

Name of Work: Proposed construction of G+1 floors Indian Bank INDSETI Building at Konur Village Namakkal.

PART - 2

Name of the Vendor/Company

Sl.No.	Description	Probable Quantity	Unit	Rate in Figures	Amount in Figures
A	CIVIL BOQ				
	Preparatory Works				
1.00	Scrub jungle including uprooting of trunk 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.	2796.00	Sqm		
	Dismantling of surface rock				
2.00	Earth work in Hard rock: Excavation for foundations for buildings in hard rock using Compressor machines, hydraulic machines (blasting prohibited) and depositing on bank for all lifts and with an initial lead-1 of 10m and up to 3m depth including all operational, incidental, labour charges such as shoring, sheeting, planking, strutting etc., and overheads & contractors profit complete for finished item of work excluding seigniorage excluding de watering charges etc.,	602.00	Cum		
	Earth Work				
3.00	Earthwork excavation for foundation (for narrow excavation) to full depth as per designed in all soils and sub soils except soft disintegrated rock not requiring blasting and hard rock requiring blasting and bailing water wherever necessary. Refilling the sides of foundation with excavated earth other than sand in layers of well rammed and compacted and depositing the surplus earth in places shown by the departmental officers with an initial lead of 10m and initial lift of 2m and clearing and leveling the site etc. complete complying with standard specification.	412.00	Cum		
4.00	Providing Pre-constructural anti- termite treatment and creating a chemical barrier to the building by injecting chemical emulsion of required concentrations raft slab and beam, under Cellular raft slab, around the footings, column pits, trenches, pits, wall trenches, back fill, plinth filling, junction of wall and floor, side walls of foundation, external perimeter of building, surrounding of pipes expansion joints, etc. as per IS specification and as per the instructions of chemical manufacturer and all as directed. The treatment shall be carried out strictly in accordance with the technical specification and conforming to IS 6313 (PART-2) or equivalent BS specification. 1. The chemical to be used as insecticides for the treatment shall be Termite oil 20% (or) 50% EC and the application shall be dilute one part of chemical 20% or 50% EC with 19 or 49 parts of water to get 1% emulsion and strictly in accordance with the manufacturer's specification.(or) 2.The chemical to be used as insecticides for the treatment shall be IMIDACLOPRID 30.5% S C and the application shall be applied at 0.075% active ingredients concentration i.e. 2.1ml formulated product diluted 1 lit of water and strictly in accordance with the manufacturer's specification.	585.00	Sqm		
5.00	Supplying and filling in foundations and basement with filling M- sand in layers not exceeding 15 cm. thick, well watered ,rammed and consolidated etc. complete complying with standard specifications.	95.00	Cum		
6.00	Plain Cement Concrete 1 : 4 :8 (one part of cement, four parts of sand and eight parts of hard broken stone) using 40 mm gauge hand broken hard broken granite stone jelly complying with standard specifications in foundations and basement.	95.00	Cum		
7.00	Refilling the approved good quality earth in plinths, area development etc. wherever specified in layers is not exceeding 200 mm thick, with available earth at site.	223.00	Cum		
8.00	Supplying and Filling Gravel:Supplying and filling in 'foundation and basement with filling sand in layers of not more than 15cm.thick well rammed watered and compacted -1m3 etc.,complete complying with standard specification.	1813.00	Cum		
9.00	Damp proof course with Cement Mortar 1:4 (One Cement and Four crushed stone sand) 12mm thick mixed with best approved quality water proofing compound conforming to Indian Standard specification as specified by the departmental officers at 2% by weight of cement used, finishing and curing etc. complete complying with standard specification.	19.65	Sqm		

10.00	Supplying and Erecting centering & shuttering for sides and soffits including supports and strutting up to 3.30 m height with all cross bracing for plane surfaces as detailed below, using mild steel sheets of 90 X 60 cm 10 gauge stiffened with MS angle of 25 x 25 x 3mm for boarding, laid over adjustable span & jacks and supported by 50mm dia pipes for general pipes scaffolding systems @ a spacing of 1.20m c/c and vertical connected at a height of 2.0m c/c including 'C' & 'U' clamps and base receiver cup at bottom for connecting pipes etc and removable systems etc complete				
a	Footing, Plinth Beam, etc.	376.00	Sqm		
b	Plain surfaces such as roof slab, floor slab, beams, lintels, loft, sill slab, staircase waist, portico slab and other similar works.	2041.00	Sqm		
c	Column Below basement Leve	153	Sqm		
d	Square and rectangular columns and smal quantities such as sunshades, parapet cum drops, window boxing, fin projections and other similar works.	625	Sqm		
11.00	Design Mix Concrete				
	Providing and laying in position, Standardised Concrete Mix M-25 Grade in accordance with IS:456-2000, using 20mm and down grade hard broken granite stone jelly for all RCC Items of works with minimum cement content of 350kg/m ³ and maximum water cement ratio of 0.50, including admixture (Plasticiser / super plasticiser) in recommended proportions as per IS:9130 to accelerate, rated setting of concrete, improve workability without impairing strength and durability with about (5.0 Cum) 7730kg. of 20mm machine crushed stone jelly and with about (3.3cum) 5156 kg. of 10-12mm machine crused stone jelly and with about (4.79cum) 7670 kg of sand, but excluding cost of reinforcement grill and fabricating charges, centering and shuttering and also including scaffolding,laying, vibrating with Mechanical vibrators, finishing, curing, etc.,and providing fixtures like fan clamps in the RCC Floor / roof slabs wherever necessary without claiming extra, etc. Complete complying with standard specification and as directed by the departmental officers. The coarse and fine aggregates to be used should comply with the requirements of IS Standards.				
a	Foundation & Basement	105.00	Cum		
b	Ground Floor	143	Cum		
c	First Floor	122.00	Cum		
d	Terrace Floor	26	Cum		
	Steel - Fe 500D/Fe 550D				
12.00	Supply, fabrication and placing of reinforcement steel of high yield strength ribbed bars of various diameters and grade conforming to IS 1786 for reinforced concrete work. The work includes recoiling, straightening, cutting, bending, fabricating, and placing in position, at all levels including lead and lift, according to drawings, specifications etc. complete and supply & use of 18G black annealed binding wire double fold to tie the bars in position and providing precast cement/ PVC cover blocks for main reinforcement to ensure specified cover and complete., including all labor charges etc	63.00	Mt		
13.00	Brick work in following Cement Mortar using best quality First class table moulded chamber burnt bricks of size 9" x 4-3/8" x 2-3/4" for sub structure using Cement Mortar 1:5 (One part of Cement and Five parts of crushed stone Sand) and for super structure using Cement Mortar 1:6 (One part of Cement and Six parts of crushed stone Sand) including curing, etc., including scaffolding, complete complying with standard specification.				
a	Foundation & Basement	57.00	Cum		
b	Ground Floor	110.00	Cum		
c	First Floor	112.00	Cum		
d	Terrace Floor	54.00	Cum		
14.00	Brick partition walls of 11.50cm thickness using best quality First class table moulded chamber burnt bricks of size 9" x 4-3/8" x 2-3/4" in Cement Mortar 1:3 (One Cement and Three crushed stone Sand) using hoop iron reinforcement if found necessary including curing etc....and including scaffolding (Hoop iron reinforcement will be measured and paid for separately)and paid for separately).				
a	Ground Floor	105.00	Sqm		
b	First Floor	102.00	Sqm		
	PLASTERING WORK				

15.00	Providing and applying 10 mm thick Cement plaster in Cement mortar 1:3 (One part of Cement and Three parts of Sand), to finishing the exposed surfaces of R.C.C. items of works such as Roof (or) floor slabs, beams, and Sun shades etc.to correct plane and level including scaffolding, hacking of surface, chiselling the undulated surface wherever necessary and curing etc., all materials and labour complete in all respects including all lead, lift and descent and as directed by the Engineer in charge. This rate includes the cost of providing Cement Mortar beadings for sun shades, steps,landing slabs, elevation etc. complete complying with standard specifications.	1166	Sqm		
16.00	Providing & applying 12 mm thick cement plaster in CM 1:5 (1 part of cement: 5 parts of sand) to walls internally in single coat at all levels to correct line and level including chicken wire mesh at all joints of brick and concrete surfaces with minimum overlap of 150 mm in all directions, scaffolding, rounding off or chambering of corners, offsets, fin/ bands, projections, etc. and cleaning of surface, raking out joints, roughening of surface, chiseling the undulated surface wherever necessary and curing, etc., all materials and labor complete in all respects including all lead, lift and descent and as directed.	2463	Sqm		
17.00	Providing & applying 12 mm thick cement plaster in CM 1:5 (1 part of cement: 5 parts of sand) to walls externally in single coat at all levels to correct line and level including scaffolding, rounding off or chambering of corners, offsets, fin/bands, projections, etc. and cleaning of surface, raking out joints, roughening of surface, chiseling the undulated surface wherever necessary and curing, etc., all materials and labor complete in all respects including all lead, lift and descent and as directed.	1610.00	Sqm		
FLOORING AND DADOING					
18.00	Paving the floor with best approved quality fine polished Kota stone slabs of size 600 x 600 of 18 / 20mm with machine cut edges and matching marble slab not less than 100mm width other than Adanga Marbles as border laid over a cement mortar bed of 20mm thick using cement mortar 1:3 (One cement and three sand) fixing the slabs in true right angles with minimum possible width of joints and pointing the joints with white cement mixed with matching colouring pigments and polishing with floor polisher to a high degree of finish etc., The kota stone slabs and other materials to be used shall be got approved by the Executive Engineer concerned before use on work, etc., complete as per standard specification Basic Cost 560/- Sqm	99.00	Sqm		
19.00	Paving the floor with best quality Stain Free Nano polished Vitrified tiles- 600 x 600 x 8mm of approved color, shade and quality laid in cement mortar 1:3 (one cement and three sand) 20mm thick in all floors and the top pointed with the white cement mixed same color pigments etc., complete complying with standard specification Basic Cost- Rs.570/Sqm	582	Sqm		
20.00	Flooring with following ceramic tiles of size 305 x 305 x 6 mm laid over 20 mm thick cement mortar 1:3 (One Cement and Three Sand) base mortar over the existing slab / floor including cutting the tiles to the required size with special cutter wherever necessary, laying in position and pointing with white cement mixed with colouring pigment at the rate of 0.3 Kg. / Sqm. etc., complete complying with standard specification.Basic cost-Rs.430/Sqm	170.00	Sqm		
21.00	Dadoing the walls with coloured Dadoing Ceramic tiles of size 300mm x 450mm x 8mm approved size , quality and colour set in CM 1 : 2 -10 mm thk. And pointed with suitable cement including finishing the joint and pointing flesh with walls and tile surface in all floors at the rate of 0.40 Kg /Sqm etc. complete. Basic Cost 430/- Sqm	589.00	Sqm		
22.00	Paving the floor with best approved quality Natural flamed finish granite for flooring/ steps & Landing of 18 / 20mm thick of with machine cut edges laid over a cement mortar bed of 20mm thick using cement mortar 1:3 (One cement and three crushed stone sand) fixing the slabs with required cement slurry and laid in true right angles with minimum possible width of joints and pointing the joints with white cement mixed with matching colouring pigments etc. complete as per standard specification Basic cost-Rs.1462/Sqm	239.00	Sqm		
23.00	Supply and fixing of Fine Double side polished granite slab , 20 mm thick (average), for ,urinal including fixing in position cutting ,chipping the wall, masonry touch up works etc. Basic cost- Rs.1850/Sqm	7	Sqm		

