

SUMMARY SHEET FOR VARIOUS CONSTRUCTION, FURNITURE AND ELECTRICAL WORK FOR BANK OF BARODA BSVS (RSETI TRAINING CENTRE) BUILDING AT KALYANPUR NAUGAWAN, PILIBHIT, UP.

	PARTICULAR	AMOUNT
(A)	CIVIL WORK	
(B)	ROAD WORK	
(C)	RAIN WATER HARVESTING	
(D)	FIRE FIGHTING SYSTEM	
(E)	ELETRICAL WORK	
(F)	FURNITURE WORK	
	GRAND TOTAL	

GST not included in the rates.

BOQ OF CONSTRUCTION WORK FOR BANK OF BARODA BSVS (RSETI TRAINING CENTRE) BUILDING AT KALYANPUR NAUGAWAN, PILIBHIT, UP.

S. No.	DESCRIPTION OF ITEM	UNIT	QUANTITY	RATE	AMOUNT
(A)	CIVIL CONSTRUCTION WORK				
1	Jungle Cleaning				
(i)	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared. (complete as per the direction of Engineer Incharge)	Sqm	4050.00		
2	Excavation				
	Earth work in excavation by mechanical means over areas after clearing of site from bushes vegetation etc. and stacking the excavated material within site area including providing required slopes to vertical sides, shoring, strutting, trimming of sides, dewatering, lead of 50 meter & lift of 1.5 meter, incidentals, etc. complete and backfilling with available excavated earth, cleaning upto the site and disposal of all surplus materials with in the site. Excavation shall be payable only for vertical cut up to the outer edge of foundation lean concrete as indicated in drawings through out the pit depths. Cost of extra excavation required for working space, supporting side shuttering of foundations and retaining walls and that required for making slopes for stability of excavation shall be deemed to be included in the rate quoted. (Note:-The line & levels in the drawings shall be strictly followed and excess excavation if any shall be made good by contractor free of cost complete as per the direction of Engineer Incharge)				
i	All kind of soil for lead of 50 meter & lift of 1.5 meter.	Cum	765.00		
ii	All kind of soil for lead of 50 meter & lift of 1.5 M to 4.5 M	Cum	207.00		
3	FILLING				
i	Excavating, supplying and filling of local earth (including royalty) by mechanical transport upto a lead of 5 km also including ramming and watering of the earth in layers not exceeding 20 cm in trenches, plinth, sides of foundation and building all around sides etc. complete.	Cum	2850.00		
ii	Supplying and filling in plinth with Jamuna sand under floors, including watering, ramming, consolidating and dressing (complete as per the direction of Engineer Incharge)	Cum	105.00		
4.00	ANTI- TERMITE TREATMENT				
4.01	Providing & Injecting chemical for pre constructional antitermite treatment and creating barrier under and around the column pits, wall trenches basement excavation top surface if plinth filling junction of wall and floor, along external per mrt of building expansion joints surrounding of pipe and conduits etc. Along external wall using chemical emulsion @7.50 Lit/sqm of the vertical surface with Chlorphyriphos /Lindance E.C. 20% with 1% concentration. Below concrete or mesonary using chemical emulsion @2.25 Lit/Sqm with Chlorphyriphos / Lindance E.C. 20% with 1% .				

	Concentration. Treatment of soil under floors with Chlorpyriphos /Lindance E.C. 20% with 1% concentration.Treatment at points of contact of wood work by chemical emulsion Chlorpyriphos /Lindance (in oil or Kerosin based solution @.5 Lit/Sqm only plinth area at ground floor will be measurement for payment.) (complete as per the direction of Engineer Incharge)				
	Chlorpyriphos/Lindane emulsiable concentrate of 20%litre.	Sqm	456.00		
5.00	CONCRETE WORK				
5.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level.				
i	M10 grade Nominal Mix 1: 3: 6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size).	Cum	46.00		
ii	1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size).	Cum	63.00		
5.2	making plinth protection 50mm thick of cement concrete 1:3:6(1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) over 75 mm thick bed of dry brick ballast 40mm nominal size well rammed and consolidated and grouted with fine sand,including finishing the top smooth.	Sqm	105.00		
6.00	REINFORCED CEMENT CONCRETE (DESIGN MIX CONCRETE)				
6.01	Providing and laying in position design mix M-25 grade cement concrete (BMC/RMC) for RCC work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS:9103 to accelerate, retard setting of concrete, improve work ability without impairing strength and durability (complete as per the direction of Engineer Incharge) (Note:- Minimum cement content should be @ 330 kg/cum).				
I	All works upto plinth level	Cum	135.00		
II	All works above plinth level upto floor V level	Cum	283.00		
6.02	Cinder concrete (1 cement : 10 cinder of 12mm size and down grade) for toilet slabs.(complete as per the direction of Engineer Incharge)	Cum	35.00		
7.00	FORM WORK				
	Centering and shuttering including strutting, proping etc. and removal of form work for various works (complete as per the direction of Engineer Incharge)				
7.01	Retaining wall (Any thickness), Return wall (any thickness) including attached pilasters, buttresses plinth and string course filets,kerbs & steps etc	Sqm	124.00		
7.02	For suspended floors, roofs, landings, balconies, canopies etc.	Sqm	966.00		
7.03	Lintels, beams, plinth beams.	Sqm	1041.00		
7.04	Foundation, Footing bases of columns, Columns, pillars, piers, Abutments, post and struts. Columns, pillars, piers, Abutments, post and struts.	Sqm	1092.00		
8.00	REINFORCEMENT STEEL				

8.01	Providing Thermo-mechanically Treated (TMT) bars of approved make only Confirming to IS:1786 grade Fe415/500) for RCC work including straightening, cutting, bending, binding and placing in position with contractor's own 16 SWG black soft annealed binding wires at every intersection, including Chairs, Overlaps, Welding, Spacers, fanhooks etc. for all heights and depths (complete as per the direction of Engineer incharge)	M.T.	52.00		
9.00	BRICK WORK				
9.01	Brick work with common burnt clay F.P.S.(nonmodular) bricks of class I designation 7.5 in foundation and plinth in Cement mortar 1:6 (1 cement : 6 coarse sand) (complete as per the direction of Engineer Incharge)	Cum	344.00		
9.02	Brick work with best quality, locally available bricks of class-I designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in, Cement mortar 1:6 (1 cement : 6 coarse sand) (complete as per the direction of Engineer Incharge)	Cum	243.00		
9.03	Half brick masonry with best quality, locally available bricks of class-I designation 7.5 in superstructure above plinth level up to floor V level. Cement mortar 1:4 (1 cement :4 coarse sand) (complete as per the direction of Engineer Incharge)	Sqm	648.00		
9.04	Extra for providing and placing in position 2 Nos 6mm dia. M.S. bars at every third course of half brick masonry (complete as per the direction of Engineer Incharge)	Sqm	648.00		
10.00	CEMENT PLASTER				
	Providing & applying Cement plaster in perfect line, plumb & level. Including surface preparations scaffoldings, curing etc.(complete as per the direction of Engineer Incharge)				
10.01	12mm thick internal Plaster in cement mix 1:4 (1 cement: 4 Fine sand)	Sqm	1883.00		
10.02	6MM thick ceiling plaster in cement mix of 1:3 (1 cement: 3 Fine sand).	Sqm	905.00		
10.03	External Plaster with 15mm thick in a cement mix of 1:4 (1 cement: 4 coarse sand).	Sqm	1323.00		
10.04	12 mm cement plaster finished with a floating coat of neat cement of mix :1:3 (1 cement: 3 fine sand)	Sqm	135.00		
10.05	Plaster 12-15 mm thick in cement mix 1:4 (1 cement: 4 coarse sand) as specified. (For Boundry wall)	Sqm	1144.00		
10.06	Forming groove of uniform size from 12x12 mm and upto 25x15 mm in the top layer of washed stone grit plastered surface as per approved pattern, including providing and fixing aluminum channels of appropriate size and thickness (not less than 2 mm), nailed to the under layer with rust proof screws and nails and finishing the groove (complete as per the direction of Engineer Incharge)	R Mtr.	250.00		
10.07	Providing and making Drip Course on chajjas, balconies or whenever necessary (complete as per the direction of Engineer Incharge)	R Mtr.	125.00		
10.08	Chicken wire mesh				
i	Supplying & fixing Iron hexagonal 12mm chicken wire mesh (20 gauge) before plastering at junctions of walls and RCC members.	Sqm	183.00		
11.00	FLOORING/DADO				

