:4 (1 cement:2 coarse:sand:4 graded stone aggregate) finished with a floating coat of neat cement including cement slurry, etc. but excluding the cost of nosing of steps etc. complete. 40 mm thick with 20 mm nominal size stone aggregate. Extra for making checkers of approved pattern on cement concrete floors, steps, landing, pavements etc.	sqm	220.00	267.70	58894.00
15	13.80A.2	Providing and applying white cement based putty of average thickness 2 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	sqm	3465.89	118.40	410361.00
15	13.46.1	Finishing walls with Acrylic Smooth exterior paint of required shade :New work (Two or more coat applied @ 1.67 ltr/ 10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm)	sqm	1012.89	71.10	72016.00
16	13.77.2	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade New work (two or more coats ) over and including priming coat with cement primer.	sqm	2453.00	69.10	169502.00
11	13.81.1	Applying priming coat with ready mixed pink or grey primer of approved brand and manufacture on wood work (hard and softwood)	sqm	241.92	26.70	6459.00
12	13.81.3	Applying priming coat with ready mixed zinc chromate yellow primer of approved brand and manufacture on steel galvanized iron/steel work.	sqm	89.88	22.80	2049.00
17	13.93.1	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade two or more coats on new work (wood & steel)	sqm	316.68	54.10	17132.00
18	10.14.1	Providing and fixing T-iron frames for doors. windows and ventilators of mils steel Tee-sections, joints miltred and welded with 15x3 mm lugs 10 cm long embedded in cement concrete blocks 15x10x10 cm of 1:3:6 ( 1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required including Fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately).	kg	958.00	70.90	67922.00
19	9.21.1	Providing and fixing flush door shutters conforming to IS : 2202 (Part-I) non-decorative type core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters. 35 mm thick including anodized aluminum butt hinges with necessary screws.	sqm	125.37	1698.20	212903.00

Sl. No.	SOR Item No.	Item of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
19	9.100.1	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete: 125 mm	each	59.00	69.40	4095.00
20	9.97.1	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868 ), transparent or dyed to required colour or shade, with necessary screws etc. complete: 300 x 10 mm	each	59.00	111.70	6590.00
21	9.98	Providing and fixing aluminium pull bolt lock, 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 bolts, nut and washers etc. complete.	each	59.00	69.60	4106.00
22	9.96.1	Providing and fixing aluminium sliding door bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete: 300 x 16 mm	each	59.00	218.70	12903.00
23	9.101.2	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	each	59.00	83.80	4944.00
24	10.12.1 + 10.13B	Providing and fixing glazed steel doors, windows or ventilators of standard rolled steel sections, joints mitered and welded with 15x3 mm M.S. lugs 10cm long with steel legs embedded in cement concrete blocks 15x10x10cm. of (1:3:6) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required, including providing and fixing of glass panels with glazing clips and special metal-sash putty of approved make complete including applying a priming coat of approved steel primer excluding the cost of metal beading and other fitting except necessary hinges or pivots as required. Extra for providing and fixing steel beading of approved shape and section with screws instead of glazing clips and met. Sash putty in steel doors, windows, ventilators and composite units. (Steel window)	sqm	69.36	3175.00	220218.00

Sl. No.	SOR Item No.	Item of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
25	10.12.1 + 10.13C	Providing and fixing glazed steel doors, windows or ventilators of standard rolled steel sections, joints mitered and welded with 15x3 mm M.S. lugs 10cm long with steel legs embedded in cement concrete blocks 15x10x10cm. of (1:3:6) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required, including providing and fixing of glass panels with glazing clips and special metal-sash putty of approved make complete including applying a priming coat of approved steel primer excluding the cost of metal beading and other fitting except necessary hinges or pivots as required. Extra for providing and fixing steel beading of approved shape and section with screws instead of glazing clips and met. Sash putty in steel doors, windows, ventilators and composite units. (Steel Ventilators.)	sqm	4.32	3181.80	13745.00
24	9.48.1	Providing and fixing M.S. grills of requirement pattern in frames of windows etc. with M.S. flat square or round bars etc all complete fixed to steel windows by welding.	kg	2333.00	86.00	200638.00
26	5.22	Reinforcement for RCC work including straightening, cutting, bending, placing in position and bonding all complete.				
26.1	5.22.7A	TMTC-500 8mm dia	kg	17650	56.00	988400.00
26.2	5.22.7B	TMTC-500 10mm dia	kg	5350	54.70	292645.00
26.3	5.22.7C	TMTC-500 12mm dia	kg	6450	53.40	344430.00
26.4	5.22.7D	TMT-500 16mm dia	kg	7500	54.40	408000.00
26.5	5.22.7E	TMT-500 20mm dia	kg	8550	53.60	458280.00
26.5	5.22.7F	TMT-500 25mm dia	kg	8000	53.60	428800.00
27	10.17	Providing and fixing M.S fan clamp type I or II of 16 mm dia. M.S bar bent to shape with hooked ends in R.C.C slabs during laying including painting the exposed portion of loop, all as per standard design complete.	each	90.00	97.00	8730.00
28	10.33.1	Providing & fixing hand rail by welding etc. to steel ladder railing & staircases railing including applying a priming coat of approved steel primer. MS tube (medium) 40mm nominal bore.	kg	450.00	90.70	40815.00
29	4.17	Making plinth protection 50 mm thick of cement concrete 1:3:6 (1 cement :3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75 mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including finishing the top smooth.	sqm	46.48	359.80	16724.00
30	5.9.1	Centering and shuttering including strutting, propping etc. and removal of form for foundation, footings, bases of columns etc. for mass concrete.	sqm	100.62	169.00	17005.00
31	5.9.5	Centering and shuttering including strutting, propping etc. and removal of form for Lintel, beams, plinth beams, girders, bressumers and cantilevers.	sqm	691.06	261.70	180850.00
32	5.9.6	Centering and shuttering including strutting, propping etc. and removal of form for Columns, pillars, piers, abutments, posts and struts	sqm	258.12	357.60	92304.00

Sl. No.	SOR Item No.	Item of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
33	5.9.3	Centering and shuttering including strutting, propping etc. and removal of form for Suspended floors, roofs, landings, balconies and access platform.	sqm	703.38	291.00	204684.00
<b>PLUMBING &amp; SANITARY WORKS</b>						
34	12.78.2	Providing and fixing on wall face unplasticised PVC (working pressure 4 kgf per sqm) rain water pipes conforming to IS:4985 including jointing with seal ring conforming to IS:5382 leaving 10 mm gap for thermal expansion. 110 mm dia	m	60.00	212.40	12744.00
35	12.80.2	Providing and fixing unplasticised -PVC pipe clip of approved design to unplasticised PVC rain water pipe / soil waste and vent pipes by means of 50x50x50mm hard wood plugs, screwed with M.S. screws of required length including cutting brick work and fixing on cement mortar(1:4) 1 cement: 4corsa sand and making good the wall etc complete for 110 mm dia pipe	each	60.00	144.50	8670.00
36	17.1.1	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm sand cast iron P or S tap, 10 litre low white P.V.C. Flushing cistern with manually controlled device (handle level) conforming to IS : 7231 Parryware/Hindware with all fittings and fixtures complete including cutting and making good the walls and floors wherever required. White Vitreous China Orissa pattern W C pan of size 580 x 440 mm with integral type foot rest.	each	2	3049.30	6099.00
37	17.2.2	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 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 : W.C. pan with ISI marked black solid plastic seat and lid	each	10	2903.00	29030.00
38	17.4	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm and 340x410x265 mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :				
	17.4.3	Range of three urinal basins with 10litre white P.V.C. automatic flushing cistern	each	5	6205.20	31026.00
39	17.7.4	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 550 x 400 mm with a single 15 mm C.P. brass pillar taps.	each	8	1604.90	12839.00

Sl. No.	SOR Item No.	Item of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
39	17.10.1	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS : 13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required : Kitchen sink with drain board 510x1040 mm bowl depth 250 mm	each	5	7099.60	35498.00
40	17.28.2.1	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete. Flexible pipe 32 mm dia	each	20	76.10	1522.00
40	17.28.2.2	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete. Flexible pipe 40 mm dia	each	12	78.50	942.00
41	17.32.2	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing : Rectangular shape 453 x 357 mm	each	10	636.90	6369.00
42	17.33	Providing and fixing 600 x 120 x 5 mm glass shelf with edges round off, supported on anodised aluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40 mm long screws, rawl plugs etc., complete.	each	10	473.70	4737.00
43	18.8.1	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes joining of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of E/I Concealed work including cutting chases and making good the same. 15 mm nominal outer dia Pipes	m.	75	221.4	16605.00
44	18.9	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of E/I.				
44.1	18.9.2	20 mm nominal outer dia Pipes (External work)	m.	100	147.30	14730.00
44.2	18.9.3	25 mm nominal outer dia Pipes (External work)	m.	50	193.60	9680.00
45	18.48	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	litre	2000	6.60	13200.00
46	18.49	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931 15 mm nominal bore	each	18	481.60	8669.00
47	18.55.2	Providing and fixing PTMT stop cock of approved quality and colour. 20 mm nominal bore, 89 mm long, weighing not less than 88 gms	each	20	175.30	3506.00

Sl. No.	SOR Item No.	Item of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
48	19.6.2	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete: 150 mm dia R.C.C. pipe	m.	40	329.40	13176.00
49	19.27.1	Constructing brick masonry road gully chamber 50x45x60 cm with bricks in cement mortar 1:4 (1cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	6	3384.80	20309.00
50	19.30.3.1	Constructing brick masonry chamber for Underground C.I. Inspection Chamber and bend with 7.5 class designation bricks in cement mortar 1:4, C.I. Cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg. (weight of cover 23 kg. and weight of frame 15 kg.), RCC top slab with 1:1.5:3 mix, foundation concrete 1:5:10 mix, inside plastering 12 mm thickness. with cement mortar 1:3 finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design. Inside dimensions 600x850 mm and 45cm deep for pipe line with three or more inlets : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	2	5352.70	10705.00
51	19.32.1	Making soak pit 2.5 m diameter 3.0 metre deep with 45 x 45 cm dry brick honey comb shaft with brick and S.W. drain pipe 100 mm diameter, 1.8 m long complete as per standard design. With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	1	28775.50	28776.00
52	CST	Construction of Septic Tank complete (as per detailed)	each	1	84878.00	84878.00
53	MTW	Providing all labour, tools and material for manual bored Tube well of size 125 x 40 mm complete job including supply and installation of 1 H.P Submersible pump (as per detailed attached)	each	1	60432.00	60432.00
<b>ELECTRICAL ITEMS OF WORK</b>						
54	1.3	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface / recessed medium class PVC 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.				
54.1	1.3.2	Group B	point	20	567.00	11340.00
54.2	1.3.3	Group C	point	120	675.00	81000.00
55	1.4	Wiring for twin control light point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box etc. as required.	point	4	720.00	2880.00

Sl. No.	SOR Item No.	Item of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
56	1.5	Wiring for light/ power plug with 2X4 sq. mm FR PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 1 No. 4 sq. mm FR PVC insulated copper conductor single core cable for loop earthing as required.	m.	380	193.00	73340.00
57	1.7	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FR PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.				
57.1	1.7.2	2x2.5 sqmm + 1x2.5 sq mm earth wire	m.	300	150.00	45000.00
57.2	1.7.3	2x4 sqmm + 1x4 sqmm earth wire (For AC, Industrial Socket)	m.	10	193.00	1930.00
57.3	1.7.5	2x10 sqmm + 1x6 sqmm earth wire	m.	10	417.00	4170.00
58	1.16	Supplying and drawing, following pair, 0.5 sq.mm FR PVC insulated annealed copper conductor, unarmoured telephone cable in the existing surface / recessed steel / PVC conduit as required.				
	1.16.2	2 pair	m.	300	19.00	5700.00
59	1.17	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ recessed steel/ PVC conduit as required.	m.	300	24.00	7200.00
60	1.29	Supplying and fixing metal/PVC box of 150 mm X 75 mm X 60 mm deep (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including providing and fixing 3 pin 5/6 A socket outlet and 5/6 A piano type switch, connections, painting etc. as required	each	30	199.00	5970.00
61	1.30	Supplying and fixing metal/PVC box of 180 mm X 100 mm X 60 mm deep (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including providing and fixing 6 pin 5/6 and 15/16 A socket outlet and 5/6 & 15/16A piano type switch, connections, painting etc. as required	each	15	313.00	4695.00
62	1.24	Supplying and fixing following modular type switch / socket on the existing modular plate and switch box including connections but excluding modular plate etc as required.				
62.1	1.24.1	5/6 A switch	each	50	98.00	4900.00
62.2	1.24.2	2 way, 5/6 A switch	each	6	108.00	648.00
62.3	1.24.3	15/16 A switch	each	10	125.00	1250.00
62.4	1.24.4	3 pin 5/6 A socket outlet	each	30	120.00	3600.00
62.2	1.24.6	Telephone socket outlet	each	10	103.00	1030.00
62.5	1.24.7	TV antenna socket outlet	each	15	103.00	1545.00
63	1.25	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	each	24	387.00	9288.00
64	1.33	Supplying and fixing 3 pin, 6A ceiling rose on the existing junction box/ wooden block including connection etc as required.	each	40	35.00	1400.00

Sl. No.	SOR Item No.	Item of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
65	1.34	Supplying and fixing batten / angle holder including connection etc as required.	each	50	48.00	2400.00
66	2.12	Supplying and fixing following rating, 240/415 V, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required				
66.1	2.12.1	6 to 32 amp, Single Pole	each	20	208.00	4160.00
66.2	2.12.2	6 to 32 amp, SPN	each		340.00	
66.3	2.12.3	40 amp, Single Pole and neutral	each	8	819.00	6552.00
67	2.9	Supplying and fixing of following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 volts, on surface/recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, detachable gland plate, interconnections, powder painted including earthing etc. as required (But without MCB/RCCB/ISOLATOR).				
	2.9.4	4 Ways (4+12 ways) double door	each	6	2971.00	17826.00
68	2.17	Supplying and fixing following rating, double pole, (single phase and neutral), 240 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
68.1	2.17.3	63 A	each	6	3277.00	19662.00
72	2.14	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required	each	40	16.00	640.00
73	3.6	Earthing with copper earth plate 600mmx 600mm x 3mm thick including accessories and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 meter long etc with charcoal/cock and salt as required.	set	2	11703.00	23406.00
74	3.7	Supplying and laying 6 SWG G.I. wire at 0.50 meter below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required	m.	20	18.00	360.00
75	3.15	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	m.	100	141.00	14100.00
76	XLPE35	Supplying of 3.5 core 35 Sqmm XLPE PVC insulated and sheathed armoured cable with alluminium conductor of approved make for working voltage upto and including 1100 volts. (material rate x 1.15 x 1.01)	m.		351.90	
77	7.1	Laying of one number PVC insulated and PVC Sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required.				
77.1	7.1.1	Upto 35 sqmm	m.		149.00	
79	2.3	Supplying and fixing following capacity TP&N disconnecter fuse switch unit inside the existing panel board with IS marked HRC fuses including drilling holes in cubical panel making connections etc. as required.				
79.1	2.3.3	100 A TP&N	each		5812.00	



Sl. No.	SOR Item No.	Item of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
80	4.2	Providing and fixing of lightning conductor finial, made of 25 mm dia 300 mm long, G.I. tube, having single prong at top, with 85 mm dia 6 mm thick G.I. base plate including holes etc. complete as required	each	1	371.00	371.00
81	4.7	Providing and fixing G.I. tape 20 mm X 3 mm thick on parapet or on surface of wall for lightning conductor complete as required. (For horizontal run)	m.	20	67.00	1340.00
82	4.8	Providing and fixing G.I. tape 20 mm X 3 mm thick on parapet or on surface of wall for lightning conductor complete as required. (For vertical run)	m.	20	86.00	1720.00
83	2.5.3	Providing & fixing following capacity busbar chamber with 4 strips of suitable size made of copper, heavy duty, complete with all accessories including connections, earthing the body etc. as required 200 Amps	each	1	6360.00	6360.00
84		<b>CARRIAGE OF MATERIALS</b> <b>(Rates inclusive of CESS)</b>				
84.1		Local Sand	cum	107.73	181.48	19551.00
84.2		Coarse Sand	cum	243.23	967.90	235422.00
84.3		Stone Chips	cum	232.44	1658.60	385525.00
84.4		Bricks	%o no.	136972	531.00	72732.00
84.6		Cement	MT	194.950	282.30	55034.00
84.7		Steel	MT	53.500	282.30	15103.00
88		Add extra cost of material for Muzaffarpur Zone w.r.t Gaya Zone (as per BCD SOR)				
88.1		Bricks	%o no.	136972	370.80	50789.00
88.2		Cement	MT	194.950	319.00	62189.00
		<b>Total (Schedule Items)</b>				<b>11232011.00</b>
		Non Schedule Items (on Tendered Rate)				
89.2	SP01	Providing and fixing uPVC soil, waste and vent pipes including cut length pipes as required, fixing the exposed pipe with clamps at 1.00 m spacing, joining of pipes & fittings with one step PVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of E/I. 110 mm dia	m	40	380.00	15200.00
90.2	SP03	Supplying fitting and fixing following uPVC (soil, waste and vent) pipe fittings complete				
90.3	SP04	DOOR TEE 110 mm dia	each	10	300.00	3000.00
90.4	SP05	DOOR BEND 110 mm dia	each	20	300.00	6000.00
90.5	SP06	BEND 45 / 87.5 degree 110 mm dia	each	10	350.00	3500.00
90.6	SP07	VENT COWEL 110 mm dia	each	8	350.00	2800.00
90.7	SP08	FLOOR TRAP 110X110 mm dia	each	12	310.00	3720.00
		<b>FIRE EXTINGUISHER</b>				

Sl. No.	SOR Item No.	Item of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
91.7	FE	Brand new ISI marked Life Guard ABC type multipurpose Fire Extinguishers 4 Kgs. Capacity, fitted with pressure gauge complete in all respects, ready to use, complete installation kit.	each	10	3000.00	30000.00
		<b>Total (Non Schedule Items)</b>				<b>64220.00</b>
		<b>Grand Total</b>				<b>11296231.00</b>

**Detailed Estimate and Abstract of Cost for Phase II work of PTEC Campus at Chandwara, Muzaffarpur**

**GUARD ROOM**

**Based on Schedule Rate : BCD Bihar -2016 & DSR - 2016**

Sl. No.	SOR Item No.	Item of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
1	2	3	4	5	6	7
<b>Civil Work</b>						
1	2.8.1	Earth work in excavation in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All Kinds of soil	cum	12.96	230.50	2987.00
2	2.26	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth: consolidating each deposited layer by ramming and watering.	cum	12.96	74.50	966.00
3	2.28	Supplying and Filling in plinth with local sand and under floors including watering, ramming consolidating and dressing complete.	cum	11.62	204.40	2375.00
4	11.72	Providing designation 100A one brick flat soling joints filled with local sand including cost of watering taxes royalty all complete as per building specification and	sqm	19.56	253.80	4964.00
5	4.1.5	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering-all work upto plinth level. 1:3:6 (1 Cement: 3 coarse sand:6 graded stone aggregate 20mm nominal size)	cum	1.22	2775.70	3386.00
6	5.1.1	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing & reinforcement - all work upto plinth level. 1:1:2 (1cement: 1 coarse sand : 2 graded stone aggregate 20mm nominal size)	cum	5.55	6035.20	33495.00
7	5.2.1	Reinforced cement concrete work in wall (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts, etc. up to floor five level excluding cost of centering, shuttering, finishing and reinforcement. ; 1:1:2 (1cement: 1 coarse sand : 2 graded stone aggregate 20mm nominal size)	cum	2.43	6644.60	16146.00
8	5.3.1b	Reinforced cement concrete work in beams, suspended floors, roofs having slope upto 15 degree, landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases upto floor five level excluding the cost of centering, shuttering, finishing and reinforcement with 1:2:4 (1 cement:2 coarse sand:4graded stone aggregate 20 mm nominal size). Add or deduct for providing richer or leaner mixes respectively at all floor levels. Providing M-15grade R.C.C instead of M-20 grade R.C.C, Providing M-25 grade R.C.C. instead of M-20 grade R.C.C	cum	4.29	5319.10	22819.00
9	6.1.14A	Brick work with bricks of class designation 100A in foundations and plinth in cement mortar 1:6 (1cement :6 coarse sand)	cum	4.56	4490.60	20477.00

Sl. No.	SOR Item No.	Item of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
10	6.1.14A + 6.3A	Brick work with bricks of class designation 100A in foundations and plinth in : Cement mortar 1:6 (1 cement: 6 coarse sand ) Extra for Brick work in superstructure above plinth level upto floor V level	cum	8.33	5003.90	41682.00
11	13.11.4	12mm thick Cement plaster of mix 1:6 (1 cement : 6 coarse sand)	sqm	37.21	101.20	3766.00
12	13.13.4	20 mm cement plaster of mix ; 1:6 (1 cement : 6 coarse sand)	sqm	66.22	140.40	9297.00
13	13.24.2	6mm thick Cement plaster of Ceiling mix 1:4 (1 cement : 4 coarse sand)	sqm	9.30	87.40	813.00
14	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 . Base with CM 1:4 20 to 25 mm thick	sqm	14.73	998.30	14705.00
15	10.14.1	Providing and fixing T-iron frames for doors. windows and ventilators of mils steel Tee-sections, joints miltred and welded with 15x3 mm lugs 10 cm long embedded in cement concrete blocks 15x10x10 cm of 1:3:6 ( 1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required including Fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately).	kg	18.20	70.90	1290.00
16	9.21.1	Providing and fixing flush door shutters conforming to IS : 2202 (Part-I) non-decorative type core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters. 35 mm thick including	sqm	2.10	1698.20	3566.00
17	9.100.1	Providing and fixing alluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete: 125 mm	each	2.00	69.40	139.00
18	9.97.1	Providing and fixing alluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868 ), transparent or dyed to required colour or shade, with necessary screws etc. complete: 300 x 10 mm	each	1.00	111.70	112.00
19	9.96.1	Providing and fixing alluminium sliding door bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete: 300 x 16 mm	each	1.00	218.70	219.00