24.00	Paving the floor with pre-polished concrete anti-skid step tiles (Required shape and design) of 20mm thick of approved quality and colour laid in Cement Mortar 1:3 (One Cement and Three sand) 20mm thick and pointed with white cement mixed with colouring pigment at the rate of 0.40 Kg. / Sqm., curing, etc., Basic cost-Rs450/Sqm	39	Sqm		
25.00	Supply and fixing of polished granite slab ,18 mm thick (average), for flooring including fixing in position cutting , chipping the wall, masonry touch up works etc. Basic cost-Rs.1500/Sqm	17	Sqm		
26.00	Supplying and fixing fine Single side polished cuddapah slab of 30mm thick for cuboards arrangements including laying to correct alignment with necessary cement mortal and black powder etc., complete with standard specificatins. Basic cost-Rs.500/Sqm	73	Sqm		
27.00	Providing, fabricating and fixing M.S. Grills Windows, and ventilator, gates, ladders, rail pipes, nosing angles, with M.S.lugs in staircase steps etc., made out of M.S rods, flats, angles, pipes, channels etc.	2926.00	Kg		
28.00	S.S Handrail				
a	Manufacturing,supplying and fixing of stainless steel hand rails for staircase using 50mm dia 304L grade stainless steel pipe of 1.6mm thick at required locations to a height of 900mm from finished floor level welded to 38mm dia stainless steel pipe post of 1mm thick as vertical at 900mm centre with 2 Nos of 25mm dia intermediate horizontal stainless steel pipe of 1.6mm thick in between.The vertical pipe has to be welded to the 100 x 100 x 6mm MS base plate encased in the base concrete.The rate is inclusive of the charges for cutting, bending, welding grinding, polishing,conveyance, electrical charges,ect.complete.	39.00	Sqm		
29.00	Manufacturing,supplying and fixing of stainless steel hand rails for staircase using 50mm dia 304L grade stainless steel pipe of 1.6mm thick will be provided with tubular supports made of 304L grade ss pipe of 25mm dia of 1.6mm thick welded to the railing.The supports will be grouted into the wall and provided with 93mm thick ss circular base plate of 304L grade.The rate shall included for grouting into concrete with necessary supporting arrangements the hand rail in floor polishing buffing, cutting, grinding, conveyance,welding charges,electrical charges,etc.complete	12.00	Rmt		
30.00	UPVC Window supplying and fixing UPVC (Un- PLASTICIZED Polyvinyl chloride) windows of casement type (open) from the profile the size of outer frame 60mmx58mm and shutter profile are reinforcement with g/1mm 125GSM and 100% corrosion free, the profiles are multi chambered section with wall thick of 2mm. The EPDM rubber (black color) covered with over all the edges of frame and shutter the shutter will be provided with Espag multi power points locks and also it operates as handle. The corners and joints should be welded and cleaned. Radiations free pin headed or plain glass 4mm thick should be provided to the shutter and it should not allow leakage of water even at most ranging storms and should have key lockable action, security protective hinges, strong locking systems and as per size for arresting noise and energy loss. The connecting mechanisim between sah and outer frame that enables opening of the window should be fixed to the wall with 100% packing with screws and silicon packing all round the frames The window should be got approved from the Executive Engineer before use on work.	106.00	Sqm		
31.00	UPVC VENTILATOR:Supplying and fixing UPVC (Un-PLASTICIZED Polyvinyl chloride) Louvered Ventilators of from the profile the size of outer frame 60x58mm and shutter profile the size of 60x78mm both profile size of 60x78mm both profiles are reinforced with GI/1MM 125GSM and 100% corrosion free , the profile are mult chambered sections with wall thick of 2mm. The EPDM rubber (black colour) covered with all over he edges of frame and shutter . The corners and joints should be welded and cleaned. Radiation pin headed glass 4mm thick should be fixe to the wall with 100% packing with screws and silicon packing all aroundthe frame. The ventilator should be got approved from the Executive Engineer before use on work.	14	Sqm		

32.00	FRP door Shutter with FRP door frames made out of FRP Sheets of 3mm thick of over all size 65mm x 50mm with rebate suitably reinforced using MS Angle / Flats, cost of holdfasts and solid core FRP shutter Panel of 5mm thick and hollow core frames of 3m wall thickness for styles and rails etc.,	51.00	Sqm		
Aluminium Sliding Door					
33.00	Supplying, fabricating and fixing in position of Alumni Anode using 5.5 mm thick frosted glazed door using rectangular Alumni. Box section of following sizes for frame and shutter with necessary accessories such as rubber beading, Al. Clips, Best track arrangement on top, Aluminum Handles on both sides, stopper bush on top, tower bolt, Locks and glass including all materials, Labour, power consumption charges required for fabrication if necessary chipping, dismantling making necessary holes in RCC Columns, Beams or Masonry wherever necessary with power drill to the extent required and made good to the original conditions after fixing etc., complete. The Alumni. surface must be anodized with matt finish under electrically controlled condition in accordance with IS specification 1868 / 1962 of Anodic fill thickness of not less than 15 Microns (Fifteen) for all sections.	3.00	Sqm		
34.00	Door Frame: Supplying and fixing first quality teak wood frames for doors, windows, ventilators and other similar joinery works with the following sizes and sections including labour charges for wrought and put up in position and also for fixing hold fast in frames and masonry etc. complete in all floors				
a	Teak wood Scantings up to 2M	0.48	Cum		
b	Teak wood Scantings over 2M and below 3M	1.55	Cum		
35.00	Supply & Fixing of 32mm thick. single leaf high density interior grade marine plywood shutters pasted both sides with 4mm thk.OST ply of approved design with 35x12mm T.W.lipping on all edges with necessary adhesives and CP screws complying with standard specification. The cost is inclusive of 1 no mortise lock , handle, tower bolt , approved equivalent make SS bearing hinges of equivalent make of approved make,2 no floor mounted SS door stopper ect. complete.	34.00	Sqm		
36.00	Supply & Fixing of 40mm thk.Double leaf high density interior grade marine plywood shutters pasted both sides 1.5mm thk.laminate approved design with 35x12mm T.W.lipping on all edges with necessary adhesives and CP screws complying with standard specification.The cost is inclusive of 1 no cylindrical Lock,handel,tower bolt ,approved equivalent make SS ball bearing hinges of quivalent make of aproved make,2 no floor mounted SS door stoper ect.complete as per drawing. Make:Kutty,Sharon,Trojan. Accesseeorice Make:Dorma, Godrej,1.5mm thk Laminate Basic Cost:810/M2	16.00	Sqm		
37.00	Manufacturing, supplying and fixing of Steel doors with following specification.MS angle of size 40x40x6mm at 3.5 kg/m used for outer frame and MS Angle of size 35x35x5mm at 2.6 Kg/m for the shutter frame. Stiffeners with 32x6mm at 1.5 Kg/m MS Flat is provided as the lock rail of the door and welded intact on both ends to the shutter frame.18 G CR Sheets of best quality is laid as panel in the shutter frames. 18x5mm at 0.70 kg/m MS flat is welded over the 32x6mm at 1.50kg/m MS Flat on the rear side of the door, sandwiching the CR Sheet for rigidity. Additional stiffeners with 18x5mm at 0.7 Kg/m MS flats are provided diagonally on the rear side of the shutter. 300mm length of hinges 2Nos, for shutter is provided. 6 Nos. of 250mm length hold fasts 200mm length specified at the ends are welded to the outer frame of the door. Tower bolt 2 Nos. at the top provided.	2.00	Sqm		
38.00	Toilet Sunken using broken brick jelly 20 mm gauge The proportion of broken brick jelly to slaked lime being 1:3:6 (1part cement,3 part fine aggregate & 6 part broken brick jelly), well beaten by wooden beaters for giving required slope and thickness required etc	13.00	Cum		
PAINTING WORK					
39.00	Painting two coats of synthetic Enamel paint of approved colour and make over one coat of anti corrosive Zinchromite primer over steel work, suitably prepared for receiving the paint by surface scraping, rubbing applying filler etc. including cost of filler, primer, paint all complete as per drawings and specifications.	167.00	Sqm		