11.01	Providing and laying Glazed Ceramic floor tiles of size 300x300 mm or more (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, in all colours, shades, laid on 20 mm thick Cement Mortar 1:4 (1 Cement : 4 Coarse sand), including pointing the joints with white cement and matching pigments etc., (complete as per the direction of Engineer Incharge) (Base Price Rs.60 Per Sq ft excluding tax)	Sqm	114.00		
11.02	Providing & fixing double glazed vitrified tile with white base polished 600mmx600mm approx. (thickness as per manufacturer's specs) in 2 or more colour as per design/detail with water absorption less than 0.08% and confirming to IS 15622, of approved make, to be fixed with cement mortar 1:4 (1 cement:4 coarse sand) 20mm thick, including grouting joints in white cement and colouring pigment to match shade of tile Skirting too shall be measured in sq mtr. (complete as per the direction of Engineer Incharge) (Base Price Rs. 80 Per Sq ft excluding tax)	Sqm	59.00		
11.03	Providing and fixing 300x600 ceramic tiles dado on walls in two or more colours as per design in toilets and kitchen. The tiles to be fixed with white cement on the base plaster. The joints in the tile to be filled with white cement mixed in colour pigment to match the colour of tiles.(complete as per the direction of Engineer Incharge) (Base Price Rs.60 Per Sq ft excluding tax)	Sqm	304.00		
11.04	Providing & laying machine cut chissel dressed 25mm thick kota stone slab flooring, as per approved quality, over 20mm average thick base laid over and joined with grey cement slurry @ 2.75kg of cement per sq. mtr of area to receive the mortar, providing neat cement slurry @ 4.4 kg of cement/ Sq. M of area over the mortar bed, jointing each slab with neat cement paste/ grouting with white cement mixed with pigment to match the shade of the slab including rubbing, mirror polishing complete. 20mm base in1:4 cement mortar, (complete as per the direction of Engineer Incharge)	Sqm	252.00		
11.05	Providing and fixing Granite Stone slab with table rubbed, edges rounded and polished on both sides, of size 75x50 cm deep and 17-18mm thick, fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6 mm nominal size) and finished smooth.(complete as per the direction of Engineer Incharge)	Sqm	17.00		
11.06	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, but excluding the cost of nosing of steps etc. complete.				
i	40 mm thick with 20 mm nominal size stone aggregate	Sqm	415.00		
11.07	Cement plaster skirting up to 15 cm height, with cement mortar 1:3 (1 cement : 3 coarse sand), finished with a floating coat of neat cement.				
i	18 mm thick	Sqm	108.00		
11.08	Providing and fixing glass strips in joints of cement concrete floors.				
i	40 mm wide and 4 mm thick	Metre	290.00		
12.00	STEEL WORK				

12.01	Supplying, fabricating, assembling, hoisting / erecting & fixing in position at all heights and with all leads, steel works of MS rolled / drwn sections (angle, channel, flats, tees, Bars, bolts etc.) as per structural drawings & as per detailed specifications (for materials & workmanship) in the situations described hereinafter including:				
i	In gratings, frames, guard bar, ladder, railings, brackets, gates,shade and similar works	KG	1700.00		
12.02	Providing and fixing angle iron frames for doors, windows and ventilators of mild steel Angle sections of size 35x35x5 mm, joints mitred and welded by angle iron 35x35x5 mm or 35x 5 mm flat pieces to the existing T-iron frame or to the wall with dash fastener, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer, all complete as per the direction of Engineer-In-charge.	KG	1739.00		
12.03	Providing & fixing glass panes, with putty and nails on MS window & Vantilator complete.				
i	Float glass panes of nominal thickness 5 mm (weight not less than 12.5kg/sqm)	Sqm	75.00		
13.00	PLOT FENCING WIRE (FRONT PLOT)				
13.01	Fencing with angle iron post placed at required distance embedded in cement concrete blocks, every 15th post, last but one end post and corner post shall be strutted on both sides and end post on one side only and provided with horizontal lines and two diagonals interwoven with horizontal wires, of barbed wire weighing 9.38 kg per 100 m (minimum), between the two posts fitted and fixed with G.I. staples, turn buckles etc. complete. (Cost of posts, struts, earth work and concrete work to be paid for separately). Payment to be made per metre cost of total length of barbed wire used.				
i	With G.I. barbed wire	R Mtr.	2250.00		
13.02	Supplying at site Angle iron post & strut of required size including bottom to be split and bent at right angle in opposite direction for 10 cm length and drilling holes upto 10 mm dia. etc. complete.	KG	1500.00		
14.00	WATER PROOFING				
14.01	Brick koba water proofing				
	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations:				
a)	Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment.				
b)	Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1cement : 5coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs	Sqm	470.00		

c)	After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep.				
d)	The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer in- Charge: With average thickness of 120 mm and minimum thickness at khurra as 65 mm. (complete as per the direction of Engineer-in-charge)				
14.02	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1 m x1 m x 400 micron, finished with 12 mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet (complete as per the direction of Engineer-in-charge)	Each	15.00		
14.03	Tapcrete water proofing				
	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like consisting of: Ist course of applying cement slurry @ 4.4 kg/sqm mixed with water proofing compound conforming to IS 2645 in recommended proportions including rounding off junction of vertical and horizontal surface. IInd course of 20 mm cement plaster 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface. IIIrd course of applying cement slurry @ 4.4 kg/sqm mixed with water proofing compound conforming to IS 2645 in recommended proportions including rounding off junction of vertical and horizontal surface.	Sqm	144.00		
15.00	DOORS AND WINDOWS				
15.01	Providing and fixing colour anodised aluminium work for doors, windows, Glezing, ventilators and partitions with extruded built up standard tubular sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, as per architectural drawings (complete as per the direction of Engineer-in-charge) (Glazing to be paid for separately).	KG.	621.00		
15.02	Providing & fixing glazing in aluminium door, window, ventilator shutters & partitions etc. With float glass panes of 5.0 mm thickness with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and (complete as per the direction of Engineer-in-charge)	Sqm	75.00		