Sl. No.	SOR Item No.	Item of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
20	10.12.1 + 10.13B	Providing and fixing glazed steel doors, windows or ventilators of standard rolled steel sections, joints mitered and welded with 15x3 mm M.S. lugs 10cm long with steel legs embedded in cement concrete blocks 15x10x10cm. of (1:3:6) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required, including providing and fixing of glass panels with glazing clips and special metal-sash putty of approved make complete including applying a priming coat of approved steel primer excluding the cost of metal beading and other fitting except necessary hinges or pivots as required. Extra for providing and fixing steel beading of approved shape and section with screws instead of glazing clips and met. Sash putty in steel doors, windows, ventilators and composite units. (Steel window)	sqm	3.00	3175.00	9525.00
21	9.48.1	Providing and fixing M.S. grills of requirement pattern in frames of windows etc. with M.S. flat square or round bars etc all complete fixed to steel windows by welding.	kg	54.00	86.00	4644.00
22	5.22	Reinforcement for RCC work including straightening, cutting, bending, placing in position and bonding all complete.				
22.1	5.22.7A	TMTC-500 8mm dia	kg	1200.00	56.00	67200.00
22.2	5.22.7C	TMTC-500 12mm dia	kg	1000.00	53.40	53400.00
23	10.17	Providing and fixing M.S fan clamp type I or II of 16 mm dia. M.S bar bent to shape with hooked ends in R.C.C slabs during laying including painting the exposed portion of loop, all as per standard design complete.	each	1.00	97.00	97.00
24	13.80A.2	Providing and applying white cement based putty of average thickness 2 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	sqm	112.73	118.40	13347.00
25	13.46.1	Finishing walls with Acrylic Smooth exterior paint of required shade :New work (Two or more coat applied @ 1.67 ltr/ 10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm)	sqm	66.22	71.10	4708.00
26	13.77.2	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade New work (two or more coats ) over and including priming coat with cement primer.	sqm	46.51	69.10	3214.00
27	13.81.1	Applying priming coat with ready mixed pink or grey primer of approved brand and manufacture on wood work (hard and softwood)	sqm	4.62	26.70	123.00
28	13.81.3	Applying priming coat with ready mixed zinc chromate yellow primer of approved brand and manufacture on steel galvanized iron/steel work.	sqm	6.00	22.80	137.00
29	13.93.1	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade two or more coats on new work (wood & steel)	sqm	10.62	54.10	575.00

Sl. No.	SOR Item No.	Item of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
30	4.17	Making plinth protection 50 mm thick of cement concrete 1:3:6 (1 cement :3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75 mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including finishing the top smooth.	sqm	9.60	359.80	3454.00
31	5.9.1	Centering and shuttering including strutting, propping etc. and removal of form for foundation, footings, bases of columns etc. for mass concrete.	sqm	16.10	169.00	2721.00
32	5.9.5	Centering and shuttering including strutting, propping etc. and removal of form for Lintel, beams, plinth beams, girders, bressumers and cantilevers.	sqm	29.78	261.70	7793.00
33	5.9.6	Centering and shuttering including strutting, propping etc. and removal of form for Columns, pillars, piers, abutments, posts and struts	sqm	32.40	357.60	11586.00
34	5.9.3	Centering and shuttering including strutting, propping etc. and removal of form for Suspended floors, roofs, landings, balconies and access platform.	sqm	19.13	291.00	5567.00
		<b>ELECTRICAL ITEMS OF WORK</b>				
35	1.3	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface / recessed medium class PVC 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.				
	1.3.2	Group B	point	6	567.00	3402.00
36	1.7	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FR PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.				
	1.7.2	2x2.5 sqmm + 1x2.5 sq mm earth wire	m.	30	150.00	4500.00
37	1.30	Supplying and fixing metal/PVC box of 180 mm X 100 mm X 60 mm deep (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including providing and fixing 6 pin 5/6 and 15/16 A socket outlet and 5/6 & 15/16A piano type switch, connections, painting etc. as required	each	2	313.00	626.00
38	1.23	Supplying and fixing following piano type switch/ socket on the existing switch box/ cover including connections etc. as required.				
38.1	1.23.1	5/6 A Switch	each	6	32.00	192.00
38.2	1.23.4	3 pin 5/6 A socket outlet	each	2	44.00	88.00
39	1.25	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	each	1	387.00	387.00
40	1.33	Supplying and fixing 3 pin, 6A ceiling rose on the existing junction box/ wooden block including connection etc as required.	each	2	35.00	70.00

Sl. No.	SOR Item No.	Item of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
41	1.34	Supplying and fixing batten / angle holder including connection etc as required.	each	2	48.00	96.00
42	2.12	Supplying and fixing following rating, 240/415 V, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required				
	2.12.2	6 to 32 amp, SPN	each	1	340.00	340.00
43		<b>CARRIAGE OF MATERIALS</b> <b>(Rates inclusive of CESS)</b>				
43.1		Local Sand	cum	12.01	181.48	2180.00
43.2		Coarse Sand	cum	11.91	967.90	11528.00
43.3		Stone Chips	cum	11.58	1658.60	19207.00
43.4		Bricks	%o no.	5864	531.00	3114.00
43.6		Cement	MT	6.800	282.30	1920.00
43.7		Steel	MT	2.200	282.30	621.00
44		Add extra cost of material for Muzaffarpur Zone w.r.t Gaya Zone (as per BCD SOR)				
44.1		Bricks	%o no.	5864	370.80	2174.00
44.2		Cement	MT	6.800	319.00	2169.00
		<b>Total (Schedule Items)</b>				<b>423909.00</b>
		Non Schedule Items (on Tendered Rate)				
45.2	FE	Brand new ISI marked Life Guard ABC type multipurpose Fire Extinguishers 4 Kgs. Capacity, fitted with pressure gauge complete in all respects, ready to use, complete installation kit.	each	1	3000.00	3000.00
		<b>Total (Non Schedule Items)</b>				<b>3000.00</b>
		<b>Grand Total</b>				<b>426909.00</b>

**Detailed Estimate and Abstract of Cost for Phase II work of PTEC Campus at Chandwara, Muzaffarpur**

**Miscellaneous Work**

**Based on Schedule Rate : BCD Bihar -2016 & DSR - 2016**

Sl. No.	SOR Item No.	Item of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
1	2	3	4	5	6	7
		<b>Fire Fighting Work (Bucket type)</b>				
1	2.8.1	Earth work in excavation in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All Kinds of soil	cum	0.37	230.50	85.00
2	2.28	Supplying and Filling in plinth with local sand and under floors including watering, ramming consolidating and dressing complete.	cum	0.06	204.40	12.00
3	11.72	Providing designation 100A one brick flat soling joints filled with local sand including cost of watering taxes royalty all complete as per building specification and direction of E/I.	sqm	0.81	253.80	206.00
4	4.1.5	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering-all work upto plinth level. 1:3:6 (1 Cement: 3 coarse sand:6 graded stone aggregate 20mm nominal size)	cum	0.24	2775.70	666.00
5	10.32.2	Steel work welded in built up sections/framed work including cutting hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel, etc. as required. In gratings, frames, guard bar, ladders, railings, brackets, gates & similar works.	kg	50.00	76.70	3835.00
6	13.81.3	Applying priming coat with ready mixed zinc chromate yellow primer of approved brand and manufacture on steel galvanized iron/steel work.	sqm	5.40	22.80	123.00
7	13.93.1	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade two or more coats on new work (wood & steel)	sqm	5.40	54.10	292.00
9		<b>CARRIAGE OF MATERIALS (Rates inclusive of CESS)</b>				
9.1		Local Sand	cum	0.06	181.48	11.00
9.2		Coarse Sand	cum	0.11	967.90	106.00
9.3		Stone Chips	cum	0.23	1658.60	381.00
9.4		Bricks	%o no.	30	531.00	16.00
9.5		Cement	MT	0.05	282.30	14.00
10		Add extra cost of material for Muzaffarpur Zone w.r.t Gaya Zone (as per BCD SOR)				
10.1		Bricks	%o no.	30	370.80	11.00
10.2		Cement	MT	0.050	319.00	16.00
		<b>Total (Cost of one set)</b>				<b>5774.00</b>
		<b>Hence Cost for 6 set (for 3 Buildings)</b>				<b>34644.00</b>
		<b>SIGNAGES</b>				



1		Providing and fixing of Signages of following type as per approved type and Design including all taxes etc. all complete.				
1.1		Signage in front of main Gate				
1.1.1	8.2.2.1	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations, of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement,	sqm	6.00	3539.50	21237.00
		<b>ACOUSTIC PANEL WORK</b>				
1	12.45	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37 mm ..... all complete				
	12.45.4	Fully Perforated Gypsum Plaster Board of size 1200 x 2400x12.5 mm having approx. 15 % perforated area with perforation size and pattern as approved by the Engineer-in-charge and as per manufacturer's specification, with all 4 side tapered and backed by acoustical tissue with NRC value not less than 0.60.	sqm	400.20	1646.40	658889.00
		<b>Open Air Theater type Earthen Seating platform</b>				
1	2.8.1	Earth work in excavation in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All Kinds of soil	cum	7.36	230.50	1696.00
2	2.28	Supplying and Filling in plinth with local sand and under floors including watering, ramming consolidating and dressing complete.	cum	8.27	204.40	1690.00
3	11.72	Providing designation 100A one brick flat soling joints filled with local sand including cost of watering taxes royalty all complete as per building specification and direction of E/I.	sqm	17.13	253.80	4348.00
4	4.1.3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering-all work upto plinth level. 1:2:4 (1 Cement: 2 coarse sand:4 graded stone aggregate 20mm nominal size)	cum	1.71	3323.10	5683.00
5	6.1.14A + 6.3A	Brick work with bricks of class designation 100A in foundations and plinth in : Cement mortar 1:6 (1 cement: 6 coarse sand ) Extra for Brick work in superstructure above plinth level upto floor V level	cum	5.94	5003.90	29723.00
6	13.11.4	12mm thick Cement plaster of mix 1:6 (1 cement : 6 coarse sand)	sqm	12.69	101.20	1284.00
7		<b>CARRIAGE OF MATERIALS (Rates inclusive of CESS)</b>				
7.1		Local Sand	cum	8.61	181.48	1563.00
7.2		Coarse Sand	cum	2.49	967.90	2410.00
7.3		Stone Chips	cum	1.52	1658.60	2521.00

7.4		Bricks	%o no.	2965	531.00	1574.00
7.5		Cement	MT	1.00	282.30	282.00
8		Add extra cost of material for Muzaffarpur Zone w.r.t Gaya Zone (as per BCD SOR)				
8.1		Bricks	%o no.	2965	370.80	1099.00
8.2		Cement	MT	1.000	319.00	319.00
<b>Development of Parking Area</b>						
Size of car parking area = 25.00m. x 6.00m.						
2	2.28	Supplying and Filling in plinth with local sand and under floors including watering, ramming consolidating and dressing complete.	cum	22.50	204.40	4599.00
3	11.79.1	Providing and laying factory made chamfered edge Cement Concrete paver blocks of required strength, thickness & size/shape, made by table vibratory method to attain superior smooth finish using PU or equivalent moulds, laid in required Grey colour & pattern over 50mm thick compacted bed of coarse sand, compacting and proper embedding / laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with coarse sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand in footpath, parks, lawns, drive ways or light traffic parking etc. all complete as per manufacturer's specifications & direction of E/I. 80 mm thick CC paver block of M-35 grade with approved colour design and pattern.	sqm	150.00	763.40	114510.00
4	4.1.3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering-all work upto plinth level. 1:2:4 (1 Cement: 2 coarse sand:4 graded stone aggregate 20mm nominal size)	cum	0.93	3323.10	3090.00
7		<b>CARRIAGE OF MATERIALS (Rates inclusive of CESS)</b>				
8.3		Local Sand	cum	22.50	181.48	4083.00
8.4		Coarse Sand	cum	0.41	967.90	397.00
8.5		Stone Chips	cum	0.83	1658.60	1377.00
8.7		Cement	MT	0.30	282.30	85.00
9.2		Add extra cost of material for Muzaffarpur Zone w.r.t Gaya Zone (as per BCD SOR)				
9.4		Cement	MT	0.300	319.00	96.00
<b>Total (Scheduled Item)</b>						<b>897199.00</b>
<b>Non Schedule Items (on Tendered Rate)</b>						
1		Supplying and installing Stainless steel Bucket of capacity 7.5 ltr for Fire Fighting Work with all fitting as per direction of E/I	each	48.00	800.00	38400.00

<b>SIGNAGES</b>						
2	AR	Labour and material cost of Steel letter including fixing at site all complete with taxes, etc.	/ letter	60.00	250.00	15000.00
3		Signage in front of each Building	each	4.00	1110.00	4440.00
4		Signage in front of each Room (made on SS plate)	each	185.00	1750.00	323750.00
5		Signage to show the direction of different buildings / activities (made on SS plate)	each	10.00	3125.00	31250.00
<b><i>For 8 no. Seating Benches for Gearden</i></b>						
6		Supplying and fixing of Seating benches made of wrought iron as per approved design, sample and make including all taxex, labour, material and tools for fixing at site as per direction all complete job.	each	8.00	20000.00	160000.00
<b>Total (Non Scheduled Item)</b>						<b>572840.00</b>
<b>Grand Total</b>						<b>1470039.00</b>

**Detailed Estimate and Abstract of Cost for Phase II work of PTEC Campus at Chandwara, Muzaffarpur**

**CAMPUS DEVELOPMENT & LAND SCAPPING**

**Based on Schedule Rate : BCD Bihar -2016 & DSR - 2016**

Sl. No.	SOR Item No.	Item of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
1	2	3	4	5	6	7
		<b>Campus Filling</b>				
1	2.28	Supplying and Filling in plinth with local sand and under floors including watering, ramming consolidating and dressing complete.	cum	1832.00 cum	204.40	374461.00
1.1		Carriage of Local sand by an average lead 3.00 km	cum	1832.00 cum	181.48	332471.00
		<b>LAND SCAPPING &amp; PLANTATION</b>				
1	23.14.2	Digging holes in ordinary soil and refilling the same with the excavated earth mixed with manure or sludge in the ratio of 2:1 by volume (2 parts of stacked volume of earth after reduction by 20% : 1 part of stacked volume of manure after reduction by 8%) flooding with water,dressing including removal of rubbish and surplus earth, if any with all leads and lifts (cost of manure, sludge or extra good earth if needed to be paid for separately): Holes 60 cm dia. And 60 cm deep.	each	205 no.	42.20	8651.00
2	23.2	Supplying and stacking of good earth at site including royalty but excluding carriage (earth measured in stacks will be reduced by 20% for payment).	cum	29.77 cum	85.50	2545.00
3	23.2d	Carriage of good Earth from a ave. lead of 2 km.	cum	29.77 cum	186.00	5537.00
4	23.4.1	Supplying and stacking at site dump manure from approved source, excluding carriage (manure measured in stacks will be reduced by 8% for payment) Screened through sieve of I.S. designation 20 mm	cum	7.44 cum	25.00	186.00
5	23.3	Supplying and stacking Sludge at site including royalty and carriage (Sludge measured in stacks will be reduced by 8% for payment)	cum	7.44 cum	241.60	1798.00
6	23.9	Mixing earth and sjudge or manure in porportion specified or directed.	cum	44.65 cum	12.40	554.00
7	23.8	Spreading of sludge, dump manure or/and good earth in required thickness (Cost of sludge, dump manure or/and good earth to be paid separately).	cum	44.65 cum	18.00	804.00
8	MR	Procurement and planting of species (Trees, Shrubs, ground covers and creepers) including watering / irrigation controlling plant disease, pests and weeds, supporting with sturdy stake (as and when required) manuring, pruning and maintetance for 3 month after planting, all complete.				
		<b>TUBE WELL &amp; PIPELINE WORK</b>				
	MTW	Providing all labour, tools and material for manual bored Tube well of size 125 x 40 mm complete job including supply and installation of 1 H.P Submerssible pump (as per detailed attached)	each	1 no.	60432.00	60432.00
		<b>Pipe line work to irrigate plantation</b>				

Sl. No.	SOR Item No.	Item of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
	18.9	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of E/I.				
	18.9.2	20 mm nominal outer dia Pipes (External work)	m.	375.00 m.	147.30	55238.00
	18.54.1	Providing and fixing PTMT bib cock of approved quality and colour. 15mm nominal bore, 86 mm long, weighing not less than 88 gms	each	18 no.	138.70	2497.00
		<b>APPROACH ROAD, PATHWAYS &amp; DRAIN</b>				
		Length of Road = 447.00 m., Length of Drain = 115.00 m.				
1	2.28	Supplying and Filling in plinth with local sand and under floors including watering, ramming consolidating and dressing complete.	cum	297.26 cum	204.40	60760.00
9	11.72	Providing designation 100A one brick flat soling joints filled with local sand including cost of watering taxes royalty all complete as per building specification and direction of E/I.	sqm	1363.35 sqm	253.80	346018.00
10	11.73	Providing designation 100A one brick on edge soling joints filled with local sand including cost of watering taxes royalty all complete as per building specification and direction of E/I.	sqm	1363.35 sqm	407.00	554883.00
11	4.1.3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering-all work upto plinth level. 1:2:4 (1 Cement: 2 coarse sand:4 graded stone aggregate 20mm nominal size)	cum	204.50 cum	3323.10	679574.00
12	5.9.1	Centering and shuttering including strutting, propping etc. and removal of form for foundation, footings, bases of columns etc. for mass concrete.	sqm	134.10 sqm	169.00	22663.00
	15.9 (RCD)	Providing Dry Rubble flooring with approved size and type of Rubble (Stone), all complete	cum	80.46 cum	1336.00	107495.00
	8.2A (RCD)	Cast in Situ Cement Concrete M 20 Kerb with Channel (Construction of cement concrete kerb with channel with top and bottom width 115 and 165 mm respectively, 250 mm high in M 20 grade PCC on M10 grade foundation 150 mm thick, kerb channel 300 mm wide, 50 mm thick in PCC M20 grade, sloped towards the kerb, kerb stone with channel laid with kerb laying machine, foundation concrete laid manually, all complete as per clause 408.) Using Concrete mixer	m	894.00 m	362.00	323628.00
13	6.47A	Providing 250mm wide brick drain in cement mortar (1:6) with av. 150mm. Clear depth and 250mm apron including cost of E/W involved with 75mm cement concrete (1:4:8) over one brick designation 100-A flat soling in proper grade and slope at the base.the drain duly.plastered in CM. (1:3) with punning over exposed surface all complete as per building specification and dir of E/I.	m	115.00 m	970.50	111608.00
13		<b>CARRIAGE OF MATERIALS (Rates inclusive of CESS)</b>				

Sl. No.	SOR Item No.	Item of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
13.1		Local Sand	cum	379.06 cum	181.48	68792.00
13.2		Coarse Sand	cum	91.00 cum	967.90	88079.00
13.3		Stone Chips	cum	182.01 cum	1658.60	301882.00
13.4		Bricks	%o no.	117357 no.	531.00	62317.00
13.5		Cement	MT	65.450 MT	282.30	18477.00
14		Add extra cost of material for Muzaffarpur Zone w.r.t Gaya Zone (as per BCD SOR)				
14.1		Bricks	%o no.	117357 no.	370.80	43516.00
14.2		Cement	MT	65.450 MT	319.00	20879.00
		<b>Total (Schedule Items)</b>				<b>3655745.00</b>
		Non Schedule Items (on Tendered Rate)				
15.2	MR	Procurement and planting of species (Trees, Shrubs, ground covers and creepers) including watering / irrigation controlling plant disease, pests and weeds, supporting with sturdy stake (as and when required) manuring, pruning and maintenance for 3 month after planting, all complete.				
16.2		Best quality Health shrubs of species				
16.3		shurbs / Hedge	each	30 no.	30.00	900.00
16.4		Marigold	each	30 no.	15.00	450.00
16.5		Roses	each	30 no.	25.00	750.00
16.6		Oleander	each	20 no.	50.00	1000.00
16.7		Cycus	each	20 no.	50.00	1000.00
16.8		Golden Duranta ( ht 6")	each	20 no.	25.00	500.00
16.9		Hamelia	each	15 no.	50.00	750.00
17		Plumeria Albba (Champa)	each	15 no.	200.00	3000.00
17.1		Lantanna Depressa	each	15 no.	150.00	2250.00
17.2		Best quality healthy trees				
17.3		Amaltas	each	12 no.	25.00	300.00
17.4		Ashoka	each	12 no.	25.00	300.00
17.5		Royal Palm	each	12 no.	150.00	1800.00
17.6		Neem	each	3 no.	15.00	45.00
		<b>Total (Non Schedule Items)</b>				<b>13045.00</b>
		<b>Grand Total</b>				<b>3668790.00</b>

**Detailed Estimate and Abstract of Cost for Phase II work of PTEC Campus at Chandwara, Muzaffarpur**

**CYCLE / MOTOR CYCLE STAND**

Based on Schedule Rate : BCD Bihar -2016 & DSR - 2016

Sl. No.	SOR Item No.	Item of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
1	2	3	4	5	6	7
		<b>Cycle / Motor Cycle Stand And Portico for Institutional Building</b>				
1	2.8.1	Earth work in excavation in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All Kinds of soil	cum	38.44 sqm	230.50	8860.00
2	2.26	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth: consolidating each deposited layer by ramming and watering.	cum	38.44 sqm	74.50	2864.00
3	2.28	Supplying and Filling in plinth with local sand and under floors including watering, ramming consolidating and dressing complete.	cum	25.67 cum	204.40	5247.00
4	11.72	Providing designation 100A one brick flat soling joints filled with local sand including cost of watering taxes royalty all complete as per building specification and direction of E/I.	sqm	256.65 sqm	253.80	65138.00
5	4.1.3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering-all work upto plinth level. 1:2:4 (1 Cement: 2 coarse sand:4 graded stone aggregate 20mm nominal size)	cum	31.41 cum	3323.10	104379.00
6	5.1.3	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing & reinforcement - all work upto plinth level. 1:2:4 (1cement: 2 coarse sand : 4graded stone aggregate 20mm nominal size)	cum	5.27 cum	3984.50	20998.00
7	6.1.14A	Brick work with bricks of class designation 100A in foundations and plinth in cement mortar 1:6 (1cement :6 coarse sand)	cum	12.14 cum	4490.60	54516.00
8	13.13.4	20 mm cement plaster of mix ; 1:6 (1 cement : 6 coarse sand)	sqm	19.50 sqm	140.40	2738.00
9	5.22	Reinforcement for RCC work including straightening, cutting, bending, placing in position and bonding all complete.				
9.1	5.22.7A	TMTC-500 8mm dia	kg	200.00 kg	56.00	11200.00
9.21	5.22.7B	TMTC-500 10mm dia	kg	350.00 kg	54.70	19145.00
10	10.16.1	Steel work in built up tubular trusses including cutting, hoisting, fixing in position and applying a priming coar of approved steel primer, welded and bolted including special shaped washers etc. complete: Hot finished welded type tubes	kg	5125.00 kg	92.30	473038.00

