

**NEIGRIHMS
NORTH EASTERN INDIRA GANDHI REGIONAL
INSTITUTE OF HEALTH & MEDICAL SCIENCES,
SHILLONG, MEGHALAYA**

**TENDER
FOR
CONSTRUCTION
OF
NURSES HOSTEL, INCINERATOR BUILDING
ETC. FOR NEIGRIHMS AT SHILLONG**

VOLUME - V

BILL OF QUANTITIES & FORM OF BID

NOV, 2007

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TENDER NO. HSCC/111/PM/Nurses Hostel/PG-I/07

PROJECT: CONSTRUCTION OF NURSES HOSTEL, INCINERATOR BUILDING AND SUBSTATION BUILDING AT NEIGRIHMS,SHILLONG

BILL OF QUANTITIES (CIVIL WORKS AND SERVICES)

1) The tenderer shall quote rates in figures and in words under column 5 & 6 and extend amount to column 7

2) In case a item of work is repeated in different Sub Heads or Sections or subsections or parts within the tender, the lowest quoted rate among the above said places shall be applicable in all the places.

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7

1.00 EARTH WORK

1.01 Earth work in excavation over areas (exceeding 30 cm in depth, 1.5m in width as well as 10 Sq.m. on plan) including disposal of excavated earth lead upto 50m and lift upto 1.5m, surplus disposed earth to be levelled and neatly dressed.

a) All kinds of soil	3709.00	CuM
b) Ordinary Rock	509.00	CuM
c) Hard Rock (blasting prohibited)	509.00	CuM

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
1.02	Earth work in excavation in foundation trenches or drains (not exceeding 1.5m in width or 10 SqM. on plan) including dressing of sides and ramming of bottoms, lift upto 1.5m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50m.					
	a) All kinds of soil	750.00	CuM			
	b) Ordinary Rock	70.00	CuM			
	c) Hard Rock (blasting prohibited)	10.00	CuM			
1.03	Extra for every additional lift of 1.5 m or part thereof in:.					
	a) All kinds of soil					
	i) 1.5m to 3.0m	1214.00	CuM			
	ii) 3.0m to 4.5m	734.00	CuM			
	iii) 4.5m to 6.0m	734.00	CuM			
	b) Ordinary Rock/Hard Rock					
	i) 1.5m to 3.0m	275.00	CuM			
	ii) 3.0m to 4.5m	245.00	CuM			
	iii) 4.5m to 6.0m	245.00	CuM			
1.04	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 lead upto 50 m and lift upto 1.5m.	1745.00	CuM			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
1.05	Supplying and filling in plinth and other areas with fine sand including, watering, ramming consolidating and dressing complete.	275.00	CuM			
1.06	Excavating trenches of required width for pipes, cables, etc. including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5m including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20cm. in depth including consolidating each deposited layer by ramming, watering etc. and disposing of surplus excavated soil as directed, within a lead of 50m					
	a) All kind of soil.					
	i) Pipes Cables etc. not exceeding 80mm dia.	15.00	Metre			
	ii) Pipes, cables, etc. exceeding 80mm dia but not exceeding 300mm dia.	510.00	Metre			
	b) Ordinary Rock					
	i) Pipes, cables, etc. exceeding 80mm dia but not exceeding 300mm dia.	10.00	Metre			
1.07	Carriage of earth by mechanical transport including loading, unloading and disposal etc complete as directed.					
	a) Up to 0.5 KM	1950.00	CuM			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
	b) Beyond 0.5 KM and up to 1 KM	1950.00	CuM			
1.08	Extra for carriage of ordinary / hard rock instead of earth over the above item (item no 1.07).	978.00	CuM			
1.09	Supplying chemical emulsion in sealed containers including delivery as specified.					
	a) Chloropyriphos emulsifiable concentrate of 20%	1230.00	Litre.			
1.10	Diluting and injecting chemical emulsion for PRE-CONSTRUCTIONAL ANTI-termite treatment and creating a continuous chemical barrier under and around the column pits, wall trenches, basement excavation, top surface of plinth filling, junction of wall and floor, along the external perimeter of building, expansion joints, over the top surface of consolidated earth on which apron is to be laid, surroundings of pipes and conduits etc. complete as per specifications (Plinth area of the building at ground floor only shall be measured for payment)					
	a) Chloropyriphos Emulsifiable concentrate 20% with 1% concentration.	1885.00	Sq.M			

SUB TOTAL

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
2.00 CONCRETE WORK						
2.01	Providing and laying cement concrete of specified grade excluding the cost of centering and shuttering - All work upto plinth level.					
	a) 1:4:8 (1 cement : 4 coarse sand :8 graded stone aggregate 40 mm nominal size).	77.00	CuM			
	b) 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size).	140.00	CuM			
	c) 1:2:4 (1 cement : 2 coarse sand :4 graded stone aggregate 20 mm nominal size).	7.00	CuM			
2.02	Providing and laying damp-proof course 40 mm thick with cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 12.5 mm nominal size)	125.00	SqM			
2.03	Providing and Applying a coat of residual petroleum bitumen of penetration 80/100 of approved quality using 1.7 Kg per square metre on damp-proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	125.00	SqM			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
2.04	Extra for providing and mixing water proofing material in cement concrete work / plaster in the proportion recommended by the manufacturers.	130.00	per bag of 50Kg. of cement used in the mix			

SUB TOTAL

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
3.00 REINFORCED CEMENT CONCRETE						
3.01	Providing and laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of specified grade for reinforced cement concrete structural elements, excluding the cost of centering, shuttering and reinforcement including admixtures in recommended proportions. (As per IS 9103) to accelerate, retard setting of concrete improve workability without impairing strength and durability as per direction of Engineer in Charge					
	a) M -25 grade reinforced cement concrete.					
	i) All work upto plinth level	391.00	CuM			
	b) All work from plinth level upto floor V level					
	i) Walls, columns, pillars, posts and struts	236.00	CuM			
	ii) Beams, girders, bressumers, cantilevers, Suspended floors lintels roofs and staircases including spiral staircases, shelves etc.	1042.00	CuM			
3.02	Deduct for providing M-20 grade RCC instead of M-25 grade RCC	75.00	CuM			
3.03	Add for providing M-30 grade RCC instead of M-25 grade RCC	236.00	CuM			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
3.04	Centering and shuttering including strutting, propping etc.with steel tubes and extension piers or built up section of roll steel and steel shuttering up to 3.5 m height and removal of form for :					
	a) Foundations, footings, bases of columns etc., mass concrete, and precast shelves.	495.00	SqM			
	b) Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc.	51.00	SqM			
	c) Suspended floors, roofs, landing and balconies.	3600.00	SqM			
	d) Lintels, beams, plinth beams, girders, bressumers and cantilevers.	3675.00	SqM			
	e) Columns, pillars, Piers, Abutments posts and struts.	2286.00	SqM			
	f) Stairs, (excluding landings) except spiral - staircases	105.00	SqM			
	g) Shelves, Platforms, counters etc	100.00	SqM			
	h) Small lintels not exceeding 1.5 m clear span ,moulding as in cornices,window sills,string courses,bands ,copings,bed plates,anchor blocks and the like	60.00	SqM			
3.05	Extra for shuttering in circular work in					
	a) Edges of slabs and breaks in floors and walls.	20.00	SqM			
3.06	Extra for additional height in centring, shuttering wherever required with adequate bracing, propping etc. including cost of de-shuttering at all levels over a height of 3.5 m for every additional height of 1 metre or part thereof (plan area to be measured)					

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
3.07	a) Suspended floors, roofs, landing, beams and balconies	1530.00	SqM			
	Reinforcement for RCC work including straightening, cutting, bending, binding and placing in position complete.					
	a) Cold twisted bars/ Thermo mechanically treated bars as mentioned in the drawing.	260.00	Tonne			

SUB TOTAL

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
4.00 BRICK WORK						
4.01	Brick work with bricks of class designation 75 in Cement mortar 1:6 (1cement : 6 coarse sand)					
	a) In foundation and plinth	35.00	CuM			
	b) In Superstructure					
	i) From plinth level to floor V level.	850.00	CuM			
4.02	Half brick masonry with bricks of class designation 75 in Cement mortar 1:3 (1 cement : 3 coarse sand)					
	a) In foundation and plinth	20.00	SqM			
	b) In Superstructure					
	i) From plinth level to floor V level.	2150.00	SqM			
4.03	Extra for providing and placing in position 2 Nos. 6 mm dia M.S. bars at every third course of half brick masonry.					
		2150.00	SqM			
4.04	Extra for forming Cavity in cavity walls with necessary weep and vent holes including use of cores and cost of providing and fixing bitumastic coated M.S. ties 600 mm long of 25mmx3mm section at not less than 3 ties per sqm as per approved design.					
		445.00	SqM			

SUB TOTAL

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7

5.00 DOORS & WINDOWS

5.01 Providing and fixing anodised aluminium work for doors, windows, ventilators and partitions with extruded built-up standard tubular and other sections of approved make conforming to IS:733 and IS:1285, color anodised to required shade according to IS:1868. (Minimum anodic coating of grade AC 15), fixed with rawl plugs and screws or with fixing clips, or with expansion hold fastners including necessary filling up of gaps at junctions, at top, bottom and sides with required PVC/neoprene felt etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / panelling, C.P. brass / stainless steel screws, all complete as per architectural drawings and as directed. (Glazing and panelling to be paid for separately).