15.03	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge.				
	Pre-laminated particle board with decorative lamination on both sides.	Sqm	25.00		
15.04	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge.				
	With stainless steel cover plate minimum 1.25 mm thickness	Each	5.00		
15.05	Providing and fixing Brass 100mm mortice latch and lock with 6 levers with pair of handles (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	Each	5.00		
15.06	Providing and fixing ISI marked flush door shutter 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 1mm high gloss laminate of both side door.				
i	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws and required hardware like L drop, hydraulic door closer.	Sqm	75.00		
15.07	Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of flush door shutters (over all area of door shutter to be measured).	Sqm	75.00		
15.08	Extra for cutting rebate in flush door shutters (Total area of the shutter to be measured).	Sqm	75.00		
16.00	Sanitary Installations				
16.01	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device conforming to IS : 7231, with all fittings and fixtures complete, including (handle lever) cutting and making good the walls and floors wherever required:				
i	White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests	Each	9.00		
16.02	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. flusing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS: 7231, with all fittings and fixture complete, including cutting and making good the walls and floors wherever required:				
i	W.C. pan with ISI marked white solid plastic seat and lid	Each	8.00		

16.03	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 unjons and G.i.clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required:				
i	One urinal basin with 5 litre white P.V.C. automatic flushing cistern.	Each	7.00		
16.04	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:				
i	White Vitreous China Wash basin sixe 550x400 mm with a pair of 15mm C.P. brass pillar taps.	Each	19.00		
16.05	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				
i	510x1040 mm bowl depth 250 mm	Each	2.00		
16.06	Providing and fixing 600x450 mm beveled edge mirror of superiorglass (of approved quality) complete with 6 mm thick hard boardground fixed to wooden cleats with C.P. brass screws and washerscomplete.	Each	19.00		
16.07	Providing and fixing PTMT liquid soap container 109 mm wide, 125 mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved qualityand colour, weighing not less than 105 gms.	Each	19.00		
16.08	Providing and fixing toilet paper holder :				
i	C.P. brass	Each	17.00		
16.09	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fittingsarrangement of approved quality and colour.				
i	600 mm long towel rail with total length of 645 mm, width 78 mm and effective height of 88 mm, weighing not less than 190 gms.	Each	22.00		
16.10	Providing and fixing approved quality heavy grade cast iron Nahani trap confirming to IS 3989 of self cleansing design with C.P. pressed steel grating with or without vent arm; of the below mentioned sizes for inlet and outlet; complete including cost of cutting and making good the walls and floors wherever if required.(complete as per the direction of Engineer-in-charge)				
i	100mm inlet and 75mm outlet	Each	40.00		
16.11	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame o f 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design, With Sewer bricks conforming to IS : 4885(complete as per the direction of Engineer-in-charge)	Each	5.00		
17.00	WATER SUPPLY				

	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00m spacing. This includes jointing 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 the directions of Engineer in Charge. (NOTE: Concealed work, including cutting chases and making good the walls etc.)				
17.01	15 mm nominal outer dia Pipes	Rmt	92.00		
17.02	25 mm nominal outer dia Pipes	Rmt	50.00		
17.03	32 mm nominal dia Pipes	Rmt	87.00		
17.04	40 mm nominal dia Pipes	Rmt	25.00		
17.05	50 mm nominal outer dia Pipes	Rmt	17.00		
17.06	Providing & fixing Heavy grade CP finish Brass fittings including making connections, cutting walls & making good the same etc.complete. (Jaguar)(complete as per the direction of Engineer-in-charge)				
i	Providing and fixing brass bib cock of approved quality :	Each	25.00		
17.07	15 mm nominal bore angular stop cock	Each	40.00		
17.08	CP Mixer single lever Sink mixer	Each	2.00		
17.09	Pillar cock	Each	17.00		
17.10	Hand shower(Health Faucet) (ABS body) with 8mm Dia, 1 Mt. long Flexible tube & Wall hook	Each	17.00		
17.11	Providing and fixing 100mm SS grating of approved quality and colour.	Each	40.00		
17.12	Flexible (coil shaped) PVC waste pipe for sink and wash basin 32mm dia with length not less than 700 mm i/c PVC waste fittings	Each	20.00		
17.13	Providing and placing on terrace (for any floor levels) Polyethylene water storage tank ISI:12701 marked indicating the BIS licence no. with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipe but without fittings and base support for tanks (Sintex, electroplast or approved having valid ISI license)(complete as per the direction of Engineer-in-charge)	Ltr.	10000.00		
17.14	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :)				
i	25 mm nominal bore	Each	8.00		
ii	32 mm nominal bore	Each	10.00		
17.15	Providing fixing and installing water pump of 2 horse power of crompton greaves or approved brand, near UGT for pumping under ground tank water to overhead water tank. Item include fixing and grouting of pump with its wiring and panel, .(complete as per the direction of Engineer-in-charge)	Each	1.00		
18.00	UPVC Soil Pipe for Toilets				
	Providing and fixing UPVC soil pipes conforming to IS:1729 on walls including filling the joints with specialised jointing solutions and fixed with G.I. clamps embedded in cement concrete blocks 100x100x100 of 1:2:4 (1 cement :2 coarse san:4 stone aggregate) including cutting holes and making good the walls etc. item includes Providing and fixing UPVC pipes specials such as door bend, horn bend, plain bend, cowls, sockets, door "T", 'Y' and 'T' junctions(both single and double etc. including fixing with cement solvent (complete as per the direction of Engineer-in-charge)				

18.01	For 75mm pipes	Rmt	58.00		
18.02	For 100mm pipes	Rmt	125.00		
18.03	For 150 mm Pipes	Rmt	75.00		
19.00	BORING / TUBEWELL				
19.01	Supplying, assembling, lowering and fixing in vertical position in bore well of 150 mm nominal size dia having minimum wall thickness 5.00 mm, ERW (Electric Resistance Welded) FE 410 mild steel screwed and socketed/ plain ended casing pipes of required dia, conforming to IS:4270, of reputed & approved make, including painted with outside surface with two coats of anticorrosive paint of approved brand and manufacture, including required hire & labour charges, fittings & accessories, all complete, for all depths, (complete as per the direction of Engineer-in-charge)	R. Mtr.	58.00		
19.02	Development of tube well in accordance with IS : 2800 (part I) and IS:11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully developed, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water samples & getting tested in approved laboratory, i/c disinfection of tubewell, all complete, including hire & labour charges of air compressor, tools & accessories etc., all complete with permission from local authority for digging tube well as per requirement (complete as per the direction of Engineer-in-charge)	per hr.	20.00		
19.03	Providing and fixing suitable size threaded mild steel cap or spot welded plate to the top of bore well housing/ casing pipe, removable as per requirement, all complete for borewell of 100mm dia.(complete as per the direction of Engineer-in-charge)	Each	1.00		
19.04	Providing and fixing M.S. clamp of 150 mm dia to the top of casing/housing pipe of tubewell as per IS: 2800 (part I), including necessary bolts & nuts of required size (complete as per the direction of Engineer-in-charge).	Each	1.00		
19.05	Providing and fixing Bail plug/ Bottom plug of 100mm dia to the bottom of pipe assembly of tubewell as per IS:2800 (part I).(complete as per the direction of Engineer-in-charge)	Each	1.00		
19.06	Providing Fixing installing and testing submersible water pump of 5 horse power of (crompton greaves, kirlosker or approved brand) for lifting up of borewell water to the UGT. Item include proper wiring and electrical panel (complete as per the direction of Engineer-in-charge)	Each	1.00		
20.00	SUB-HEAD:ROOFING				
20.01	Providing and fixing on wall face unplasticised rigid PVC rain water pipes conforming to IS : 13592 type A, Including jointing with seal ring conforming to IS : 5382, leaving 10mm Gap for thermal expansion, (i) single socketed pipes.				
i	75 mm dia	R/M	71.00		
ii	110mm dia	R/M	92.00		
20.02	Providing and fixing on wall face unplasticised PVC moulded fittings/ accessories for unplasticised rigid PVC rain water pipes conforming to IS : 13592 type A, Including jointing with seal ring conforming to IS : 5382, leaving 10mm Gap for thermal expansion.				
a	Single tee with door				