11	12.1.4	Providing corrugated G.S. sheet roofing fixed with G.I.J. or hooks, bolts and nuts 8 mm diameter with bitumen and G. I. limpet washers or with G.I. limpet washers filled with white lead and including a coat of approved steel primer and two coats of approved paint on over lapping of sheets complete (upto a pitch of 60°) excluding the cost of purlins, rafters and trusses 0.8mm thick with zinc coating not less than 275 gm/sqm	sqm	228.80 sqm	729.60	166932.00
12	12.6.1	Providing ridges or hips of width 60 cm overall width plain G.S. sheet fixed with G.I.J. or L hooks . Bolts and nuts 8 mm dia. G. I. limpet and bitumen washers complete. 0.80 mm thick with zinc coating not less than 275 gm/sqm Consider the length of the ridge 10.35 metres. The ridge will be made out of plain G. I. sheets 0.9 m x 1.8 m ,.	m	26.90 m	499.90	13447.00
13		<b>CARRIAGE OF MATERIALS (Rates inclusive of CESS)</b>				
13.1		Local Sand	cum	27.92 cum	181.48	5067.00
13.2		Coarse Sand	cum	18.34 cum	967.90	17751.00
13.3		Stone Chips	cum	29.44 cum	1658.60	48829.00
13.4		Bricks	%o no.	12439 no.	531.00	6605.00
13.5		Cement	MT	11.500 MT	282.30	3246.00
13.6		Steel	MT	0.550 MT	282.30	155.00
14		Add extra cost of material for Muzaffarpur Zone w.r.t Gaya Zone (as per BCD SOR)				
14.1		Bricks	%o no.	12439 no.	370.80	4612.00
14.2		Cement	MT	11.500 MT	319.00	3669.00
		<b>Total</b>				<b>1038436.00</b>
		<b>Grand Total</b>				<b>1038436.00</b>



**Detailed Estimate and Abstract of Cost for Phase II work of PTEC Campus at Chandwara, Muzaffarpur**

**CAMPUS LIGHTING**

**Based on Schedule Rate : BCD Bihar -2016 & DSR - 2016**

Sl. No.	SOR Item No.	Item of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
1	2	3	4	5	6	7
1	8.13.1	Supplying and erection of 6 metre height Hot-dip Galvanized octagonal street light pole with following arm with top dia 70mm and bottom dia A/F 130 mm, made of 3 mm sheet along with base plate of size 220 x 220 x 12 mm, small door opening for junction box mounting and suitable size foundation bolts with template and and all complete as required. (but without pole collar) Single Arm, 1500 mm	each	18 no.	22703.00	408654.00
2	8.13.2	Supplying and erection of 6 metre height Hot-dip Galvanized octagonal street light pole with following arm with top dia 70mm and bottom dia A/F 130 mm, made of 3 mm sheet along with base plate of size 220 x 220 x 12 mm, small door opening for junction box mounting and suitable size foundation bolts with template and and all complete as required. (but without pole collar) Double Arm, 1500 mm	each	5 no.	24238.00	121190.00
3	8.3	Providing and making steel pole collar with cement concrete 1:3:6 of specified size and shape including form work, plastering if required, curing etc. as required. (Volume of pole/pipe not to deducted)	each	23 no.	6132.00	141036.00
4	5.12.5	Supplying and fixing 40/45 watt LED type street light with die cast aluminium housing for ingress protection of IP65 and complete with all accessories etc., on pole / building including connection with FR PVC insulated copper conductor cable and earthing the body etc. as required	each	28 no.	9624.00	269472.00
5	XLPE6	Supplying of 2 core 6 sqmm XLPE PVC insulated and sheathed armoured cable with aluminium conductor of approved make for working voltage upto and including 1100 volts. (material rate x 1.15 x 1.01)	m.	365.00 m.	548.00	200020.00
6	7.1	Laying of one number PVC insulated and PVC Sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required.				
	7.1.1	Upto 35 sqmm	m.	365.00 m.	149.00	54385.00
7	1.7	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FR PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.				
	1.7.2	2x2.5 sqmm + 1x2.5 sq mm earth wire	m.	280.00 m.	150.00	42000.00
		<b>Total (Schedule Items)</b>				<b>1236757.00</b>
		Non Schedule Items (on Tendered Rate)				

	Supplying and fixing 10/15 watt LED type garden light with die cast aluminium housing (Philips / Bajaj / Equivalent make) for ingress protection of IP65 and complete with all accessories etc., on pipe post including connection with FR PVC insulated copper conductor cable and earthing the body etc. (complete job) as required	each	10 no.	31200.00	312000.00
	<b>Total (Non Schedule Items)</b>				<b>312000.00</b>
	<b>Grand Total</b>				<b>1548757.00</b>
	<b>Grand Total</b>				<b>4646271.00</b>

<b>Detailed Estimate and Abstract of Cost for Phase II work of PTEC Campus at Chandwara, Muzaffarpur</b>					
<b>SOLAR PANEL</b>					
<b>Based on Quotation rate.</b>					
<b>Sl. No.</b>	<b>Item of Work</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate (Rs.)</b>	<b>Amount (Rs.)</b>
<b>1</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
1	Supply, Installation & Commissioning of 5 kWp Solar Hybrid Power Plant set complete system including all cost for Solar Panel 250 Wp x 20 no., 10 no. 12 V- 150AH Battery, 5 kVA Inverter (Hybrid PCU), and other accessories complete with 5 year warranty.	per set	3 set	700000.00	2100000.00
	<b>Grand Total</b>				<b>2100000.00</b>

Detailed Estimate and Abstract of Cost for Phase II work of PTEC Campus at Chandwara, Muzaffarpur (FURNITURE AND FURNISHING)					
Sl. No.	Item of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
1	2	3	4	5	6
<b>A</b>	<b>Intitutional Building</b>				
<b>A.1</b>	<b>Furniture :</b>				
	Supply of Following Steel Furniture of reputed make as per approved sample, including all taxes and FOR at site.				
1	DESK BENCH : Three Seater Class room Desk cum Bench Dimension-1500 x 895 x 750(Approx.) Desk panel Seat, Back-The panels should be made from 18 mm thick pre-laminated Boards with PVC edge banding on all sides, Understructure-Made of 25.4 x 25.4 mm x1.2 mm thick powder coated ERW tubes at base which are welded to the desk and seat supports that are made of 1.0 mm thick powder coated MS 'C' sections. Stiffeners should be provided between the 2 vertical frames at base and back of seat should be made from 25.4 x25.4 x1.2 mm thick powder coated ERW tubes closed with plastic caps. Additional horizontal supports of 1.5 mm thick powder coated MS 'C' sections should be placed below the desk and seat to add to the rigidity of the structure. The storage shelf is made from 0.8 mm thick powder coated MS sheet which is affixed below the desktop. Hooks are provided on either sides of the vertical frame of the desk, for hanging bags/bottles. They are made from 6.0 mm dia MS rods.	each	160	9616.00	1538560.00
2	CHAIR : (for Staff Room, Girls Common Room, Seminar Room, Vice Principal, Library etc.) Chair with Cushion chair on tubular frame with arm cantilever type made of dia 2.5cm X 14BG MS ERW round Tube with black powder coated paint and Back made of chemically treated and seasoned wood, caned and furnished with melamine polish. Seat height 43cm, back height 80 cm.	each	50	3906.00	195300.00
3	TEACHERS TABLES : (CLASS ROOM) TABLES made of MS ERW round tube dia 25.4 x 1.2 mm thick with 25mm thick pre-laminated top size 900 x 590 x 750 with one drawer unit made of 0.5 mm thick CRCA sheet mild steel, all steel components shall be powder coated paint fitted with lock.	each	15	9888.00	148320.00
4	TEACHERS TABLES : (Canteen) TABLES made of MS ERW round tube dia 25.4 x 1.2 mm thick with 25mm thick pre-laminated top size 900 x 590 x 750 with one drawer unit made of 0.5 mm thick CRCA sheet mild steel, all steel components shall be powder coated paint fitted with lock.	each	15	9888.00	148320.00

5	CHAIR : (for Canteen) CHAIR without arm with SEAT/BACK: The Seat and Back should be made of injection moulded high impact strength Polypropylene polymer compound with indoor grade UV resistance. SEAT SIZE: 52.5 cm. (W) x 53.2 cm. (D), * BACK SIZE : 51.6 cm. (W) x 40.5 cm. (H) .S.S. UNDERSTRUCTURE: The tubular welded frame made by Stainless Steel 202 grade tube dully buff polished to give shiny finish	each	15	2500.00	37500.00
6	OFFICE TABLE : TABLE made of MS ERW round tube dia 25.4 x 1.2mm thick with 25mm thick pre-laminated top size 1365W x 680D with both side drawer unit one side three drawers & another side two drawers made of 0.5 mm thick CRCA sheet mild steel, All steel components have powder coated paint fitted with both side drawer lock.	each	2	13500.00	27000.00
7	PRINCIPAL TABLE : TABLE of size 1500 x 750 x 750 made up of 18mm thick pre-laminated Particle Board (PLB), all work surface edges are duly sealed with 2mm thick PVC edge banding, Rectangular Frame-Fabricated component in 1.2mm thick CRCA (IS:513), Finish: Powder coat (Epoxy polyester), Leg-Fabricated component in 38mmx25mmx1.2mm thick MS ERW Tube (IS:7138), Finish: Powder coat (Epoxy polyester)	each	1	14425.00	14425.00
8	MIDBACK CHAIR : (for Principal) CHAIR Mid Back; The seat and back are made up of 1.2 cm. thick hot-pressed plywood, upholstered with fabric upholstery covers and moulded Polyurethane foam. The seat shall be extra thick foam on front edge to give comfort to popliteal area. Dimension BACK SIZE - 47.5 cm. (W) x 58.0cm. (H) & SEAT SIZE 47.0 cm. (W) x 48.0 cm. (D). ARMRESTS: The one-piece armrests are injection moulded from black Co-polymer Polypropylene. 4) CENTER TILT SYNCHRO MECHANISM . PNEUMATIC HEIGHT ADJUSTMENT . The pneumatic height adjustment has an adjustment stroke of 12.0 cm. TELESCOPIC BELLOW ASSEMBLY: The bellow is 3 piece telescopic type and injection moulded in black Polypropylene. PEDESTAL ASSEMBLY: The pedestal is injection moulded and fitted with 5 nos. twin wheel castors.	each	1	7010.00	7010.00
9	Visitor Chair - CHAIR with Cantilever type frame made of dia 2.54cm x 14 BG thick M.S.ERW tube and coated without arm. Seat/Back made of chemically treated and seasoned wood, caned and furnished with melamine polish. BACK SIZE-38.1 cm (W) X 42.4 cm (D). The seat should be extra thick foam on front edge to give comfort to popliteal area.	each	4	5510.00	22040.00

10	TABLE (for STAFF ROOM, RESOURCE ROOM, ARTS ROOM, PSYCHOLOGY LABS) : TABLE 1800W Dimension- 1800 x 900 x 740 made of Worktop- 25 thick pre-laminated Particle Board (PLB) with 2mm thick PVC Edge beading, Understructure C – Frames 1.6 mm thick M.S C-frame supporting the Top., Legs- Dia. 38.1 x 1.6 mm thick M.S ERW tube.	each	5	10550.00	52750.00
11	LABORATORY TABLE: Laboratory Table of size 1600 x 910 mm with main Storage Unit with cam Lock: 900mm D , 880 mm wide with two Shutters & One Drawer, Add -On Storage Sink Unit With Cam Lock : 900 mm (W) x 355 mm (D), 3 Way Faucet Bench Mounted 3 way water fittings " Swing Gooseneck .	each	4	69186.00	276744.00
12	LAB STOOL : Revolving Lab Stool with Back, Seat Assembly made of flat plywood, moulded Polyurethane foam and upholstered with replaceable synthetic leather covers, SEAT size of 400 mm diameter, 360° Revolving type. BACK Assembly made of contoured Lumbar support for extra comfort. BACK SIZE: 45.0 cm (W) covered with HIGH RESILIENCE (HR) foam as per IS:7888 for 25% compression. HEIGHT should be manually adjustable with locking facility at comfortable position. PEDESTAL Assembly should be fabricated from 2 mm thick HR sheet (IS: DD 1079 I HR), powder coated (DFT 40-60 microns ) and fitted with an injection moulded black Polypropylene Hub Cap and twin wheel castors.	each	40	3342.00	133680.00
13	STOOLS : Stool with 300 mm dia made of 1.00 mm thick CR Steel dully welded to the understructure and powder coated (DFT 40-60 microns) painting. UNDERSTRUCTURE should be made of MS ERW tube (22 mm dia). All MS section should be powder coated in approved colour.	each	60	1100.00	66000.00
14	STEEL ALMIRAH : Steel Almirah of size 1980 x 916 x 486 mm with Four Shelves multi bend construction and inter locking design and full length over applying doors and sides. Three-way bolting mechanism. Spot welding & CO2 welding. Anticorrosion treated components, oven baked powder coating process. Material thickness 0.9mm.Top, Bottom, LH& RH sides and back material thickness= 0.9mm,Removable RH & LH main door with stiffeners material thickness= 0.9mm, 4 adjustable shelves of thickness= 0.8mm.	each	10	18552.00	185520.00
15	TABLE (for Library) : TABLE 1800W Dimension- 1800 x 900 x 740 made of Worktop- 25 thick pre-laminated Particle Board (PLB) with 2mm thick PVC Edge beading, Understructure C – Frames 1.6 mm thick M.S C-frame supporting the Top., Legs- Dia. 38.1 x 1.6 mm thick M.S ERW tube.	each	5	10550.00	52750.00

16	CHAIR : (for Library) CHAIR without arm with SEAT/BACK: The Seat and Back should be made of injection moulded high impact strength Polypropylene polymer compound with indoor grade UV resistance. SEAT SIZE: 52.5 cm. (W) x 53.2 cm. (D), * BACK SIZE : 51.6 cm. (W) x 40.5 cm. (H) .S.S. UNDERSTRUCTURE: The tubular welded frame made by Stainless Steel 202 grade tube dully buff polished to give shiny finish	each	20	2500.00	50000.00
17	LIBRARY STEEL GLASS ALMIRAH : Sliding Door Unit,, Dimension- 900 mm (W) x 450 mm (D) (1830 mm H), Construction & Material -Rigid Knock down construction, Prime Quality CRCA Steel – 0.8 mm thick. Sliding Door Arrangement -Sliding Door with top hanging arrangement to prevent derailment. Each door provided with 2 Plastic roller having steel ball bearing for smooth movement of door & less noise. Unit should have Glass door for visibility of the content. Locking & handle - Snap on type aesthetically appealing die cast 5 Lever Cam lock for safe locking, Plastic flush & recessed handle Shelving - Height wise Adjustable Shelf Mounting, Uniformly Distributed Load Capacity per each full shelf is 80 kg approx & for half shelf it is 40 kg with Epoxy Polyester Powder coated to the thickness of 50 microns	each	10	18500.00	185000.00
18	COMPUTER TABLE : Computer Table of size 600 x 450 x 750 mm made of 18mm thick pre-laminated Board with PVC edge banding. Panel of 18mm thick Pre-Laminated Board with Single extrusion slide for Key Board fitted with 4 Nos. Caster	each	40	3142.00	125680.00
19	CHAIR : (for Sick room) Chair with Cushion chair on tubular frame with arm cantilever type made of dia 2.5cm X 14BG MS ERW round Tube with black powder coated paint and Back made of chemically treated and seasoned wood, caned and furnished with melamine polish. Seat height 43cm, back height 80 cm.	each	1	3906.00	3906.00
20	STOOLS (for sick room) : Stool with 300 mm dia made of 1.00 mm thick CR Steel dully welded to the understructure and powder coated (DFT 40-60 microns) painting. Top of stool should be stainless steel	each	1	4810.00	4810.00
21	Single sheet bed (for Sick room) of standard ayush semi flower with Mattress	each	1	30109.00	30109.00

22	MIDBACK CHAIR : (for Principal) CHAIR Mid Back; The seat and back are made up of 1.2 cm. thick hot-pressed plywood, upholstered with fabric upholstery covers and moulded Polyurethane foam. The seat shall be extra thick foam on front edge to give comfort to popliteal area. Dimension BACK SIZE - 47.5 cm. (W) x 58.0cm. (H) & SEAT SIZE 47.0 cm. (W) x 48.0 cm. (D). ARMRESTS: The one-piece armrests are injection moulded from black Co-polymer Polypropylene. 4) CENTER TILT SYNCHRO MECHANISM . PNEUMATIC HEIGHT ADJUSTMENT . The pneumatic height adjustment has an adjustment stroke of 12.0 cm. TELESCOPIC BELLOW ASSEMBLY: The bellow is 3 piece telescopic type and injection moulded in black Polypropylene. PEDESTAL ASSEMBLY: The pedestal is injection moulded and fitted with 5 nos. twin wheel castors.	each	1	7010.00	7010.00
23	TABLES : TABLES made of MS ERW round tube dia 25.4 x 1.2 mm thick with 25mm thick pre-laminated top size 900 x 590 x 750 with one drawer unit made of 0.5 mm thick CRCA sheet mild steel, all steel components shall be powder coated paint fitted with lock.	each	1	9888.00	9888.00
<b>A.2 Fixture :</b>					
1	Supplying erection and testing of approved make electric ceiling fan of double ball bearing AC-230-250 volts complete with standard down rod canopy, hanging shackle without regulator including connection with all necessary material complete.-1400mm Sweep	each	90	2226.00	200340.00
2	Supplying erection and testing of approved make wall Mounting fan of AC-230-250 volts with all accessories material complete.-400mm Sweep	each	8	2493.00	19944.00
3	Supplying erection and testing of approved make Fresh Air fan of AC-230-250 volts with all accessories material complete.-225mm Sweep	each	8	1231.00	9848.00
4	Supplying and Instalation of 30 Ltr capacity water cooler voltas or equivalent make complete job as per direction of engineer encharge.	each	1	35000.00	35000.00
5	Supplying and Instalation of Kent water purifier with UV protection complete job as per direction of engineer encharge.	each	1	16500.00	16500.00
6	Supplying and testing and commissioning of colour camera (Dome Shaped) 800 TVL lookman make model secura SXD -1318 MT day night vision camera IR distance 15m all complete job.	each	12	5337.00	64044.00
7	Supplying and testing and commissioning of Digital video Recorder lookman make 24 Channel model secura SDVR -9224Standalone N/W DVR along with Hard disk HDD 1000GB all complete job.	each	1	64132.00	64132.00
8	Supplying and testing and commissioning of Switcher Comtech make model all complete job.	each	1	9600.00	9600.00
9	Supplying and testing and commissioning of colour TV monitors make sony/samsung 21" all complete job.	each	1	8650.00	8650.00



10	Supplying and testing and commissioning of cable for power I/P to camera laying of cable all complete job.	mtr	300	28.75	8625.00
11	Supplying and testing and commissioning of RJ-6 wire all complete job.	mtr	500	25.00	12500.00
12	Supplying and Fixing of following size of PVC conduit along with accessories in surface /recess including cutting the wall and making good the same in case of recess conduit as required 25mm dia.	mtr	500	55.00	27500.00
	Provision for <b>Play &amp; Sports Equipments</b>	LS			120000.00
	<b>Total (Institutional Building)</b>				<b>3919005.00</b>
<b>B</b>	<b>Boys Hostel &amp; Girls Hostel</b>				
<b>B.1</b>	<b>Furniture :</b>				
	Supply of Following Steel Furniture of reputed make as per approved sample, including all taxes and FOR at site. (Quantity for both the hostel)				
1	Single sheet bed (APO BED) : Bed made of MS ERW tube and CR steel sheet as per approved sample.	each	208	7236.00	1505088.00
2	Study Table : Table of size 600 x 450 x 750 mm made of 18mm thick pre-laminated Board with PVC edge banding. Panel of 18mm thick Pre-Laminated Board with Single drawer	each	201	3300.00	663300.00
3	CHAIR : (Study chair) CHAIR without arm with SEAT/BACK: The Seat and Back should be made of injection moulded high impact strength Polypropylene polymer compound with indoor grade UV resistance. SEAT SIZE: 52.5 cm. (W) x 53.2 cm. (D), * BACK SIZE : 51.6 cm. (W) x 40.5 cm. (H) .S.S. UNDERSTRUCTURE: The tubular welded frame made by Stainless Steel 202 grade tube dully buff polished to give shiny finish	each	200	2500.00	500000.00
4	King Size Double Bed for Warden as per approved sample.	each	2	19500.00	39000.00
5	Library / Dining Table : TABLE 1800W Dimension- 1800 x 900 x 740 made of Worktop- 25 mm Thick PLB Tops with 2mm Thick PVC Edge Beading, Understructure C – Frames 1.6 mm thick M.S C-Frame Supporting the Top., Legs- Dia. 38.1 x 1.6 mm thick M.S ERW tube	each	48	11509.00	552432.00
6	CHAIR : (Dining chair) CHAIR without arm with SEAT/BACK: The Seat and Back should be made of injection moulded high impact strength Polypropylene polymer compound with indoor grade UV resistance. SEAT SIZE: 52.5 cm. (W) x 53.2 cm. (D), * BACK SIZE : 51.6 cm. (W) x 40.5 cm. (H) .S.S. UNDERSTRUCTURE: The tubular welded frame made by Stainless Steel 202 grade tube dully buff polished to give shiny finish	each	200	2500.00	500000.00