40.00	Painting two coats of synthetic Enamel paint of approved colour and make over one coat of anti wood primer over new wood, suitably prepared for receiving the paint by surface scraping, rubbing applying filler etc. including cost of filler, primer, paint all complete as per drawings and specifications.	99.00	Sqm		
41.00	Supplying and Painting new plastered surface with two coats of distempering one coat of distemper primer	1166.00	Sqm		
42.00	Supplying and Painting new plastered internal ceiling surface with two coats of distempering one coat of distemper primer	1874.00	Sqm		
43.00	Supplying and painting the walls with one coat of wall primer and two coats of Exterior emulsion (apex or equivalent) as instructed by the departmental officers including preparation of surface curing, etc., complete in all floors complying with standard specifications	1610.00	Sqm		
44.00	Providing and laying water proofing treatment to vertical and surfaces for sunken portion of depressed portions of W.C., and the like consisting of :i) 1st 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. ii) 2nd course of 20mm cement plaster 1:2 (1 cement : 2 coarse sand) mixed with water proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface. iii) 3rd course of applying blown or residual bitumen applied hot at 1.7Kg. per sqm of area. iv) 4th course of 400 micron thick PVC sheet. (Overlaps at joints of PVC sheet should be 100 mm wide and pasted to each other with bitumen @ 1.7 Kg/sqm.)	728.00	Sqm		
45.00	Providing water proof plastering on top of chajjas in cement mortar 1:4 (1 Cement:4 C.Sand) , 20 mm thick including providing and removing scaffolding, , rounding of all corners wherever required smooth rendering etc., complete mixing with water proof compound of approved make (Fosrock , Build plast chemicals) as per manufacturers specifications with a minimum of 150 ml per bag of cement used including curing etc., complete with all lead and lift charges for all heights.	93	Sqm		
46.00	Weathering Course Concrete using best quality broken brick jelly of 20 mm uniform gauge in pure slaked lime (NO Sand to be used (over the RCC roof slab in the proportion of brick jelly to lime being 32 : 121/2 by volume laid over in single layer and consolidated to the required slope and finished thickness and beating the concrete with wooden beaters of approved pattern, keeping the surface constantly wet by sprinkling lime, jiggery water etc. complete complying with standard specifications and as directed	51.00	Cum		
47.00	Finishing the top terracotta tiles of roof with one course of machine pressed tiles of size 230mm x 230mm x 20mm of approved quality set in Cement Mortar 1:3 (One Cement and Three Sand) 12mm thick mixed with water proofing compound conforming to ISS at 2% by weight of cement used and the joints pointed neatly to full depth of tiles with the same cement mortar mixed with red oxide and water proofing compound including curing etc.,	538.00	Sqm		
48.00	Providing, supply, mixing laying cement plastering 20mm thick with cement mortar 1:4 mixed with water proofing compound Conplast X4211C conforming to IS:2645, @ 150ml per bag of cement (normal setting integral water proofing compound) as specified by the manufacturer over PCC leveling course including preparation of surface, dewatering, finishing, curing etc.	41.00	Sqm		
Under Ground Sump					
Earth work					
49.00	Earthwork excavation for foundation (for narrow excavation) to full depth as per designed in all soils and sub soils except soft disintegrated rock not requiring blasting and hard rock requiring blasting and bailing water wherever necessary. Refilling the sides of foundation with excavated earth other than sand in layers of well rammed and compacted and depositing the surplus earth in places shown by the departmental officers with an initial lead of 10m and initial lift of 2m and clearing and leveling the site etc. complete complying with standard specification.	27.00	Cum		
50.00	Supplying and filling in foundations and basement with filling M-sand in layers not exceeding 15 cm. thick, well watered, rammed and consolidated etc. complete complying with standard specifications.	2	Cum		
51.00	Plain Cement Concrete 1:4:8 (one part of cement, four parts of sand and eight parts of hard broken stone) using 40 mm gauge hand broken granite stone jelly complying with standard specifications in foundations and basement.	2	Cum		
52.00	Supplying and erecting centering and shuttering for soffits including necessary supports and strutting upto 3 M height for plane surfaces as detailed below in all floors with all cross bracings using Mild Steel sheets of size 90 x 60 cm and 10 BG stiffened with welded Mild Steel angle of size 25mm x 25mm x 3 mm for boarding laid over silver oak joists of size 10cm x 6.50 cm spaced at abote 90 cm centre to centre and supported by casurina props of 10cm to 13 cm dia spaced at not more than 75 cm centre to centre etc. complete complying with the standard specification. (Payment for centering shall be given after the concrete is laid).	57.00	Sqm		

53.00	Providing and laying in position, Standardised Concrete Mix M-25 Grade in accordance with IS:456-2000, using 20mm and down grade hard broken granite stone jelly for all RCC Items of works with minimum cement content of 350kg/m ³ and maximum water cement ratio of 0.50, including admixture (Plasticiser / super plasticiser) in recommended proportions as per IS:9130 to accelerate, rated setting of concrete, improve workability without impairing strength and durability with about (5.0 Cum) 7730kg. of 20mm machine crushed stone jelly and with about (3.3cum) 5156 kg. of 10-12mm machine crushed stone jelly and with about (4.79cum) 7670 kg of sand, but excluding cost of reinforcement grill and fabricating charges, centering and shuttering and also including laying, vibrating with Mechanical vibrators, finishing, curing, etc.,and providing fixtures like fan clamps in the RCC Floor / roof slabs wherever necessary without claiming extra, etc., Complete complying with standard specification and as directed by the departmental officers. The coarse and fine aggregates to be used should comply with the requirements of IS Standards.	9.00	Cum		
54.00	Steel - Fe 500 D/Fe 550D: Supply, fabrication and placing of reinforcement steel of high yield strength ribbed bars of various diameters and grade conforming to IS 1786 for reinforced concrete work. The work includes recoiling, straightening, cutting, bending, fabricating, and placing in position, at all levels including lead and lift, according to drawings, specifications etc. complete and supply & use of 18G black annealed binding wire double fold to tie the bars in position and providing precast cement/ PVC cover blocks for main reinforcement to ensure specified cover and complete.,	1.15	MT		
55.00	Providing, supply, mixing laying cement plastering 20mm thick with cement mortar 1:4 mixed with water proofing compound Conplast X4211C conforming to IS:2645, @ 150ml per bag of cement (normal setting integral water proofing compound) as specified by the manufacturer over PCC leveling course including preparation of surface, dewatering, finishing, curing etc	35.00	Sqm		
56.00	Supplying, laying and fixing in position ceramic tiles of approved size, quality and colour set k in CM 1:3 - 20 mm thick Including cutting the tiles to the required size with special cutter where ever necessary and pointing the joints with coloured cement using 0.40 Kg / Sqm including finishing the flooring and pointing the joints flesh with tile surface etc. complete. Basic cost-Rs.430/Sqm	29.00	Sqm		
57.00	Supplying and fixing in position C.I.Manhole covers (heavy duty) of various sizes of best approved quality and as per standard specification etc., complete.0.6X0.6M Size etc., complete.	1.00	Nos		
58.00	PVC mould CI steps for sump	8.00	Nos		
SEPTIC TANK					
59.00	Earthwork excavation for foundation (for narrow excavation) to full depth as per designed in all soils and sub soils except soft disintegrated rock not requiring blasting and hard rock requiring blasting and bailing water wherever necessary.Refilling the sides of foundation with excavated earth other than sand in layers of well rammed and compacted and depositing the surplus earth in places shown by the departmental officers with an initial lead of 10m and initial lift of 2m and clearing and leveling the site etc.complete complying with standard specification.	27.00	Cum		
60.00	Supplying and filling in foundations and basement with filling M-sand in layers not exceeding 15 cm.thick,well watered,rammed and consolidated etc. complete complying with standard specifications.	2.00	Cum		
61.00	Plain Cement Concrete 1:4:8 (one part of cement, four parts of sand and eight parts of hard broken stone) using 40 mm gauge hand broken hard broken granite stone jelly complying with standard specifications in foundations and basement.	2.00	Cum		
62.00	Supplying and erecting centering and shuttering for soffits including necessary supports and strutting upto 3 M height for plane surfaces as detailed below in all floors with all cross bracings using Mild Steel sheets of size 90 x 60 cm and 10 BG stiffened with welded Mild Steel angle of size 25mm x 25mm x 3 mm for boarding laid over silver oak joists of size 10cm x 6.50 cm spaced at abote 90 cm centre to centre and supported by casurina props of 10cm to 13 cm dia spaced at not more than 75 cm centre to centre etc. complete complying with the standard specification.(Payment for centering shall be given after the concrete is laid).	12.00	Sqm		
63.00	Providing and laying in position, Standardised Concrete Mix M-25 Grade in accordance with IS:456-2000, using 20mm and down grade hard broken granite stone jelly for all RCC Items of works with minimum cement content of 350kg/m ³ and maximum water cement ratio of 0.50, including admixture (Plasticiser / super plasticiser) in recommended proportions as per IS:9130 to accelerate, rated setting of concrete, improve workability without impairing strength and durability with about (5.0 Cum) 7730kg. of 20mm machine crushed stone jelly and with about (3.3cum) 5156 kg. of 10-12mm machine crushed stone jelly and with about (4.79cum) 7670 kg of sand, but excluding cost of reinforcement grill and fabricating charges, centering and shuttering and also including laying, vibrating with Mechanical vibrators, finishing, curing, etc.,and providing fixtures like fan clamps in the RCC Floor / roof slabs wherever necessary without claiming extra, etc., Complete complying with standard specification and as directed by the departmental officers. The coarse and fine aggregates to be used should comply with the requirements of IS Standards.	4.00	Cum		
64.00	Steel - Fe 500 D/Fe 550 D: Supply, fabrication and placing of reinforcement steel of high yield strength ribbed bars of various diameters and grade conforming to IS 1786 for reinforced concrete work. The work includes recoiling, straightening, cutting, bending, fabricating, and placing in position, at all levels including lead and lift, according to drawings, specifications etc. complete and supply & use of 18G black annealed binding wire double fold to tie the bars in position and providing precast cement/ PVC cover blocks for main reinforcement to ensure specified cover and complete., including all labor charges etc as directed by departmental officers.	0.60	MT		
65.00	Brick work in following Cement Mortar using best quality First class table moulded chamber burnt bricks of size 9" x 4-3/8" x 2-3/4" for sub structure using Cement Mortar 1:5 (One part of Cement and Five parts of crushed stone Sand) and for super structure using Cement Mortar 1:6 (One part of Cement and Six parts of crushed stone Sand) including curing, etc., including scaffolding, complete complying with standard specification.	6.00	Cum		