(i) For fixed portions

12474.00 Kg.

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
	(ii) For shutters of doors, & windows stay including providing and fixing Stainless Steel friction hinges/ pivots and making provisions for fixing of fittings wherever required including the cost of PVC/ neoprene gasket required as per drawing and as directed. (Fittings like lockable handles, tower bolts etc shall be paid for separately.)	1520.00	Kg.			
5.02	Providing and fixing flush door shutters decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters: a) 35mm thick including anodised aluminium butt hinges with necessary screws.	94.00	SqM			
5.03	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions, curtain walls etc. complete as per the architectural drawings and as directed. (Cost of aluminium snap beading shall be paid in basic item). a) With glass panes of 4.0mm thickness (weight not less than 10.00 kg./sqm.)	280.00	SqM			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
	b) With glass panes of 5.50mm thickness (weight not less than 13.75 kg./sqm.)	15.00	SqM			
5.04	Extra for providing frostings on glass panes of 10.00 kg/sqm. (4mm thick) instead of ordinary glass panes 10.0 kg/sqm. (4mm thick) respectively in doors, windows and clerestory window shutters. (Area of opening for glass panes excluding portion inside rebate shall be measured)	15.00	SqM			
5.05	Extra for providing vision panel not exceeding 0.1 sqm. In all type of flush doors (Cost of glass excluded) (over all area of door shutter to be measured).					
	i) Rectangular or square	25.00	SqM			
5.06	Providing glass panes, with wooden fillets wherever necessary.					
	a) 3mm thick Glass panes weighing 7.5 kg./sqm.	1.00	SqM			
5.07	Providing and fixing aluminium handles colour anodised (anodic coating not less than grade AC10 as per IS: 1868) to required colour or shade with necessary screws etc. complete.					
	a) 125 mm.	416.00	Each			
	b) 100mm for windows (lockable type)	449.00	Each			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
5.08	Providing and fixing aluminium tower bolt colour anodised (anodic coating not less than grade AC10 as per IS: 1868) to required colour or shade with necessary screws etc.					
	a) 150 x 10 mm	864.00	Each			
	b) 250 x 10 mm	208.00	Each			
5.09	Providing and fixing aluminium sliding door bolts colour anodised (anodic coating not less than grade AC10 as per IS: 1868) to required colour or shade with necessary nuts, screws etc. complete :					
	a) 250 x 16 mm	198.00	Each			
5.10	Providing and fixing aluminium pull bolt lock colour anodised (anodic coating not less than grade AC10 as per IS: 1868) to required colour or shade with necessary nuts, screws etc. complete :					
		11.00	Each			
5.11	Providing and fixing chrome plated brass 100 mm mortice latch and lock with six levers and a pair of anodised (anodic coating not less than grade AC 10 as per IS :1868) aluminum lever handles with necessary accessories and screws etc. complete . (Best make of approved quality)					
		4.00	Each			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
5.12	Providing and fixing aluminium hanging floor door stopper colour anodised (anodic coating not less than grade AC10 as per IS: 1868) to required colour & shade with necessary screws etc. complete					
	a) Twin rubber stopper	208.00	Each			
5.13	Providing and fixing double action hydraulic floor spring of approved brand and manufacture (conforming to IS : 6315) for aluminium doors including cost of cutting floors as required, embedding in floors and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as directed. with stainless steel cover plate					
		8.00	Each			
5.14	Providing and fixing chrome plated brass 100 mm mortice latch with one dead bolt & a pair of lever handles with necessary accessories and screws etc. complete .					
	(Best make of approved quality)	3.00	Each			
5.15	Providing and fixing 35mmx12mm wooden moulded beading to door and window frames with iron screws, plugs and priming coat on unexposed surface etc. complete					
	a) Approved quality 1st class local hard wood	2100.00	Metre			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
5.16	Providing and fixing aluminium U beading of required size to prelaminate / flush door shutter including fixing etc. complete as per direction of the Engineer.	17.00	Kg.			
5.17	Extra for providing etching on glass panes in doors, windows and clerestory window shutters, partitions etc in desired pattern complete as per drawing and as directed. (Area of etching shall be measured for payment)	10.00	SqM			
5.18	Providing and fixing IS : 3564 marked aluminium extruded section body tubular type universal hydraulic door closer with double speed adjustment with necessary accessories etc complete.	5.00	Each			
5.19	Providing fixing wooden spacer frames of required size for fixing the aluminum windows including nails, screws etc including finishing with synthetic enamel paint on all exposed surfaces complete as per drawing and as directed.					
	a) Approved quality IInd class local hard wood	6.00	CuM			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
5.20	Providing and fixing 35mm panelled or panelled and glazed shutters for doors, windows and clerestory windows including black enamelled M.S butt hinges with necessary screws excluding, panelling which will be paid for separately.					
a)	Approved quality IInd class local hard wood	345.00	Sqm			
5.21	Providing and fixing panelling or panelling in glazing in panelled or panelled and glazed shutters for shutters for doors, windows and clerestory windows(area of opening for panel inserts excluding portion inside grooves or rebate to be measured).Panelling for panelled or panelled and glazed shutters 25mm to 40mm thick					
a)	Plain particle board flat pressed 3 layer or graded(medium density) grade I, conforming to IS:3087	156.00	Sqm			

SUB TOTAL

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
6.00 STEEL WORK						
6.01	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. all complete as directed.	4300.00	Kg.			
6.02	Supplying and fixing rolling shutters of approved make, made of required size MS laths interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete as per drawing including the cost of providing and fixing necessary 27.5cm long wire springs grade No.2 and MS top cover of required thickness for rolling shutters.					
	a) 80 x 1.25 mm M.S. laths with 1.25 mm thick top cover.	100.00	SqM			
6.03	Providing and fixing ball bearing for rolling shutters.	18.00	Each			
6.04	Extra for providing grilled rolling shutters manufactured out of 8mm dia M.S. bar instead of laths as per design approved by Engineer (Area of grill to be measured)	25.00	SqM			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
6.05	Extra for providing mechanical device chain and crank operation for operating rolling shutters a) Exceeding 10 SqM and up to 16.80 SqM in the area	35.00	SqM			
6.06	Steel work welded in built up sections/frame work including cutting, hoisting, fixing in position, making holes, repairing and applying a priming coat of approved steel primer using structural steel etc. as required. a) In gratings, frames, guard bar, ladders, railings, brackets, gates in similar works. b) In stringers, treads, landings etc. of staircases including use of chequered plates, inserts etc. wherever required, all complete.	2100.00	Kg.			
		300.00	Kg.			
6.07	Providing and fixing handrail in M.S. tubes, plates, rods, flats etc. by cutting, welding, fabricating and fixing etc. in steel ladder, railing, balcony railing & staircase railing including applying a priming a coat of approved steel primer. a) a) Upto 65 mm dia M.S. pipe	950.00	Kg.			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
6.08	Providing and fixing steel glazed doors, windows and ventilators of standard rolled steel sections, joints mitred and welded with 15x 3 mm lugs, 10 cm long, embedded in cement concrete blocks 15 x 10 x10 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 providing and fixing of glass panes 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 fittings except necessary hinges or pivots as required.					
	a) Windows fixed	11.00	SqM			
	b) Windows side hung	25.00	SqM			
6.09	Providing and fixing oxidised M.S handles conforming to IS 4992 with necessary screws etc. complete.					
	a) 125 mm.	10.00	Each			
	b) 100 mm	35.00	Each			
6.10	Providing and fixing oxidised M.S tower bolt black finished (Barrel type)with necessary screws etc. complete					
	(a) 150 x 10 mm	35.00	Each			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
6.11	Providing and fixing oxidised M.S sliding door bolts with necessary nuts, screws etc. complete a) 250 x 16 mm	5.00	Each			
6.12	Providing and fixing 1mm thick M.S. sheet door with frame of 40x40x6 mm angle iron and 3mm M.S. gusset plates at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer. a) Using M.S. angles 40x40x6 mm for diagonal braces	12.00	SqM			
6.13	Providing and fixing M.S. Structural work fabricated from standard sections i.e. rounds, solid angles, slotted angles, channels including cutting to size, drilling, welding, fixing and welding to insert plates in RCC structural members fixing to RCC members through dash fastners of suitable size as directed including cutting and making good the walls and floors (for pipe hangers/supports, clamps, ladders, lockable covers for water storage tanks, cable trays and supports etc.).	610.00	Kg.			