7	TABLE : (for warden)TABLE of size 1500 x 750 x 750 made up of 18mm thick pre-laminated Particle Board (PLB), all work surface edges are duly sealed with 2mm thick PVC edge banding, Rectangular Frame-Fabricated component in 1.2mm thick CRCA (IS:513), Finish: Powder coat (Epoxy polyester), Leg-Fabricated component in 38mmx25mmx1.2mm thick MS ERW Tube (IS:7138), Finish: Powder coat (Epoxy polyester)	each	2	14425.00	28850.00
8	MIDBACK CHAIR : (for Warden) CHAIR Mid Back; The seat and back are made up of 1.2 cm. thick hot-pressed plywood, upholstered with fabric upholstery covers and moulded Polyurethane foam. The seat shall be extra thick foam on front edge to give comfort to popliteal area. Dimension BACK SIZE - 47.5 cm. (W) x 58.0cm. (H) & SEAT SIZE 47.0 cm. (W) x 48.0 cm. (D). ARMRESTS: The one-piece armrests are injection moulded from black Co-polymer Polypropylene. 4) CENTER TILT SYNCHRO MECHANISM . PNEUMATIC HEIGHT ADJUSTMENT . The pneumatic height adjustment has an adjustment stroke of 12.0 cm. TELESCOPIC BELLOW ASSEMBLY: The bellow is 3 piece telescopic type and injection moulded in black Polypropylene. PEDESTAL ASSEMBLY: The pedestal is injection moulded and fitted with 5 nos. twin wheel castors.	each	2	7010.00	14020.00
9	Visitor Chair - CHAIR with Cantilever type frame made of dia 2.54cm x 14 BG thick M.S.ERW tube and coated without arm. Seat/Back made of chemically treated and seasoned wood, caned and furnished with melamine polish. BACK SIZE-38.1 cm (W) X 42.4 cm (D). The seat should be extra thick foam on front edge to give comfort to popliteal area.	each	4	5510.00	22040.00
10	Storwel Medium : Steel Almirah of size 1380 x 916 x 486 mm with two Shelves multi bend construction and inter locking design and full length over applying doors and sides. Three-way bolting mechanism. Spot welding & CO2 welding. Anticorrosion treated components, oven baked powder coating process. Material thickness 0.9mm.Top, Bottom, LH& RH sides and back material thickness= 0.9mm,Removable RH & LH main door with stiffeners material thickness= 0.9mm, 4 adjustable shelves of thickness= 0.8mm.	each	200	16610.00	3322000.00
12	Kitchen wall Storage of size 500 x 695 x381 mm as per approved sample	each	10	11021.00	110210.00
13	STOOLS : Stool with 300 mm dia made of 1.00 mm thick CR Steel dully welded to the understructure and powder coated (DFT 40-60 microns) painting. UNDERSTRUCTURE should be made of MS ERW tube (22 mm dia). All MS section should be powder coated in approved colour.	each	4	1100.00	4400.00

14	CHAIR : (Comman room) CHAIR without arm with SEAT/BACK: The Seat and Back should be made of injection moulded high impact strength Polypropylene polymer compound with indoor grade UV resistance. SEAT SIZE: 52.5 cm. (W) x 53.2 cm. (D), * BACK SIZE : 51.6 cm. (W) x 40.5 cm. (H) .S.S. UNDERSTRUCTURE: The tubular welded frame made by Stainless Steel 202 grade tube dully buff polished to give shiny finish	each	50	2500.00	125000.00
<b>B.2 Fixture :</b>					
1	Supplying erection and testing of approved make electric ceiling fan of double ball bearing AC-230-250 volts complete with standard down rod canopy, hanging shackle without regulator including connection with all necessary material complete.-1400mm Sweep	each	142	2226.00	316092.00
2	Supplying erection and testing of approved make Fresh Air fan of AC-230-250 volts with all accessories material complete.-225mm Sweep	each	12	1231.00	14772.00
3	Supplying and Instalation of 30 Ltr capacity water cooler voltas or equivalent make complete job as per direction of engineer encharge.	each	2	35000.00	70000.00
4	Supplying and Instalation of Kent water purifier with UV protection complete job as per direction of engineer encharge.	each	2	16500.00	33000.00
5	Supplying and testing and commissioning of LED TV of 42" size of approved brand and model (SONY/ SAMSUNG/ or equivalent) all complete job.	each	2	42000.00	84000.00
<b>Utencils (for both Hostels of 100 student each)</b>					
	i) For preparation of food (Tawa & Tasla of different size, Pressure Cooker, etc)	LS			36000.00
	ii) For Consumption of food (Plate (Thali), Half plate, Quarter plate, Bawls, Spoon, Fork, Service tray, etc)	LS			110000.00
	GAS BURNER & CYLLENDER	LS			20000.00
<b>Total (Both Hostel)</b>					<b>8070204.00</b>
<b>C Principal Quarter</b>					
<b>C.1 Furniture :</b>					
	Supply of Following Steel Furniture of reputed make as per approved sample, including all taxes and FOR at site.				

1	MIDBACK CHAIR : CHAIR Mid Back; The seat and back are made up of 1.2 cm. thick hot-pressed plywood, upholstered with fabric upholstery covers and moulded Polyurethane foam. The seat shall be extra thick foam on front edge to give comfort to popliteal area. Dimension BACK SIZE - 47.5 cm. (W) x 58.0cm. (H) & SEAT SIZE 47.0 cm. (W) x 48.0 cm. (D). ARMRESTS: The one-piece armrests are injection moulded from black Co-polymer Polypropylene. 4) CENTER TILT SYNCHRO MECHANISM . PNEUMATIC HEIGHT ADJUSTMENT . The pneumatic height adjustment has an adjustment stroke of 12.0 cm. TELESCOPIC BELLOW ASSEMBLY: The bellow is 3 piece telescopic type and injection moulded in black Polypropylene. PEDESTAL ASSEMBLY: The pedestal is injection moulded and fitted with 5 nos. twin wheel castors.	each	1	7010.00	7010.00
2	Visitor Chair - CHAIR with Cantilever type frame made of dia 2.54cm x 14 BG thick M.S.ERW tube and coated without arm. Seat/Back made of chemically treated and seasoned wood, caned and furnished with melamine polish. BACK SIZE-38.1 cm (W) X 42.4 cm (D). The seat should be extra thick foam on front edge to give comfort to popliteal area.	each	4	5510.00	22040.00
3	OFFICE TABLE : TABLE made of MS ERW round tube dia 25.4 x 1.2mm thick with 25mm thick pre-laminated top size 1365W x 680D with both side drawer unit one side three drawers & another side two drawers made of 0.5 mm thick CRCA sheet mild steel, All steel components have powder coated paint fitted with both side drawer lock.	each	1	13500.00	13500.00
4	STEEL ALMIRAH : Steel Almirah of size 1980 x 916 x 486 mm with Four Shelves multi bend construction and inter locking design and full length over applying doors and sides. Three-way bolting mechanism. Spot welding & CO2 welding. Anticorrosion treated components, oven baked powder coating process. Material thickness 0.9mm.Top, Bottom, LH& RH sides and back material thickness= 0.9mm,Removable RH & LH main door with stiffeners material thickness= 0.9mm, 4 adjustable shelves of thickness= 0.8mm.	each	2	18552.00	37104.00
5	SOFA SET : 2-Seater Sofa as per approved sample	each	1	21800.00	21800.00
6	SOFA SET : 1-Seater Sofa as per approved sample	each	2	9926.00	19852.00
7	SOFA SET : Central Table with Glazed top of approved sample	each	1	9189.00	9189.00
8	DINING TABLE SET : Dining Table set with Glazed top with 6 no. Armless Dining Chair as per approved sample	each	1	36000.00	36000.00

9	CHAIR : (Study chair) CHAIR without arm with SEAT/BACK: The Seat and Back should be made of injection moulded high impact strength Polypropylene polymer compound with indoor grade UV resistance. SEAT SIZE: 52.5 cm. (W) x 53.2 cm. (D), * BACK SIZE : 51.6 cm. (W) x 40.5 cm. (H) .S.S. UNDERSTRUCTURE: The tubular welded frame made by Stainless Steel 202 grade tube dully buff polished to give shiny finish	each	1	2500.00	2500.00
10	King Size Double Bed for Warden as per approved sample.	each	1	19500.00	19500.00
<b>C.2 Fixture :</b>					
1	Supplying erection and testing of approved make electric ceiling fan of double ball bearing AC-230-250 volts complete with standard down rod canopy, hanging shackle without regulator including connection with all necessary material complete.-1400mm Sweep	each	5	2226.00	11130.00
2	Supplying erection and testing of approved make Fresh Air fan of AC-230-250 volts with all accessories material complete.-225mm Sweep	each	3	1231.00	3693.00
<b>Total (Pricipal Quarter)</b>					<b>203318.00</b>
<b>GRAND Total (Complete Furniture &amp; Fixture)</b>					<b>12192527.00</b>

**Detailed Estimate and Abstract of Cost for Phase II work of PTEC Campus at Chandwara, Muzaffarpur**

**MAIN GATE**

**Based on Schedule Rate : BCD Bihar -2016 & DSR - 2016**

Sl. No.	SOR Item No.	Item of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
1	2	3	4	5	6	7
<b>Civil Work</b>						
1	2.8.1	Earth work in excavation in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All Kinds of soil	cum	16.46 cum	230.50	3794.00
2	2.26	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth: consolidating each deposited layer by ramming and watering.	cum	16.46 cum	74.50	1226.00
3	2.28	Supplying and Filling in plinth with local sand and under floors including watering, ramming consolidating and dressing complete.	cum	0.92 cum	204.40	188.00
4	11.72	Providing designation 100A one brick flat soling joints filled with local sand including cost of watering taxes royalty all complete as per building specification and direction of E/I.	sqm	8.00 sqm	253.80	2030.00
5	4.1.5	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering-all work upto plinth level. 1:3:6 (1 Cement: 3 coarse sand:6 graded stone aggregate 20mm nominal size)	cum	0.80 cum	2775.70	2221.00
6	5.1.1	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing & reinforcement - all work upto plinth level. 1:1:2 (1cement: 1 coarse sand : 2 graded stone aggregate 20mm nominal size)	cum	2.47 cum	6035.20	14907.00
7	5.2.1	Reinforced cement concrete work in wall (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts, etc. up to floor five level excluding cost of centering, shuttering, finishing and reinforcement ; 1:1:2 (1cement: 1 coarse sand : 2 graded stone aggregate 20mm nominal size)	cum	8.40 cum	6644.60	55815.00
8	5.9.1	Centering and shuttering including strutting, propping etc. and removal of form for foundation, footings, bases of columns etc. for mass concrete.	sqm	3.76 sqm	169.00	635.00
9	5.9.6	Centering and shuttering including strutting, propping etc. and removal of form for Columns, pillars, piers, abutments, posts and struts	sqm	68.00 sqm	357.60	24317.00
10	5.22	Reinforcement for RCC work including straightening, cutting, bending, placing in position and bonding all complete.				
10.1	5.22.7A	TMTC-500 8mm dia	kg	600.00 kg	56.00	33600.00
10.2	5.22.7C	TMTC-500 12mm dia	kg	1350 kg	53.40	72090.00
11	6.1.12A + 6.3A	Brick work with bricks of class designation 100A in foundations and plinth in cement mortar 1:4 (1cement :4 coarse sand) Extra for Brick work in superstructure above plinth level upto floor V level	cum	3 cum	5237.70	13094.00
12	13.11.4	12mm thick Cement plaster of mix 1:6 (1 cement : 6 coarse sand)	sqm	10 sqm	101.20	1012.00

Sl. No.	SOR Item No.	Item of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
13	8.2.2.2	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations, of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels Granite of any colour and shade Area of slab over 0.50 sqm	sqm	58 sqm	3573.70	207203.00
14	10.32.2	Steel work welded in built up sections/framed work including cutting hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel, etc. as required. In gratings, frames, guard bar, ladders, railings, brackets, gates & similar works.	kg	680.00 kg	76.70	52156.00
15	13.93.1	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade two or more	sqm	13.50 sqm	54.10	730.00
16		<b>CARRIAGE OF MATERIALS (Rates inclusive of CESS)</b>				
16.1		Local Sand	cum	1.08 cum	181.48	196.00
16.2		Coarse Sand	cum	8.20 cum	967.90	7937.00
16.3		Stone Chips	cum	9.99 cum	1658.60	16569.00
16.4		Bricks	%o no.	1493 no.	531.00	793.00
16.5		Cement	MT	4.950 MT	282.30	1397.00
16.6		Steel	MT	1.950 MT	282.30	550.00
17		Add extra cost of material for Muzaffarpur Zone w.r.t Gaya Zone (as per BCD SOR)				
17.1		Bricks	%o no.	1493 no.	370.80	554.00
17.2		Cement	MT	4.950 MT	319.00	1579.00
		<b>Grand Total</b>				<b>514593.00</b>

**Detailed Quantity calculation for Phase II work at PTEC Campus at Chandwara, Muzaffarpur**

Sl. No.	Description	D	Details	Quantity
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**Construction of Guard Room**

1	Earthwork in excavation in Foundation		4 x 1.20 x 1.20 x 2.25 =	12.96 cum
	<b>Total</b>			<b>12.96 cum</b>

	Filling available excavated earth (excluding rock) in trenches, plinth, sides of Qty same as E/W excavation			12.96 cum
				<b>12.96 cum</b>

	Supplying and filling in plinth with local sand and under floors including,			
			4 x 1.20 x 1.20 x 0.08 =	0.46 cum
			1 x 3.05 x 3.05 x 1.20 =	11.16 cum
				<b>11.62 cum</b>

	Providing Designation 100A Brick flat Soling			
			4 x 1.20 x 1.20 =	5.76 sqm
			4 x 3.30 x 0.25 =	3.30 sqm
			1 x 3.05 x 3.05 =	9.30 sqm
			1 x 1.20 x 1.00 =	1.20 sqm
				<b>19.56 sqm</b>

	PCC 1:3:6			
			4 x 1.20 x 1.20 x 0.075 =	0.43 cum
			1 x 3.05 x 3.05 x 0.075 =	0.70 cum
			1 x 1.20 x 1.00 x 0.075 =	0.09 cum
				<b>1.22 cum</b>

	RCC 1:1.5:3 in Foundation & Plinth			
			4 x 1.20 x 1.20 x 0.75 =	4.32 cum
			4 x 3.30 x 0.25 x 0.30 =	0.99 cum
			1 x 3.20 x 0.25 x 0.300 =	0.24 cum
				<b>5.55 cum</b>

	RCC 1:1.5:3 in Columnn			
			4 x 0.30 x 0.30 x 6.75 =	2.43 cum
				<b>2.43 cum</b>

	RCC 1:1.5:3 in beam, Lintel & Slab			
			4 x 3.30 x 0.25 x 0.20 =	0.66 cum
			4 x 3.30 x 0.25 x 0.30 =	0.99 cum
			1 x 3.96 x 3.96 x 0.15 =	2.35 cum
			2 x 2.50 x 0.45 x 0.08 =	0.17 cum
			1 x 1.20 x 1.00 x 0.10 =	0.12 cum
				<b>4.29 cum</b>

	Brick work with bricks of class designation 100A in Foundation and plinth			
			4 x 3.05 x 0.25 x 1.20 =	3.66 cum
			1 x 1.00 x 1.00 x 0.60 =	0.60 cum
			1 x 1.00 x 1.00 x 0.30 =	0.30 cum



		=	<b>4.56 cum</b>
Brick work with bricks of class designation 100A in superstructure in cement			
	4 x 3.05 x 0.25 x 3.15	=	9.61 cum
d	1 x 1.00 x 0.25 x 2.10	=	-0.53 cum
d	2 x 2.00 x 0.25 x 0.75	=	-0.75 cum
		=	<b>8.33 cum</b>
12mm thick Cement plaster of mix 1:6 (1 cement : 6 coarse sand)			
	4 x 3.05 x 3.05	=	37.21 sqm
		=	<b>37.21 sqm</b>
20mm thick Cement plaster of mix 1:6 (1 cement : 6 coarse sand)			
	4 x 3.56 x 4.65	=	66.22 sqm
		=	<b>66.22 sqm</b>
6mm thick Cement plaster in ceiling of mix 1:4 (1 cement : 4 coarse sand)			
	1 x 3.05 x 3.05	=	9.30 sqm
		=	<b>9.30 sqm</b>
Kotah stone slab flooring			
	1 x 3.05 x 3.05	=	9.30 sqm
	1 x 1.00 x 1.00	=	1.00 sqm
	3 x 1.00 x 0.45	=	1.35 sqm
	2 x 2.50 x 0.25	=	1.25 sqm
	4 x 3.05 x 0.15	=	1.83 sqm
		=	<b>14.73 sqm</b>
Providing and fixing T-iron frames for door chokhat			
Door	measured weight		
	D (1.00 m x 2.1 m)		18.20 kg
		=	<b>18.20 kg</b>
Providing and fixing Flush door shutter			
	D (1.00 m x 2.1 m)	1 x 1.00 x 2.10	= 2.10 sqm
		=	<b>2.10 sqm</b>
Providing and fixing Gazed Steel window (sliding type)			
	W	2 x 2.00 x 0.75	= 3.00 sqm
		=	<b>3.00 sqm</b>
Providing and fixing M S grill			
			54.00 kg
		=	<b>54.00 kg</b>
Providing M S Reinforcement			
	TMTC-500 8mm dia		1200.00 kg

TMTC-500 12mm dia 1000.00 kg

Centering and shuttering including strutting, propping etc. and removal of

PCC	16 x 1.20 x 0.08 =	1.44 sqm
	1 x 3.40 x 0.08 =	0.26 sqm
RCC	16 x 1.20 x 0.75 =	14.40 sqm

**= 16.10 cum**

Centering and shuttering including strutting, propping etc. and removal of form for Lintel, beams, plinth beams, girders, bressumers and cantilevers.

PCC	4 x 3.30 x 0.85 =	11.22 sqm
	1 x 3.20 x 0.85 =	2.72 sqm
RCC	4 x 3.30 x 0.60 =	7.92 sqm
	4 x 3.30 x 0.60 =	7.92 sqm

**= 29.78 cum**

Centering and shuttering including strutting, propping etc. and removal of form for Columns, pillars, piers, abutments, posts and struts

PCC	4 x 1.20 x 6.75 =	32.40 sqm
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**= 32.40 cum**

Centering and shuttering including strutting, propping etc. and removal of form for Suspended floors, roofs, landings, balconies and access platform.

RCC	1 x 3.96 x 3.96 =	15.68 sqm
	2 x 2.50 x 0.45 =	2.25 sqm
	1 x 1.20 x 1.00 =	1.20 sqm

**= 19.13 cum**

### Open Air Theater type Earthen Seating platform

1 E/W excavation

	1 x 17.89 x 0.45 x 0.43 =	3.46 cum
	1 x 6.10 x 0.45 x 0.43 =	1.18 cum
	1 x 3.95 x 0.45 x 0.43 =	0.76 cum
	1 x 2.11 x 0.45 x 0.43 =	0.41 cum
	2 x 4.00 x 0.45 x 0.43 =	1.55 cum

**= 7.36 sqm**

2 Supplying and filling in plinth with local sand and under floors including,

	1 x 17.89 x 0.45 x 0.10 =	0.81 cum
	1 x 6.10 x 0.45 x 0.10 =	0.27 cum
	1 x 3.95 x 0.45 x 0.10 =	0.18 cum
	1 x 2.11 x 0.45 x 0.10 =	0.09 cum
	2 x 4.00 x 0.45 x 0.10 =	0.36 cum
	1 x 8.95 x 0.50 x 0.60 =	2.69 cum
	1 x 7.12 x 0.75 x 0.45 =	2.40 cum
	1 x 5.03 x 0.75 x 0.30 =	1.13 cum
	1 x 3.04 x 0.75 x 0.15 =	0.34 cum

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$$= \quad \mathbf{8.27 \text{ cum}}$$

3 Brick Flat Soling

$$\begin{aligned} 1 \times 17.89 \times 0.45 &= 8.05 \text{ sqm} \\ 1 \times 6.10 \times 0.45 &= 2.75 \text{ sqm} \\ 1 \times 3.95 \times 0.45 &= 1.78 \text{ sqm} \\ 1 \times 2.11 \times 0.45 &= 0.95 \text{ sqm} \\ 2 \times 4.00 \times 0.45 &= 3.60 \text{ sqm} \end{aligned}$$

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$$= \quad \mathbf{17.13 \text{ sqm}}$$

4 PCC 1:2:4

$$\begin{aligned} 1 \times 17.89 \times 0.45 \times 0.10 &= 0.81 \text{ cum} \\ 1 \times 6.10 \times 0.45 \times 0.10 &= 0.27 \text{ cum} \\ 1 \times 3.95 \times 0.45 \times 0.10 &= 0.18 \text{ cum} \\ 1 \times 2.11 \times 0.45 \times 0.10 &= 0.09 \text{ cum} \\ 2 \times 4.00 \times 0.45 \times 0.10 &= 0.36 \text{ cum} \end{aligned}$$

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$$= \quad \mathbf{1.71 \text{ cum}}$$

5 Brick work in CM 1:6

$$\begin{aligned} 1 \times 19.89 \times 0.25 \times 0.75 &= 3.73 \text{ cum} \\ 1 \times 8.18 \times 0.25 \times 0.60 &= 1.23 \text{ cum} \\ 1 \times 5.95 \times 0.25 \times 0.45 &= 0.67 \text{ cum} \\ 1 \times 4.11 \times 0.25 \times 0.30 &= 0.31 \text{ cum} \end{aligned}$$

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$$= \quad \mathbf{5.94 \text{ cum}}$$

6 12 mm Cement Plaster in CM 1:6

$$\begin{aligned} 1 \times 12.48 \times 0.75 &= 9.36 \text{ sqm} \\ 2 \times 1.00 \times 0.60 &= 1.20 \text{ sqm} \\ 2 \times 1.00 \times 0.45 &= 0.90 \text{ sqm} \\ 1 \times 4.11 \times 0.30 &= 1.23 \text{ sqm} \end{aligned}$$

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$$= \quad \mathbf{12.69 \text{ sqm}}$$

### Development of Parking Area

Size of car parking area =  
25.00m. x 6.00m.