66.00	Brick partition walls of 11.50cm thickness using best quality First class table moulded chamber burnt bricks of size 9" x 4-3/8" x 2-3/4" in Cement Mortar 1:3 (One Cement and Three crushed stone Sand) using hoop iron reinforcement if found necessary including curing etc. (Hoop iron reinforcement will be measured and paid for separately)and paid for separately).	4.00	Sqm		
67.00	Providing, supply, mixing laying cement plastering 20mm thick with cement mortar 1:4 mixed with water proofing compound Conplast X4211C conforming to IS:2645, @ 150ml per bag of cement (normal setting integral water proofing compound) as specified by the manufacturer over PCC leveling course including preparation of surface, dewatering, finishing, curing etc. all complete as per manufacture's Specification and direction	64.39	Sqm		
68.00	Supplying and fixing in position C.I.Manhole covers (heavy duty) of various sizes of best approved quality and as per standard specification set., complete.0.6X0.6M Size etc., complete.	1.00	Nos		
69.00	PVC mould CI steps for sump	8	Nos		
	COMPOUND WALL				
	Earth work				
70	Earthwork excavation for foundation (for narrow excavation) to full depth as per designed in all soils and sub soils except soft disintegrated rock not requiring blasting and hard rock requiring blasting and bailing water wherever necessary.Refilling the sides of foundation with excavated earth other than sand in layers of well rammed and compacted and depositing the surplus earth in places shown by the departmental officers with an initial lead of 10m and initial lift of 2m and clearing and leveling the site etc.complete complying with standard specification.	462.00	Cum		
71	Supplying and filling in foundations and basement with filling M- sand in layers not exceeding 15 cm. thick, well watered ,rammed and consolidated etc. complete complying with standard specifications.	37.00	Cum		
72	Plain Cement Concrete 1 : 4 : 8 (one part of cement, four parts of sand and eight parts of hard broken stone) using 40 mm gauge hand broken hard broken granite stone jelly complying with standard specifications in foundations and basement.	37.00	Cum		
73	Supplying and Erecting centering for sides and soffits including necessary supports and strutting up to 3.29 M height for plane surfaces as detailed below in all floors with all cross bracings using Mild Steel sheets of size 90 x 60 cm and 10 BG stiffened with welded Mild Steel angle of size 25mm x 25mm x 3 mm for boarding laid over silver oak joists of size 10cm x 6.50 cm spaced at about 90 cm centre to centre and supported by casurina props of 10cm to 13 cm dia spaced at not more than 75 cm centre to centre etc. complete complying with the standard specification. (Payment for centering shall be given after the concrete is laid)				
a	Footing, Plinth Beam, etc.	294.00	Sqm		
b	Square and rectangular columns and small quantities such as sunshades, parapet cum drops, window boxing, fin projections and other similar works.	355.00	Sqm		
74	Providing and laying in position, Standardised Concrete Mix M-25 Grade in accordance with IS:456-2000, using 20mm and down grade hard broken granite stone jelly for all RCC Items of works with minimum cement content of 350kg/m ³ and maximum water cement ratio of 0.50, including admixture (Plasticiser / super plasticiser) in recommended proportions as per IS:9130 to accelerate, rated setting of concrete, improve workability without impairing strength and durability with about (5.0 Cum) 7730kg. of 20mm machine crushed stone jelly and with about (3.3cum) 5156 kg. of 10-12mm machine crused stone jelly and with about (4.79cum) 7670 kg of sand, but excluding cost of reinforcement grill and fabricating charges, centering and shuttering and also including laying, vibrating with Mechanical vibrators, finishing, curing, etc.,and providing fixtures like fan clamps in the RCC Floor / roof slabs wherever necessary without claiming extra, etc., Complete complying with standard specification and as directed by the departmental officers. The coarse and fine aggregates to be used should comply with the requirements of IS Standards.				
a	Foundation & Basement	84.00	Cum		
	Steel - Fe 500 D/Fe 550 D				
75	Supply, fabrication and placing of reinforcement steel of high yield strength ribbed bars of various diameters and grade conforming to IS 1786 for reinforced concrete work. The work includes decoiling, straightening, cutting, bending, fabricating, and placing in position, at all levels including lead and lift, according to drawings, specifications etc. complete and supply & use of 18G black annealed binding wire double fold to tie the bars in position and providing precast cement/ PVC cover blocks for main reinforcement to ensure specified cover and complete	12.00	MT		
76	Brick work in following Cement Mortar using best quality First class table moulded chamber burnt bricks of size 9" x 4-3/8" x 2-3/4" for sub structure using Cement Mortar 1:5 (One part of Cement and Five parts of crushed stone Sand) and for super structure using Cement Mortar 1:6 (One part of Cement and Six parts of crushed stone Sand) including curing, etc., including scaffolding, complete complying with standard specification.	98.00	Sqm		
77	Providing & applying 20 mm thick cement plaster in CM 1:5 (1 part of cement: 5 parts of sand) to walls externally in single coat at all levels to correct line and level including scaffolding, rounding off or champhering of corners, offsets, fin/ bands, projections,etc.and cleaning of surface, raking out joints, roughening of surface, chiseling the undulated surface wherever necessary and curing, etc.	1050.00	Sqm		
78	Supplying and fixing mild steel grills for windows, ventilators, Gate etc., including priming one coat necessary fixtures complete as per drawings.	360.00	Kg		
79	Painting new iron works such as steel doors, windows, ventilators, window bars, balustrades etc., with two coats of best approved first quality and colour of synthetic enamel paint over the existing Zinc chromite priming coat in all floors excluding cost of priming coat etc., complete complying with standard specification.	24.00	Sqm		
80	Supplying and painting the exterior walls with one coat of wall primer and two coats of Acrylic Exterior emulsion (ACE quality of Asian paints or its equivalent) as per manufacturers specifications including preparation of surface, curing the primer coat and including Scaffolding, cleaning the paint drop stains after completion painting works etc., complete in all floors complying with standard specifications	1050.00	Sqm		
	EXTERNAL DEVELOPMENT				

	Earth work				
81	Earthwork excavation for foundation (for narrow excavation) to full depth as per designed in all soils and sub soils except soft disintegrated rock not requiring blasting and hard rock requiring blasting and bailing water wherever necessary. Refilling the sides of foundation with excavated earth other than sand in layers of well rammed and compacted and depositing the surplus earth in places shown by the departmental officers with an initial lead of 10m and initial lift of 2m and clearing and leveling the site etc. complete complying with standard specification.	5.00	Cum		
82	Supplying and filling in foundations and basement with filling M- sand in layers not exceeding 15 cm. thick, well watered, rammed and consolidated etc. complete complying with standard specifications.	28.00	Cum		
83	Plain Cement Concrete 1 : 4 : 8 (one part of cement, four parts of sand and eight parts of hard broken stone) using 40 mm gauge hand broken granite stone jelly complying with standard specifications in foundations and basement.	2.00	Cum		
84	Supplying and Erecting centering for sides and soffits including necessary supports and strutting up to 3.29 M height for plane surfaces as detailed below in all floors with all cross bracings using Mild Steel sheets of size 90 x 60 cm and 10 BG stiffened with welded Mild Steel angle of size 25mm x 25mm x 3 mm for boarding laid over silver oak joists of size 10cm x 6.50 cm spaced at about 90 cm centre to centre and supported by casurina props of 10cm to 13 cm dia spaced at not more than 75 cm centre to centre etc. complete complying with the standard specification. (Payment for centering shall be given after the concrete is laid)				
a	Footing, Plinth Beam, etc.	32.00	Sqm		
85	Providing and laying in position, Standardised Concrete Mix M-25 Grade in accordance with IS:456-2000, using 20mm and down grade hard broken granite stone jelly for all RCC Items of works with minimum cement content of 350kg/m ³ and maximum water cement ratio of 0.50, including admixture (Plasticiser / super plasticiser) in recommended proportions as per IS:9130 to accelerate, rated setting of concrete, improve workability without impairing strength and durability with about (5.0 Cum) 7730kg. of 20mm machine crushed stone jelly and with about (3.3cum) 5156 kg. of 10-12mm machine crushed stone jelly and with about (4.79cum) 7670 kg of sand, but excluding cost of reinforcement grill and fabricating charges, centering and shuttering and also including laying, vibrating with Mechanical vibrators, finishing, curing, etc., and providing fixtures like fan clamps in the RCC Floor / roof slabs wherever necessary without claiming extra, etc., Complete complying with standard specification and as directed by the departmental officers. The coarse and fine aggregates to be used should comply with the requirements of IS Standards.				
a	Foundation & Basement	4.00	Cum		
	Steel - Fe 500 D/Fe 550 D				
86	Supply, fabrication and placing of reinforcement steel of high yield strength ribbed bars of various diameters and grade conforming to IS 1786 for reinforced concrete work. The work includes decoiling, straightening, cutting, bending, fabricating, and placing in position, at all levels including lead and lift, according to drawings, specifications etc. complete and supply & use of 18G black annealed binding wire double fold to tie the bars in position and providing precast cement/ PVC cover blocks for main reinforcement to ensure specified cover and complete.	0.26	MT		
87	Providing & applying 12mm thick cement plaster in CM 1:5 (1 part of cement: 5 parts of sand) to walls externally in single coat at all levels to correct line and level including scaffolding, rounding off or champhering of corners, offsets, fin/ bands, projections, etc. and cleaning of surface, raking out joints, roughening of surface, chiseling the undulated surface wherever necessary and curing, etc., all materials and labour complete in all respects including all lead, lift and descent and as directed.	40.00	Sqm		
88	Supplying and painting the exterior walls with one coat of wall primer and two coats of Acrylic Exterior emulsion (ACE quality of Asian paints or its equivalent) as per manufacturers specifications including preparation of surface, curing the primer coat and including Scaffolding, cleaning the paint drop stains after completion painting works etc., complete in all floors complying with standard specifications	12.00	Sqm		
89	Supplying and laying of Interlocking Paver Block Stone 63mm thick . Over a base layer of crushed stone sandfilling incl. Cost of materials laying and Labour charges etc.	258.00	Sqm		
	SUB TOTAL (A)				
B	PLUMBING BOQ				
	PART - A SANITARY FITTINGS				
90	Supplying and fixing of floor mounted white colour European water closet Parryware or equivalent, with seat cover and dual flush (3/6 lit) cistern having P trap with seat cover, supplying non corrosive hinges, CP bolts, nuts, washers, providing and fixing dash anchor fasteners with bolts / L - brackets with anticorrosive paint cutting grooves in masonry or concrete surfaces, grouting with cement concrete 1:2:4 mix, using 20mm size stone jelly, restoring the damaged portion to their original condition using required materials, fixing the water closet to perfect level, alignment, testing etc. complete. Model- Casa C022x	24.00	Each		
91	Supply & Fixing of two in one CP Health Faucet of the closet mounting type with hose connected two way BIB COCK complete fittings. (Make: Parryware or equivalent) Model : Primo health Faucet. Code: E8383A1	24.00	Each		
92	Providing and keeping in stores, shifting to the place of installation, fixing, testing and commissioning of WHITE coloured vitreous china under counter Regular rectangular wash basin with brackets / G.I. rag bolts and nuts painted, 32mm dia brass C.P. waste coupling, (heavy) 32mm dia brass C.P. bottle trap, 15mm dia brass C.P. Piller cock with flange, 15mm dia brass C.P. cold water connecting pipe, etc., The work shall include, required extension nipples, cutting / chasing and making good the walls and floors - toilets. (Make: Parryware or equivalent) Model :Atom pro. Code:C897Q	23.00	Each		
93	Supplying & fixing of Long body Bibcock with brackets including fixing over Wall tile dado complete. (Make: Parryware or equivalent) Model: Pluto Collection Code: G3806A1	61.00	Each		
94	Supplying & fixing of Angle valve stopcock with connecting hose and wall flange. (Make: Parryware or equivalent) Model :Cute Code:T9880A1	54.00	Each		
95	Towel Rail :Supplying and fixing approved best quality brass CP towel rail 600mm long and 20mm dia with brackets of same materials including cost of teak wood plugs and CP screws, etc., complete complying with standard specifications. (Make: Parryware or equivalent) Code : T5901A1	13.00	Each		
96	Supplying and fixing in position Indian make bevelled edge mirror of approved quality and brand PVC / Fibre Glass framed 600 x 450 x 5.5mm thick mirror, shelf type with hard board backing of approved colour fixed with brass screws, rawl plug, etc., complete complying with standard specification.	22.00	Each		
97	Supplying and fixing best approved best quality CP stop cock 15mm dia including cost of brass screws, etc., complete complying with standard specifications. (Make: Parryware or equivalent) Code:T3511A1	11.00	Each		