SUB TOTAL

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
7.00 FLOORING						
7.01	Machine cut 18mm thick Marble stone flooring over 20mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with grey cement slurry mixed with pigment to match the shade of slabs including rubbing and polishing complete as per design including laying in strips & simple patterns with :					
	a) Udaipur Green Marble	20.00	SqM			
	b) Jaisalmer Yellow marble	105.00	SqM			
7.02	Kota Stone slab flooring laid over 20mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete.					
	a) 25 mm thick	865.00	SqM			
7.03	Kota stone slabs 25mm thick in risers of steps, skirting, dado and pillars laid on 12mm (average) thick cement mortar 1:3 (1 cement : 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.					
		105.00	SqM			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
7.04	Providing and fixing glass strips in joints of terrazzo/ cement concrete floors. a) 40 mm wide and 6 mm thick	1430.00	Metre			
7.05	Marble stone tile in skirting, risers of steps laid over 12mm (average) thick base of cement mortar 1:3 (1 cement : 3 coarse sand) laid and jointed with white cement slurry mixed with pigment to match the shade of slab , flush with the wall plaster / tiles including rubbing and polishing complete. a) Udaipur green marble Stone Tile (8mm nominal thickness) b) Marble tiles (polished) Rajnagar (8mm nominal thickness)	175.00 60.00	SqM SqM			
7.06	Providing and laying 62mm thick cement concrete flooring comprising an under layer of 50mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) and top layer of 12mm thick metallic cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 selected stone aggregate 6mm nominal size) by volume including a floating coat of neat cement slurry, with coving at corners etc. all as required, as per specifications, drawings and as directed complete.	482.00	SqM			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
7.07	Cement plaster skirting & dado with cement mortar 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement. a) 18 mm thick	50.00	SqM			
7.08	Extra for mirror polishing on Kota/Marble stone work where ever required to give high gloss finish complete over the corresponding item of flooring.	50.00	SqM			
7.09	Providing and fixing 1st quality ceramic glazed tiles conforming to IS : 13753 of minimum thickness 5mm of approved make in all colours , shades except burgundy, bottle green, black of any size as approved by Engineer-In-Charge in skirting, risers of steps and dados over 12mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3 kg per sqM including pointing in white cement mixed with pigment of matching shade complete. Size upto 300x300mm.	970.00	SqM			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
7.10	Precast terrazzo tiles 20mm thick with marble chips of size upto 6mm as per approved shade laid in floors and landings, jointed with neat cement slurry mixed with pigment to match the shade of the tiles including rubbing and polishing complete with precast tiles on 20 mm thick bed of cement mortar 1:4 (1 cement : 4 coarse sand)					
	a) Light shade using white cement	1730.00	SqM			
7.11	Providing and laying in ceramic glazed floor tiles (thickness to be specified by manufacturer) of 1st quality conforming to IS:13755, in all colours and shades except White,Ivory,greys, Fume red Brown, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including grouting and pointing the joints with white cement and matching pigment etc. complete.					
	a) Sizes upto 395mm x 395mm.	325.00	SqM			
7.12	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.					
	a) 40mm thick with 20mm nominal size stone aggregate	50.00	SqM			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
7.13	Providing and fixing mirror polished, machine cut for kitchen platforms, vanity counters facias and similar locations of required size of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1cement: 4coarse sand) with joints treated with white cement , mixed with matching pigment, epoxy touch ups, including rubbing, curing etc. complete at all levels.					
	i) Over 0.5 SqM and upto 1.0 SqM					
	a) 18mm thick Udaipur Green Marble	15.00	SqM			
	ii) Over 1.0 SqM and upto 2.0 SqM					
	a) 18mm thick Udaipur Green Marble	15.00	SqM			
7.14	Extra for providing edge moulding to 18 mm thick Granite stone counters, vanities etc. over item no. 7.13 including machine polishing to edge to give high gloss finish etc. complete as per design and as approved by the Engineer.					
		40.00	Metre			
7.15	Extra for nosing in steps and treads of specified stone slab.					
		180.00	Metre			

SUB TOTAL

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
8.00 CEILING & ROOFING						
8.01	Making khurras 45 x 45 cm with average minimum thickness of 5cm cement concrete 1:2:4 (1:cement: 2 coarse sand: 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1m x 1m 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.	24.00	Each			
8.02	Providing and applying water proofing treatment in vertical and horizontal surfaces using (Cement based crystallining product to run in capillaries of concrete) mixed in water in ratio as per manufacturers specifications & applied by brushes on wet concrete surface as per specification and as directed.	430.00	SqM			
8.03	Providing and filling cement concrete 1:5:10 (1 Cement : 5 Coarse sand : 10 broken brick bats 40 to 80 mm nominal size) including watering, ramming etc. complete as directed.	40.00	CuM			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
8.04	Providing and laying brick tiles of class designation 100 over roofs grouted with cement mortar 1:3 (1 cement :3 fine sand) mixed with 2 % integral water proofing compound laid over a bed of 20 mm thick cement mortar 1:4 (1 cement : 4 coarse sand) and finished neat complete.	1480.00	SqM			
8.05	Providing and laying APP (Atactic Polypropylene Polymer) modified prefabricated five layers, 3mm thick water proofing membrane, black finished reinforced with non oven polyester matt of approved manufacturer consisting of a coat of bitumen primer for bitumen membrane @ 0.40 ltr/sq.mt. by the same membrane manufactured of density at 25 Degree Celsius ,0.87-0.89Kg/ltr and viscosity 70-160cps Over the primer coat the layer of membrane shall be laid using butane torch and sealing all joints etc., and preparing the surface complete as per manufacturer's specifications and as directed. 3mm thick (Work to be got executed through a specialised agency and covered by a 10 years guarantee by the main contractor)	1480.00	SqM			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
8.06	Grading roof for water proofing treatment with Cement concrete 1:2:4 (1 cement concrete : 2 coarse sand: 4 graded stone aggregate 12.5 mm nominal size) including mixing Recron -3S fibre or equivalent with concrete to prevent any surface crack as per manufactures specifications all complete	122.00	CuM			
8.07	Extra for covering top of membrane with geotextile, 120gsm non woven, 100% polyester of thickness 1 to 1.25mm bonded to the membrane with intermittant touch by heating the membrane by Butane Torch as per manufactures recommendation	925.00	SqM			

SUB TOTAL

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
9.00 FINISHING						
9.01	12 mm cement plaster of mix; a) 1:6 (1 cement: 6 medium sand)	4780.00	SqM			
9.02	15 mm cement plaster on the rough side of single or half brick wall of mix: a) 1:6 (1 cement: 6 medium sand) b) 1:4 (1 cement: 4 medium sand)	3150.00 1355.00	SqM SqM			
9.03	6 mm cement plaster of mix.1:3 (1 cement : 3 medium sand)	3465.00	SqM			
9.04	20 mm cement plaster on the rough side of single or half brick wall of mix: a) 1:4 (1 cement: 4 medium sand)	2335.00	SqM			
9.05	Neat cement punning.	150.00	SqM			
9.06	Providing and applying wall care putty of 3mm thickness (average) over plastered surface to prepare the surface even and smooth complete	150.00	SqM			
9.07	Supplying and applying oil bound washable distemper of approved brand and manufacture to give an even shade.					

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
	a) New work (two or more coats) over and including a primer coat with cement primer.	6685.00	SqM			
9.08	Supplying and applying plastic emulsion paint of approved brand and manufacture to give an even shade in Walls / Ceilings					
	a) Two or more coats on new work	100.00	SqM			
9.09	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade.					
	a) Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture.	795.00	SqM			
9.10	Supply & apply two or more coats of 100% pure acrylic elastomeric exterior coating at a spread rate of 45 sqft/lit. depending upon the porosity of the concrete to form a film thickness of min. 115 micron with 1000% elongation prior to that application of one coat of Sealer + 50% diluted prime coat at a spread rate of 100sqft/lit depending upon the porosity of the concrete as per the manufacturer specification & direction of the Engineer-in-charge.					
		4000.00	SqM			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
9.11	Extra for plastering exterior walls of height more than 10m from ground level for every additional height of 3m or part there of	825.00	SqM			
9.12	White washing with lime to give an even shade New work (Three or more works)	225.00	SqM			
9.13	Distemping with dry distemper of approved branded manufacture (two or more coats) and of required shade on new work, over and including priming coat of whitening to give an even shade.	4380.00	SqM			
9.14	Finishing walls with water proofing cement paint of approved band and manufacture and of required shade to give an even shade a) New work (Three or more coats)	50.00	SqM			
9.15	Rough cast plaster with a mixture of sand and gravel or crushed stone from 6mm to 10 mm nominal size dashed over and including the fresh plaster in two layers, under layer 12 mm cement plaster 1:4 (1Cement : 4 Coarse sand) and top layer 10 mm cement plaster 1:3 (1Cement : 3 Fine sand) mixed with 10 % finely grounded hydrated lime by volume of cement. a) Ordinary cement finish using ordinary cement	360.00	SqM			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7

9.16 Finishing Walls with Premium Acrylic Smooth Exterior paint with Silicone additives "Snowcyl-XT" or equivalent of required shade.