i	75x75x75mm	EACH	8.00		
ii	110x110x110mm	EACH	15.00		
b	Bend 87.5*				
i	75 mm bend	EACH	10.00		
ii	110mm bend	EACH	20.00		
c	shoe (Plain)				
i	110mm shoe	EACH	10.00		
20.03	Providing and fixing unplasticised - PVC pipe clips of approved design to unplasticised PVC rain water pipes by means of 50x50x50mm hardwood plugs, screwed with M.S. screws of required length including cutting brick work and fixing in cement mortar 1:4(1cement : 4 coarse sand) and making good the wall etc. complete				
i	75mm	EACH	10.00		
ii	110mm	EACH	40.00		
21.00	WHITE WASHING / PAINTING :				
21.01	Providing and applying white cement based putty (J.K. or BIRLA WHITE) of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth (complete as per the direction of Engineer-in-charge)	Sqm	2835.00		
21.02	Applying one coat of water thinnable cement primer of approved brand and manufacture on interior wall surface: Water thinnable cement primer(complete as per the direction of Engineer-in-charge)	Sqm	2467.00		
21.03	Distemping with 1st quality acrylic distemper (ready mixed) of approved manufacturer, of required shade and colour complete, as per manufacturer's specification. Two or more coats on new work.				
i	2 or more coats after preparing base over a coat of cement primer (complete as per the direction of Engineer-in-charge)	Sqm	2835.00		
21.04	Finishing walls with textured exterior paint of required shade on New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including priming coat of exterior primer applied @ 2.20kg/ 10 sqm(complete as per the direction of Engineer-in-charge)	Sqm	2467.00		
21.05	Painting synthetic enamel paint of approved brand and manufacture of required colour to give an even shade : New work (two or more coats) including a coat of approved steel primer but excluding a coat of mordant solution (complete as per the direction of Engineer-in-charge)	Sqm	267.00		
	GRAND TOTAL OF CONSTRUCTION WORK			(A)	
(B)	ROAD WORK				
22.00	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, lain required colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with line sand etc. all complete as per the direction of Engineer-in-charge.	Sqm	624.00		
	GRAND TOTAL OF ROAD WORK			(B)	
(C)	RAIN WATER HARVESTING				

22.01	Making trenches or rain water drains along with boundary wall and along the roads etc. size to be 300x450 mm deep (clear sizes from inside) and lined with 230mm thick brick wall in 1:6 cement mortar over PCC in 1:3:6 (1 cement:3 coarse sand:6 coarse aggregate) and finished with 12mm avg plaster in 1:5(1 cement:5 coarse sand) coarse sand plaster, giving proper slope to finish in rain water pit. (complete as per the direction of Engineer-in-charge)	Rmt.	25.00		
22.02	Providing & fixing factory made precast RCC perforated drain covers, having concrete of strength not less than M-25, of size 800 x 450x50 mm, reinforced with 8 mm dia 4nos longitudinal & 9 nos cross sectional T.M.T. hoop bars, including providing 50 mm dia perforations @ 100 to 125 mm c/c, including providing edge binding with M.S. flats of size 50 mm x 1.6 mm c(complete as per the direction of Engineer-in-charge)	Each	35.00		
22.03	Providing and fixing Connecting pipes for "Terrace rain water". The pipes to be inside earth including digging trenches for the pipes 150mm dia PVC pipes to be placed in trenches and covered with concrete 1:3:6 and covering the trenches afterwards. Pipes to be connected to the rain water outlet of down take pipes of existing building. The item also includes connecting pipes to the water drains along boundary wall (complete as per the direction of Engineer-in-charge)	Rmt.	110.00		
22.04	Providing and making 600 x 600 mm x 450 deep manholes for rain water pipes, same specification as for Masonery chambers in Misc. civil works.(complete as per the direction of Engineer-in-charge)	Each	10.00		
22.05	Providing and fixing 1000x1000x1200mm deep collection chamber for collecting rain water from all rainwater pipes, same specification as for Masonery chamber in Misc. Civil works.(complete as per the direction of Engineer-in-charge)	Each	1.00		
22.06	Recharge PIT with 2 bores method CLEAR size of 6mx3mx2.3 mt depth, with 230 mm brick walls all around in the mix of 1: 3, base of the walls is with 100 mm thick P.C.C in mix of 1: 3: 6 The pit is lined with boulders, coarse sand, gravel as shown in the drawing attached. The pit to have 2 Nos. 200 mm bore filled with gravels and 100 mm dia PVC pipe for 20 mt depth and slotted pipe for 6 mt depth complete with bail plug and 25 mm vent pipes on top and well caps, top of the pit is covered with 75 mm thick detachable R.C.C slabs. Item includes getting rain water harvesting scheme approved by the local Central Ground water authority and procuring necessary sanctions for the work and keeping all liasioning with Govt. authorities.(complete as per the direction of Engineer-in-charge)	Each	1.00		
22.07	Constructing brick masonry manhole in cement mortar 1:4 (1 cement: 4 coarse sand) with R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand: 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement (complete as per the direction of Engineer-in-charge)				

i	Inside size 90x80cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) :With common burnt clay F.P.S. (non modular) bricks of class designation 7.5(complete as per the direction of Engineer-in-charge)	Each	6.00		
ii	Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (medium duty) 500 mm internal diameter, total weight of cover and frame to be not less than 116 kg (weight of cover 58 kg and weight of frame 58 kg) :With common burnt clay F.P.S. (non modular) bricks of class designation 7.5(complete as per the direction of Engineer-in-charge)	Each	5.00		
GRAND TOTAL OF RAIN WATER HARVESTING					(C)
(D) FIRE FIGHTING SYSTEM					
23.01	Supply, Erection, Testing and commissioning of Terrace fire pump located at terrace level capable of delivering 450 LPM 30M HEAD capacity complete with adequate HP. Electric driven mono-block type Centrifugal pump with squirrel cage motor with bronze impeller etc (complete as per the direction of Engineer-in-charge)	Per set	1.00		
23.02	Underground MS, ERW piping conforming to IS:1239 (I) medium complete with IS:1239/ Meter fittings from parent pipes, wrapping & coating with 4 mm factory tape (15% overlap) including excavation in soft soil and backfilling with soil only(complete as per the direction of Engineer-in-charge)				
i	100 NB	Rmt	40.00		
23.03	Above ground MS, ERW, black, medium piping conforming to IS: 1239 (I) including fittings conforming to IS:1239 (II) & painting(complete as per the direction of Engineer-in-charge)				
i	100 NB	Rmt	35.00		
ii	80 NB	Rmt	45.00		
iii	50 NB	Rmt	15.00		
iv	25 NB	Rmt	10.00		
23.04	S/F Cast Iron Wafer type Butterfly valves of PN 1.0 rating with matching Flanges, NB & G (complete as per the direction of Engineer-in-charge)				
i	100 NB	Each	2.00		
23.05	S/F 2 Way Gun Metal Fire Brigade connection complete with built in check valve and 100 NB isolation Butterfly valve (complete as per the direction of Engineer-in-charge)	Each	1.00		
23.06	Small bore Hose Reel of 19 mm dia x 30 m long complete with 25 NB brass gate valve and 6 mm dia nozzle (complete as per the direction of Engineer-in-charge)	Each	4.00		
23.07	Providing and placing on terrace (for any floor levels) Polyethylene water storage tank ISI:12701 marked indicating the BIS licence no. with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipe but without fittings and base support for tanks (Sintex, electroplast or approved having valid ISI license)(complete as per the direction of Engineer-in-charge)	Ltr.	10000.00		
GRAND TOTAL OF FIRE FIGHTING SYSTEM					(D)