98	Flat Back Urinal :Providing and keeping in stores, shifting to the place of installation, fixing, testing and commissioning of white vitreous china white color large flat back urinal with CP angle cock spreader flushing supported by CI/MS bracket including built in waste grating,C.P. cast brass bottle trap with extension piece, wall flanges,flush piping.(Make: Parryware or equivalent) Code:C0501	12.00	Each		
99	Supplying and fixing in position CP shower rose with CP stop cock arrangement of size 15mm dia inlet and 100mm outlet to the pipe line with necessary cutting, threading and jointing using shellac etc., complete complying with standard specification and as directed by the departmental officers. (Make: Parryware or equivalent) Model :Coral Code:T9825A1, Model :Alpha Shower Code:T9885A1	12.00	Each		
100	Supplying & fixing of Coat hook with brackets including fixing over Wall tile dado / door shutter using suitable size non-corrosive screw nails etc. complete.(Make: Parryware or equivalent)	38.00	Each		
PART - B SOIL, WASTE AND VENT PIPE LINES					
101	Supplying and fixing in position best quality PVC soil / waste pipes of various dia having 6 kg / sq.cm. pressure BIS mark and providing leak proof joints using PVC adhesives including fixing to the wall with special PVC / MS clamp, teak wood plugs, brass screws, etc., and making connection to all sanitary fittings, dismantling masonry / RCC works wherever found necessary and making the good dismantled portion to the original condition, including testing for any leakages,etc., complete complying with standard specifications.				
a	40mm dia. 6kg class PVC pipes.	39.00	Rmt		
b	50mm dia. 6kg class PVC pipes.	62.00	Rmt		
c	75mm dia. 6kg class pipes.	122.00	Rmt		
d	110mm dia. 6kg class pipes.	145.00	Rmt		
102	Supplying and fixing in position PVC nahini /Floor Trap with PVC Grating type of size 100x75/75x50 mm with best quality gratings of approved brand fixed over a bed of brick jelly lime concrete 1:2:5(One lime two sand and five aggregate) brick jelly 40mm and finishing with CM 1:3(One cement and three sand)wherever found necessary and making good to the original condition and giving connections to the PVC pipes etc.,	57.00	Each		
103	Supply and fixing in position best quality PVC IS 4985 - CLASS-II - 4 Kg/Sqcm -Rain water pipes of various size having ISI mark and providing leak proof joints with such as Bend, Tee Junction, door etc.,of approved qualityincluding fixing to the wall with special PVC /MS clamps, etc., and making connection to all sanitary fittings, wherever necessary and making chipping good to the original condition, complying with standard specification etc., complete.				
a	75mm dia. 6kg class PVC pipes.	6.00	Rmt		
b	110mm dia. 4kg class pipes.	74.00	Rmt		
104	Supplying and fixing in position of the following dia PVC rain water gratings for rain water pipes ,of approved quality and variety of various size confirming to ISS and including necessary cutting and fixing and giving connection to PVC pipes etc.,				
a	75mm	2.00	Nos		
b	100mm x 75mm	4.00	Nos		
105	Supplying and fixing in position of the following dia PVC specials such as PVC vent Cowl etc.,of approved quality and variety of various size confirming to ISS amend providing leak proof joint etc., including necessary cutting and fixing and giving connection to PVC pipes etc.,				
a	75mm dia	8.00	Nos		
b	110mm dia	11.00	Nos		
PART-C - EXTERNAL DRAINAGE					
106	Supply and fixing in position best quality PVC IS 4985 - CLASS- III - 6 Kg/Sqcm -Soil/ waste pipes of various size with approved quality and variety of various size confirming having ISI mark and providing leak proof joints including erection of below ground with excavation and refilling etc., and making connection to Manholes / Gully trap, wherever necessary and making chipping good portion to the original condition, complying with standard specification etc.,complete.				
a	75mm dia. 6kg class III-pipes.	34.00	Rmt		
b	110mm dia. 6kg class III-pipes.	20.00	Rmt		
c	160mm dia. 6kg class III-pipes.	173.00	Rmt		
107	Supply, laying and erection of glazed stone ware gully trap (100 x 75 mm) with 100 mm dia, outlet including embedding trap in cement concrete 1:3:6 and constructing chamber of size 300 x 300 mm inside clear in brick masonry 230 mm thick, plaster with water proof cement mortar (1:3) 15 mm thick on both internal and external surfaces inside finished with floating coat of neat cement. The work including excavation to required depth of gully trap and refilling and making good in the surface with Providing and fixing SFRC frame and cover 400 x 400 mm (clear opening) complete complying with std. specification.	8.00	Each		
108	Supplying and Erection and construction of sewer chambers of required internal dimensions 450x450 upto 0.6 mtr.depth with 230mm brick masonry in C.M.1:5 thk of masonry over bed of 1:2:4 R.C.C. 200 mm thk bove 100 mm thk P.C.C.1:3:6 Cement concrete foundations over sand bed of 100mm thk channelling in 1:2:4 cement concrete, plastering in 1:3 cement mortar for internal and external surface finished with floating coat of neat cement, the work including excavation for required depth of gully trap and refilling and making good in the surface with SFRC cover and frame 450x450mm (clear opening)complete complying with standard specifications etc.,	22.00	Each		
109	Construction of rain water recharge well of 1200mm dia and depth upto 1500mm, in addition 110 dia special blue slotted pipe for bore well.pipe should be laid from bottom of ring well centre to below 1500mm as shown in the drawings, including all types of excavation, occur for pipe, filling of rain water harvesting materials with construction of R.C.C. ring and top 100mm RCC SLAB WITH 450X450mm perforated SFRC manhole and 230mm brick wall in 2'height with below 300mm lengthx100mm thk P.C.C. as per the structural filling the filter media as per drawing.	2.00	Each		
D. WATER SUPPLY SYSTEM					
110	Internal Concealed Works				
	Providing, supplying & laying of Unplasterized Poly Vinyl Chloride (UPVC-SDR-11 Pipes conforming to IS 15778 having thermal stability cold water with brass and UPVC fittings like Elbow, Brass Tee, Brass Elbow, Offsets, Tee with clamps @1.00 meters spacing, with jointing of pipes with one step UPVC solvent cement with including cutting of chase including testing of the joints complete and making good the walls etc. Rate is inclusive of all material labour, transportation, tools & tackles taxes, levies VAT etc all complete as per as per specifications, Concealed work including chase cutting)				
a	20 mm nominal (OD) pipes	170.00	Rmt		
c	32 mm nominal (OD) pipes	174.00	Rmt		
E.EXPOSED PLUMBING WORKS					