a) New Work (Two or more coats applied @1.43ltr/10 sqm over and including base coat of water proofing cement paint Snowcem Plus or equivalent applied @2.20 kg/10sqm)

50.00 SqM

SUB TOTAL

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
10.00 MISCELLANEOUS						
10.01	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 bed of dry brick ballast 40 mm nominal size well rammed and consolidated and grouted with fine sand including finishing the top smooth.	184.00	SqM			
10.02	Providing and fixing 24 gauge and 18 mm mesh size chicken wire mesh at junction of concrete and brickwork and other locations including cutting to required size and side laps of minimum 75 mm and fixing in position with cement and nails as directed.	1480.00	SqM			

SUB TOTAL

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7

11.00 INTERNAL PLUMBING , WATER SUPPLY & SANITARY FIXTURES

A) SANITARY FIXTURES & INTERNAL PLUMBING

11.01 Providing and fixing white vitreous china water closet squatting pan (Indian type W.C. pan) with 100mm sand cast Iron P or S trap, 10 litre low level P.V.C. flushing cistern (of approved make) with fittings, C.I./M.S. brackets, 32mm diameter flush pipe with fittings and clamps, over-flow arrangement with specials and mosquito proof coupling of approved municipal design including painting of fittings and brackets, cutting and making good the walls and floors wherever required.

a) Orissa pattern W.C. pan of size 580x440mm with integral type foot rests flush pipe and overflow arrangement.

4.00 Each

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
11.02	<p>Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, with C.P. brass hinges and rubber buffers, 10 litre low level flushing cistern with fittings & C.I./ M.S. brackets, 40mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete including painting of fittings and brackets, cutting and making good the walls and floors wherever required:</p> <p>a) W.C. pan with black solid plastic seat & lid, with white vitreous china flushing cistern and C.P. flush bend.</p>	34.00	Each			
11.03	<p>Providing and fixing white vitreous china wash basin with C.I./M.S. brackets, 15mm C.P. brass pillar taps, 32mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever required:</p> <p>a) Flat back wash basin size 550 x 400 mm with a single 15mm C.P. brass pillar tap.</p> <p>c) Oval shape wash basin with counter top 520 x 410 mm with wash basin mixer.</p>	25.00	Each			
		6.00	Each			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
11.04	Providing and fixing stainless steel kitchen sink as per I.S.13983 with C.I brackets and stainless steel plug 40mm including painting of fittings and brackets, cutting and making good the walls wherever required. a) Kitchen sink with drain board 510x1040 bowl depth 178mm	8.00	Each			
11.05	Providing and fixing bottle trap for wash basins and sinks. a) 32 mm dia b) 40mm dia	35.00 8.00	Each Each			
11.06	Providing and fixing 600x450mm bevelled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	2.00	Each			
11.07	Providing and fixing full size branded mirrors of 5mm thick float glass (of approved quality) complete with 6mm thick ply backing fixed to wall over suitable hardwood base frame complete with 32mmx19mm decorative teakwood moulding all around duly polished as per drawings and as directed.	10.00	SqM			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
11.08	Providing and fixing unplasticised PVC connection pipe with brass unions, 45 cm length. a) 15 mm dia nominal bore	85.00	Each			
11.09	Providing and fixing G.I EXTENSION PIECE for 100 mm dia floor trap formed out of main pipe(Type A) with multiple side inlets, suitable for various dia pipes, side connections, including all fixtures and fittings as per site conditions and as per standard details and water tight sealing of joints and area surrounding the grating and as directed.	110.00	Each			
11.10	Providing and fixing C.P. brass liquid soap container with C.P. brass lid and brackets fixed to wall with wooden cleats and C.P. brass screws, including cutting and making good the walls wherever required.	21.00	Each			
11.11	Providing and fixing toilet paper holder . a) Vitreous china	34.00	Each			
11.12	Providing and fixing CP brass twin coat hooks fixed on toilet door/wall with CP brass screws.	20.00	Each			
11.13	Providing and fixing towel rail complete with brackets fixed to wooden cleats with C.P. brass screws.					

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
a)	C.P. brass towel rail with two C.P. brass brackets 600 x 20 mm size.	21.00	Each			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
B) SOIL, WASTE, RAIN WATER AND VENT PIPES						
11.14	Providing and fixing soil, waste and vent pipes. a) 100 mm dia. Centrifugally cast (spun) iron S&S	345.00	Metre			
11.15	Providing and fixing M.S holder-bat clamps of approved design to Centrifugal Cast iron/ cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10 cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) including cost of cutting holes and making good the walls etc. a) for 100 mm dia. pipe	263.00	Each			
11.16	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete. a) 100 mm Centrifugally cast (spun) iron S&S.	52.00	Each			
11.17	Providing and fixing plain bend of required degree. a) 100 mm Centrifugally cast (spun) iron S&S	32.00	Each			
11.18	Providing and fixing heel rest sanitary bend. a) 100 mm Centrifugally cast (spun) iron S&S	16.00	Each			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
11.19	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3mm thick, bolts and nuts complete. a) 100x100x100mm Centrifugally cast (spun) iron S&S	13.00	Each			
11.20	Providing and fixing terminal guard. a) 100 mm Centrifugally cast (spun) iron S&S	17.00	Each			
11.21	Providing and fixing Double equal junction of required degree with access door, insertion rubber washer 3mm thick, bolts and nuts complete. a) 100x100x100 x100mm Centrifugally cast (spun) iron S & S pipe	10.00	Each			
11.22	Providing and fixing collar: a) 100 mm dia Centrifugally cast (spun) iron S&S	203.00	Each			
11.23	Providing lead caulked joints to sand cast iron /centrifugally cast (spun) iron pipes and fittings of diameter: a) 100 mm	744.00	Each			
11.24	Providing and fixing M.S. stays and clamps for sand cast iron / centrifugally cast (spun) iron pipes of diameter : a) 100 mm	42.00	Each			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
11.25	Providing and fixing sand cast iron/centrifugally cast(spun) iron trap of self cleansing design with sand cast iron screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors: a) 100 mm inlet and 100 mm outlet	113.00	Each			
11.26	Extra for providing and fixing stainless steel jali (grating) in place of C.I. grating with or without hole for waste pipe for floor/ Nahani trap. a) 100 mm dia weight not less than 100 gms.	112.00	Each			
11.27	Painting sand cast iron / centrifugally cast (spun) iron soil, waste vent pipes and fittings with paint of any colour such as chocolate, grey, or buff etc. over a coat of primer (of approved quality) for new work: a) 100 mm diameter pipe	197.00	Metre			
11.28	Providing and fixing G.I.(heavy class) pipes and fittings conforming to IS: 1239 clamps and hinges including cutting chases and holes and making good the walls and ceiling for waste pipes from wash basins, urinals kitchen sink and equipment waste connections pump deliveries & suction & condensate drainage as directed.					