BOQ OF ELECTRICAL WORK FOR BANK OF BARODA BSVS (RSETI TRAINING CENTRE) BUILDING AT KALYANPUR NAUGAWAN, PILIBHIT, UP.					
(E)	ELECTRICAL WORK				
S.No.	DESCRIPTION				AMOUNT
A)	MV PANEL BOARDS				
B)	MV CABLES				
C)	DISTRIBUTION BOARDS				
D)	POINT WIRING				
E)	TELEPHONE SYSTEM				
F)	FANS FIXTURES & LIGHTS PART				
G)	EARTHING				
H)	ELECTRICAL MATERIAL FOR SLAB INTERNAL WORK				
	GRAND TOTAL OF ELECTRICAL WORK			(E)	
<u>PREAMBLE TO BOQ</u>					
1.0	The work shall be executed as per relevant specification and drawings.				
2.0	All material and equipment shall be as per specification and as per approved makes of material. Where specifications are not available the material shall be as per Indian standard specifications. The quantities and capacities of the equipments shall meet the requirement for successful completion of the work.				
3.0	The installation and testing shall also be as per specifications and as per direction and satisfaction of Engineer in charge.				
4.0	Contractor shall submit the shop drawings for approval by consultants / Engineer in charge. The work shall be carried out as per the approved shop drawings.				
5.0	Panels shall be fabricated as per specifications after approval of fabrication drawings by consultant / Engineer incharge.				
6.0	All Electrical panel must have provision of potential free contacts for BMS/FAS.				
7.0	All Electrical panel must have digital type energy meter with RS 485 port.				
8.0	The rates of all the items of the BOQ shall include the cost of :-				
i)	All materials, fixing hardware, accessories, tools and plants, freight, insurance, labour, taxes, duties, testing commissioning and of the work, as per specifications and drawings.				
ii)	Wastage on material and labour.				
iii)	Loading, unloading, handling charges, hoisting the material to all upper levels.				
iv)	Execute the work as per specifications and drawings to the full satisfaction of engineer incharge.				
v)	All liabilities, obligations and risks arising out of conditions of contract.				
vi)	All requirements for successful completion of the work whether mentioned in BOQ, specifications and drawings or not.				
vii)	In the event of conflict between BOQ, specifications and drawings, the most stringent shall apply. The decision of Architect / Engineer incharge / Consultant shall be final and binding.				
9.0	The quantities of the items in the BOQ are for general guidance only based on the consultants drawings and documents. The contractor shall be paid for actual quantities as per schedule rates.				
10.0	Contractor shall visit the site before quoting the rates and satisfying himself about the working conditions. Since this is a tall building, hoisting the material to upper levels may be taken into account while quoting the rates. No extra claim on this account shall be entertained.				
11.0	Approval of all makes of material to be supplied out of approved list, shall be obtained by the contractor. Sample of the material shall be kept at site to check with the material actually installed at site.				
12.0	Engineer in charge may get the material tested at authorized labs. In case material is found under specifications as per IS, same shall be replaced by the contractor. The test fee for 1 st test shall be borne by the client but for subsequent test, fee due to failure of first sample, would be borne by the contractor.				

13.0	Testing and commissioning shall be carried out as per IS 732-1989 for the installation. The record of test results shall be maintained and submitted to the engineer in charge who would check the same at random.				
14.0	The tender shall be filled in ink and any cutting / overwriting shall be attested by the tenderer. Rates shall be quoted both in figures and words. If there is discrepancy between the rates in figures and words, then rates in words shall be final.				
15.0	Totaling errors or missing amounts shall be corrected and incorporated in tendered amount.				
16.0	Continuous earth wire shall run alongwith circuit wiring and point wiring. All switch boxes and fixtures shall be earthed. Only solid conductor earth wire shall be used for earthing.				
17.0	Where only conduits are laid for other services 16 SWG steel wire shall run in the conduit for pulling the wires at later date, by other agencies.				
18.0	Tenderer may note that there are lot of RCC walls in which conduits and outlet boxes switch boxes are to be provided. Costing of such walls shall be done with mixer shutterings. Conduits and boxes shall be laid before pouring the concrete. The outlet boxes, J.boxes, switch boxes shall be touch welded to the reinforcement before concreting. Only deep metallic J.boxes shall be used with PVC conduit as well.				
19.0	All connections shall be through, aluminium ferrules for aluminum conductors and copper ferrules for copper conductor cables.				
20.0	Earth wire with point wiring, circuit wiring, shall be of green colour with solid conductor.				
21.0	DBs shall be circuit numbered.				
22.0	As built drawing shall be prepared by the contractor after successful completion of the work these drawings shall incorporate the actual layouts, routes of cables and conduits with sizes, locations of outlets, DBS switch rooms panel, Tag blocks EPABX, Switches servers, fire detectors, zonal and main fire panels, location of CCTV cameras, monitors, etc. sets of blue prints of switch drawings shall be submitted to the Engineer incharge for verification with actual layout at site and for record.				
S. No.	DESCRIPTION OF ITEM	UNIT	QUANTITY	RATE	AMOUNT
A)	MV PANEL BOARDS				
	Design, fabrication, loading, unloading at store, installaton, testing & commissioning as directed by Engineer-in-Charge, of LT Panels fabricated out of 2mm thick for structural members (Load bearing members) and 1.6mm thick for door and covers (Non load bearing members) CRCA sheet in cubicle compartmentalize free standing floor mounted, dust and vermin proof with reinforcement of suitable size angle iron, channel 'T' irons and / or flats wherever necessary, 16 gauge CRCA sheet steel shall be used for final distribution panels. Cable gland plates shall be provided on top as well as at the bottom of the panels. Panels shall be treated with all anticorrosive process before painting as per specifications with 2 coats of zinc chromate primer and final approved shade of enamelled paint. 2 Nos. earthing terminals shall be provided for all distribution panels. Panels shall be suitable for 415V, 3-phase, 4-wire, 50Hz supply system and with 15% spare space, lifting hooks shall also be provided in case of large panels. Panel must be BMS/FAS Compatible.				
	Approval shall be taken for each panel before fabrication. Galvanized hardwares with zinc passivation shall be used in fabrication of panels.				
	General Notes:				
1	MCCB:				
	MCCBs shall be used with Thermal Magnetic Based releases upto 250A and microprocessor based Over Load, Short Circuit / Earth Fault release.				
2	Breaking capacity mentioned is Ics value.				