111	Providing, supplying & laying of Chlorinated Poly Vinyl Chloride (UPVC-SDR-13.5) Pipes conforming to IS 15778 having thermal stability cold water with brass and UPVC fittings like Elbow, Brass Tee, Brass Elbow, Offsets, Tee with clamps @1.00 meters spacing, with jointing of pipes with one step UPVC solvent cement with including cutting of chase including testing of the joints complete and making good the walls etc. Rate is inclusive of all material labour, transportation, tools & tackles taxes, levies VAT etc all complete as per as per specifications, Exposed work including chase cutting, bracket fixing)				
b	40mm nominal(OD) pipes	108.00	M		
F. EXTERNAL PLUMBING WORKS					
112	Providing, supplying & laying of Chlorinated Poly Vinyl Chloride (UPVC) Pipes conforming to IS 15778 having thermal stability cold Metro water with brass and UPVC fittings like Elbow, Brass Tee, Brass Elbow, Offsets, Tee with clamps @1.00 meters spacing, with jointing of pipes with one step UPVC solvent cement with including cutting of chase including testing of the joints complete and making good the walls etc.Rate is inclusive of all material labour,transportation, tools & tackles taxes, levies VAT etc all complete as per as per specifications,Concealed work including chase cutting)				
a	32mm UPVC pipes	135.00	Rmt		
b	40mm UPVC pipes	263.00	Rmt		
113	Providing, supplying & laying of Gunmetal type NRV - pressure rating less tahn 16 Kg/Sqcm and IS778 with 2 Nos of MTA with jointing material like shellac, thread including testing of the joints complete and making good the walls etc. Rate is inclusive of all material labour, transportation, tools & tackles all complete as per as per specifications,				
a	32 DIA	2.00	Each		
b	40 DIA	16.00	Each		
114	Supply and delivery of clear water vertical wet type submersible pump suitable for 100mm dia borewell conforming to IS 8034/2002 as amended thereafter and BEE 3 Star Rated capable of discharging noted LPM against head of water column due to all causes. The pump shall be with stainless steel shaft and dynamically balanced bronze or Cast SS impeller, brass screws and CI FG 200 grade pump bowl/diffuser with ISI mark. The pump shall be directly coupled to a continuous rated two pole suitable wet type vertical squirrel cage induction motor as per IS9283 /1995 and as amended there after, suitable for operation in AC three phase 415 V+/- 10 %, 50 HZ +/- 5 % etc...(The make and quality of pump set to be got approved by the Executive Engineer before use on works.)	1.00	Each		
115	Supplying and erection of horizontal shaft centrifugal mono block power pump set of single phase 2.00 H.P of best approved quality and make with ISI mark on suitable pedestal with foundation bolt and nut including labour supplying and fixing of starter and main switch suitable for 2.00 H.P pumpset on suitable angle iron frame work with necessary labour including panel board, supply and run off 4 of 10 Sq.mm, in P V C pipe with 14 SWG TC wire including fixing of suction pipe and foot valve up to a maximum depth of 7m and delivery pipes upto the exterior wall of pump room etc., complete and operating the pumps on trial run for 3 days. (The make and quality of pump set to be got approved by the Executive Engineer before use on works.) (TWAD- Pa no:103 Sl.no:45)200mx60m	1.00	Each		
BORE WELL					
115	Drilling of bore wells in alluvial soil or sedimentary strata of clay and sand or sand stone, shale, pebbles, boulders etc., by first taking a pilot bore of 150 mm dia and then enlarging to the required dia by direct or reverse rotary mud circulation method including charges for all T&P, cost of fuel, labour charges, bentonite mud and water required for drilling at the site shown by the departmental officers including construction of mud pit etc., complete.				
a	Upto 60 m Depth ending below ground level	60.00	Rmt		
b	Upto 60m to 90 m Depth ending below ground level	30.00	Rmt		
c	Upto 90m to 120 m Depth ending below ground level	30.00	Rmt		
d	Upto 120m to 150m Depth ending below ground level	30.00	Rmt		
e	Upto 150m to 180m Depth ending below ground level	30.00	Rmt		
116	Reaming 150mm dia Pilot bore to 300mm dia bore as directed by the departmental officers upto required depth				
a	Upto 60 m Depth ending below ground level	60.00	Rmt		
b	Upto 60m to 90 m Depth ending below ground level	30.00	Rmt		
c	Upto 90m to 120 m Depth ending below ground level	30.00	Rmt		
d	Upto 120m to 150m Depth ending below ground level	30.00	Rmt		
e	Upto 150m to 180m Depth ending below ground level	30.00	Rmt		
117	Supplying, and fixing the following size of PVC pipes of approved quality and variety conforming to pressure IS 4985. The rate is inclusive of cost of pipe, all taxes, conveyance charges of materials and all other labour charges for fixing the PVC pipe as directed by the departmental officers etc., complete complying with standard specifications. The PVC pipe should be got approved by the departmental officers before use on work and Labour Charges for insering PVC casing pipe assembly (with slots and without slots) in the drilled holes including jointing the pipes with PVC couplers with PVC adhesive etc., complete and supplying and packing annular space with pebbles of size and quality as approved by the Departmental Officers.				
150mm dia PVC Casing Pipe (With or without Slot)					
a	In Bore Well	180.00	Rmt		
118	Charges for developing Borewell with air compressor of 600 CFM capacity (Min 8 Hours) including transportation and labour and fuel charges for the compressor as directed by the departmental officers and conducting yeild test by 'V' notch methods, excluding cost of bore charges and conveyance charges for handling boring				
a	For Borewell	8.00	Hrs		
119	Suppling and fixing PVC bore well end cap of size 165/168mm dia etc., complete complying with standard specification as directed by departmental officers				
a	End cap	1.00	Nos		
120	Supply of 4.00 Sqmm / PVC insulated and sheathed, 3 core flat type copper cable for submersible motor complete complying with standard specifications as directed by departmental officers				
a	In bore well	210.00	Rmt		
121	Supply and fixing the Nylon Rope to connect the submersible motor in borewell etc., complete complying with standard specifications as directed by departmental officer.				
a	In bore well	180.00	Rmt		
SUB TOTAL (B)					
C ELECTRICAL BOQ					
A Main Panel boards (LT Electrical Installation Works)					

122	Supply and fixing of TNEB Meter Board suitable for 3 Phases 100A service connection made up of suitable angle iron frame work of size 2 feet x 1-1/2 feet using angle iron of size 1 1/2" x 1 -1/2" x 1/4" rigidly fixed on wall covered with hylem sheet of size 2 feet x 1-1/2 feet of 12 mm thickness with necessary bolts and nuts support and supply and fixing of 3 nos 100Amps Fuse unit (500V) 1 no. Neutral link copper earth flat size 1" x 1/4" with inter connections of EB meter to Fuse unit by 7/16 Pvc insulated copper With earth connections complete.	1.0	each		
123	Supply and fixing of 100 Amps TPN sheet double break switch with HRC fuse and neutral on suitable angle iron frame work with MS Cable Entry Boxes and with earth Connections only	1.0	each		
124	Fabrication, Supply, Erection, Testing and Commissioning of CPRI certified Indoor panel board made up of 2mm thickness powder coated CRCA sheet steel with cu bus bar provision (Ph-10x10mm for all phases Ne-10x10mm & E-2X10x3mm) with heat shrinkable insulation and SMC supports, door with industrial lock, Incomer 100A TPN MCCB-1Nos. Out going: 8 nos. of 63Amps TPN MCCB, 1 set Metering Compartment consisting of 1 no Digital multifunctional meter Accuracy class 1.0 with 3 nos of CTs 100/ 5 amps ratio and RYB cluster type indication lamps with control fuses with provision for locking the indoor panel board complete etc., as per IS standard. The above panel board is to be erected with anchor fasteners, bolt and nuts with suitable angles and channels of size 75 x 40mm (Drawing to be approved by the Engineer-in-charge before fabrication.)	1.0	each		
B LT ,1100V GRADE PVC / XLPE ARMURED UNDERGROUND CABLE					
1	Supply and Laying of 4 x 6 Sqmm. PVC armoured LTUG cable in suitable size HDPE pipe in a trench to be excavated at a depth of 0.75 metre and refilling the earth to make good	350.0	mtr		
2	Supply and Laying of 3 1/2 x 50 Sqmm. PVC armoured LTUG cable in suitable size HDPE pipe in a trench to be excavated at a depth of 0.75 metre and refilling the earth to make good.	75.0	mtr		
CABLE GLANDS					
3	Supply and fixing of brass cable gland for 4 X 6 Sqmm PVC armoured LTUG cable with earth connection.	20.0	each		
4	Supply and fixing of brass cable gland for 3 1/2 X 50 Sqmm PVC armoured LTUG cable with earth connection.	2.0	each		
CABLE END TERMINATION					
5	Supply and providing cable end termination of 4 X 6 Sqmm PVC LTUG Aluminium armoured cable with necessary Aluminium cable sockets by crimping etc, with electrical connection complete.	20.0	mtr		
6	Supply and providing cable end termination of 3 1/2 X 50 Sqmm PVC LTUG Aluminium armoured cable with necessary Aluminium cable sockets by crimping etc, with electrical connection complete.	2.0	each		
C EARTHING					
1	Earthing as per the ISI specification with an earth electrode of 2.1 mtr class 'B' GI pipe of dia not less than 40mm, with copper earth plate of size 125mm x 50mm x 6mm with necessary funneling arrangements with necessary masonry work and with 38mm RCC cover slab for the brick masonry	2.0	each		
2	Plate earthing with copper plate of size 600 x 600 x 3 mm as per the ISI specification with an earth electrode of 2.1 mtr class 'B' GI pipe of dia not less than 40mm, with copper earth plate of size 125mm x 50mm x 6mm with necessary funneling arrangements with necessary masonry work and with 38mm RCC cover slab for the brick masonry.	4.0	each		
3	Supply and run of 2 of No.8 SWG G.I wire for guarding with grade with No.8 SWG G.I wire at the equal interval of 1.5 Metre.	65.0	mtr		
4	Supply and run of 25mm x 3mm tinned copper flat with necessary clamps / Supports on wall / floor / ground for earth connection	50.0	mtr		
D DISTRIBUTION BOARD					
1	Supply and fixing of 4 way Triple pole and neutral MCB sheet steel enclosure distribution board with double door (metal) RCBO, RCD+MCB 63A, 7 modules 100mA as incoming and 1 Nos of 4P 63AMPS MCB 12Nos. 6A to 32A SPMCB outgoing in flush with wall and making good of the concealed portion with earth connection only. The MCB DB and MCB's should be with ISI mark (like legrand/ hager/Equivalant) make) FOR COMMON LOAD	1.0	each		
2	Supply and fixing of 12 way Triple pole and neutral MCB sheet steel enclosure distribution board with double door (metal) RCBO, RCD+MCB 63A, 7 modules 100mA as incoming and 1 Nos of 4P 63AMPS MCB 36Nos. 6A to 32A SPMCB outgoing in flush with wall and making good of the concealed portion with earth connection only. The MCB DB and MCB's should be with ISI mark (like legrand/ hager/Equivalant) make) FOR FLOOR DB (LDB CUM PDB)	2.0	each		
3	Supply and fixing of 4 way Vertical Triple pole and neutral MCB sheet steel enclosure distribution board with double door (metal) with 1 no. 63A 4P MCB switch as incoming and 2 nos 40A TP MCB, 6 nos. 6A to 32A SP MCB as outgoing in flush with wall with earth connection only. Higher End(LIFT CONTROL & UPS CONTROL)	2.0	each		
4	Supply and fixing of 12 way single pole and neutral MCB sheet steel enclosure distribution board with double door (metal) with 1 no. 32A DP MCB switch as incoming and 10 nos. 6A to 32A SP MCB as outgoing on wall with earth connection only. FOR UPS DB	2.0	each		
E MAINS WIRING					
1	Supply and Run of 2 of 1.5 Sqmm. (36/0.3) PVC insulated SC unsheathed copper conductor of 1100 V grade in suitable PVC rigid pipe Concealed in wall and ceiling with continuous earth wire connection by 1.5 Sqmm. PVC insulated SC unsheathed copper wire and making good of the concealed portion with suitable colour.	450.0	mtr		
2	Supply and Run of 2 of 2.5 Sqmm. (36/0.3) PVC insulated SC unsheathed copper conductor of 1100 V grade in suitable PVC rigid pipe Concealed in wall and ceiling with continuous earth wire connection by 2.5 Sqmm. PVC insulated SC unsheathed copper wire and making good of the concealed portion with suitable colour.	1350.0	mtr		
3	Supply and Run of 2 of 4 Sqmm. (56/0.3) PVC insulated SC unsheathed copper conductor of 1100 V grade in suitable PVC rigid pipe on wall and ceiling with continuous earth wire connection by 2.5 Sqmm. PVC insulated SC unsheathed copper wire with painting of suitable colour.	1050.0	mtr		
4	Supply and Run of 2 of 6 Sqmm. (84/0.3) PVC insulated SC unsheathed copper conductor of 1100 V grade in suitable PVC rigid pipe on wall and ceiling with continuous earth wire connection by 2.5 Sqmm. PVC insulated SC unsheathed copper wire with painting of suitable colour.	60.0	mtr		
5	Supply and Run of 4 of 6 Sqmm. (84/0.3) PVC insulated SC unsheathed copper conductor of 1100 V grade in suitable PVC rigid pipe on wall and ceiling with continuous earth wire connection by 2.5 Sqmm. PVC insulated SC unsheathed copper wire with painting of suitable colour.	60.0	mtr		
6	Supply and Run of 4 of 10 Sqmm. (140/0.3) PVC insulated SC unsheathed copper conductor of 1100 V grade in suitable PVC rigid pipe on wall and ceiling with continuous earth wire connection by 4 Sqmm. PVC insulated SC unsheathed copper wire with painting of suitable colour	35.0	mtr		
F LAN/TELEPHONE/TV/CCTV/SPEAKER CABLE					
1	Supply, laying testing and commissioning of of CATE -6 pair PVC insulated with rigid PVC conduit Pipe open / concealed type and with all necessaries	2940.0	mtr		
EMPTY PVC CONDUIT					