2 Supplying and filling in plinth with local sand and under floors including,

$$1 \times 25.00 \times 6.00 \times 0.15 = 22.50 \text{ cum}$$

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$$= \quad \mathbf{22.50 \text{ cum}}$$

3 Interlocking Cement Concrete paver blocks

$$1 \times 25.00 \times 6.00 = 150.00 \text{ sqm}$$

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$$= \quad \mathbf{150.00 \text{ sqm}}$$

4 PCC 1:2:4

$$2 \times 31.00 \times 0.15 \times 0.10 = 0.93 \text{ cum}$$

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$$= \quad \mathbf{0.93 \text{ cum}}$$

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**Construction of Approach Road / Pathways**

Supplying and filling in plinth with local sand and under floors including,

$$1 \times 447.00 \times 3.05 \times 0.10 = 136.34 \text{ cum}$$

$$1 \times 447.00 \times 1.20 \times 0.30 = 160.92 \text{ cum}$$

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$$= \mathbf{297.26 \text{ cum}}$$

Providing Designation 100A Brick flat Soling

$$1 \times 447.00 \times 3.05 = 1363.35 \text{ sqm}$$

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$$= \mathbf{1363.35 \text{ sqm}}$$

Providing Designation 100A one Brick on Edge Soling

$$1 \times 447.00 \times 3.05 = 1363.35 \text{ sqm}$$

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$$= \mathbf{1363.35 \text{ sqm}}$$

PCC 1:2:4

$$1 \times 447.00 \times 3.05 \times 0.150 = 204.50 \text{ cum}$$

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$$= \mathbf{204.50 \text{ cum}}$$

Centering and shuttering including strutting, propping etc. and removal of form for foundation, footings, bases of columns etc. for mass concrete.

$$\text{PCC} \quad 2 \times 447.00 \times 0.15 = 134.10 \text{ sqm}$$

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$$= \mathbf{134.10 \text{ sqm}}$$

Providing Dry Rubble flooring with approved size and type of Rubble

$$2 \times 447.00 \times 0.60 \times 0.15 = 80.46 \text{ cum}$$

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$$= \mathbf{80.46 \text{ cum}}$$

Cast in Situ Cement Concrete M 20 Kerb with Channel (Construction of

$$2 \times 447.00 = 894.00 \text{ m}$$

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$$= \mathbf{894.00 \text{ m}}$$

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**Construction of Main Gate**

1 Earthwork in excavation in Foundation

$$2 \times 2.15 \times 2.15 \times 1.78 = 16.46 \text{ cum}$$

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$$\mathbf{\text{Total}} \quad \mathbf{16.46 \text{ cum}}$$

Filling available excavated earth (excluding rock) in trenches, plinth, sides of Qty same as E/W excavation

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$$16.46 \text{ cum}$$

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$$\mathbf{16.46 \text{ cum}}$$

Supplying and filling in plinth with local sand and under floors including,

$$2 \times 2.15 \times 2.15 \times 0.10 = 0.92 \text{ cum}$$

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$$= \mathbf{0.92 \text{ cum}}$$

Providing Designation 100A Brick flat Soling

$$2 \times 2.00 \times 2.00 = 8.00 \text{ sqm}$$

$$= \underline{\underline{8.00 \text{ sqm}}}$$

PCC 1:3:6

$$2 \times 2.00 \times 2.00 \times 0.100 = 0.80 \text{ cum}$$

$$= \underline{\underline{0.80 \text{ cum}}}$$

RCC 1:1:2 in Foundation & Plinth

$$2 \times 1.80 \times 1.80 \times 0.15 = 0.97 \text{ cum}$$

$$2 \times 1.88(\text{ave. area}) \times 0.40 = 1.50 \text{ cum}$$

$$= \underline{\underline{2.47 \text{ cum}}}$$

RCC 1:1:2 in Column

$$2 \times 1.00 \times 1.00 \times 0.95 = 1.90 \text{ cum}$$

$$2 \times 2 \times 1.00 \times 0.25 \times 5.00 = 5.00 \text{ cum}$$

$$2 \times 2.50 \times 1.00 \times 0.30 = 1.50 \text{ cum}$$

$$= \underline{\underline{8.40 \text{ cum}}}$$

Centering and shuttering including strutting, propping etc. and removal of form for foundation, footings, bases of columns etc. for mass concrete.

For PCC	$2 \times 8.00 \times 0.10 =$	1.60 sqm
For RCC	$2 \times 7.20 \times 0.15 =$	2.16 sqm
		$= \underline{\underline{3.76 \text{ sqm}}}$

Centering and shuttering including strutting, propping etc. and removal of form for Columns, pillars, piers, abutments, posts and struts

$2 \times 4.00 \times 0.95 =$	7.60 sqm
$2 \times 2 \times 2.50 \times 5.00 =$	50.00 sqm
$2 \times 2.50 \times 1.00 =$	5.00 sqm
$2 \times 9.00 \times 0.30 =$	5.40 sqm
	$= \underline{\underline{68.00 \text{ sqm}}}$

Reinforcement for RCC Work

Centering and shuttering including strutting, propping etc. and removal of form for foundation, footings, bases of columns etc. for mass concrete.

TMTC-500 8mm dia	$=$	600.00 kg
TMTC-500 12mm dia	$=$	1350.00 kg

Brick work with bricks of class designation 100A in superstructure in cement

$$2 \times 2 \times 0.50 \times 0.25 \times 5.00 = 2.50 \text{ cum}$$

$$= \underline{\underline{2.50 \text{ cum}}}$$

12mm thick Cement plaster of mix 1:6 (1 cement : 6 coarse sand)

$$2 \times 2 \times 0.50 \times 5.00 = 10.00 \text{ sqm}$$

$$= \underline{\underline{10.00 \text{ sqm}}}$$

Granite stone slab cladding

$2 \times 4.40 \times 5.10 =$	44.88 sqm
$2 \times 2 \times 2.50 \times 0.30 =$	3.00 sqm
$2 \times 2.50 \times 1.00 =$	5.00 sqm
$2 \times 1.60 \times 1.00 =$	3.20 sqm
$2 \times 0.30 \times 1.00 =$	0.60 sqm

$$2 \times 0.65 \times 1.00 = 1.30 \text{ sqm}$$

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$$= \mathbf{57.98 \text{ sqm}}$$

M S Grill gate

$$580.00 \text{ kg}$$

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$$= \mathbf{580.00 \text{ kg}}$$

Synthetic enamel paint over Steel surface

$$1 \times 4.50 \times 3.00 = 13.50 \text{ sqm}$$

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$$= \mathbf{13.50 \text{ sqm}}$$

**DETAILED ESTIMATE OF BOUNDARY WALL**

Sl. No.	Item No.	Item of Work	Location	Description	Length	Breadth	Height	Nos	Quantity	unit	
					L	B	H/Depth	Nos			
<b>1</b>	<b>EARTHWORK IN EXCAVATION</b>										
	2.8.1	Earthwork in excavation in areas(exceeding 30cm in depth. 1.5m in width as well es 10sqm on plan) including dressing of sides and ramming of bottom,lift upto 1.5 including getting out the excavated soil and disposal of surplus soil as directed within a lead of 50m	Footing	F-1 &F-2	1.20	0.80	1.45	83	115.54		
				F-3	1.20	1.08	1.45	22	41.34		
				Below Tie Beam		416.00	0.25	0.25	1	26.00	
											<b>182.88 cu.m</b>
<b>2</b>	<b>EARTH FILLING</b>										
	2.26	Filling available excavated earth (excluding rock) in trenches and plinth side of foundation etc. in layers not exceeding 20cm. thick in depth consolidating each deposited layer by ramming and watering lead.		Excavated Qty.				182.880	182.88		
				Qty same as excavation							
											<b>182.88 cu.m</b>
<b>3</b>	<b>SAND FILLING</b>										
	2.28	Supplying and filling in plinth with local sand and under floots including watering, ramming consolidating and dressing complete.	In Foundation	F-1 &F-2	1.200	0.800	0.100	83	7.97		
				F-3	1.200	1.080	0.100	22	2.85		
											<b>10.82 cu.m</b>
<b>4</b>	<b>FLAT BRICK SOLING</b>										
	11.72	Providing designation 100 A one brick flat soling joints filled with local sand including cost of watering, taxes, royalty all complete as per building specification and direction of E/I,	In Foundation	F-1 &F-2	1.200	0.800		83	79.68		
				F-3	1.200	1.080		22	28.51		
				Below Tie Beam		416.00	0.250		1	104.00	
										<b>212.19 sq.m</b>	
<b>5</b>	<b>P.C.C.</b>										
	4.1.5	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- all work upto plinth level. 1:3:6 (1cement: 3 coarse sand : 6 graded stone aggregate 20mm nominal size)	In Foundation	F-1 &F-2	1.200	0.800	0.100	83	7.97		
				F-3	1.200	1.080	0.100	22	2.85		
									(A)	10.82	
									(A)	10.820	<b>cu.m</b>
<b>6</b>	<b>R.C.C. WORK in Foundation &amp; Plinth</b>										
	5.1.1	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centring, shuttering, finishing & reinforcement - all work upto plinth level. 1:1:2 (1 cement:1 coarse sand:2 graded stone aggregate 20mm nominal size)	Raft In Foundation	F-1 &F-2	1.200	0.800	0.150	83	11.95		
				Pedestal In Foundation	F-1 &F-2	1.050	0.600	0.150	83	7.84	
				Column up to tie beam	F-1 &F-2	0.250	0.300	0.750	83	4.67	
				Raft In Foundation	F-3	1.200	1.080	0.150	22	4.28	
				Pedestal In Foundation	F-3	1.050	0.800	0.150	22	2.77	
				Column up to tie beam	F-3	0.250	0.300	0.750	44	2.48	
											<b>33.99 cu.m</b>
	<b>R.C.C. WORK ABOVE TIE LVL.</b>										
<b>7</b>	5.2.1	Reinforced cement concrete work in wall (any thickness), including attached pilasters, buttresses, plinth and struts etc upto floor ive level excluding the cost of centring, shuttering, finishing & reinforcement - all work upto plinth level. 1:1:2 (1 cement: 1 coarse sand: 2 graded stone aggregate)		Stiffner	0.250	0.300	2.100	127	20.00		
					Tie beam	416.00	0.250	0.250	1	26.00	
					At top	416.00	0.300	0.100	1	12.48	
						0.000	0.300	0.100	1	0.00	
						0.000	0.250	0.100	1	0.00	
											<b>58.48 cu.m</b>
	<b>BRICK WORK</b>										
<b>8</b>	6.1.14A	Brick work with bricks of class designation 100A in superstructure above plinth level	Wall		416.00	0.250	1.500	1	156.00		
						0.000	0.250	0.600	1	0.00	

	6.3A	upto five floor cement mortar 1:6 (Cement :6 coarse sand)							(A)	156.00	
									(A - B)	156.00	cu.m
<b>PLASTER WORK</b>											
9	13.11.4	12mm thick Cement plaster of mix 1:6 (1 cement : 6 coarse sand)	Wall	416.00		1.600	2	1331.20			
				416.00		0.350	1	145.60			
			Stiffner	1.100		0.600	0	0.00			
				0.000		1.600	2	0.00			
				0.000		0.350	1	0.00			
								1476.80			
								1476.80		sq.m	
<b>FINISHING WORK</b>											
10	13.46.1	Finishing walls with Acrylic Smooth exterior paint of required shade : New work (Two or more coat applied @ 1.67 ltr/ 10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm) New work (Two or more coat applied @ 1.67 ltr/ 10 sqm over a nd including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm)	Wall							1476.80	sq.m
11	13.81.3	Applying priming coat with ready mixed zinc chromate yellow primer of approved	Steel work	416.00		0.600	1	249.60			
								249.60		sq.m	
12	13.93.1	Painting with synthetic enamel paint of approved brand and manufacture to give	Steel work	416.00		0.600	1	249.60			
								249.60		sq.m	
<b>STEEL WORK</b>											
13	9.48.1	Providing and fixing M.S. grills of requirement pattern in frames of windows etc. with M.S. flats, square or round bars etc.all complete	Grill	Over Boundry	416.00	0.60	1	249.60		sq.m	
					0.00	0.600	1	0.00		sq.m	
						Per sq m. @ 25kg		6240.00			
						Total		6240.00		Kgs.	
14	5.22	Reinforcement for RCC work including straightening, cutting, bending, placing in position and bonding all complete.									
	5.22.7A	TMTC-500 -8mm dia								5600	Kgs.
	5.22.7B	TMTC-500 -10mm dia								2950	Kgs.
	5.22.7C	TMTC-500 -12mm dia								6200	Kgs.
<b>SHUTTERING</b>											
15	5.9.1	Centring and shuttering including strutting, propping etc. and removal of form for foundation, footings, basees of columns etc. for mass concrete.	RCC	F-1 &F-2	0.800	0.150	166	19.92			
				F-1 &F-2	1.200	0.150	166	29.88			
				F-3	1.200	0.150	44	7.92			
				F-3	1.080	0.150	44	7.13			
			PCC		4.000	0.100	83	33.20			
			PCC		4.560	0.100	22	10.03			
								108.08		sq.m	
16	5.9.6	Centring and shuttering including strutting, propping etc. and removal of form for columns, pillars, piers, abutments, posts and struts	Above TB	Stiffner	1.10	2.10	127	293.37			
			Below TB		1.10	0.75	127	104.78			
								398.15		sq.m	
17	5.9.5	Centring and shuttering including strutting, propping etc. and removal of form for lintel, beams, plinth beams, griders, bressumers and cantilevers.	TB		416.00	0.250	2	208.000			
			Top		416.00	0.250	1	104.000			
					0.00	0.100	2	0.000			
					0.00	0.100	2	0.000			
								312.000		sq.m	
18	<b>CARRIAGE OF MATERIALS</b>										
	<b>Type of materials</b>										
	Cement									55.400	MT
	Coarse Sand									107.10	cum
	Local Sand									15.06	cum
	Stone Chips									88.77	cum
	Brick									83913	Nos.
	Steel									14.750	MT
	Add Extra Cost										
	Brick									83913.0	Nos.
	Cement									55.400	MT



<b>Material Statement (for carriage purpose)</b>							
Sl. no.	Particulars of Item	Quantity	Cement in kg.	Sand in cum.	Stone chips in cum.	Bricks in no.	Local Sand in cum.
<b>Construction of Boundary Wall</b>							
1	Brick flat soling	212.19 sqm.				6849	4.24
2	Brick work in CM (1:6)	156.00 cum.	9750.00	40.56		77064	
3	12 mm Cement Plaster in CM (1:6)	1476.80 sqm.	5316.48	22.15			
4	PCC M100 (1:3:6)	10.82 cum.	2380.40	5.09	10.17		
5	RCC M250	92.47 cum.	37912.70	39.30	78.60		
6	Sand in filling	10.82 cum.					10.82
<b>Total</b>			<b>55359.58</b>	<b>107.10</b>	<b>88.77</b>	<b>83913</b>	<b>15.06</b>
			<b>55.400</b>				
			MT				
<b>Development of Parking Area</b>							
1	PCC M150 (1:2:4)	0.93 cum.	297.60	0.41	0.83		
2	Sand in filling	22.50 cum.					22.50
	Tiles Flooring	sqm.					
<b>Total</b>			<b>297.60</b>	<b>0.41</b>	<b>0.83</b>		<b>22.50</b>
			<b>0.300</b>				
			MT				
<b>APPROACH ROAD, PATHWAYS &amp; DRAIN</b>							
1	Brick edge soling	1363.35 sqm.				73348	54.53
2	Brick flat soling	1363.35 sqm.				44009	27.27
3	PCC M150 (1:2:4)	204.50 cum.	65440.00	91.00	182.01		
4	Sand in filling	297.26 cum.					297.26
<b>Total</b>			<b>65440.00</b>	<b>91.00</b>	<b>182.01</b>	<b>117357</b>	<b>379.06</b>
			<b>65.450</b>				
			MT				
<b>MAIN GATE</b>							
1	Brick flat soling	8.00 sqm.				258	0.16
2	Brick work in CM (1:6)	2.50 cum.	156.25	0.65		1235	
3	12 mm Cement Plaster in CM (1:6)	10.00 sqm.	36.00	0.15			
4	Marble / Granite / Kotah flooring	57.98 sqm.	86.39	2.40			
5	PCC M100 (1:3:6)	0.80 cum.	176.00	0.38	0.75		
6	RCC M250	10.87 cum.	4456.70	4.62	9.24		
7	Sand in filling	0.92 cum.					0.92
<b>Total</b>			<b>4911.34</b>	<b>8.20</b>	<b>9.99</b>	<b>1493</b>	<b>1.08</b>
			<b>4.950</b>				
			MT				

Sl. no.	Particulars of Item	Quantity	Cement in kg.	Sand in cum.	Stone chips in cum.	Bricks in no.	Local Sand in cum.
8	Brick edge soling	1363.35 sqm.				73348	54.53
9	Brick flat soling	1363.35 sqm.				44009	27.27
	Brick work in CM (1:4)	cum.					
	Brick work in CM (1:6)	cum.					
	40 mm Cement Concrete flooring with M150	cum.					
	1.5 mm Cement Punning	sqm.					
	6 mm Cement Plaster in CM (1:4)	sqm.					
	12 mm Cement Plaster in CM (1:3)	sqm.					
	12 mm Cement Plaster in CM (1:4)	sqm.					
	12 mm Cement Plaster in CM (1:6)	sqm.					
	20 mm Cement Plaster in CM (1:6)	sqm.					
	M20 C.C Kerb	m.					
	Marble / Kotah flooring	sqm.					
	60mm cement concrete paver block	sqm.					
	PCC (1:4:8)	cum.					
	PCC M100 (1:3:6)	cum.					
10	PCC M150 (1:2:4)	204.50 cum.	65440.00	91.00	182.01		
	Plinth protection 50mm thick CC (1:3:6)	sqm.					
	125 mm Brick work in CM (1:4)	sqm.					
	75 mm Brick work in CM (1:4)	sqm.					
	RCC M150	cum.					
	RCC M200	cum.					
	RCC M250	cum.					
11	Sand in filling	297.26 cum.					297.26
	Tiles Flooring	sqm.					
	Tiles / Marble / Kotah skirting	sqm.					
	Tiles on wall	sqm.					
	<b>Total</b>		<b>65440.00</b>	<b>91.00</b>	<b>182.01</b>	<b>117357</b>	<b>379.06</b>
			<b>65.450</b>				
			MT				

**DETAILED ESTIMATE FOR PROPOSED OF PRINCIPAL RESIDENCE & STAFF QUARTER**  
**BIHAR STATE EDUCATIONAL INFRASTRUCTURE CORPORATION LTD., SHIKSHA BHAWAN, SAIDPUR, PATNA**  
**Based on SOR FOR BCD BIHAR - 2016**  
**CIVIL WORKS**

Item No.	Item of Work	Decription	Location	Length	Breadth	Height	Nos	Quantity	unit	
				L	B	H/Depth	Nos			
<b>EARTHWORK IN EXCAVATION</b>										
1	2.8.1	Earthwork in excavation in areas(exceeding 30cm in depth. 1.5m in width as well es 10sqm on plan) including dressing of sides and ramming of bottom,lift upto 1.5 including getting out the excavated soil and disposal of surplus soil as directed within a lead of 50m. All Kind of soil								
	F-4		Foundation	3.000	9.200	2.225	1	61.410		
	F-5		Foundation	3.250	3.250	2.225	2	47.000		
	F-9		Foundation	3.400	9.400	2.225	1	71.110		
	F-10		Foundation	3.400	5.000	2.225	1	37.830		
	F-11		Foundation	9.300	5.000	2.225	1	103.460		
	F-12		Foundation	3.300	3.500	2.225	1	25.700		
	F-13		Foundation	3.300	3.300	2.225	1	24.230		
									0.000	
	TB-2		Tie Beam	13.680	0.250	0.525	1	1.800		
	TB-4			7.010	0.250	0.525	1	0.920		
	TB-5			3.600	0.250	0.525	1	0.470		
	TB-6			8.755	0.250	0.525	1	1.150		
	TB-9			4.365	0.250	0.525	1	0.570		
									0.000	
	STEPS		Main Entrance	2.800	1.270	0.300	1	1.070		
	Ramp			3.345	1.270	0.300	1	1.270		
				3.045	1.270	0.300	1	1.160		
				3.190	1.270	0.300	1	1.220		
	Ramp wall			3.345	0.250	0.300	2	0.500		
				1.270	0.250	0.300	1	0.100		
				3.045	0.250	0.300	2	0.460		
				1.270	0.250	0.300	1	0.100		
				3.190	0.250	0.300	2	0.480		
				1.270	0.250	0.300	1	0.100		
								<b>382.110 cu.m</b>		
<b>EARTH FILLING</b>										
2	2.26	Filling available excavated earth (excluding rock) in trenches and plinth side of foundation etc. in layers not exceeding 20cm. thick in depth consolidating	Excavated				382.110	382.110		
								<b>382.110 cu.m</b>		
<b>SAND FILLING</b>										
3	2.28	Supplying and filling in plinth with local sand and under floots including watering, ramming consolidating and dressing complete.								
	F-4		Foundation	3.000	9.200	0.100	1	2.760		
	F-5			3.250	3.250	0.100	2	2.110		
	F-9			3.400	9.400	0.100	1	3.200		
	F-10			3.400	5.000	0.100	1	1.700		
	F-11			9.300	5.000	0.100	1	4.650		
	F-12			3.300	3.500	0.100	1	1.160		
	F-13			3.300	3.300	0.100	1	1.090		
	TB-2		Tie Beam	13.680	0.250	0.100	1	0.340		
	TB-4			7.010	0.250	0.100	1	0.180		
	TB-5			3.600	0.250	0.100	1	0.090		
	TB-6			8.755	0.250	0.100	1	0.220		
	TB-9			4.365	0.250	0.100	1	0.110		
	STEPS		Main Entrance	2.800	1.270	0.150	1	0.530		
	Ramp			3.345	1.270	0.150	1	0.640		
				3.045	1.270	0.150	1	0.580		
				3.190	1.270	0.150	1	0.610		
	Ramp wall			3.345	0.250	0.150	2	0.250		
				1.270	0.250	0.150	1	0.050		
				3.045	0.250	0.150	2	0.230		
				1.270	0.250	0.150	1	0.050		
					3.190	0.250	0.150	2	0.240	

Item No.	Item of Work	Decription	Location	Length	Breadth	Height	Nos	Quantity	unit
				L	B	H/Depth	Nos		
				1.270	0.250	0.150	1	0.050	
							(A)	20.840	cu.m
			Bed Room	3.350	4.265	0.900	1	12.860	
			Bed Room	3.350	4.115	0.900	1	12.410	
			Balcony	3.625	1.220	0.900	1	3.980	
			Balcony	3.045	1.220	0.900	1	3.340	
		Flooring at ± 0.00 lvl.	Dining Room	3.045	4.265	0.900	1	11.690	
			Toilet Area	1.500	2.100	0.900	1	2.840	
			Toilet Area	1.545	2.100	0.900	1	2.920	
			Kitchen	2.100	2.975	0.900	1	5.620	
			Living Room	3.570	4.265	0.900	1	13.700	
			Guest Room	3.845	3.350	0.900	1	11.590	
							(B)	80.950	cu.m
							(A+B) :	101.790	cu.m
<b>FLAT BRICK SOLING</b>									
4	11.72	Providing designation 100A one brick flat soling joints filled with local sand including cost of watering texes royalty all complete as per building specification and direction of E/I.							
			F-4	3.000	9.200		1	27.600	
			F-5	3.250	3.250		2	21.130	
			F-9	3.400	9.400		1	31.960	
			F-10	3.400	5.000		1	17.000	
			F-11	9.300	5.000		1	46.500	
			F-12	3.300	3.500		1	11.550	
			F-13	3.300	3.300		1	10.890	
							(A)	166.630	sq.m
			TB-2	13.680	0.250		1	3.420	
			TB-4	7.010	0.250		1	1.750	
			TB-5	3.600	0.250		1	0.900	
			TB-6	8.755	0.250		1	2.190	
			TB-9	4.365	0.250		1	1.090	
			STEPS	2.800	1.270		1	3.560	
			Ramp	3.345	1.270		1	4.250	
				3.045	1.270		1	3.870	
				3.190	1.270		1	4.050	
			Main Entrance	3.345	0.250		2	1.670	
				1.270	0.250		1	0.320	
			Ramp wall	3.045	0.250		2	1.520	
				1.270	0.250		1	0.320	
				3.190	0.250		2	1.600	
				1.270	0.250		1	0.320	
								30.830	sq.m
							(A+B)	197.460	sq.m
			Bed Room	3.350	4.265		1	14.288	
			Bed Room	3.350	4.115		1	13.785	