3	This BOQ to be read in conjunction with technical specifications and Single Line Diagram (attached for reference). If any discrepancy occurs that should be brought to the notice of Client/Consultant before quoting the price otherwise stringent condition will be deemed to have been considered.				
4	All MCCBs shall be provided with rotary operating handle and ON/OFF lamps.				
5	All meters shall be digital type (unless otherwise specified) with RS 485 Port.				
6	All Incoming and outgoing breaker must have provision of Potential free contacts for BMS/FAS.				
7	All MCBs shall be motor duty type.				
8	All current/voltage transformer shall be cast resin type.				
9	All indicating lamps shall be LED type.				
10	Current density for Al. bus bars shall not be more than 0.8A/Sqmm. Rating of Bus bar is after considering all derating factors. (Bus bar sizing calculation to be submitted for approval.)				
11	All internal control wiring shall be heat resistant type.				
12	All TP feeders shall be provided with Isolable neutral link.				
13	Bus bar chamber & cable entry both shall be provided at top only.				
14	All feeders shall be provided with door interlocked with door defeat, pad lock facility.				
15	Live parts shall not be accessible after opening the door, Transparent acrylic sheet to be provided to cover the same.				
16	Spare contacts of MCCBs / Relay / Contactor shall be wired upto terminal block.				
17	20% spare control terminal to be provided.				
18	All incoming/outgoing cables shall be terminated on links/terminals.				
1	MV PANEL				
	(Loc. :- Panel Room)				
I.	INCOMING				
a)	1 No-125 Amp,25KA,4P MCCB				
II.	METERING & INDICATION SEB				
a)	CT for metering 120/5A Class-1, 15VA - 3 Nos.				
b)	Multifunction Meter-1 no.				
c)	Red, Yellow & Blue indicating lights with control MCB of 2A - 1 Set				
III	OUTGOING				
a)	63 A TPN MCB (10KA) - 4 No.				
b)	40A TPN MCB (10KA) - 2 Nos.				
c)	25A DP MCB (10KA) -2 Nos	NOS	1.00		
d)	g) 4 Pole ELCB/RCCB 100 M Amp , 2 Nos of Siemems/ L&T / Sneider Including all accessories neutral links etc all complete including dressing				
e)	125 Amp 4 pole changeover switch (Manual)				
	TOTAL CARRIED OVER TO SUMMARY				(A)
B)	MV CABLES				

1	Supplying, Laying, testing & commissioning of the following sizes of XLPE Al. Conductor armoured cables of 1.1KV grade on the surface of wall or on existing cable trays complete with hangers, properclamps fixing hardware etc. as required				
a)	3.5 C x 50 Sq. mm Al. Cable	R Mtr.	30.00		
b)	4 C x 25 Sq. mm Cu. Cable	R Mtr.	45.00		
c)	4 C x 16 Sq. mm Cu. Cable	R Mtr.	40.00		
d)	4 C x 10 Sq. mm Cu. Cable	R Mtr.	40.00		
2	Suppling, making, testing & commissioning of end termination with brass mettalic double compression glands suitable for the following sizes of XLPE Al. conductor armoured cables including proper sizes of copper thimbles etc. as required.				
a)	3.5 C x 50 Sq. mm Al. Cable	Nos.	8.00		
b)	4 C x 25 Sq. mm Cu. Cable	Nos.	8.00		
c)	4 C x 16 Sq. mm Cu. Cable	Nos.	8.00		
d)	4 C x 10 Sq. mm Cu. Cable	Nos.	8.00		
	TOTAL CARRIED OVER TO SUMMARY				(B)
C)	DISTRIBUTION BOARDS				
	Supplying, installation, testing & commissioning of following type wall mounted Horizontal TPN/SPN distribution board of double door type design made out of 16 gauge MS sheet with supplying and fixing following accessories including painting, interconnections, painting, earthing and labeling etc. as required.				
1	6 WAY TPN DB (PDB)				
	Incoming				
a)	63Amp TPN MCB (10KA) - 1 No				
	63Amp DP RCCB (30mA) -1 Nos				
	Busbars				
b)	100 Amp TPN copper busbars - 1 Set				
	Outgoing				
c)	10/16/20/25 Amp SP MCB (10KA) - 18 Nos	Set	2.00		
	Neutral links - 3 Nos (Separate for each phase)				
2	6 WAY TPN DB (LDB)				
	Incoming				
a)	40Amp TPN MCB (10KA) - 1 No				
	40Amp DP RCCB (30mA) - 1 Nos				
	Busbars				
b)	100 Amp TPN copper busbars - 1 Set				
	Outgoing				
c)	10/16/20/25 Amp SP MCB (10KA) - 18 Nos	Set	2.00		
	Neutral links - 3 Nos (Separate for each phase)				
3	8 WAY TPN DB (UPS)				
	Incoming				
a)	63Amp TPN MCB (10KA) - 1 No				
	63Amp DP RCCB (30mA) - 1 Nos				
	Busbars				
b)	100 Amp TPN copper busbars - 1 Set				
	Outgoing				
c)	10/16/20/25 Amp SP MCB (10KA) - 24 Nos				
	Neutral links - 3 Nos	Set	2.00		

4	63 Amp. 4 P ,25ka MCB with Box for UPS	Set	4.00		
	TOTAL CARRIED OVER TO SUMMARY			(C)	
D)	POINT WIRING				
1	Wiring for switch controlled Light Point with 3 x 1.5 Sq. mm PVC insulated FRLS multistrand copper conductor 1100 Volt grade wires in PVC surface/recessed conduit with accessories including cost of providing saddles etc for surface conduiting and/or cost of cutting and filling chases for recessed conduiting and including the cost of supplying and fixing a 6 Amp 240 Volt grid plate mounted switch with moulded cover plate in zinc chromate passivated MS box, and costing circuit wiring with 3 x 2.5sq. mm 1100 volt grade PVC insulated FRLS Multistrand copper conductor wires, inPVC conduit complete as per specifications and as required.				
(i)	Primary Point	Points	60.00		
(ii)	Secondary Point	Points	45.00		
2	Wiring for 5 pin 6 A Light plug point with 3 x 1.5 Sq.mm PVC insulated FRLS multistrand copper conductor 1100 Volt grade wires in recessed/surface FRLS PVC conduit with accessories including cost of providing saddles etc for surface conduiting and/or cost of cutting & filling chases for recessed conduiting, including the cost of providing & fixing 1 No. Modular type 3 pin 6 A socket outlet controlled by 6 A switch in zinc chromate passivated MS box, and circuit wiring with 3 x 2.5 sq mm complete as per specifications and as required.	Points	60.00		
3	Wiring for following. 6 pin 6/16 A Power plug point controlled by 1 No. 16A Switch with 3 x 4.0 Sq. mm PVC insulated FRLS multi strand copper conductor 1100 Volt grade wires in recessed/surfacePVC conduit with accessories including cost of providing saddles etc for surface conduiting and/or cost of cutting chases for recessed conduiting, including the cost of providing & fixing 1 No. Modular type 6 pin 16 A socket outlet controlled by 1 No. 16 A switch in zinc chromate passivated MS box, complete as per specification and as required.	Points	40.00		
4	Wiring for ceiling/wall fan Point with 3 x 1.5 Sq. mm PVC insulated FRLS multi strand copper conductor 1100 Volt grade wires in surface / recessed, PVC conduit with accessories including cost of providing saddles etc for surface conduiting and/or cost of cutting and filling chases for recessed conduiting and including the cost of supplying and fixing a 6 Amp 240 Volt grid plate mounted switch & 300W electronic regulator with moulded cover plate in zinc chromate passivated MS box, and including the cost of circuit wiring with 3 x 2.5sq. mm 1100 volt grade PVC insulated FRLS multi strand copper conductor wire, inPVC conduit complete as per specifications and as required.	Points	66.00		