	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
2	25mmdia	200.0	mtr		
G	POINTS WIRING				
1	Wiring with 2 x 1.5 Sqmm. (22/0.3) PVC insulated single core unsheathed copper conductor of 1100 V grade in suitable PVC rigid pipe on wall and ceiling with PVC accessories with Module GI switch box on wall with 6A one way module switch with module front plate with continuous earth wire connection of 14 SWG TC wire with painting of Suitable colour for Open PVC Light point / fan point (for electronic regulator) (SD-284) Pg.no:128	274.0	point		
2	Wiring with 3 x 1.5 Sqmm. (22/0.3) PVC insulated single core unsheathed copper conductor of 1100 V grade in suitable PVC rigid pipe on wall and ceiling and switch drop portion PVC rigid pipe concealed in wall with PVC accessories with Module GI switch box in flush with wall with 6A two way module switch with module front plate with continuous earth wire connection of 14 SWG TC wire with painting of Suitable colour for Open PVC Stair case Light point	14.0	point		
3	Wiring, Connecting, Testing & Commissioning with 3 X 1.5sqmm PVC insulated single core unsheathed copper conductor cable of 1100 V grade in suitable PVC rigid pipe concealed in wall and ceiling with PVC accessories, including supply and fixing of modular 2 Nos of 6A Two way switch, one step type fan regulator along with moulded front plate in G.I anodised manufacturer's mounting box fixed flush with the wall complete with all accessories as required for Fan Points. (Length of the points will be 5 to 8 mts.) TWO WOAY FAN POINT	4.0	point		
4	Wiring with 2 x 1.5 Sqmm. (22/0.3) PVC insulated single core unsheathed copper conductor of 1100 V grade in suitable PVC Rigid pipe on wall and ceiling and switch drop portion PVC rigid pipe concealed in wall with PVC accessories with suitable Module GI switch box in flush with wall with 1 no. 6A one way module switch and 1 no. 6A 3/2 pin module socket with module front plate with painting of Suitable colour with continuous earth wire connection of 14 SWG TC wire for Open PVC conduit Plug point	60.0	point		
5	Lift Shaft Wiring : Wiring, Connecting, Testing & Commissioning for lift well light point and 6Amps power socket outlet for all 2 floors with 2 x 1.5 sqmm FRLS PVC insulated stranded copper conductor of 1100V grade along with 1 x 1.5 sqmm FRLS PVC insulated stranded copper conductor cable as earth wire in MS conduit including providing and fixing switch box, 2 Nos. of 5A single way flush type switch (for controlling light point and socket Outlet) for each floor of the lift well , 1 No. 5A 5 Pin shuttered socket outlet with flush type switch for each floor of the lift well and making necessary connections complete etc	1.0	point		
H	SOCKETS				
1	Supply and fixing of 1 no.6A two module 5 pin socket , 1 no. 6A one module switch with module cover plate (plastic) on suitable module concealed Box (GI) in flush with wall with connections.	49.0	each		
2	Supply and fixing of 4nos.6A two module 5 pin socket , 4 nos. 6A one module switch with module cover plate (plastic) on suitable module concealed Box (GI) in flush with wall with connections. Higher End	34.0	each		
3	Supply and fixing of 1 no.6/16A two module socket , 1 no. 16A one module switch with module cover plate (plastic) on suitable module concealed Box (GI) in flush with wall with connection.	36.0	each		
4	Supply and fixing of 1 no.6A two module socket , 1 no. 6/16A two module socket, 1 no. 6A one module switch , 1 no. 16A one module switch on suitable module surface mounting Box (Plastic) with module cover plate (plastic) on wall with connections.	15.0	each		
5	Supply and fixing of 20A 3 pin and 2 pin combined flush type wall socket with 25A switch FOR gysar UNIT in switch along with moulded front plate in G.I anodised manufacturer's mounting box fixed flush with the wall complete with all accessories as required as per the site condition.	3.0	each		
6	Supply and fixing of 20A DP Switch With indicator(2M) 20Amps 3 Pin Socket With Shutter Type , combined flush type wall socket FOR Split AC unit UNIT in switch along with moulded front plate in G.I anodised manufacturer's mounting box fixed flush with the wall complete with all accessories as required as per the site condition.	10.0	each		
7	Supply and fixing of modular type RJ-11 telephone Socket & RJ 45 Data socket housed in GI box to be concealed on wall	25.0	each		
8	Supply and fixing of modular type RJ-11 telephone Socket housed in GI box to be concealed on wall	4.0	each		
9	Supply and fixing of modular type RJ-45 Data socket housed in GI box to be concealed on wall	10.0	each		
	LAN NETWORK SWITCHES - HIGHER END/Un-Managed 10 / 100 / 1000				
10	Supply and fixing of 9U Rack With necessary Works Required as etc	2.0	each		
11	Supply and fixing of 16 Port Patch Panel – Unloaded With necessary Works Required as etc	2.0	each		
12	Supply and fixing of lan network switches - 16 Port With necessary Works Required as etc	2.0	each		
13	Supply and fixing of 1 mtr Patch Cord With necessary Works Required as etc	20.0	each		
14	Supply and fixing of 2 mtr Patch Cord With necessary Works Required as etc	20.0	each		
I	FITTINGS				
1	supply and fixing of 24W LED 2x2 square type Recessed fitting with LED (Higher end) on false Ceiling with suitable hanging support from ceiling with PVC unsheathed copper leads from terminals to the fitting MAKE : BAJAJ, SKYLUX SURFACE/BZSSOL 36L LED WH GX	26.0	each		
2	Supply and fixing 4 feet 40W LED Tube Light with TW round Blocks on wall or ceiling with flu tube with PVC unsheathed copper leads from terminal to the fitting. MAKE : BAJAJ, BATTENS & TUBE LIGHTS /BCLAB 40W LED P	119.0	each		
3	Supply and fixing of Surface mounted rimless round downlight. Moulded in engineering plastic, it offers best in class high lumen output & wider distribution. MAKE : BAJAJ RADIANCE RIMLESS RD / BPSLR Surface 12W LED WH RD SD	63.0	each		
4	Supply & Fixing of LED mirror light - 1 Engineering plastic batten with white acrylic cover sleek design & high efficiency for wall & surface mounted applications.MAKE : BAJAJ LED BATTEN,BCLSB 10 W WH	22.0	each		
5	Supply and Fixing of WT bulk Head Fitting With Guard with suitable for 9W CFL / LED lamp and giving connection	22.0	each		
6	supply and fixing of 30W LED street light fitting with LED (Higher end) with 25 mm dia. GI pipe (class B) with 1 no. 25 mm GI bend complete on the existing post/ on wall with PVC unsheathed copper leads with MS clamps and with painting	8.0	each		
7	supply and fixing of 65 mm dia. (2 - 1/2") GI pipe (class B) of 6 metre length with 300mm x 300mm x 6mm MS base plate duly welded at the bottom with concreting with construction of masonry pedestal with suitable SMC box with door arrangement to house 6A SP MCB switch, 2/4 way connector on suitable hylem sheet and supply and fixing of 60W LED street light fitting with LED (Lower end) with 1 metre 32mm dia. GI pipe (class B) Complete with suitable MS clamps for LED steet light fitting and SMC box with PVC unsheathed copper leads from SMC box to fitting and with painting of suitable colour	15.0	each		