Item No.	Item of Work	Decription	Location	Length	Breadth	Height	Nos	Quantity	unit		
				L	B	H/Depth	Nos				
		Flooring at ± 0.00 lvl.	Balcony	3.625	1.220		1	4.423			
			Balcony	3.045	1.220		1	3.715			
			Dining Room	3.045	4.265		1	12.987			
			Toilet Area	1.500	2.100		1	3.150			
			Toilet Area	1.545	2.100		1	3.245			
			Kitchen	2.100	2.975		1	6.248			
			Living Room	3.570	4.265		1	15.226			
			Guest Room	3.845	3.350		1	12.881			
			Stair Room	4.265	2.250		1	9.596			
								<b>99.540</b>			
								<b>(A+B)+(C)</b>	<b>253.800 sq.m</b>		
<b>P.C.C.</b>											
<b>5</b>	<b>4.1.3</b>	Providing and laying in position cement concrete of specified grade exluding the cost of centring and shuttering-all work upto plinth level.1:2:4(1 Cement: 2 coarse sand:4 graded stone aggregate 20 mm nominal size)									
			F-4	3.000	9.200	0.075	1	0.225			
			F-5	3.250	3.250	0.075	2	0.488			
			F-9	3.400	9.400	0.075	1	0.255			
			F-10	3.400	5.000	0.075	1	0.255			
			F-11	9.300	5.000	0.075	1	0.698			
			F-12	3.300	3.500	0.075	1	0.248			
			F-13	3.300	3.300	0.075	1	0.248			
			TB-2	13.680	0.250	0.075	1	0.257			
			TB-4	7.010	0.250	0.075	1	0.131			
			TB-5	3.600	0.250	0.075	1	0.068			
			TB-6	8.755	0.250	0.075	1	0.164			
			TB-9	4.365	0.250	0.075	1	0.082			
			STEPS	2.800	1.270	0.075	1	0.267			
				3.345	1.270	0.075	1	0.319			
			Ramp	3.045	1.270	0.075	1	0.290			
				3.190	1.270	0.075	1	0.304			
				3.345	0.250	0.075	2	0.125			
				1.270	0.250	0.075	1	0.024			
			Ramp wall	3.045	0.250	0.075	2	0.114			
				1.270	0.250	0.075	1	0.024			
				3.190	0.250	0.075	2	0.120			
				1.270	0.250	0.075	1	0.024			
								<b>(A)</b>	<b>4.730 cu.m</b>		
			Bed Room	3.350	4.265	0.075	1	1.072			
			Bed Room	3.350	4.115	0.075	1	1.034			
			Balcony	3.625	1.220	0.075	1	0.332			
			Balcony	3.045	1.220	0.075	1	0.279			

Item No.	Item of Work	Decription	Location	Length	Breadth	Height	Nos	Quantity	unit	
				L	B	H/Depth	Nos			
			±0.00 LVL. Flooring	Dining Room	3.045	4.265	0.075	1	0.974	
				Toilet Area	1.500	2.100	0.075	1	0.236	
				Toilet Area	1.545	2.100	0.075	1	0.243	
				Kitchen	2.100	2.975	0.075	1	0.469	
				Living Room	3.570	4.265	0.075	1	1.142	
				Guest Room	3.845	3.350	0.075	1	0.966	
				Stair Room	4.265	2.250	0.075	1	0.720	
								(B)	7.470	cu.m
								(A+B)	12.200	cu.m
<b>FLOORING</b>										
6	11.38	Providing and laying Ceramic glazed floor tiles 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in all colours, shades, except White, Ivory, Grey, Fume Red Brown laid on 20mm thick bed of Cement Mortar 1:4 (1 cement : 4 Coarse sand) including pointing the joints with white cement and matching pigments etc. complete.	at ± 0.00 lvl.	Toilet Area	1.500	2.100		1	3.150	
				Toilet Area	1.545	2.100		1	3.245	
				Kitchen	2.100	2.975		1	6.248	
			at +3300 lvl.	Toilet Area	1.500	2.100		2	6.300	
				Toilet Area	1.545	2.100		2	6.489	
				Kitchen	2.100	3.350		2	14.070	
			at +6600 lvl.	Toilet Area	1.500	2.100		2	6.300	
				Toilet Area	1.545	2.100		2	6.489	
				Kitchen	2.100	3.350		2	14.070	
									66.360	sq.m
<b>WALL TILES</b>										
7	11.36	Providing and fixing 1st quality Ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the nufacturer) 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 step and dados over 12mm thick bed of Cement Mortar 1:3 (1 cement : 3 Coarse sand)and jointing with grey cement slurry @ 3.3 kg per sqm including pointing in white cement mixed with pigments of matching shade complete.	at ± 0.00 lvl.	Toilet Area	1.500	2.100	2.100	1	15.120	
				Toilet Area	1.545	2.100	2.100	1	15.309	
				Kitchen	2.100	2.950	2.100	1	21.210	
			at +3300 lvl.	Toilet Area	1.500	2.100	2.100	2	30.240	
				Toilet Area	1.545	2.100	2.100	2	30.618	
				Kitchen	2.100	3.350	2.100	2	45.780	
			at +6600 lvl.	Toilet Area	1.500	2.100	2.100	2	30.240	
				Toilet Area	1.545	2.100	2.100	2	30.618	
				Kitchen	2.100	3.350	2.100	2	45.780	
								(A)	264.915	sq.m
			Deduction for Door at ALL lvl.	D3	0.750		2.100	10	15.750	
				D2	0.900		2.100	5	9.450	
								(B)	25.200	sq.m
								(A-B)	239.715	sq.m
<b>FLOORING &amp; SKIRTING</b>										
8	8.2.1.1	Providing and fixing 20mm thick mirror polished, machine cut for kitchen platforms, vanity counters facias and similar locatins of required size of approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement :4 coarse sand) with joints treated with white cement, mixe*		Bed Room	3.350	4.265		1	14.288	
				Bed Room	3.350	4.115		1	13.785	
				Balcony	3.625	1.220		1	4.423	

Item No.	Item of Work	Decription	Location	Length	Breadth	Height	Nos	Quantity	unit		
				L	B	H/Depth	Nos				
	with matching pigment-epoxy touch ups. including rubbing, curing etc. complete at all lbevels. Rajnagar plain white marbfe /Udaipur green marble/ Zebra block marble Area of each slab over 0.2 sqm but upto 0.5 sqm Rajnagar plain whit	±0.00 LVL. Flooring	Balcony	3.045	1.220		1	3.715			
			Dining Room	3.045	4.265		1	12.987			
			Living Room	3.570	4.265		1	15.226			
			Guest Room	3.845	3.350		1	12.881			
			Stair Room	4.265	2.250		1	9.596			
						1.500	0.630		2	1.890	
		+3300 LVL. Flooring	Bed Room	3.350	4.265				2	28.576	
			Bed Room	3.350	4.115				2	27.571	
			Balcony	3.625	1.220				2	8.845	
			Balcony	3.045	1.220				2	7.430	
			Dining Room	3.045	4.265				2	25.974	
			Living Room	3.570	4.265				2	30.452	
			Verandah	5.190	1.740				1	9.031	
				2.250	1.860				1	4.185	
			STORE ROOM	1.470	1.470				2	4.322	
				1.500	0.630				4	3.780	
			PASSAGE	2.800	1.400				1	3.920	
		+6600 LVL. Flooring	Bed Room	3.350	4.265				2	28.576	
			Bed Room	3.350	4.115				2	27.571	
			Balcony	3.625	1.220				2	8.845	
			Balcony	3.045	1.220				2	7.430	
			Dining Room	3.045	4.265				2	25.974	
			Living Room	3.570	4.265				2	30.452	
			Verandah	5.190	1.740				1	9.031	
				2.250	1.860				1	4.185	
			STORE ROOM	1.470	1.470				2	4.322	
				1.500	0.630				4	3.780	
			PASSAGE	2.800	1.400				1	3.920	
									<b>(A)</b>	<b>396.963</b>	
		±0.00 LVL. Flooring	Bed Room	3.350	4.265	0.150			1	2.285	
			Bed Room	3.350	4.115	0.150			1	2.240	
			Balcony	3.625	1.220	0.150			1	1.454	
			Balcony	3.045	1.220	0.150			1	1.280	
Dining Room	3.045			0.150			1	0.457			
	4.265			0.150			1	0.640			
	2.405			0.150			1	0.361			
Living Room	3.570			0.150			1	0.536			
	4.265		0.150			1	0.640				

Item No.	Item of Work	Decription	Location	Length	Breadth	Height	Nos	Quantity	unit	
				L	B	H/Depth	Nos			
				2.225		0.150	1	0.334		
			Guest Room	3.845	3.350	0.150	1	2.159		
			Stair Room	4.265	2.250	0.150	1	1.955		
		+3300 LVL. Flooring								
			Bed Room	3.350	4.265	0.150	2	4.569		
			Bed Room	3.350	4.115	0.150	2	4.479		
			Balcony	3.625	1.220	0.150	2	2.907		
			Balcony	3.045	1.220	0.150	2	2.559		
			Dining Room	3.045		0.150	4	1.827		
				4.265		0.150	2	1.280		
				2.405		0.150	2	0.722		
			Living Room	3.570		0.150	2	1.071		
				4.265		0.150	2	1.280		
				2.225		0.150	2	0.668		
			Verandah	5.190		0.150	1	0.779		
				1.740		0.150	2	0.522		
				1.470		0.150	2	0.441		
				2.250		0.150	1	0.338		
				1.860		0.150	2	0.558		
			STORE ROOM	1.470	1.470	0.150	2	1.764		
			PASSAGE	2.800		0.150	1	0.420		
			+6600 LVL. Flooring							
				Bed Room	3.350	4.265	0.150	2	4.569	
		Bed Room		3.350	4.115	0.150	2	4.479		
		Balcony		3.625	1.220	0.150	2	2.907		
		Balcony		3.045	1.220	0.150	2	2.559		
		Dining Room		3.045		0.150	4	1.827		
				4.265		0.150	2	1.280		
				2.405		0.150	2	0.722		
		Living Room		3.570		0.150	2	1.071		
				4.265		0.150	2	1.280		
				2.225		0.150	2	0.668		
		Verandah		5.190		0.150	1	0.779		
				1.740		0.150	2	0.522		
				1.470		0.150	2	0.441		



Item No.	Item of Work	Decription	Location	Length	Breadth	Height	Nos	Quantity	unit
				L	B	H/Depth	Nos		
				2.250		0.150	1	0.338	
				1.860		0.150	2	0.558	
			STORE ROOM	1.470	1.470	0.150	2	1.764	
			PASSAGE	2.800		0.150	1	0.420	
							(B)	66.701	
		Deduct for Doors & Openings	D	1.200		0.150	7	1.260	
			D1	1.050		0.150	16	2.520	
			D2	0.900		0.150	5	0.675	
			D3	0.750		0.150	2	0.225	
							(C)	4.680	sq.m
							D= (A+B)-(C)	458.984	sq.m
			MAIN ENTRANCE STEP	2.800	0.300		1	0.840	
				2.800	0.970		1	2.716	
				2.800		0.150	2	0.840	
			BACK SIDE STEP	2.175	0.300		3	1.958	
				2.175		0.150	4	1.305	
							(E)	7.659	
							(D+E)	466.643	sq.m
<b>R.C.C. WORK BELOW PLINTH LVL.</b>									
9	5.1.1	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centring,shuttering,finishing and reinforcement-All work upto plinth level 1:1:2 (1 cement:1 coarse sand:2 graded stone aggregate 20mm nominal size)	F-1	2.900	3.400	0.400	0	0.000	
			F-4	3.000	9.200	0.400	1	11.040	
			BEAM	9.200	0.700	0.600	1	3.860	
			F-5	3.250	3.250	0.400	2	8.450	
			PEDESTAL	0.600	0.900	0.300	2	0.320	
			F-9	3.400	9.400	0.300	1	9.590	
			BEAM	9.400	0.700	0.700	1	4.610	
			F-10	3.400	5.000	0.500	1	8.500	
			PEDESTAL	0.600	0.900	0.200	1	0.110	
			F-11	9.300	5.000	0.400	1	18.600	
			BEAM	9.300	0.700	0.600	1	3.910	
			F-12	3.300	3.500	0.400	1	4.620	
			PEDESTAL	0.600	0.900	0.300	1	0.160	
			F-13	3.300	3.300	0.400	1	4.360	
			PEDESTAL	0.600	0.900	0.300	1	0.160	
							(A)	78.290	
							(A)	78.290	cu.m
<b>R.C.C. WORK ABOVE PLINTH LVL.</b>									
10	5.2.1	Reinforced cement concrete work in wall (any thickness), including attached pilasters, buttresses, plinth and struts etc upto floor five level excluding the cost of centring, shuttering, finishing & reinforcement - all work upto plinth level. 1:1:2 (1cement: 1 coarse sand : 2 graded stone aggregate 20mm nominal size)	C-1	0.300	0.600	2.050	6	2.210	
			C-2	0.300	0.600	2.050	4	1.480	
			C-3	0.300	0.600	2.050	2	0.740	
							(A)	4.430	cu.m
			C-1	0.300	0.600	9.900	6	10.690	
			C-2	0.300	0.600	9.900	4	7.130	

Item No.	Item of Work	Decription	Location	Length	Breadth	Height	Nos	Quantity	unit
				L	B	H/Depth	Nos		
			C-3	0.300	0.600	9.900	2	3.560	
							(B)	21.380	cu.m
							(A+B) :	25.810	cu.m
11	5.3 + 5.33B.4 + 5.33B.1	Reinforced cement concrete work in beams, suspended floors, roofs having slope upto 15, landings, balconiec, shelves, chajjas, lintels, bands, plain window sills, staircasees and spiral staircases upto floor five level excluding the cost of centring, shuttering, finishing & reinforcement - all work upto plinth level. 1:2:4 (1cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal size)	TB-1	1.750	0.250	0.300	0	0.000	
			TB-2	13.680	0.250	0.300	1	1.030	
			TB-4	7.010	0.250	0.300	1	0.530	
			TB-5	3.600	0.250	0.300	1	0.270	
			TB-6	8.755	0.250	0.300	1	0.660	
			TB-9	4.365	0.250	0.300	1	0.330	
							(A)	2.820	cu.m
		(Extra for Providing M-15grade R.C.C instead of M-20 grade R.C.C.)	PB-1	1.750	0.250	0.250	0	0.000	
		(Extra for Proiding M-25 grade R.C.C. instead of M-20 grade R.C.C.)	PB-2	13.680	0.250	0.450	1	1.540	
			PB-3	3.295	0.250	0.250	0	0.000	
			PB-4	13.185	0.250	0.450	1	1.480	
			PB-5	3.600	0.250	0.450	0	0.000	
			PB-6	3.295	0.250	0.250	0	0.000	
			PB-6A	2.500	0.250	0.350	1	0.220	
			PB-7	3.600	0.250	0.450	1	0.410	
			PB-8	6.990	0.250	0.450	0	0.000	
			PB-8A	6.990	0.250	0.450	1	0.790	
			PB-9	3.600	0.250	0.450	0	0.000	
			PB-10	1.750	0.250	0.250	0	0.000	
			PB-11	-					
			PB-12	3.600	0.250	0.450	1	0.410	
			PB-13	8.755	0.250	0.450	1	0.980	
			PB-14	0.505	0.250	0.250	2	0.060	
			PB-14A	0.505	0.250	0.250	2	0.060	
			PB-15	8.755	0.250	0.550	0	0.000	
			PB-16	2.350	0.250	0.250	0	0.000	
			PB-17	7.990	0.250	0.550	0	0.000	
			PB-18	3.600	0.250	0.450	0	0.000	
			PB-19	9.260	0.250	0.550	1	1.270	
			PB-20	7.990	0.250	0.600	1	1.200	
			PB-21	8.755	0.250	0.450	1	0.980	
							(B)	9.400	cu.m
			D	1.500	0.250	0.150	3	0.170	
			D1	1.350	0.250	0.150	4	0.200	
			D2	1.200	0.125	0.150	2	0.050	
			D3	1.050	0.125	0.150	2	0.040	
			W	1.500	0.250	0.150	2	0.110	
			W1	1.500	0.250	0.150	3	0.170	
			W2	1.500	0.250	0.150	4	0.230	
			V	0.900	0.125	0.150	2	0.030	
			FGL	2.100	0.250	0.150	1	0.080	
			D	1.500	0.250	0.150	4	0.230	
			D1	1.350	0.250	0.150	12	0.610	
			D2	1.200	0.125	0.150	8	0.180	
			D3	1.050	0.125	0.150	14	0.280	
			W	1.500	0.250	0.150	8	0.450	
			W1	1.500	0.250	0.150	8	0.450	
			W2	1.500	0.250	0.150	14	0.790	
			W3	1.500	0.250	0.150	4	0.230	
			V	0.900	0.250	0.150	8	0.270	

Item No.	Item of Work	Decription	Location	Length	Breadth	Height	Nos	Quantity	unit
				L	B	H/Depth	Nos		
		FGL		2.100	0.250	0.150	2	0.160	
		D	MUMTY ROOM	1.500	0.250	0.150	1	0.060	
		FGL		2.100	0.250	0.150	1	0.080	
							<b>(C) :</b>	<b>4.870 cu.m</b>	
		FFB-2	Floor beam at +3300 Lvl.	13.680	0.250	0.500	1	1.710	
		FFB-3		3.295	0.250	0.350	1	0.290	
		FFB-5		9.890	0.250	0.500	1	1.240	
		FFB-8		3.295	0.250	0.350	1	0.290	
		FFB-11		3.695	0.250	0.350	2	0.650	
		FFB-12		1.750	0.250	0.250	2	0.220	
		FFB-14		0.505	0.250	0.250	2	0.060	
		FFB-14A		0.505	0.250	0.250	2	0.060	
		FFB-15		8.755	0.250	0.600	1	1.310	
		FFB-16		2.350	0.250	0.250	1	0.150	
		FFB-17		9.260	0.250	0.600	1	1.390	
		FFB-18		3.600	0.250	0.350	2	0.630	
		FFB-19		9.260	0.250	0.600	2	2.780	
		FFB-20		2.500	0.250	0.300	1	0.190	
		SFB-1	Floor beam at +6600Lvl.	1.750	0.250	0.250	2	0.220	
		SFB-2		23.680	0.250	0.500	1	2.960	
		SFB-3		3.295	0.250	0.350	2	0.580	
		SFB-4		5.980	0.250	0.250	1	0.370	
		SFB-5		9.890	0.250	0.500	1	1.240	
		SFB-6		3.600	0.250	0.600	1	0.540	
		SFB-7		3.600	0.250	0.600	1	0.540	
		SFB-8		3.295	0.250	0.350	2	0.580	
		SFB-9		6.990	0.250	0.500	2	1.750	
		SFB-10		3.600	0.250	0.500	2	0.900	
		SFB-11		3.695	0.250	0.350	2	0.650	
		SFB-12		1.750	0.250	0.250	2	0.220	
		SFB-13		8.755	0.250	0.500	2	2.190	
		SFB-14		0.505	0.250	0.250	4	0.130	
		SFB-14A		0.505	0.250	0.250	4	0.130	
		SFB-15		8.755	0.250	0.600	2	2.630	
		SFB-16		2.350	0.250	0.250	2	0.290	
		SFB-17		9.260	0.250	0.600	2	2.780	
		SFB-18		3.600	0.250	0.350	2	0.630	
		SFB-19		9.260	0.250	0.600	2	2.780	
		SFB-20	2.500	0.250	0.300	1	0.190		
							<b>(D) :</b>	<b>33.270 cu.m</b>	
		RB-1	Roof beam at +9900 Lvl.	1.750	0.250	0.250	4	0.440	
		RB-2		10.590	0.250	0.450	2	2.380	
		RB-3		5.980	0.250	0.250	1	0.370	
		RB-4		16.480	0.250	0.450	1	1.850	
		RB-5		3.600	0.250	0.450	2	0.810	
		RB-6		6.990	0.250	0.450	2	1.570	
		RB-7		3.600	0.250	0.450	2	0.810	
		RB-8		3.695	0.250	0.250	2	0.460	
		RB-9		8.755	0.250	0.450	2	1.970	
		RB-10		0.505	0.250	0.250	4	0.130	
		RB-11		0.505	0.250	0.250	4	0.130	
		RB-12		8.755	0.250	0.450	2	1.970	
		RB-13		9.260	0.250	0.450	2	2.080	
		RB-14		3.600	0.250	0.250	2	0.450	