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
	a) 32 mm nominal bore	40.00	Metre			
	b) 40 mm nominal bore	60.00	Metre			
11.29	Providing and laying 50mm thick cement concrete 1:5:10 (1 cement :5 coarse sand: 10 hard stone aggregate 20mm and down gauge) around C.I. pipes as per design and as directed.					
	a) 100 mm dia	135.00	Metre			
11.30	Providing and fixing unplasticised-PVC pipe clips of approved design to unplasticised-PVC rain water pipes by means of 50x50x50 mm hard wood plugs,screwed with M.S screws of required length including cutting brick work and fixing in cement mortar 1:4(1 cement:4 coarse sand) and making good the wall etc. complete.					
	i) 110mm	13.00	Each			
	ii) 160mm	65.00	Each			
11.31	Providing and fixing on wall face unplasticised-PVC (working pressure 4kg per sqm cm) rain water pipes conforming to IS: 4985 including jointing with seal ring conforming to IS:5382 leaving 10mm gap for thermal expansion.					
	(I) Single socketed pipes					
	a) 110 mm diameter	40.00	Metre			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
	b) 160mm	195.00	Metre			
11.32	Providing and fixing on wall face fittings/ accessories for rain water pipes conforming including jointing with seal ring conforming to IS:5382 leaving 10mm gap for thermal expansion.					
	a) Coupler					
	i) 110 mm diameter	12.00	Each			
	ii) 160 mm diameter	65.00	Each			
	b) Bend 87.5o					
	i) 110mm bend	8.00	Each			
	ii) 160mm	65.00	Each			
	c) Shoe (plain)					
	i) 110 mm	8.00	Each			
	ii) 160 mm	16.00	Each			
11.33	Providing & fixing to the inlet mouth of rain water pipe with grating					
	a)For 110 OD pipe	8.00	Each			
	b)For 160 OD pipe	16.00	Each			
11.34	Providing and fixing GI class-B pipe spouts for rain water 300mm -600m long including cutting to required size etc complete in all respects.					
	a) 40 mm dia	16.00	Metre			
	b) 50 mm dia	16.00	Metre			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
11.35	Providing and fixing floor drain points formed out of 65 mm dia GI elbow, 32/40 mm GI outlet including with 75mm dia Stainless Steel grating with frame, embedded in floor, all complete as directed.	20.00	Each			
11.36	Providing and fixing cast brass clean out /Floor clean out plug with suitable insert keys for opening male threaded joint fixed to G.I.socket complete (cleanout to be flushed with floor finish) a) 100 mm dia	26.00	Each			
11.37	Providing & fixing 125mm dia stainless steel cockroach trap with all accessories complete as per drawing.	8.00	Each			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
C WATER SUPPLY						
11.38	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, including cutting and making good the walls etc. (Internal work):					
	a) Concealed					
	I) 15 mm dia nominal bore	140.00	Metre			
	ii) 20 mm dia nominal bore	80.00	Metre			
	iii) 25 mm dia nominal bore	140.00	Metre			
	iv) 32 mm dia nominal bore	15.00	Metre			
	b) Exposed on Wall					
	I) 15 mm dia nominal bore	5.00	Metre			
	ii) 20 mm dia nominal bore	15.00	Metre			
	iii) 25 mm dia nominal bore	70.00	Metre			
	iv) 32 mm dia nominal bore	42.00	Metre			
	v) 40 mm dia nominal bore	25.00	Metre			
	vi) 50 mm dia nominal bore	25.00	Metre			
	vii) 65 mm dia nominal bore	15.00	Metre			
11.39	Providing and fixing brass gate valve with C.I. wheel of approved quality (screwed end).					
	i) 20 mm dia nominal bore	8.00	Each			
	ii) 25 mm dia nominal bore	16.00	Each			
	iii) 32 mm dia nominal bore	9.00	Each			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
	iv) 40 mm dia nominal bore	2.00	Each			
	v) 50 mm dia nominal bore	8.00	Each			
	vi) 65 mm dia nominal bore	2.00	Each			
11.40	Painting G.I. pipes and fittings with white paint over a ready mixed priming coat, both of approved quality for new work..					
	I) 15 mm dia nominal bore	5.00	Metre			
	ii) 20 mm dia nominal bore	15.00	Metre			
	iii) 25 mm dia nominal bore	70.00	Metre			
	iv) 32 mm dia nominal bore	42.00	Metre			
	v) 40 mm dia nominal bore	25.00	Metre			
	vi) 50 mm dia nominal bore	25.00	Metre			
	vii) 65 mm dia nominal bore	15.00	Metre			
11.41	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality.					
	I) 15 mm dia nominal bore	140.00	Metre			
	ii) 20 mm dia nominal bore	80.00	Metre			
	iii) 25 mm dia nominal bore	140.00	Metre			
	iv) 32 mm dia nominal bore	15.00	Metre			
11.42	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.					
	a) 15 mm nominal bore	101.00	Each			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
11.43	Providing and fixing C.P brass bib cock of approved quality. a) 15mm nominal bore.	35.00	Each			
11.44	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931. a) 15 mm nominal bore	153.00	Each			
11.45	Providing and fixing ball valve (brass) of approved quality complete:- High or low pressure with plastic floats a) 25 mm nominal bore	6.00	Each			
11.46	Supplying, fixing, testing and commissioning of storage type water heater (Geyser) etc. with automatic thermostatic control electric element, pressure release valve, M.S. nuts and bolts etc. conforming to IS: 2082 b) 25 Litre Capacity	25.00	Each			
11.47	Making chases upto 7.5 x 7.5 cm in walls including making good after housing G.I. pipe etc.	50.00	Metre			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
11.48	Providing and placing on terrace (at all floors) polyethylene water storage tank ISI : 12701 MARKED indicating the BIS license No 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.	26500.00	Litre			
11.49	Providing & fixing 9 mm thick thermal insulation tubing of elastomeric flexible material having hermetic blistered closed cell structure of expanded synthetic rubber over pipes/ fitting as per manufacturer's specifications etc.complete.					
	a) 15 mm dia nominal bore with wrapping of two layer of PVC heavy gauge sheet over insulation.	20.00	Metre			
	b) 20 mm dia nominal bore with wrapping of two layer of PVC heavy gauge sheet over insulation	25.00	Metre			
	c) 25 mm dia nominal bore with wrapping of two layer of PVC heavy gauge sheet over insulation	25.00	Metre			
11.50	Providing and fixing C.P. brass adjustable shower with 15 or 20mm inlet	34.00	Each			

SUBTOTAL

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7

12.00 SEWERAGE AND DRAINAGE

12.01	Providing laying and jointing glazed stoneware pipes grade 'A' with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete.					
	a) 100 mm diameter	25.00	Metre			
12.02	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) around S.W./RCC pipes including bed concrete as per standard design:					
	a) 100 mm diameter	25.00	Metre			
	b) 150 mm diameter	160.00	Metre			
	c) 250 mm diameter	310.00	Metre			
12.03	Providing and fixing square-mouth S.W. gully trap grade 'A' complete with C.I. grating, brick masonry chamber with bricks of class designation 50 and water tight C.I. cover with frame of 300x300 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.					
	a) 100x100mm size P type	12.00	Each			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
12.04	Constructing brick masonry manhole with 75 class designation bricks in cement mortar 1:4 (1 cement : 4 coarse sand), R.C.C. top slab with 1:2:4 mix (1cement : 2 coarse sand : 4graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 (1cement : 4 coarse sand : 8graded stone aggregate 40 mm nominal size), inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, and making necessary channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement all complete as per standard design.					
	a) Inside size 90x80 cm and 60 cm deep including C.I. cover and frame (light duty), 455x610 mm internal diameter total weight of cover and frame to be not less than 38 kg.. (Weight of cover 23 Kg and weight of frame 15 Kg.)			17.00	Each	
	b) 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.)			5.00	Each	
12.05	Extra depth for manholes					

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
	a) Size 90 x 80 cm		1.00 Metre			
	b) Size 120x 90 Cm		1.00 Metre			
12.06	Providing and fixing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS: 10910 on 12 mm dia steel bar conforming to IS: 1786 having minimum cross section as 23 mm x 25 mm and over all minimum length 263 mm and width as 165 mm with minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete as per design.		61.00 Each			
12.07	Providing and laying non-pressure NP2 class (light duty) S & S R.C.C. pipes jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete.					
	a) 150 mm dia R.C.C pipe		165.00 Metre			
	b) 250 mm dia R.C.C pipe		300.00 Metre			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
12.08	Providing and laying non-pressure NP3 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.					
	a) 150 mm dia. R.C.C. pipe.	10.00	Metre			
	b) 250 mm dia. R.C.C. pipe.	10.00	Metre			
12.09	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete.					
	a) For pipes 150 to 300mm in diameter	2.00	Each			
12.10	Constructing brick masonry gully chamber / catch basin 50x45x45 cm with bricks of class designation 75 in cement mortar 1:5 (1 cement : 5 fine sand) including 500 x 450 mm pre-cast RCC horizontal grating with frame complete as per standard design.					
		20.00	Each			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
12.11	Extra depth for Gully chamber size 50x45 cm	2.00	Metre			
12.12	Making soak pit 2.5 diameter 3.0 meter deep with 45 x 45 cm dry brick honey comb shaft with bricks of class designation 75 and S.W. drain pipe 100 mm diameter, 1.8 m long complete as per standard design. a) With F.P.S. bricks	2.00	Each			
12.13	Constructing brick masonry water tight grease trap with 75 class designation bricks in cement mortar 1 : 5 (1 cement : 5 fine sand) earth work, excavation in all kinds of soil, foundation concrete 1 : 4 : 8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size) inside and outside plastering 12 mm thick with cement mortar 1 : 3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement including constructing baffle wall, stainless steel angles on corners, stainless steel perforated plates with stainless steel lifting handles, inlet and outlet fittings, double seal C.I. covers complete as per standard design : a) Inside size 1.2 m x 0.6 m and 1.2 m deep including two nos. 60x60 cm. C.I. Cover and frame (double seal weight of cover and frame not less than 75 kg)	1.00	Each			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
12.14	Constructing brick masonry open surface drain with bricks of class designation 75 in cement mortar 1:4 (1 cement : 4 fine sand) including earth excavation, 10cm thick bed concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40mm nominal size) and 25mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size) for filling haunches including 12mm plaster 1:4 (1 cement : 4 coarse sand) with a floating coat of neat cement inside the drain, its top and exposed side including disposal of surplus earth complete as per standard design :	430.00	Metre			
a)	30 cm drain 30 cm average depth With F.P.S. bricks					