5	Wiring for exhaust fan Point with 3 x 1.5 Sq. mm PVC insulated FRLS multi strand copper conductor 1100 Volt grade wires in surface / recessed PVC conduit with accessories including cost of providing saddles etc for surface conduiting and/or cost of cutting and filling chases for recessed conduiting and including the cost of supplying and fixing a 6 Amp 240 Volt grid plate mounted switch with moulded cover plate in zinc chromate passivated MS box, and including the cost of circuit wiring with 3 x 2.5sq. mm 1100 volt grade PVC insulated FRLS multi strand copper conductor wire, inPVC donduit complete as per specifications and as required.	Points	15.00		
6	Wiring for 20A Single Phase metal clad socket outlet with 2 x 4 +1 x 2.5 sqmm PVC insulated FRLS multistrand copper wire of 1100 volt grade in surface / recessed PVC conduit pipe with accessories including supply and fixing 20A 3pin metal clad plug and socket and 20A SP MCB (MD) in IP 44 Poly carbonate box complete as per specification and as required.	Points	5.00		
7	Providing and fixing of following sizes of PVC Flexible Conduits suitable for various applications, halogen free, oil and petrol resistant, flame retardant, self extinguishing, high compressive strength and good wearing properties along with connectors complete with conduit gland & all accessories required.				
a)	25mm dia	RM	250.00		
8	Circuit Wiring with 3 x 2.5 + 1x 2.5 mm PVC insulated FRLS multistrand copper conductor 1100 Volt grade wires in recessed/surface PVC conduit with accessories including cost of providing saddles etc for surface conduiting and/or cost of cutting & filling chases for recessed conduiting,complete as per specifications and as required.	R Mtr.	250.00		
9	Circuit Wiring with 3 x 4.00 + 1x 2.5 mm PVC insulated FRLS multistrand copper conductor 1100 Volt grade wires in recessed/surface PVC conduit with accessories including cost of providing saddles etc for surface conduiting and/or cost of cutting & filling chases for recessed conduiting,complete as per specifications and as required.	R Mtr.	200.00		
	TOTAL CARRIED OVER TO SUMMARY			(D)	
E)	TELEPHONE SYSTEM				
1	Supply & fixing the following sizes of PVC conduit in recessed or on surface of wall . False ceiling including cutting the wall and making good the same as required.				
a)	25 mm dia	R Mtr.	130.00		
2	Supply and fixing of RJ11 moduler Telephone outlet in Zinc chromate passivated M.S. Box and Modular Plate including cost of M.S.box, modular plate and connections etc as required.	Nos.	5.00		
3	Supplying & laying the following sizes of PVC insulated and overall sheathed taped telephone cables of 0.51mm dia size inPVC conduit recessed in wall or on surface of wall including cutting the chases in making good the same and connection etc. complete as required. (From TTB on Ground Floor to Upper Floor)				

b)	20 Pair telephone cable	R Mtr.	30.00		
4	MDF (10Pair) (Krone box)	Nos.	1.00		
	TOTAL CARRIED OVER TO SUMMARY			(E)	
F)	FANS FIXTURES & LIGHTS PART				
1	Supply & installation , testing & commissioning of 36" ceiling Fan complete with all accessories such as blades, canopy etc. including wiring the down rod with 3 x 1.5 sq mm FRLS PVC insulated multistranded copper conductor wires and earthing the fans etc. complete as required.	Nos.	66.00		
2	Supply & installation , testing & commissioning of wall Mounted Fan 500mm Sweep . complete with all accessories such as blades, canopy etc.Connection with 3 x 1.5 sq mm FRLS PVC insulated multistranded copper conductor wires from the socket outlet to the fan earthing etc. . complete as required.(Wall Mounted Fans Bracket fans sweep 500 mm)	Nos.	6.00		
3	Supply & installation, testing & commissioning of 12/9" exhaust fans on existing opening in wall including all fixing hardware, louvers, shutters etc. Connection with 3 x 1.5 Sqmm FRLS PVC insulated multistranded copper conductor wire from the socket outlet to the fan earthing etc. complete as required.	Nos.	14.00		
4	Supply & installation storing, unpacking, assembling, testing, & commissioning of All type of Recessed / Surface mounted Lighting Fixtures (as approved by client/architect) including all fixing hardwares complete as required (LED tubeLight 20 watt)	Nos.	92.00		
	TOTAL CARRIED OVER TO SUMMARY			(F)	
G)	EARTHING				
1	Supply, installation, testing and commissioning of 3000 mm long 25 mm dia minimum 11.6 kg in weight high tensile strength solid steel rods molecularly bonded with 250 microns copper coating complies to IS 3043 and tested as per IEC 62561-2, High resistance to corrosion and high tensile strength earthing kit with connector and sufficient weight earth conductivity enhancing mineral compound tested as per IEC 62561-7 complete in all manners with all require accessories etc. for lowering the effective ground impedance value to less than one ohm and ensuring that it should be less than one ohm by adding more earthing pits as a combined sets.The earthing enhancement compound shall boost moisture to retain the moisture duly tested & certified by CPRI & CETL Laboratory.Incase more earthing pits are added then interconnecting these pits shall be included in this item	Sets	2.00		
2	Supply and fixing of 25 mm x 3 mm thick copper strip in earth electrode including connection etc. as required	R Mtr.	20.00		
3	Supply and fixing of 25mm x 6mm thick G.I. strip earth electrode including connection etc as required.	R Mtr.	50.00		
4	1 x 16sqmm copper wire for UPS/Server	R Mtr.	30.00		
5	Supplying and laying of 8 SWG G.I. Wire on surface / recess as required.	R Mtr.	50.00		
	TOTAL CARRIED OVER TO SUMMARY			(G)	
H)	ELECTRICAL MATERIAL FOR SLAB INTERNAL WORK				

1	Providing and fixing of GI Fan box for RCC slab internal work including fixing complete.	Nos	65.00		
2	Providing and fixing of 25 mm GI one/two/three/four way junction box/DB for RCC slab internal work including fixing complete.	Nos	140.00		
3	Providing and fixing of 25 mm GI one/two/three/four way deep junction box/DB for RCC slab internal work including fixing complete.	Nos	20.00		
4	Supply & fixing the following sizes of PVC MMS conduit in recessed or on surface of wall . False ceiling including cutting the wall and making good the same as required.				
a)	25 mm dia	R Mtr.	750.00		
TOTAL CARRIED OVER TO SUMMARY				(H)	

BOQ OF FURNITURE WORK FOR BANK OF BARODA BSVS (RSETI TRAINING CENTRE) BUILDING AT KALYANPUR NAUGAWAN, PILIBHIT, UP.