Item No.	Item of Work	Decription	Location	Length	Breadth	Height	Nos	Quantity	unit	
				L	B	H/Depth	Nos			
		RB-15		9.260	0.250	0.450	2	2.080		
		RB-16		2.500	0.250	0.300	1	0.190		
							(E) :	17.690	cu.m	
							H=(A+B+C+D+E) :	68.050	cu.m	
		W	Chhajja AT +2100, +3600 & 5800 Lvl.	1.500	0.450	0.088	10	0.591		
		W1		1.500	0.450	0.088	11	0.650		
		W2		1.500	0.450	0.088	18	1.063		
		W3		1.500	0.450	0.088	4	0.236		
		V		0.900	0.300	0.088	10	0.236		
							(A) :	2.776	cu.m	
		Roof & Floor Slab	Slab at +3300 lvl	120.000		0.150	1	18.000		
			Slab at +6600 lvl.	216.643		0.150	1	32.496		
			Slab at +9900 lvl.	216.643		0.150	1	32.496		
			Mumty Slab at +12300	3.350	6.560	0.125	1	2.747		
							(B) :	85.740	cu.m	
							(A+B+C) :	88.516	cu.m	
							(A+B+C)+(H) :	156.570	cu.m	
<b>BRICK WORK</b>										
12	6.1.14A	Brick work with bricks of class designation 100A in foundations and plinth in cement mortar 1:6 (1cement :6 coarse sand)	TB-1	1.750	0.250	0.750	0	0.000		
			TB-2	13.680	0.250	0.750	1	2.565		
			TB-3	3.600	0.250	0.750	0	0.000		
			TB-4	7.010	0.250	0.750	1	1.314		
			TB-5	3.600	0.250	0.750	1	0.675		
			TB-6	8.755	0.250	0.750	1	1.642		
			TB-7	0.505	0.250	0.750	0	0.000		
			TB-8	4.870	0.250	0.750	0	0.000		
			TB-9	4.365	0.250	0.750	1	0.818		
								(A) :	7.010	cu.m
			STEPS	2.800	0.250	0.300	1	0.210		
			Ramp wall	3.345	0.250	0.350	2	0.585		
				1.270	0.250	0.150	1	0.048		
				Main Entrance	3.045	0.250	0.350	2	0.533	
				1.270	0.250	0.150	1	0.048		
				3.190	0.250	0.350	2	0.558		
				1.270	0.250	0.150	1	0.048		
			BACK SIDE STEP	2.175	0.300	0.150	1	0.098		
				2.175	0.150	0.150	1	0.049		
							(B) :	2.180	cu.m	
							(A+B) :	9.190	cu.m	
13	6.1.14A + 6.3A	Brick work with bricks of class designation 100A in superstructure above plinth level upto three floor cement mortar 1:6 (1cement :6 coarse sand)	A1'-A5	8.755	0.250	2.950	1	6.457		
			B1'-B2	0.765	0.250	2.950	1	0.564		
			B3-B5	5.640	0.250	2.950	1	4.160		
			E1-E4	5.660	0.250	2.950	1	4.174		
			±0.00 LVL. to +3300 LVL.	F1-F5	9.885	0.250	2.950	1	7.290	
			1'A-1'B	3.600	0.250	2.950	1	2.655		
			2B-2'E	6.990	0.250	2.950	1	5.155		
			4'B-4'D	3.295	0.250	2.950	1	2.430		
			5A-5B	3.600	0.250	2.950	1	2.655		
			5D-5F	6.195	0.250	2.950	1	4.569		
			A1'-A5	8.755	0.250	2.950	1	6.457		
			B1'-B2	0.765	0.250	2.950	1	0.564		
			D'4"-D'5	1.720	0.250	2.950	1	1.269		
			E1-E4	5.660	0.250	2.950	1	4.174		

Item No.	Item of Work	Decription	Location	Length	Breadth	Height	Nos	Quantity	unit
				L	B	H/Depth	Nos		
		±3300 LVL. to +6600 LVL.	F1-F4	5.660	0.250	2.950	1	4.174	
			J1'-J2	0.765	0.250	2.950	1	0.564	
			J3'-J5	4.390	0.250	2.950	1	3.238	
			K1'-K5	8.755	0.250	2.950	1	6.457	
			1E-1F	2.500	0.250	2.950	1	1.844	
			1'A-1'B	3.600	0.250	2.950	1	2.655	
			1'J-1'K	3.600	1.250	2.950	2	26.550	
			2B-2E	6.990	0.250	2.950	1	5.155	
			2F-2J	6.990	0.250	2.950	1	5.155	
			4'B-4'D	3.295	0.250	2.950	1	2.430	
			4G-4J	3.295	0.250	2.950	1	2.430	
			5A-5B	3.600	0.250	2.950	1	2.655	
			5D-5D'	2.225	0.250	2.950	1	1.641	
			5F'-5G	2.225	0.250	2.950	1	1.641	
			5J-5K	3.600	0.250	2.950	1	2.655	
		+6600 LVL. to +9900 LVL.	A1'-A5	8.755	0.250	2.950	1	6.457	
			B1'-B2	0.765	0.250	2.950	1	0.564	
			D'4"-D'5	1.720	0.250	2.950	1	1.269	
			E1-E4	5.660	0.250	2.950	1	4.174	
			F1-F4	5.660	0.250	2.950	1	4.174	
			J1'-J2	0.765	0.250	2.950	1	0.564	
			J3'-J5	4.390	0.250	2.950	1	3.238	
			K1'-K5	8.755	0.250	2.950	1	6.457	
			1E-1F	2.500	0.250	2.950	1	1.844	
			1'A-1'B	3.600	0.250	2.950	1	2.655	
			1'J-1'K	3.600	1.250	2.950	2	26.550	
			2B-2E	6.990	0.250	2.950	1	5.155	
			2F-2J	6.990	0.250	2.950	1	5.155	
			4'B-4'D	3.295	0.250	2.950	1	2.430	
			4G-4J	3.295	0.250	2.950	1	2.430	
		5A-5B	3.600	0.250	2.950	1	2.655		
		5D-5D'	2.225	0.250	2.950	1	1.641		
		5F'-5G	2.225	0.250	2.950	1	1.641		
		5J-5K	3.600	0.250	2.950	1	2.655		
								<b>203.530</b>	<b>cu.m</b>
			E1-E4	5.660	0.250	2.150	1	3.042	

Item No.	Item of Work	Decription	Location	Length	Breadth	Height	Nos	Quantity	unit				
				L	B	H/Depth	Nos						
			MUMTY ROOM	F1-F4	5.660	0.250	2.150	1	3.042				
				1E-1F	2.500	0.250	2.150	1	1.344				
				4E-4F	2.500	0.250	2.150	1	1.344				
											<b>8.770</b>	<b>cu.m</b>	
			Parapet at +9900 LVL.	1'A-1'B	3.600	0.250	0.900	1	0.810				
				B1'-B2	0.765	0.250	0.900	1	0.172				
				2B-2E	6.990	0.250	0.900	1	1.573				
				2F-2J	6.990	0.250	0.900	1	1.573				
				J2-J1'	0.765	0.250	0.900	1	0.172				
				1'J-1'K	3.600	0.250	0.900	1	0.810				
				K1'-K5	8.755	0.250	0.900	1	1.970				
				5K-5A	23.680	0.250	0.900	1	5.328				
				A5-A1'	8.755	0.250	0.900	1	1.970				
											<b>14.380</b>	<b>cu.m</b>	
											<b>(A) :</b>	<b>226.680</b>	<b>cu.m</b>
			D	DEDUCT FOR DOOR & WINDOW +2100 Level	1.200	0.250	2.100	3	1.890				
			D1		1.050	0.250	2.100	4	2.205				
			W		1.200	0.250	1.800	2	1.080				
			W1		1.200	0.250	1.500	3	1.350				
			W2		1.200	0.250	1.200	4	1.440				
			V		0.600	0.250	0.600	2	0.180				
			FGL		1.800	0.250	2.100	1	0.945				
			D	DEDUCT FOR DOOR & WINDOW +5400 & +8700 Level	1.200	0.250	2.100	4	2.520				
			D1		1.050	0.250	2.100	12	6.615				
			W		1.200	0.250	1.800	8	4.320				
			W1		1.200	0.250	1.500	8	3.600				
			W2		1.200	0.250	1.200	14	5.040				
			W3		1.200	0.250	0.800	4	0.960				
			V		0.600	0.250	0.600	8	0.720				
			FGL	1.800	0.250	2.100	2	1.890					
D	DEDUCT FOR DOOR & WINDOW MUMTY ROOM	1.200	0.250	2.100	1	0.630							
FGL		1.800	0.250	2.100	1	0.945							
								<b>(B)</b>	<b>36.330</b>				
								<b>(A - B)</b>	<b>190.350</b>	<b>cu.m</b>			
14	6.18.4A + 6.19A	Half brick Masonry with bricks of class designation 100A in superstructure above plinth level upto five floor cement mortar 1:4 (1cement :4 coarse sand)	±0.00 LVL. to +3300 LVL.	3B-3D	3.295		3.150	1	10.379				
				4D'-4F	4.095		3.150	1	12.899				
				1A'-1B	1.750		3.150	1	5.513				
				6A'-6B	1.750		3.150	1	5.513				
				A'1-A'1'	0.505		3.150	1	1.591				
				A'5-A'6	0.505		3.150	1	1.591				
				B5-B6	0.505		3.150	1	1.591				
				B1-B1'	0.505		3.150	1	1.591				

Item No.	Item of Work	Decription	Location	Length	Breadth	Height	Nos	Quantity	unit
				L	B	H/Depth	Nos		
			-	2.100		3.150	1	6.615	
			B2-B3	2.350		3.150	1	7.403	
			B'2-B'3	2.350		3.150	1	7.403	
			D2-D3	2.350		3.150	1	7.403	
			D4-D5	3.600		3.150	1	11.340	
			D'4-D'5	3.600		3.150	1	11.340	
		+3300 LVL. to +6600 LVL.	1A'-1B	1.750		3.150	2	11.025	
			1J-1J'	1.750		3.150	2	11.025	
			3'A-3'B	3.600		3.150	2	22.680	
			3'J-3'K	3.600		3.150	2	22.680	
			3B-3D	3.295		3.150	2	20.759	
			3G-3J	3.295		3.150	2	20.759	
			4D-4G	9.890		3.150	2	62.307	
			4"D'-4"E	1.470		3.150	2	9.261	
			4"F-4"F'	1.595		3.150	2	10.049	
			5D'-5F'	5.565		3.150	2	35.060	
			6A'-6B	1.750		3.150	2	11.025	
			6J-6J'	1.750		3.150	2	11.025	
			A'1-A'1'	0.505		3.150	2	3.182	
			A5-A6	0.505		3.150	2	3.182	
			B1-B1'	0.505		3.150	2	3.182	
			B5-B6	0.505		3.150	2	3.182	
			B2-B3	2.350		3.150	2	14.805	
			B'2-B'3	2.350		3.150	2	14.805	
			D2-D3	2.350		3.150	2	14.805	
			D4-D5	3.590		3.150	2	22.617	
			D'4-D'4"	1.860		3.150	2	11.718	
			E4-E4"	1.860		3.150	2	11.718	
			F4-F4"	1.860		3.150	2	11.718	
			F'4"-F'4	1.860		3.150	2	11.718	
			G5-G4	3.600		3.150	2	22.680	
			G2-G3	2.350		3.150	2	14.805	
			G'2-G'3	2.350		3.150	2	14.805	
			J2-J3'	3.600		3.150	2	22.680	
			J1-J1'	0.505		3.150	2	3.182	
			J5-J6	0.505		3.150	2	3.182	
			J'1-J'1'	0.505		3.150	2	3.182	
			J'5-J'6	0.505		3.150	2	3.182	
							(A)	554.148	
		D2	DEDUCT FOR	0.900	0.125	2.100	10	18.900	
		D3	OPENING	0.750	0.125	2.100	16	25.200	
							(B)	44.100	

Item No.	Item of Work	Decription	Location	Length	Breadth	Height	Nos	Quantity	unit
				L	B	H/Depth	Nos		
							(A-B)	510.048	Sq.m.
15	6.21A	Extra for providing and placing in position 2 nos., 6dia MS bars at every third course of half brik masonry (with F.P.S. brick)		Same Quantity half brick				510.048	Sq.m.
<b>PLASTER WORK</b>									
16	13.13.4	20 mm cement plaster of mix ; 1:6 (1 cement : 6 coarse sand)	-1050 LVL. to +3300 LVL. External Wall	1'A-1A'	1.850	4.500	1	8.325	
				A'1-A'1'	0.505	4.500	1	2.273	
				1A'-1B	1.750	4.500	1	7.875	
				B1-B2	1.270	4.500	1	5.715	
				2B-2D	3.295	4.500	1	14.828	
				2D-2E	3.695	4.500	1	16.628	
				2E-2F	2.500	4.500	1	11.250	
				F2-F5	8.755	4.500	1	39.398	
				5F-5D	6.195	4.500	1	27.878	
				5D-5B	3.295	4.500	1	14.828	
				B6-B5	0.505	4.500	1	2.273	
				6A'-6B	1.750	4.500	1	7.875	
				A'6-A'5	0.505	4.500	1	2.273	
				5A-5A'	1.850	4.500	1	8.325	
			A5-A1'	8.755	4.500	1	39.398		
			±3300 LVL. to +6600 LVL.	1'A-1A'	1.850	3.600	1	6.660	
				A'1-A'1'	0.505	3.600	1	1.818	
				1A'-1B	1.750	3.600	1	6.300	
				B1-B2	1.270	3.600	1	4.572	
				2B-2D	3.295	3.600	1	11.862	
				2D-2E	3.695	3.600	1	13.302	
				2F-2J	6.990	3.600	1	25.164	
				J2-J1	1.270	3.600	1	4.572	
				1J-1J'	1.750	3.600	1	6.300	
				J'1-J'1'	0.505	3.600	1	1.818	
				1J'-1K	1.850	3.600	1	6.660	
				K1'-K5	8.755	3.600	1	31.518	
				5J'-5K	1.850	3.600	1	6.660	
				J'6-J'5	0.505	3.600	1	1.818	
			6J-6J'	1.750	3.600	1	6.300		
			J6-J5	0.505	3.600	1	1.818		
			5J'-5B	16.480	3.600	1	59.328		
			B6-B5	0.505	3.600	1	1.818		
			6A'-6B	1.750	3.600	1	6.300		



Item No.	Item of Work	Decription	Location	Length	Breadth	Height	Nos	Quantity	unit
				L	B	H/Depth	Nos		
			A'6-A'5	0.505		3.600	1	1.818	
			5A-5A'	1.850		3.600	1	6.660	
			A5-A1'	8.755		3.600	1	31.518	
		+6600 LVL. to +9900 LVL.	1'A-1A'	1.850		3.600	1	6.660	
			A'1-A'1'	0.505		3.600	1	1.818	
			1A'-1B	1.750		3.600	1	6.300	
			B1-B2	1.270		3.600	1	4.572	
			2B-2D	3.295		3.600	1	11.862	
			2D-2E	3.695		3.600	1	13.302	
			2F-2J	6.990		3.600	1	25.164	
			J2-J1	1.270		3.600	1	4.572	
			1J-1J'	1.750		3.600	1	6.300	
			J'1-J'1'	0.505		3.600	1	1.818	
			1J'-1K	1.850		3.600	1	6.660	
			K1'-K5	8.755		3.600	1	31.518	
			5J'-5K	1.850		3.600	1	6.660	
			J'6-J'5	0.505		3.600	1	1.818	
			6J-6J'	1.750		3.600	1	6.300	
			J6-J5	0.505		3.600	1	1.818	
			5J'-5B	16.480		3.600	1	59.328	
			B6-B5	0.505		3.600	1	1.818	
			6A'-6B	1.750		3.600	1	6.300	
			A'6-A'5	0.505		3.600	1	1.818	
		5A-5A'	1.850		3.600	1	6.660		
		A5-A1'	8.755		3.600	1	31.518		
		+9900LVL.to +10800 LVL.	1'A-1'B	3.600		0.900	2	6.480	
			B1'-B2	0.765		0.900	2	1.377	
			2B-2E	6.990		0.900	2	12.582	
			2F-2J	6.990		0.900	2	12.582	
			J2-J1'	0.765		0.900	2	1.377	
			1'J-1'K	3.600		0.900	2	6.480	
			K1'-K5	8.755		0.900	2	15.759	
			5K-5A	23.680		0.900	2	42.624	
			A5-A1'	8.755		0.900	2	15.759	
		MUMTY	E1-E4	5.660		2.400	1	13.584	
			F1-F4	5.660		2.400	1	13.584	

Item No.	Item of Work	Decription	Location	Length	Breadth	Height	Nos	Quantity	unit		
				L	B	H/Depth	Nos				
			ROOM	1E-1F	2.500		2.400	1	6.000		
				4E-4F	2.500		2.400	1	6.000		
			EXTARNAL	COLUMN	1.800		3.600	6	38.880		
			Parapet at TOP	1'A-1'B	3.600		0.250	2	1.800		
				B1'-B2	0.765		0.250	2	0.383		
				2B-2E	6.990		0.250	2	3.495		
				2F-2J	6.990		0.250	2	3.495		
				J2-J1'	0.765		0.250	2	0.383		
				1'J-1'K	3.600		0.250	2	1.800		
				K1'-K5	8.755		0.250	2	4.378		
				5K-5A	23.680		0.250	2	11.840		
				A5-A1'	8.755		0.250	2	4.378		
			W		1.800	0.450		10	16.200		
					2.700		0.088	10	2.363		
			W1		1.800	0.450		11	17.820		
					2.700		0.088	11	2.599		
			W2	Chhajja AT +2100, +3600 & 5800 Lvl.	1.800	0.450		18	29.160		
					2.700		0.088	18	4.253		
			W3		1.800	0.450		4	6.480		
					2.700		0.088	4	0.945		
			V		0.900	0.450		10	8.100		
					1.800		0.088	10	1.575		
			<b>1012.825 sq.m</b>								
			17	13.11.4	12mm thick Cement plaster of mix 1:6 (1 cement : 6 coarse sand)	±0.00 LVL. to +3300 LVL. Internal Wall	Bed Room	3.350	4.265	3.450	1
			Bed Room	3.350	4.115		3.450	1	51.509		
			Balcony	3.625	1.220		3.450	1	33.431		
			Balcony	3.045	1.220		3.450	1	29.429		
			Dining Room	3.045			3.450	4	42.021		
				4.265			3.450	2	29.429		
				2.405			3.450	2	16.595		
			Living Room	3.570			3.450	2	24.633		
				4.265			3.450	2	29.429		
				2.225			3.450	2	15.353		
			Guest Room	3.845	3.350		3.450	1	49.646		
			Stair Room	4.265	2.250		3.450	1	44.954		
			Toilet Area	1.500	2.100		3.450	1	24.840		
			Toilet Area	1.545	2.100		3.450	1	25.151		
			Kitchen	2.100	2.950		3.450	1	34.845		
			Bed Room	3.350	4.265		3.450	2	105.087		
			Bed Room	3.350	4.115		3.450	2	103.017		
			Balcony	3.625	1.220		3.450	2	66.861		
			Balcony	3.045	1.220		3.450	2	58.857		

Item No.	Item of Work	Decription	Location	Length	Breadth	Height	Nos	Quantity	unit
				L	B	H/Depth	Nos		
		+3300 LVL. to +6600 LVL. Internal Wall	Dining Room	3.045		3.450	4	42.021	
				4.265		3.450	2	29.429	
				2.405		3.450	2	16.595	
			Living Room	3.570		3.450	2	24.633	
				4.265		3.450	2	29.429	
				2.225		3.450	2	15.353	
			Verandah	5.190		3.450	1	17.906	
				1.740		3.450	2	12.006	
				1.470		3.450	2	10.143	
				2.250		3.450	1	7.763	
				1.860		3.450	2	12.834	
			STORE ROOM	1.470	1.470	3.450	2	40.572	
			PASSAGE	2.800		3.450	1	9.660	
			Toilet Area	1.500	2.100	3.450	2	49.680	
			Toilet Area	1.545	2.100	3.450	2	50.301	
			Kitchen	2.100	3.350	3.450	2	75.210	
		Stair Room	4.265	2.250	3.450	0	0.000		
		+6600 LVL. to +9900 LVL. Internal Wall	Bed Room	3.350	4.265	3.450	2	105.087	
			Bed Room	3.350	4.115	3.450	2	103.017	
			Balcony	3.625	1.220	3.450	2	66.861	
			Balcony	3.045	1.220	3.450	2	58.857	
			Dining Room	3.045		3.450	4	42.021	
				4.265		3.450	2	29.429	
				2.405		3.450	2	16.595	
			Living Room	3.570		3.450	2	24.633	
				4.265		3.450	2	29.429	
				2.225		3.450	2	15.353	
			Verandah	5.190		3.450	1	17.906	
				1.740		3.450	2	12.006	
				1.470		3.450	2	10.143	
				2.250		3.450	1	7.763	
				1.860		3.450	2	12.834	
			STORE ROOM	1.470	1.470	3.450	2	40.572	
		PASSAGE	2.800		3.450	1	9.660		
		Toilet Area	1.500	2.100	3.450	2	49.680		
		Toilet Area	1.545	2.100	3.450	2	50.301		

Item No.	Item of Work	Decription	Location	Length	Breadth	Height	Nos	Quantity	unit
				L	B	H/Depth	Nos		
			Kitchen	2.100	3.350	3.450	2	75.210	
			Stair Room	4.265	2.250	3.450	0	0.000	
			MUMTY ROOM	E1-E4	5.660	2.400	1	13.584	
				F1-F4	5.660	2.400	1	13.584	
				1E-1F	2.500	2.400	1	6.000	
				4E-4F	2.500	2.400	1	6.000	
							(A)	2097.680	
			D	1.200		2.100	3	7.560	
			D1	1.050		2.100	4	8.820	
			W	1.200		1.800	2	4.320	
			W1	1.200		1.500	3	5.400	
			W2	1.200		1.200	4	5.760	
			V	0.600		0.600	2	0.720	
			FGL	1.800		2.100	1	3.780	
								0.000	
			D	1.200		2.100	4	10.080	
			D1	1.050		2.100	12	26.460	
			W	1.200		1.800	8	17.280	
			W1	1.200		1.500	8	14.400	
			W2	1.200		1.200	14	20.160	
			W3	1.200		0.800	4	3.840	
			V	0.600		0.600	8	2.880	
			FGL	1.800		2.100	2	7.560	
								145.320	
							(A - B)	1952.360	sq.m
18	13.24.2	6mm thick Cement plaster of Ceiling mix 1:4 (1 cement : 4 coarse sand)							
			Floor Slab at +3300 Lvl.	Bed Room	3.350	4.265	1	14.288	
				Bed Room	3.350	4.115	1	13.785	
				Balcony	3.625	1.220	1	4.423	
				Balcony	3.045	1.220	1	3.715	
				Dining Room	3.045	4.265	1	12.987	
				Living Room	3.570	4.265	1	15.226	
				Guest Room	3.845	3.350	1	12.881	
				Stair Room	4.265	2.250	0	0.000	
					1.500	0.630	0	0.000	
				Toilet Area	1.500	2.100	1	3.150	
				Toilet Area	1.545	2.100	1	3.245	
				Kitchen	2.100	2.950	1	6.195	
							(A)	89.900	
			Bed Room	3.350	4.265	2	28.576		