SUB TOTAL

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
13.00	EXTERNAL WATER SUPPLY , WATER TREATMENT					
13.01	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. (external work)					
	a) 25 mm dia nominal bore	20.00	Metre			
	b) 32 mm dia nominal bore	10.00	Metre			
	c) 40 mm dia nominal bore	5.00	Metre			
	d) 50 mm dia nominal bore	5.00	Metre			
	e) 65 mm dia nominal bore	70.00	Metre			
13.02	Providing and fixing brass ferrule with C.I. Mouth cover including boring and tapping the main					
	a) 25 mm nominal bore	4.00	Each			
13.03	Making connection of G.I. Distribution branch with G.I. Main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete."					
	a) 25 to 40mm nominal bore	4.00	Each			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
13.04	Constructing masonry Chamber 30x30x50 cm, inside with 75 class designation brick work in cement mortar 1:5 (1 cement :5 fine sand) for gate valve, with C.I. surface box 100mm. x100x75 (inside) with hinged cover fixed in cement concrete slag 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) necessary excavation foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement :3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design.					
		4.00	Each			
13.05	Providing and filling sand of grading zone V or coarser grade alround the G.I. pipes in external work.					
	a) 25 mm dia nominal bore	20.00	Metre			
	b) 32 mm dia nominal bore	25.00	Metre			
	c) 40 mm dia nominal bore	5.00	Metre			
	d) 50 mm dia	5.00	Metre			
	e) 65 mm dia	70.00	Metre			
13.06	Providing and fixing brass stop cock of approved quality					
	a) 20mm nominal bore	2.00	Each			

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
13.07	Disinfecting G.I. /C.I. Water mains by flushing with water containing bleaching powder at 0.5gms per litre of water and cleaning the same with fresh water, operation to be repeated 3 times including getting the sample of water from disinfected main tested in the municipal laboratory.					
	a) up to 80 mm dia C.I./G.I pipe	110.00	Metre			
SUB TOTAL						

Item No	Description of Item	Total Qty.	Unit	Rate in Rs. (in Figures)	Rate in Rs. (in Words)	Amount in Rs.
1	2	3	4	5	6	7
14.00 FIRE FIGHTING SYSTEM						
14.01	Providing and fixing fire extinguisher of carbon dioxide type consisting of brand new high pressure steel cylinder bearing IS: 7285 mark and having the approval of controller of explosives Nagpur, wheel type valve bearing IS:3224 mark internal discharge tube, 1 meter long high pressure discharge hose, non conducting horn, suspension bracket, fully charged bearing IS: making fixed to wall as directed.					
	a) 4.5kg capacity cylinder	15.00	Each			
14.02	Providing and fixing 9 litres capacity fire extinguisher water type gas pressure conforming to IS marking, fixed to wall.					
		15.00	Each			
14.03	Providing and fixing ABC type fire extinguishers complete in all respects.					
	a) Capacity 2.0 Kg.	15.00	Each			

SUBTOTAL

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5	6	7

1.00 MV PANELS & DISTRIBUTION BOARDS

1.01 MAIN DISTRIBUTION BOARD - GF NH

Supply, installation, testing and commissioning of M.V. cubicle type totally enclosed free standing type, dust, damp and vermin proof Main Distribution Board with lockable arrangement, neoprene gaskets, complete with busbars, M.V. danger notice plate, ammeter, ammeter selector switch, voltmeter, voltmeter selector switch, indicating lamps, CT's, interconnections with suitable capacity aluminum leads/ solid aluminum strips/rods, connectors, all accessories, connection of incoming and outgoing cables with thimbles, stove enameled painted, proper base frame, and having following incoming and outgoing switchgears etc complete as required.

INCOMER :

1 No. 315 Amp. 415 Volts, TPN Switch Disconnecter Fuse Unit with HRC fuses.

1 No. 0-500 Volt voltmeter with selector switch.

1 No. 0-315 Amp. ammeter with selector switch and 315/5A CT.

1 No Energy Meter with fuses.

1 Set of phase indicating lamp with HRC fuses.

BUSBARS :

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5	6	7
	400 Amp TPN busbars of aluminum alloy.					
	OUTGOINGS :					
	4 No. 100 Amp. 415 Volts, TPN Switch Disconnecter Fuse Unit with HRC fuses.					
	4 No. 40 Amp. 415 Volts, TPN Switch Disconnecter Fuse Unit with HRC fuses.					
	2 No. 63 Amp. 415 Volts, TPN Switch Disconnecter Fuse Unit with HRC fuses.		1 Set			
1.02	SUB DISTRIBUTION BOARD - FF, SF & TF NH Supply, installation, testing and commissioning of M.V. cubicle type totally enclosed free standing type, dust, damp and vermin proof Main Distribution Board with lockable arrangement, neoprene gaskets, complete with busbars, M.V. danger notice plate, ammeter, ammeter selector switch, voltmeter, voltmeter selector switch, indicating lamps, CT's, interconnections with suitable capacity aluminum leads/ solid aluminum strips/rods, connectors, all accessories, connection of incoming and outgoing cables with thimbles, stove enameled painted, proper base frame, and having following incoming and outgoing switchgears etc complete as required.					
	INCOMER :					
	1 No. 100 Amp. 415 Volts, TPN Switch Disconnecter Fuse Unit with HRC fuses.					

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5	6	7
	1 No. 0-500 Volt voltmeter with selector switch.					
	1 No. 0-100 Amp. ammeter with selector switch and 100/5A CT.					
	1 Set of phase indicating lamp with HRC fuses.					
	BUSBARS :					
	150 Amp TPN busbars of aluminum alloy.					
	OUTGOINGS :					
	4 No. 40 Amp. 415 Volts, TPN Switch Disconnecter Fuse Unit with HRC fuses.					
	2 No. 63 Amp. 415 Volts, TPN Switch Disconnecter Fuse Unit with HRC fuses.					
		3	Set			
1.03	Supplying and fixing of following way, horizontal type, three phase and neutral, sheet steel, ivory colored, MCB distribution board (double door type with Acrylic Cover) having provision for MCB-cum-ELCB as incomer, 415 volts, on recess, complete with tinned copper busbar, din bar, detachable gland plate, interconnection including painting, earthing etc. as required.					
	i) 4 Way			#REF!	Each	
	ii) 6 Way			#REF!	Each	

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5	6	7
1.04	Supply and fixing following rating, 415 volts, MCB-cum-ELCB (Earth leakage circuit breaker with short circuit & overcurrent protection) with current sensitivity of 30mA, in the existing MCB DB complete with connections, testing and commissioning etc. as required.					
	i) 25 Amps FP		1 Each			
	ii) 32 Amps FP		2 Each			
	iii) 40 Amps FP		4 Each			
	iv) 63 Amps FP		9 Each			
1.05	Supplying and fixing following rating single pole, 240 volts, Miniature Circuit Breaker (MCB) in the existing MCB DB complete with connections, testing and commissioning etc. as required.					
	i) 6-32 Amps	#REF!	Each			
1.06	Supply and fixing following rating, 415 volts, Four Pole MCB, in sheet metal enclosure on surface/recess including connection of incoming and outgoing cables with all civil works for fixing, and all accessories complete as required					
	i) 32 Amps, Four Pole		5 Each			

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5	6	7
1.07	Supply and fixing following rating, 415 volts, Switch Fuse Unit with fuses in sheet metal enclosure on surface/recess including connection of incoming and outgoing cables with all civil works for fixing, and all accessories complete as required					
	i) 63 Amps, Four Pole	2	Each			
1.08	Supply and fixing single pole blanking plate in the existing MCB DB etc complete as required	20	Each			
TOTAL SUBHEAD 1.00						

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5	6	7
2.00	WIRING					
2.01	Wiring for light point/fanpoint/ exhaust fan point/call bell point with 1.5 sq.mm. PVC insulated, copper conductor cable (including 1.5 sqmm PVC insulated, copper conductor cable for earthing from switchboard to each point) in recessed steel conduit (Including Supplying & Fixing along with all accessories) with modular type switches in suitable size modular metal boxes, base plate & modular cover plates etc. and complete as required.					
						#REF! Point
2.02	Wiring for twin control light point with 1.5 sq.mm. PVC insulated, copper conductor cable (including 1.5 sq.mm. PVC insulated, copper conductor cable for earthing from switchboard to each point) in recessed steel conduit (Including Supplying & Fixing along with all accessories) with 2 way 5/6A modular type switches in suitable size modular metal boxes, base plate & modular cover plates etc. and complete as required.					
						26 Point

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5	6	7
2.03	Wiring for 5A light plugs with 1.5 sq.mm. PVC insulated, copper conductor cable including 1.5 sq.mm. PVC insulated, copper conductor cable for earthing in recessed steel conduit (Including Supplying & Fixing along with all accessories), including supplying & fixing suitable size metal box (nominal size) on surface or in recess with suitable cover plate in front including providing and fixing 3 pin 5/6 amps socket outlet and 5/6 amps Modular piano type switch, connections painting etc. as per technical specifications and complete as required.					
					#REF!	Point
2.04	Supplying and fixing 2 no 3 pin 5/6 amps socket outlet and one no 6 pin 15/16 amps socket outlet with 15/16 amps Modular piano type switch, including supplying & fixing modular metal box, connections painting etc. as per technical specifications and complete as required.					
						140 Point