S. No.	DESCRIPTION OF ITEM	UNIT	QUANTITY	RATE	AMOUNT
(F)	FURNITURE WORK				
1.00	Supplying and fixing chairs in class room with writing pad of size (H-840x w 460 x d400) WITH PU HANDLE, SEAT & BACK HD FOAM STEEL FRAME PIPE 1 INCH 16 GAUGE	NOS	60.00		
2.00	Supplying and fixing revolving chair for faculty in class room with central tilt, PU Foam Seat & medium Back, with gas lift & steel inserted Base. (As per approved by architect/bank)	NOS	2.00		
3.00	Supply and fixing steel tubler section table for faculty in class room with One Drawer should have 18mm thick pre lam TOP SIZE: W-900XD-600XH-755MM	NOS	2.00		
4.00	Supply and fixing revolving chair for staff in office with push back, PU Foam Seat & medium Back, with gas lift & steel inserted Base.	NOS	2.00		
5.00	Supplying and fixing table for staff in faculty room with MOBILE PEDESTAL which should have 25 mm thick pre lam work top with duck Nose bidding & 75mmx40mm teak wood frame for top & legs of 75mmx75mm round legs Size (1500x900x750), Pedestal Size: (800x615x550)	NOS	2.00		
6.00	Supplying and fixing fixed back chair for visitors in faculty and staff room made of PU Foam Seat & medium back. (As per approved by architect/bank)	NOS	6.00		
7.00	Supplying and fixing revolving chair in work shop with Push Back, PU Foam Seat & medium Back, with gas lift & steel inserted base. (As per approved by architect/bank)	NOS	6.00		
8.00	Supplying and fixing table in workshop with MOBILE PEDESTAL which should have 25mm thick pre lam work top with duck Nose bidding & 75mmx40mm teak wood frame for top & legs of 75mmx75mm round legs Size (1200x900x750), Pedestal Size:(400x485x665)	NOS	8.00		
9.00	Supplying and fixing fixed back chair with handle in computer lab made of PU Foam Seat & medium back .(As per approved by architect/bank)	NOS	16.00		
10.00	Supplying and fixing table in computer lab which should have 18mm thick pre lam TOP SIZE:W-900XD-590XH750MMM.(As per approved by architect/bank)	NOS	8.00		
11.00	Supplying and fixing fixed back chair with handle in common room made of HD Foam seat & back Size: (880x580x580)(As per approved by architect/bank)	NOS	8.00		
12.00	Supply and fixing revolving chair in director room with central tilt, PU Foam Seat & high back, with gas lift & steel inserted base.(As per approved by architect/bank)	NOS	1.00		
13.00	Supplying and Fixing fixed back visitor's chair with handle in director room made of PU Foam seat & medium back .(As per approved by architect/bank)	NOS	3.00		

14.00	<p>Director room table to have 18-19 BWR Ply , finished with 1mm thk Laminate all edges of table and front or side. All internal surface of table to be finished with white paint..Drawer unit to be made from only FASCIA 19mm BWR ply but the inner drawers made from 12mm Bwr Ply.and 19mm BWR ply FASCIA finished with 1mm thk Laminate .The drawers to run on telescopic drawer channels (Hettich, Kaff, ozone). Drawer units to have two smaller and one bigger drawers.and locking arrangement (Godrej/ Hettich/ Dorset). Inculding Teak lipping 6mm thk as required to be provided at every section of ply.Footrest of 75x50mm 2nd class teakwood member to be fixed for each table with Deco paint on expoed teak wood surface /lipping, the rate to include all hardware such as drawer channels, S.S handles, single lock for three drawers etc. The item also includes a key-board tray running on telescopic channel, made from 19mm BWR Ply finished with 0.8mm laminate on top and teakwood round moulding in front (size of key board 560x450) readymade CPU trolley with castors etc The table size is taken to be 1800mm wide x 900mm depth x750mm height.(As per drawing)</p>	NOS	1.00		
15.00	<p>Table to have 18-19 BWR Ply , finished with 1mm thk Laminate all edges of table and front or side. All internal surface of table to be finished with white paint.Drawer unit to be made from only FASCIA 19mm BWR ply but the inner drawers made from 12mm Bwr Ply.and 19mm BWR ply FASCIA finished with 1mm thk Laminate .The drawers to run on telescopic drawer channels (Hettich, Kaff, ozone). Drawer units to have two smaller and one bigger drawers.and locking arrangement (Godrej/ Hettich/ Dorset). Inculding Teak lipping 6mm thk as required to be provided at every section of ply.Footrest of 75x50mm 2nd class teakwood member to be fixed for each table with Deco paint on expoed teak wood surface /lipping, the rate to include all hardware such as drawer channels, S.S handles, single lock for three drawers etc. The item also includes a key-board tray running on telescopic channel, made from 19mm BWR Ply finished with 0.8mm laminate on top and teakwood round moulding in front (size of key board 560x450) readymade CPU trolley with castors etc The table size is taken to be 1200mm wide x 600mm depth x750mm height.(As per drawing)</p>	NOS	4.00		

16.00	Providing and fixing BUNK BEDS in guards area with one set comprising of one bed above other. The Main Frame of beds to be made from 75x50mm Teakwood members with 50x35mm cross members at appropriate locations. The sides of the bed to be not more than 150mm-200mm made from 18mm BWR ply finished with 1.0mm laminate. The bed to have 12mm BWR ply to take mattress. The bed to also have in built ladder structure from 63x45mm teakwood members to climb on upper bed. All wood surface to be finished in Melamine finish and inside of ply to be finished in spirit polish complete.(Including 100mm Mattres) Note :- Bed shoud be modular system and may be reassembled.	NOS	30.00		
17.00	Supplying and fixing dining table (1800x900x825) made of stainless steel tubular section of 304 grade with granite top of 16 to 18 mm thick.	NOS	7.00		
18.00	Supplying and fixing dining chair made of single piece moulded plywood 12mm thick veneer faced duly polished and fixed on base pipe 25 mm dia stainless steel 16 gauge with support and back support od size (420x480x980)	NOS	42.00		
19.00	Supplying and fixing double bed set Constructed in 'B' grade Teak wood, Overall size 78"x60"x12" finished in lacquer polish. Constructed with two 3"x3"x12" posts with decorative finish on the foot side of the bed and two posts 3"x3" on the head side of the bed to have suitable castor wheels with total height of 12", These posts must be joined with 72"(finished length) plank of 6"x1" on the long side and 54" net plank on the same size on the short side of the bed joined in dowels as shown in the sketch in the right column. The bed to be covered in 19mm ply board suitably moulded in Teak Wood to hold the mattress and give finished look.	NOS	2.00		
20.00	Supply and fixing of vertical blinds with head rail of 25mm high & 50 mm wide extruded alluminium alloy section with wall thickness of 1.2 mm. The section to be anodized for smooth and crozen resistant finish with the provision of fabric valance matching with louvers fabric. The blinds are to be provided with complete accessories required for proper functioning of the system to the satisfaction of the engineer-in-charge/Architect.	SQ.M	25.00		
GRAND TOTAL OF FURNITURE WORK					(F)