Item No.	Item of Work	Decription	Location	Length	Breadth	Height	Nos	Quantity	unit	
				L	B	H/Depth	Nos			
			Floor Slab at +6600 Lvl.	Bed Room	3.350	4.115		2	27.571	
				Balcony	3.625	1.220		2	8.845	
				Balcony	3.045	1.220		2	7.430	
				Dining Room	3.045	4.265		2	25.974	
				Living Room	3.570	4.265		2	30.452	
				Verandah	5.190	1.740		1	9.031	
					2.250	1.860		1	4.185	
				STORE ROOM	1.470	1.470		2	4.322	
					1.500	0.630		4	3.780	
				PASSAGE	2.800	1.400		1	3.920	
				Toilet Area	1.500	2.100		2	6.300	
				Toilet Area	1.545	2.100		2	6.489	
				Kitchen	2.100	3.350		2	14.070	
								<b>(B)</b>	<b>180.950</b>	
			Floor Slab at +10500 Lvl.	Bed Room	3.350	4.265		2	28.576	
				Bed Room	3.350	4.115		2	27.571	
				Balcony	3.625	1.220		2	8.845	
				Balcony	3.045	1.220		2	7.430	
				Dining Room	3.045	4.265		2	25.974	
				Living Room	3.570	4.265		2	30.452	
				Verandah	5.190	1.740		1	9.031	
					2.250	1.860		0	0.000	
				STORE ROOM	1.470	1.470		0	0.000	
					1.500	0.630		0	0.000	
				PASSAGE	2.800	1.400		1	3.920	
				Toilet Area	1.500	2.100		2	6.300	
				Toilet Area	1.545	2.100		2	6.489	
				Kitchen	2.100	3.350		2	14.070	
								<b>(C)</b>	<b>168.660</b>	
			Mumty Slab at +12900	Stair	3.350	6.560		1	21.976	
			Waste slab		3.725	1.325		6	29.614	
			Landing		2.500	1.270		3	9.525	
								<b>(D)</b>	<b>61.110</b>	
								<b>(A+B+C+D)</b>	<b>500.620</b>	<b>sq.m</b>
<b>19</b>	11.3.1 + 11.8	Cement concrete flooring 1:2:4(1 cement:2 coarse:sand:4 graded stone agregate) finished with a floating coat of neat cement including cement slurry, etc. but excluding the cost of nosing of steps etc. complete. 40 mm thick with 20 mm nominal size stone aggregate. Extra for making chequers of approved pattern on cement concrete floors, steps, landing, pavemerts etc.	Roof		220.000				<b>220.000</b>	<b>sq.m</b>
<b>20 FINISHING WORK</b>										

Item No.	Item of Work	Decription	Location	Length	Breadth	Height	Nos	Quantity	unit		
				L	B	H/Depth	Nos				
13.80A.2	Providing and applying white cement based putty of average thickness 2 mm, of approved brand and manufacturer, overthe plastered wall surface to prepare the surface even and smooth complete.	External Wall						3465.805	sq.m		
21 13.46.1	Finishing walls with Acrylic Smooth exterior paint of required shade :New work (Two or more coat applied @ 1.67 ltr/ 10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm)	External Wall						1222.020	sq.m		
22 13.77A.1	Distempering with 1st quality washable distemper (ready made ) of approved manufacturer and of required shade and colour complete. As per manufacture's specifications.Two or more coats on new work	Internal Wall & Ceiling						2452.980	sq.m		
23 13.81.1	Applying priming coat with ready mixed pink or grey primer of approved brand and manufacture on wood work (hard and softwood)	D	DOOR +2100 Level	1.200		2.100	3	7.560			
		D1		1.050		2.100	8	17.640			
		D	DOOR +5400 & +8700 Level	1.200		2.100	8	20.160			
		D1		1.050		2.100	24	52.920			
		D	DOOR MUMTY ROOM	1.200		2.100	1	2.520			
										100.800	sq.m
										241.920	sq.m
24 13.81.3	Applying priming coat with ready mixed zinc chromate yellow primer of approved brand and manufacture on steel galvanized iron/steel work.	W	DOOR & WINDOW +2100 Level	1.200		1.800	2	4.320			
		W1		1.200		1.500	3	5.400			
		W2		1.200		1.200	4	5.760			
		V		0.600		0.600	2	0.720			
		FGL		1.800		2.100	1	3.780			
		W	DOOR & WINDOW +5400 & +8700 Level	1.200		1.800	8	17.280			
		W1		1.200		1.500	8	14.400			
		W2		1.200		1.200	14	20.160			
		W3		1.200		0.800	4	3.840			
		V		0.600		0.600	8	2.880			
		FGL	1.800		2.100	2	7.560				
		FGL	WINDOW MUMTY ROOM	1.800		2.100	1	3.780			
										89.880	
									(A)	89.880	
								89.880	sq.m		
25 13.93.1	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade two or more coats on new work	D	DOOR +2100 Level	1.200		2.100	4	10.080			
		D1		1.050		2.100	4	8.820			
		D	DOOR +5400 & +8700 Level	1.200		2.100	8	20.160			
		D1		1.050		2.100	24	52.920			
		D	DOOR MUMTY ROOM	1.200		2.100	1	2.520			

Item No.	Item of Work	Decription	Location	Length	Breadth	Height	Nos	Quantity	unit
				L	B	H/Depth	Nos		
								<b>94.500</b>	
				Multiplying Factor-1.2 (for each side) as per Table -1 [IS:1200]			<b>(A)</b>	<b>226.800</b>	
				W	1.200	1.800	2	4.320	
				W1	1.200	1.500	3	5.400	
				W2	1.200	1.200	4	5.760	
				V	0.600	0.600	2	0.720	
				FGL	1.800	2.100	1	3.780	
				W	1.200	1.800	8	17.280	
				W1	1.200	1.500	8	14.400	
				W2	1.200	1.200	14	20.160	
				W3	1.200	0.800	4	3.840	
				V	0.600	0.600	8	2.880	
				FGL	1.800	2.100	2	7.560	
				FGL	1.800	2.100	1	3.780	
								<b>89.880</b>	
				Multiplying Factor-0.5 (for each side) as per Table -1 [IS:1200]			<b>(B)</b>	<b>89.880</b>	
							0	0.000	
								<b>0.000</b>	
				Multiplying Factor-1.5 (for painting all over)			<b>(C)</b>	<b>0.000</b>	
								<b>(A+B)</b>	<b>316.680 sq.m</b>
26	10.14.1	Providing and fixing T-iron frames for doors, windows and ventilators of mils steel Tee-sections, joints miltred and welded with 15x3 mm lugs 10 cm long embedded in cement concrete blocks 15x10x10 cm of 1:3:6 ( 1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required including	D	DOOR +2100 Level	1.200	2.100	4	21.600	
			D1		1.050	2.100	4	21.000	
			D2		0.900	2.100	8	40.800	
			D	DOOR +5400 & +8700 Level	1.200	2.100	8	43.200	
			D1		1.050	2.100	24	126.000	
			D	DOOR MUMTY ROOM	1.200	2.100	1	5.400	
			D3		0.750	2.100	10	15.750	
									<b>(40x40x6) Per m. @ 3.5kg</b>
								<b>958 Kg.</b>	
27	9.21.1	Providing and fixing flush door shutters conforming to IS : 2202 (Part-I) non-decorative type.core of block board construction with frame of 1st class hard wood and well mathched commercial 3 plyveneering wiith vertical grains or cross bands and face veneers on both faces of shutters.35 mm thick including anodized aluminum butt hinges with necessary screws-	D	DOOR +2100 Level	1.200	2.100	4	10.080	
			D1		1.050	2.100	4	8.820	
			D2		0.900	2.100	8	15.120	
			D	DOOR +5400 & +8700 Level	1.200	2.100	8	20.160	
			D1		1.050	2.100	24	52.920	
			D	DOOR MUMTY ROOM	1.200	2.100	1	2.520	
			D3		0.750	2.100	10	15.750	
								<b>125.370 sq.m</b>	
28	9.66.1	Providing and fixing M.S.handles with necessary screws etc.complete 125 mm	DOOR				59	59	EACH
29	9.63.1	Providing and fixing oxidised M.S.tower bolt black finish,(barrel type) with necessary screws etc.complete	DOOR				59	59	EACH
30	9.64	Providing and fixing ISI marked 85x42mm oxidised M.S. pull bolt lock conforming to IS : 7534 with necessary screws bolts, nut and washers	DOOR				59	59	EACH
31	9.62.1	Providing and fixing oxidised M.S. sliding door bolts with nuts and screws etc. complete 300x16xmm	DOOR				59	59	EACH
32	<b>STEEL WORK</b>								
	10.12.1 +	Providing and fixing glazed steel doors, windows or ventilators of standard rolled steel sections, joints	W		1.200	1.800	2	4.320	

Item No.	Item of Work	Decription	Location	Length	Breadth	Height	Nos	Quantity	unit			
				L	B	H/Depth	Nos					
10.13b	mitered and welded with 15x3 mm M.S. lugs10cm long with steel legs embedded in cement concrete blocks 15x10x10cm.of (1:3:6) (1cement : 3coarse sand : 6graded stone aggregate 20mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required, including providing and fixing of glass panels with glazing clips and special metal-sash putty of approved make complete including applying a priming coat of approved steel primer excluding the cost of metal beading and other fitting except necessary hinges or pivots as required Extra for providing and fixing steel beading of approved shape and section with screws instread of glaxing clips and met. Sash putty in steel doors, windows,ventilators and composite units.	W1	DOOR & WINDOW +2100 Level	1.200		1.500	2	3.600				
		W2		1.200		1.200	4	5.760				
		W		1.200		1.800	8	17.280				
		W1	DOOR +5400 & +8700 Level	1.200		1.500	8	14.400				
		W2		1.200		1.200	14	20.160				
		W3		1.200		0.800	4	3.840				
								<b>69.360 sq.m</b>				
33	10.12.1 + 10.13C	Providing and fixing glazed steel doors, windows or ventilators of standard rolled steel sections, joints mitered and welded with 15x3 mm M.S. lugs10cm long with steel legs embedded in cement concrete blocks 15x10x10cm.of (1:3:6) (1cement : 3coarse sand : 6graded stone aggregate 20mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required, including providing and fixing of glass panels with glazing clips and special metal-sash putty of approved make complete including applying a priming coat of approved steel primer excluding the cost of metal beading and other fitting except necessary hinges or pivots as required Extra for providing and fixing steel beading of approved shape and section with screws instread of glaxing clips and met. Sash putty in steel doors, windows,ventilators and composite units.	V	DOOR & WINDOW +2100 Level	0.600		0.600	4	1.440			
			V	DOOR +5400 & +8700 Level	0.600		0.600	8	2.880			
									<b>4.320 sq.m</b>			
34	9.48.1	Providing and fixing M.S. grills of requirement pattern in frames of windows etc. with M.S. flats square or round bars etc all complete fixed to steel windows by welding.	W	DOOR & WINDOW +2100 Level	1.200		1.800	4	8.640			
			W1		1.200		1.500	6	10.800			
			W2		1.200		1.200	8	11.520			
			V		0.600		0.600	4	1.440			
			FGL		1.800		2.100	1	3.780			
			W	DOOR +5400 & +8700 Level	1.200		1.800	8	17.280			
			W1		1.200		1.500	8	14.400			
			W2		1.200		1.200	14	20.160			
			W3		1.200		0.800	4	3.840			
			V		0.600		0.600	8	2.880			
			FGL	1.800		2.100	2	7.560				
			FGL	DOOR MUMTY ROOM	1.800		2.100	1	3.780			
											<b>106.080 sq.m</b>	
											<b>2333.760 Kgs.</b>	
								Per sq m. @ 22kg				
35	5.22	Reinforcement for RCC work including straightening, cutting, bending, placing in position and bonding all complete. TMTC-500										
			5.22.7A	TMTC-500 8mm dia					<b>17650 KG</b>			
			5.22.7B	TMTC-500 10mm dia					<b>5350 KG</b>			
			5.22.7C	TMTC-500 12mm dia					<b>6450 KG</b>			
			5.22.7D	TMT-500 16mm dia					<b>7500 KG</b>			
			5.22.7E	TMT-500 20mm dia					<b>8550 KG</b>			
			5.22.7F	TMT-500 25mm dia					<b>8000 KG</b>			



Item No.	Item of Work	Decription	Location	Length	Breadth	Height	Nos	Quantity	unit	
				L	B	H/Depth	Nos			
36	10.17	Providing & fixing M.S. Fan hook of 16 mm. dia. M.S. bar 1 Mtr. Long bent to required size and shape, placed in position and fixed in Truss Frame / RCC Slab / beam at the time of casting all complete as per building specification and direction of E/I. (Where materials is not supplied by deptt.)						90.00	Each	
37	10.33.1	Providing & fixing hand rail by welding etc. to steel ladder railing & staircases railing including applying a priming coat of approved steel primer. MS tube (medium) 40mm nominal bore.	Hand rail	Stair				450.00	kg.	
								450.00	kg.	
<b>MISCELLANEOUS WORK</b>										
38	4.17	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement :3 coarse sand : 6 graded stone aggregate 20mm nominal size ) over 75mm bad by dry brick ballast 40mm nominal size well rammend and consolidated and grouted with fine sand including finishing the top smooth.			46.475	1.000		46.48	sq.m	
<b>SHUTTERING</b>										
39	5.9.1	Centring and shuttering including strutting, propping etc. and removal of form for foundation, footings, bases of columns etc. for mass concrete.	F-1	Foundation	2.900	3.400	0.400	0	0.000	
			F-4		3.000	9.200	0.400	1	9.760	
			BEAM		9.200	0.700	0.600	1	11.880	
			F-5		3.250	3.250	0.400	2	10.400	
			PEDESTAL		0.600	0.900	0.300	2	1.800	
			F-9		3.400	9.400	0.300	1	7.680	
			BEAM		9.400	0.700	0.700	1	14.140	
			F-10		3.400	5.000	0.500	1	8.400	
			PEDESTAL		0.600	0.900	0.200	1	0.600	
			F-11		9.300	5.000	0.400	1	11.440	
			BEAM		9.300	0.700	0.600	1	12.000	
			F-12		3.300	3.500	0.400	1	5.440	
			PEDESTAL		0.600	0.900	0.300	1	0.900	
			F-13		3.300	3.300	0.400	1	5.280	
								(A)	100.620	Sqm.
40	5.9.5	Centring and shuttering including strutting, propping etc. and removal of form for lintel, beams, plinth beams, griders, bressumers and contilevers.	TB-1	Tie Beam	1.750		0.300	0	0.000	
			TB-2		23.680		0.300	1	14.208	
			TB-4		16.480		0.300	1	9.888	
			TB-5		3.600		0.300	1	2.160	
			TB-6		8.755		0.300	1	5.253	
			TB-9		4.365		0.300	1	2.619	
			PB-1	1.750		0.250	1	0.875		
			PB-2	23.680		0.450	1	21.312		
			PB-3	3.295		0.250	1	1.648		
			PB-4	13.185		0.450	1	11.867		

Item No.	Item of Work	Decription	Location	Length	Breadth	Height	Nos	Quantity	unit	
				L	B	H/Depth	Nos			
		PB-5	Plinth Beam	3.600		0.450	1	3.240		
		PB-6		3.295		0.250	1	1.648		
		PB-6A		2.500		0.350	1	1.750		
		PB-7		3.600		0.450	1	3.240		
		PB-8		6.990		0.450	1	6.291		
		PB-8A		6.990		0.450	1	6.291		
		PB-9		3.600		0.450	1	3.240		
		PB-10		1.750		0.250	1	0.875		
		PB-11		-					0.000	
		PB-12		3.600		0.450	1	3.240		
		PB-13		8.755		0.450	2	15.759		
		PB-14		0.505		0.250	2	0.505		
		PB-14A		0.505		0.250	2	0.505		
		PB-15		8.755		0.550	1	9.631		
		PB-16		2.350		0.250	1	1.175		
		PB-17		7.990		0.550	1	8.789		
		PB-18		3.600		0.450	1	3.240		
		PB-19		9.260		0.550	2	20.372		
		PB-20		7.990		0.600	1	9.588		
		PB-21		8.755		0.450	1	7.880		
								(A)	142.959	
		D	Lintel at +2100 Level	1.500	0.250	0.150	3	1.725		
		D1		1.350	0.250	0.150	4	1.958		
		D2		1.200	0.125	0.150	2	0.870		
		D3		1.050	0.125	0.150	2	0.761		
		W		1.500	0.250	0.150	2	1.275		
		W1		1.500	0.250	0.150	3	1.725		
		W2		1.500	0.250	0.150	4	2.175		
		V		0.900	0.125	0.150	2	0.653		
		FGL		2.100	0.250	0.150	1	1.155		
		D	Lintel at +5400 & +8700 Level	1.500	0.250	0.150	4	2.175		
		D1		1.350	0.250	0.150	12	5.198		
		D2		1.200	0.125	0.150	8	3.030		
		D3		1.050	0.125	0.150	14	4.541		
		W		1.500	0.250	0.150	8	3.975		
		W1		1.500	0.250	0.150	8	3.975		
		W2		1.500	0.250	0.150	14	6.675		
		W3		1.500	0.250	0.150	4	2.175		
		V		0.900	0.250	0.150	8	2.385		
		FGL	2.100	0.250	0.150	2	1.785			
		D	MUMTY ROOM	1.500	0.250	0.150	1	0.825		
		FGL		2.100	0.250	0.150	1	1.155		
							(B)	50.190		
		FFB-1		1.750		0.250	2	1.750		
		FFB-2		23.680		0.500	1	23.680		
		FFB-3		3.295		0.350	2	4.613		
		FFB-4		5.980		0.250	1	2.990		
		FFB-5		9.890		0.500	1	9.890		
		FFB-6		3.600		0.600	1	4.320		
		FFB-7		3.600		0.600	1	4.320		

Item No.	Item of Work	Decription	Location	Length	Breadth	Height	Nos	Quantity	unit
				L	B	H/Depth	Nos		
		FFB-8	Floor beam at +3300 Lvl.	3.295		0.350	2	4.613	
		FFB-9		6.990		0.500	2	13.980	
		FFB-10		3.600		0.500	2	7.200	
		FFB-11		3.695		0.350	2	5.173	
		FFB-12		1.750		0.250	2	1.750	
		FFB-13		8.755		0.500	2	17.510	
		FFB-14		0.505		0.250	4	1.010	
		FFB-14A		0.505		0.250	4	1.010	
		FFB-15		8.755		0.600	2	21.012	
		FFB-16		2.350		0.250	2	2.350	
		FFB-17		9.260		0.600	2	22.224	
		FFB-18		3.600		0.350	2	5.040	
		FFB-19		9.260		0.600	2	22.224	
		FFB-20		2.500		0.300	1	1.500	
		SFB-1		Floor beam at+6600Lvl.	1.750		0.250	2	1.750
		SFB-2	23.680			0.500	1	23.680	
		SFB-3	3.295			0.350	2	4.613	
		SFB-4	5.980			0.250	1	2.990	
		SFB-5	9.890			0.500	1	9.890	
		SFB-6	3.600			0.600	1	4.320	
		SFB-7	3.600			0.600	1	4.320	
		SFB-8	3.295			0.350	2	4.613	
		SFB-9	6.990			0.500	2	13.980	
		SFB-10	3.600			0.500	2	7.200	
		SFB-11	3.695			0.350	2	5.173	
		SFB-12	1.750			0.250	2	1.750	
		SFB-13	8.755			0.500	2	17.510	
		SFB-14	0.505			0.250	4	1.010	
		SFB-14A	0.505			0.250	4	1.010	
		SFB-15	8.755			0.600	2	21.012	
		SFB-16	2.350			0.250	2	2.350	
		SFB-17	9.260			0.600	2	22.224	
		SFB-18	3.600			0.350	2	5.040	
		SFB-19	9.260			0.600	2	22.224	
		SFB-20	2.500		0.300	1	1.500		
		RB-1	Roof beam at +9900 Lvl.	1.750		0.250	4	3.500	
		RB-2		10.590		0.450	2	19.062	
		RB-3		5.980		0.250	1	2.990	
		RB-4		16.480		0.450	1	14.832	
		RB-5		3.600		0.450	2	6.480	
		RB-6		6.990		0.450	2	12.582	
		RB-7		3.600		0.450	2	6.480	
		RB-8		3.695		0.250	2	3.695	
		RB-9		8.755		0.450	2	15.759	
		RB-10		0.505		0.250	4	1.010	

Item No.	Item of Work	Decription	Location	Length	Breadth	Height	Nos	Quantity	unit
				L	B	H/Depth	Nos		
				0.505		0.250	4	1.010	
				8.755		0.450	2	15.759	
				9.260		0.450	2	16.668	
				3.600		0.250	2	3.600	
				9.260		0.450	2	16.668	
				2.500		0.300	1	1.500	
							(C)	497.913	
							(A+B+C)	691.062	Sqm.
41	5.9.6	Centring and shuttering including strutting, propping etc. and removal of form for columns, pillars, piers, abutments, posts and struts	C-1	0.300	0.600	2.050	6	22.140	
			C-2	0.300	0.600	2.050	4	14.760	
			C-3	0.300	0.600	2.050	2	7.380	
			C-1	0.300	0.600	9.900	6	106.920	
			C-2	0.300	0.600	9.900	4	71.280	
			C-3	0.300	0.600	9.900	2	35.640	
							(A)	258.120	Sqm.
42	5.9.3	Centring and shuttering including strutting, propping etc. and removal of form for suspended floors, roofs, landings, balconies and access platform.	W	1.800	0.450		10	16.200	
				2.700		0.088	10	2.363	
			W1	1.800	0.450		11	17.820	
				2.700		0.088	11	2.599	
			W2	1.800	0.450		18	29.160	
				2.700		0.088	18	4.253	
			W3	1.800	0.450		4	6.480	
				2.700		0.088	4	0.945	
			V	0.900	0.450		10	8.100	
				1.800		0.088	10	1.575	
							(A)	89.500	Sqm.
			Roof & Floor Slab	Slab at +3300 lvl	197.414		1	197.414	
				Slab at +6600 lvl.	197.414		1	197.414	
				Slab at +9900 lvl.	197.414		1	197.414	
				Mumty Slab at +12300	3.350	6.560	1	21.976	
							(B)	614.220	
							(A+B)	703.720	Sqm.
43	<b>CARRIAGE OF MATERIALS</b>								
		<b>Type of materials</b>	<b>Lead in Km</b>						
		Local Sand						107.730	cum
		Sand						243.230	cum
		Stone Chips						232.436	cum
		Brick						136.972	Thous.
		Cement						194.950	MT
		Steel						53.500	MT
		<b>Add extra cos of material with gaya</b>							
		Bricks						136.972	Thous.
		Cement						194.950	MT