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5	6	7
2.05	Wiring for power plug with 2X4 sqmm PVC insulated, copper conductor, single core cable in recessed steel conduit (Including Supplying & Fixing along with all accessories) along with 1.5 sqmm PVC insulated, copper conductor, single core cable for loop earthing, including supplying & fixing suitable size metal box (nominal size) on surface or in recess with suitable cover plate in front including providing and fixing 6 pin 15/16 amps socket outlet and 15/16 amps Modular piano type switch, connections painting etc. as per technical specifications and complete as required.					
	i) From MCB-Distribution Board to the Socket Outlets.	#REF!	Point			
	ii) From one power point to the Socket Outlets.	#REF!	Point			
2.06	Wiring for circuit wiring with following sizes PVC insulated, copper conductor, single core cable in recessed steel conduit (Including Supplying & Fixing along with all accessories) along with 1.5 sqmm PVC insulated, copper conductor, single core cable for loop earthing complete as required.					
	i) 2X1.5 Sqmm with 1 no. loop earth wire	#REF!	Metre			
	ii) 4X1.5 Sqmm with 1 no. loop earth wire	#REF!	Metre			

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5	6	7
2.07	Wiring for submain wiring with following sizes of PVC insulated, copper conductor single core cable in recessed steel conduit (Including Supplying & Fixing along with all accessories) complete as required.					
	i) 4X16 Sqmm with 2 No. 6 SWG GI wire for earthing	150	Metre			
	ii) 3X25 +1 x 16 Sqmm with 2 No. 6 SWG GI wire for earthing	225	Metre			
2.08	Supply and fixing following 20 Amps, 240 volts, 2P+E, Industrial Socket Outlet (with plugs) in a metal box with 20Amp /32 Amp SP MCB in a sheet steel cover on surface or recess complete with all accessories including connections, testing and commissioning etc. as required.	#REF!	Each			
2.09	Supplying, providing & fixing cordless bell push with musical bell, batteries etc of approved make complete as required.	20	Each			
2.10	Numbering of ceiling fan and regulator/ exhaust fan/ light fixtures as required	#REF!	Each			
TOTAL SUBHEAD 2.00						

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5	6	7
3.00	LIGHT FIXTURES AND FANS					
3.01	Supply of following light fixture with electronic ballast, starter, capacitor, tubes/lamps, reflector, diffuser, MS body/housing holder etc. complete with all fixing accessories as required.					
	i) 2X36watt Industrial Type fluorescent light with vitreous enameled reflector (GE GE T I 2x36PC C/S HF or equivalent)	2	Each			
	ii) 2X36watt fluorescent light with opal acrylic cover (GE GETC2x36 AOS/HF or equivalent)	2	Each			
	iii) 1X36 Watt box type fluorescent light fixture (GE T K 1X 36 EW of GE or Equivalent).	#REF!	Each			
	iv) 2X36 Watt surface mounted mirror optics fluorescent light fixture (GE T C 2X36 MO DL S/HF of GE or Equivalent)	#REF!	Each			
	v) 1X36 Watt surface mounted mirror optics fluorescent light fixture (GE T C 1X36 MO S/HF of GE or Equivalent)	#REF!	Each			

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5	6	7
3.02	Installation, testing and commissioning of prewired, fluorescent fittings of all types, complete with all accessories and tube etc. directly on ceiling/wall, including connections with 1.5 sq.mm. PVC insulated, copper conductor, single core cable etc. as required.					
					#REF!	Each
3.03	Installation, testing and commissioning of prewired, fluorescent fittings of all types, complete with all accessories and tube etc. including supplying and fixing ball and socket arrangement, 2 Nos down rods, 20mm diaX1.6mm thick steel conduit of required length, painting and wiring the down rods and connection with 1.5 sqmm PVC insulated, copper conductor single core cable as required.					
					#REF!	Each
3.04	Supply of following compact fluorescent light fixture with electronic ballast, starter, capacitor, lamps, reflector, diffuser, MS body/housing holder etc. complete with all fixing accessories as required.					
	i) 1X11 watt CFL Fixture with acrylic diffuser (GE CFL K 1 x 11 EAW or equivalent)	4	Each			
	ii) 2X11 watt surface mounted mirror optics (Philips FCS 31/211 or equivalent)	4	Each			

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5	6	7
	iii) 1X9 watt Bulk head light fixture (Philips FXC101 or equivalent)		2 Each			
	iv) 1X11W Mirror Top Light CFL Fixture (GE CFL K 1X11 EAW of GE or equivalent)	#REF!	Each			
	v) 1X9W Exit lights as per requirements		15 Each			
3.05	Installation, testing and commissioning of prewired, CFL fittings of all types, complete with all accessories and tube etc. directly on ceiling/ wall/ false ceiling, including connections with 1.5 sq.mm. PVC insulated, copper conductor, single core cable etc. as required.		#REF!	Each		

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5	6	7
3.06	Supplying, installation , testing & commissioning of following ceiling fans complete with double ball bearing, motor, blades, downrod, canopies, capacitor, modular type electronic fan regulator etc. suitable for operation on 230 volts, 50 Hz., 1 phase, AC supply, including wiring the down rod OF suitable length and connection with 1.5 sqmm PVC insulated, copper conductor single core cable complete as required					
	i) 1200 mm sweep	#REF!	Each			
3.07	Supply, installation, testing & Commissioning of following sizes of light duty exhaust fan suitable for single phase 230 volts, 50 Hz., AC supply complete with motor, louvers/shutters, including making the hole to suit the size of the above fan, making good the damage, with supplying & fixing louvers/shutters complete with frame for exhaust fans of all sizes. etc. complete as required.					
	i) 300 mm. dia., 1400 RPM	#REF!	Each			
	ii) 205 mm. dia., 1400 RPM	#REF!	Each			
TOTAL SUBHEAD 3.00						

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5	6	7
4.00	TELEPHONE SYSTEM					
4.01	Supply and fixing of following sizes of steel conduit alongwith the accessories in recess including painting in case of surface conduit, or cutting the wall and making good the same in case of conduit as recessed required					
	i) 20 mm dia	175	Metre			
	ii) 25 mm dia	35	Metre			
4.02	Supplying and fixing 2 module modular metal box in recess including providing and fixing following no., following modular telephone socket outlet, base plate, modular connections, etc. complete as required.					
	i) 1 pair cord outlet (Jack Type)	1	Each			
	ii) 2 pair cord outlet (Jack Type)	4	Each			
4.03	Supplying, Installation, testing and commissioning of following sizes of telephone distribution board (TTB) in M.S. hinged type box duly painted complete with Krone type tag block etc. including terminations of cable as required.					
	i) 10 Pair	1	Each			

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5	6	7
4.04	Supply and drawing of following sizes of 0.61mm dia annealed tinned copper conductor PVC insulated and PVC sheathed unarmoured telephone cable in existing recess steel conduit complete as per technical specifications and as required					
	i) 2 Pair	250	Meter			
4.05	Supply and laying in ground including excavation, sand filling, brick protection etc. following sizes of 0.61mm dia annealed tinned copper conductor PVC insulated and PVC sheathed armoured telephone cable complete as required					
	i) 10 Pair	100	Metre			
4.06	Supply and fixing coin operated telephone set complete with fixing arrangements, connections & wiring complete as required.					
		#REF!	Each			
TOTAL SUBHEAD 4.00						

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5	6	7
5.00	OUTDOOR LIGHTING					
5.01	Supply, installation, testing and commissioning of external post top lantern with following accessories and complete as required :					
	a) 4m high (3.3m above ground) 50mm dia GI pole as approved, adopting socket at top for fixture mentioned below, base plate 300 x 300 x 6mm and provision for mounting junction box etc. - 1 set					
	b) Post top lantern with 125W HPMV lamp (Philips HPC 102/125 HPF or equivalent) and its wiring with 2 x 2.5 sq.mm PVC insulated copper wire and 14 gauge bare copper earth wire from junction box - 1 set					
	c) 20A DP junction box with 2 no. incoming and outgoing terminals and 2 nos. tap-out terminal with 1 nos. 5A HRC fuses complete 1 set					
	d) Providing 400x400x700mm deep 1:3:6 ratio cement concrete including excavation shuttering alignment of poles casting etc. including 100mm thick lean concrete shall be provided at the bottom, with pipe for cable entry, etc complete as required.					
	i) With Mercury Lamp Fixture			#REF!	Set	

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5	6	7
5.02	<p>Supply, installation, testing and commissioning of 2X9W CFL (FGC201 Mini Bollard of Phillips or equivalent) type footpath light fixture complete with lamps, glass, louvers etc. as per technical specifications as required having following :</p> <p>16 A DP junction box with 2 no. incoming and outgoing terminals, 2 nos. tap-out terminal and 5A HRC Fuses (to be placed within the foundation)- 1 Set</p> <p>Providing suitable size 1:3:6 ratio cement concrete including excavation, shuttering, alignment of fixture, casting etc.</p>	#REF!	Set			
5.03	<p>Spiral Earthing made out of 6 SWG GI Wire, 50mm Dia., 115 turns closely wound, 1.5 mtr below ground, earth pit of 350 Dia., 1.5 Mtr depth including providing charcoal and salt for earthing at alternate layers of 300mm depth (total 3 layers), connections etc complete as required.</p>	10	Each			

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5	6	7
5.04	<p>FEEDER PILLAR-NH-EXT-ROAD Supply, erection, testing and commissioning of the following M.V. cubicle double door type totally enclosed (IP-55 Protection) free standing type with locking arrangement, dust, damp and vermin proof Outdoor Type Feeder Pillar - Road Lighting complete with busbars, following switchgears, interconnections, cable termination etc. as required</p> <p>INCOMER : 100 Amps, 415/500V, TPN Switch Disconnector Fuse Units with HRC fuses, indicating lamps, 60 A TPN Contactor with Timer (suitable for road light control operation to feed all street light circuits).</p> <p>BUSBARS : 150 Amps TPN busbars of aluminium</p> <p>OUTGOINGS : 5 no. 32 A, 230V, DP, Miniature Circuit Breaker (MCB)</p>					
TOTAL SUB HEAD - 5.00						

1 Set

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5	6	7
6.00	CABLES					
	L.T. CABLES					
6.01	Supply of following sizes of 1.1 kV grade multicore aluminium/ copper conductor PVC sheathed armoured cable as per relevant IS code including straight cable joints if required.					
	i) 2 Core, 4 sqmm (Al Conductor)		50 Metre			
	ii) 2 Core, 6 sqmm (Al Conductor)	#REF!	Metre			
	iii) 3.5 Core, 50 sqmm (Al Conductor)	#REF!	Metre			
	iv) 3.5 Core, 95 sqmm (Al Conductor)		50 Metre			
	v) 3.5 Core, 300 sqmm (Al Conductor)	#REF!	Metre			
6.02	Supplying and making end termination with brass compression gland and aluminum lugs for following size of PVC insulated & PVC sheathed/ XLPE aluminum conductor cable of 1.1 kV grade complete as required.					
	i) 2 Core, 4 sqmm (Al Conductor)	#REF!	Each			
	ii) 2 Core, 6 sqmm (Al Conductor)	#REF!	Each			
	iii) 3.5 Core, 50 sqmm (Al Conductor)	#REF!	Each			
	iv) 3.5 Core, 95 sqmm (Al Conductor)	#REF!	Each			
	v) 3.5 Core, 300 sqmm (Al Conductor)	#REF!	Each			

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5	6	7
6.03	Supplying & making cable route marker with cement concrete 1:2:4 (1 cement: 2 Coarse Sand: 4 Graded stone aggregate 20mm nominal size) of size 60cm x 60cm at the bottom and 50cm x 50 cm at the top with a thickness of 10 cm including inscription duly engraved as required.					
		20	Each			

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5	6	7
6.04	Laying of one number PVC insulated and PVC sheathed power cable 1.1kV grade direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc. complete as required					
	i) Size not exceeding 25 sq.mm	#REF!	Metre			
	ii) Size exceeding 25 sq.mm but not exceeding 120 sq.mm	#REF!	Metre			
	iii) Size exceeding 120 sq.mm but not exceeding 300 sq.mm	#REF!	Metre			
6.05	Laying of one number PVC insulated and PVC sheathed power cable 1.1kV grade direct in the existing RCC/ Hume/Stoneware/Metal pipe as required					
	i) Size not exceeding 25 sq.mm	#REF!	Metre			
	ii) Size exceeding 25 sq.mm but not exceeding 120 sq.mm	#REF!	Metre			
	iii) Size exceeding 120 sq.mm but not exceeding 300 sq.mm	#REF!	Metre			
6.06	Laying of one number PVC insulated and PVC sheathed power cable 1.1kV grade on surface or on existing cable tray complete as required.					

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5	6	7
	i) Size not exceeding 25 sq.mm	#REF!	Metre			
	ii) Size exceeding 25 sq.mm but not exceeding 120 sq.mm	#REF!	Metre			
	iii) Size exceeding 120 sq.mm but not exceeding 240 sq.mm	#REF!	Metre			
6.07	Fabricating and installing following sizes of perforated M.S. cable trays including horizontal and vertical bends, reducers, tees, cross members and other accessories as required and duly suspended from the ceiling with MS suspenders and including painting etc. as required					
	i) 100mm width X 50mm depth X 1.6mm thickness		25 Metre			
	i) 150mm width X 50mm depth X 1.6mm thickness		25 Metre			
6.08	Providing and fixing 6 SWG dia GI wire on surface or in recess for loop earthing alongwith the existing cable as required.		100 Metre			
TOTAL SUB HEAD - 6.00						

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5	6	7
7.00	EARTHING, SAFETY EQUIPMENTS AND MISC. ITEMS					
7.02	Earthing with GI plate 600mmX600mmX6mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. (but without charcoal or coke and salt) complete as required					
		#REF!	Set			
7.03	Extra for using charcoal and salt for GI or copper plate earth electrode as required.					
		8	Set			
7.04	Supplying and laying 25mmX5mm GI strip at 0.5mm below ground level as strip earth electrode, including soldering etc. as required.					
		#REF!	Metre			
7.05	Providing and fixing 25mmX5mm GI strip on surface/on existing cable trench/RCC pipe or in recess for earth electrode as required.					
		#REF!	Metre			
7.06	Supplying and laying 50mmX6mm copper strip at 0.5mm below ground level as strip earth electrode as required as required.					
		#REF!	Metre			

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5	6	7
7.07	Providing and fixing 50mmX6mm copper strip in 65 mm dia class B GI Pipe on surface/existing cable trench/RCC pipe for connections etc. as required.	#REF!	Metre			
7.08	Supplying and laying 25mmX3mm copper strip at 0.5mm below floor level as strip earth electrode as required as required (For static earthing of OT floors).	250	Metre			
7.09	Providing and laying of following sizes non pressure NP class (Heavy duty) RCC pipe with collar joint with stiff mixture of cement (1 cement : 2 fine sand) including testing the joints etc. as required. i) 150mm dia	#REF!	Metre			
7.10	Supplying and laying of 1.1kV grade 1 metre wide anti skid chequered type rubber mat.	#REF!	Metre			
7.11	Supply and fixing shock treatment chart in English, Hindi and local language mounted on 5mm thick Plywood and 3mm thick plain glass front complete as required.	15	Set			

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5	6	7
7.12	Providing & fixing G.I. pipe complete with G.I. Fittings, clamps including trenching & refilling/ wall cutting & plastering, etc. (for cable entry) with all minor civil & mech. Works complete as required.					
	i) 50 mm dia nominal bore	#REF!	Metre			
TOTAL SUB HEAD - 7.00						

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5	6	7
8.00	LIGHTNING PROTECTION					
8.01	Earthing with GI earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. (but without charcoal or coke and salt) complete as required.					
		#REF!	Set			
8.02	Extra for using charcoal and salt for GI or copper plate earth electrode as required.					
		#REF!	Set			
8.03	Providing and fixing of lightning conductor finial, made of 25mm. dia. 300mm., long GI tube, having single prong at top, with 85 mm. dia. 6 mm. thick GI base plate including holes etc. complete as required.					
		#REF!	Each			
8.04	Providing and fixing GI tape 20mm X 3mm thick on parapet or surface of wall for lightning conductor as required. (For horizontal run).					
		#REF!	Metre			
8.05	Providing and fixing GI tape 20mm X 3mm thick on parapet or surface of wall for lightning conductor as required. (For Vertical run).					
		#REF!	Metre			

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5	6	7
8.06	Providing and fixing testing joint, made of 20mm X 3mm/ 32mmX6mm thick GI strip, 125 mm. long, with 4 no.'s of GI bolts, nuts, check nuts and spring washers etc. complete as required.	#REF!	Each			
8.07	Providing and laying GI tape, 32 mm X 6 mm thick, from test joint upto earth electrode directly in ground as required.	#REF!	Metre			
TOTAL SUB HEAD - 8.00						

S.No.	Description.	Qty.	Unit.	Rate in Figures (in Rs.)	Rate in Words	Amount in Figures (in Rs.)
1	2	3	4	5	6	7
9.00	CONDUITING/CABLING FOR TV OUTLETS & Misc ITEMS					
9.01	Supply and erection of pipe for wiring purposes including bends, inspection boxes etc. where necessary and painting as required					
	i) Heavy gauge welded conduit pipe 25mm dia 1.60mm thickness flushed.	#REF!	Metre			
9.02	Supplying and fixing metal box of following sizes (nominal size) on surface or in recess with suitable size phenolic laminated sheet cover in the front including painting etc. as required.					
	i) Approved MS Modular Box for TV Outlet	#REF!	Each			
9.03	Supplying and fixing 1 No., Modular Coaxial TV Outlet in existing Modular metal box including connection of TV cable, etc. complete as required	#REF!	Each			
9.04	Supply and drawing Coaxial TV Cable in existing conduit complete as required.	#REF!	Metre			
TOTAL SUB HEAD - 9.00						