8	Supply and fixing of 1200 mm (48") AC ceiling fan complete with out regulator and 1000mm down rod on the including fan clamp with side plates and cross arm of size 450mm (18")	26.0	each		
9	Supply and fixing of 1400 mm (52") AC ceiling fan complete with stepped electronic 300 W regulator and 300mm down rod on the existing clamp -	22.0	each		
10	Supply and fixing of 400mm Sweep Wall Mounted Fan Circulator complete and including fan clamp with Necessary required Job etc...	6.0	each		
11	Supply and fixing of 300mm (12") sweep (Light duty) AC Exhaust fan complete without provision of hole in the wall.	25.0	each		
K	CCTV				
1	IP based IR Dome Indoor Camera: SITC of IP Dome camera with 1/2.7" 2MP Progressive Scan CMOS, at 1920 x 1080 Resolution, 25 FPS, Triple streaming, min one H.264 stream & one H.264/MPEG 4 stream compression support, 2.8/4/6 mm Fixed lens, Color image at 0.01 lux, Tamper detection with built in True WDR of 120DB, BLC/HLC, True Day&Night with ICR, Auto Gain Control, 3D Noise Reduction, ONVIF profile S & G Support, Inbuilt Alarm mode for Network loss, Motion Detection. Required wall / ceiling mounting accessories as specified in the Tender Specifications . The camera shall be capable of operating on POE/12VDC/24VAC . The camera shall be certified with CE, FCC, UL and ROHS certifications. Camera shall be supplied along with Suitable adaptor with 3 meter cable and suitable mounitn support/back box.	8.0	each		
2	IP based 30 m Bullet Camera:SITC of IP Dome camera with Progressive Scan CMOS, at 1920 x 1080 Resolution, 25 FPS, Triple streaming, min one H.264 stream & one H.264/MPEG 4 stream compssion support, 2.8/4/6 mm Fixed lens, Color image at 0.01 lux, Tamper detection with built in True WDR of 120DB, BLC/HLC, True Day&Night with ICR, Auto Gain Control, 3D Noise Reduction, ONVIF profile S & G Support, Inbuilt Alarm mode for Network loss, Motion Detection. Required wall / ceiling mounting accessories as specified in the Tender Specifications . The camera shall be capable of operating on POE/12VDC/24VAC . The camera shall be certified with CE, FCC, UL and ROHS certifications. Camera shall be supplied along with Suitable adaptor with 3 meter cable and suitable mounting support/back box.	7.0	each		
3	SITC OF RACKS for CCTV Equipments as per following specification,Conforms to DIN 41494 Or Equivalent EIA/ISO/EN/CEA StandardFinish - Powder coated finish with Seven tank pretreatment process meeting ASTM standard Color - Black/off white/grey Fan module Mount Provision on top Cover Welded frame with vented top cover with fan mounting provision, Associated Front Glass or perforated Metal Door with lock & Key and Back vented / Perforated metal door with lock & key and partially vented side panels, free standing on floor with 4 No. casters wheels with 2 no with brakes & 2 No. without brakes, cable oraginesers, Levelers with required 16A/5A power strips including accessories. Number of racks shall be as per the design requirement for switches locations and main cctv equipments. vendor to consider required number of racks as per their requirement	1.0	each		
4	16 port 10/100/1000 layer 2 , POE switches with IP multicast snooping and data-driven IGMP support and with minimum two 1000baseT RJ45 uplink ports and two 1000 baseT Fiber uplink ports,patch cords, patch panel and enclosure/rack for switch with mounting supports and all accessories.	2.0	each		
5	SITC of Network Video Recorder:Supply , Installation , Testing and commissioning of 32 Channel NVR (Network Video Recorder), Up to 8-ch IP cameras can be connected, Incoming Bandwidth 320 Mbps, , SATA Hard Disks with interfaces, ANR Technology, H.265/H.264/MPEG4 video compression, 3 × USB at least 1 × USB with 3.0, upport H.265, MJPEG,Supports RAID0, RAID1, RAID5, RAID6 and RAID10 ,Supports HDD hot swap, Supports Dual Power-Redundant, Alarm I/O 16/4, RS-485, RS-232, 2 RJ-45 10 /100/1000 Mbps self-adaptive Ethernet interface, Multiple network monitoring: Web viewer, CE, FCC, UL certified, including fixing accessories and cable termination with required connectors/Jack, complete in all respect as per instruction of engineer in-charge. Storage to be considered upto 12TTB, 15FPS, 30days Storage and 70% motion based recording . HDD Calculation to be submitted & should be approved by consultant. Rate shall be inclusive of required surveillance hard disk (make: Seagate, Western digital)	1.0	each		
SUB TOTAL (C)					
D	LIFT BOQ				
123	Design, Supply, Installation, Testing & Commissioning of stainless steel lift: 8 Passenger Elevator, 2 stops with machine room as per Specification & Details following Below : Passenger Type Elevator, No. of Units 1, Capacity -8 Person, Speed 1 m/s, Stops & Openings 2 stops & 2 openings, Single entrance car, Travel height 10 m, Head Room height as per drawing, Pit Height as per design, MAP Floor Position Topmost floor, Car dimensions 2000 mm wide x 2000 mm deep x 3300 mm height, Door dimensions 900 mm wide x 2100 mm height, Door type Two-panel centre opening Plain Panel, Car Operating Panels are Stainless Steel Face Plate, Segmented LCD display Square surface mounted Buttons. The Surface to be finished with- Car Panel & Door SS Finish,SS Handrail at Rear Side, LED light Provision and Flooring as per Client requirement. The work to be completed as per design and approval of the Architect, etc. complete. (Rates includes submission of drawing ,iasioning works with ceig and obtaining approval, licence and safety certificate for operations of lift.)	1.00	Nos		
SUB TOTAL (D)					
E	FIRE PROTECTION BOQ				
System :Down comer System					
124	Supply, erection, testing and commissioning of fire fighting application monoblock motor pumpset of 900LPM at 40 metres head to develop 3.5 kg/sq.cm at the heightest and farthest hydrant point to make 30mwater jet at the time of fire fighting emergency cicumstances, coupled with 11 KW / 15 HP rated three phase 414 volts, 50 Hz, 2880 rpm electrical motor the pump with cast ron body, bronze impeller, rope gland packaging, suction size of 80 mm dia. delivery size of 65 mm dia., including the cost of foundaton concrete anti vibration mounting, rain safety hood and etc.complete as directed by the Departmental Officers (Kirkoskar make KDS 1555+ or Equivalent)	QRO	set		
125	Supply and fixing of Fire fighting application obliquetype stainless steel Hydrant Valve of size 63mm dia with oblique type instantaneous coupling with rotatingwheel to open and close the valve including MS flange of table "E",bolts & nuts with washer as per IS 5290 at ring main around the building and wet riser inside the building including conveyance all incidental charges,necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary etc complete as per standard specification and as directed by the Departmental Officers. Make:OMEX / KARTAR / LIFE GUARD / SAFE GUARD / EQUIVALENT.	QRO	Each		

126	Supply of Fire Fighting Application MS Hose Box to keep two number of hoses and 1 No. of branch pipe with nozzle having proper glass window type double door with universe open key, painted inside white and outside Post Office Red. Near every hydrant point including conveyance, all incidental charges, necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary, etc., complete as per standard specification and as directed by the Departmental Officers. Make: OMEX / KARTAR / LIFE GUARD / SAFE GUARD / EQUIVALENT.	QRO	Each		
127	Supply, and fixing in position of Fire Fighting Application Hose of 63mm dia of 15 metres length binded by copper wire with 63mm dia stainless steel male and female instantaneous fire fighting special coupling as per IS 901 as directed by the Departmental Officers. Near every hydrant points including conveyance, all incidental charges, necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary etc complete as per standard specification and as directed by the Departmental Officers. Make: OMEX / KARTAR / LIFE GUARD / SAFE GUARD / EQUIVALENT.	QRO	Each		
128	Supply, and fixing in position of Fire Fighting Application 63mm dia stainless steel short length Branch Pipe with hexagonal type spray nozzle of 15mm (or) 20mm jet bore. Near every hydrant points including conveyance, all incident charges, necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary, etc., complete as per standard specification and as directed by the Departmental Officers. Make: OMEX / KARTAR / LIFE GUARD / SAFE GUARD / EQUIVALENT.	QRO	Each		
129	Supply, installation of Fire Fighting Application 180 degree swinging type, hose reel drum with 20mm dia braided thermoplastic hose of 30 metres long, so as to extend to necessary distance by self rolling spindle wheel including necessary 20mm dia ball valve and open and close spray nozzle, warm clip, etc., as per the standard pattern of any reputed make at every loor nearer to hydrant valve, including conveyance, all incidental charges, necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary., etc., complete as per standard specification and as directed by the Departmental Officers. Make: OMEX / KARTAR / LIFE GUARD / SAFE GUARD / EQUIVALENT.	QRO	Each		
130	Supply, erection, testing and commissioning of cast iron body and bronze internal non-rising spindle luice valve of sizes at required places to control the flow of water including necessary MS flange of table „E”, gaskets, bolts & nuts including conveyance, all incidental charges, necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary, etc., complete as er standard specification and as directed by the Departmental Officers. Make: NORMEX / ARTAR / EQUIVALENT				
	a) 100mm dia	QRO	Each		
	b) 150mm dia	QRO	Each		
131	Supply, erection, testing and commissioning of following MS „C Class Heavy Duty Pipe as per IS 1239 to withstand a developing pressure of 10 kg. / sq.cm including necessary fittings like MS flange of table „E, elbows, reducers, gaskets, bolt, nuts with washers & joints as per standard method of arc welding, including one coat metal primer and two coat Post Office Red painting including conveyance, all incidental charges, necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary, etc., complete as per standard specification and as directed by the Departmental Officers. Make: JINDAL / EQUIVALENT.				
	i) 150 mm dia	QRO	Rmt		
	ii) 100 mm dia	QRO	Rmt		
	iii) 80 mm dia	QRO	Rmt		
132	Supply, erection, testing and commissioning of Air Release Valve of 20mm dia, so as to release airlock in 100mm dia MS pipe at top most wet riser, including conveyance, all incidental charges, necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary, etc., complete as per standard specification and as directed by the Departmental Officers. Make: KARTAR / EQUIVALENT.	QRO	Each		
133	Supply and laying of 2 core 1.5 Sqmm. armoured copper cable for control wiring to the Terrace Pump Motor with runs of 14 SWG TC wire for earthing, providing in wall with suitable size GI clamps, screws, wooden plug, end termination by using suitable size Cable glands, copper sockets and etc., as directed by the Departmental Officers.	QRO	Rmt		
134	Supply and laying of 4 core 10 Sqmm. armoured copper cable for power wiring to the Terrace Pump Motor with runs of 14 SWG TC wire for earthing, providing in wall with suitable size GI clamps, screws, wooden plug, end termination by using suitable size cable glands, copper sockets and etc., as directed by the Departmental Officers.	QRO	Rmt		
135	Supply, erection, testing and commissioning of Fire Fighting Application direct on line main control panel to control electrical Terrace Pump Motor of 3.75 KW / 5 HP rated 415 volts / 50 Hz 3 phase, 2880 RPM including necessary auto / manual operations, over load relay, selector switches arrangements, voltmeter and ammeter provision, etc., as directed by the Departmental Officers.	QRO	Each		
System : Portable First Aid Fire Extinguishers					
136	Supply and fixing of stored pressure ABC (Mono Ammonium Phosphate) Powder Type Fire Extinguisher of 6 kg. capacity as per IS:15683 with pressure gauge, discharge hose & control nozzle, wall mounting bracket, safety clip etc., including conveyance, all incidental charges, necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary etc, complete as per standard specification and as directed by the Departmental Officers. Make: EXCELLENT / SAFETY FIRST / EQUIVALENT	QRO	Each		
137	Supply and fixing of Carbon-di-Oxide Gas Type 2 kg. capacity Fire Extinguisher as per New IS15683, complete with control valve, discharge hose with horn, wall mounting bracket, safety clip etc., including conveyance, all incidental charges, necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary etc., complete as per standard specification and as directed by the Departmental Officers. Make: EXCELLENT / SAFETY FIRST / EQUIVALENT	QRO	Each		
138	4 kg capacity Clean Agent Type Fire Extinguisher .complete with brass forged squeeze grip type valve and filled with NAFPIV clean agent gas environmental friendly approved by EPA and listed under SNAP USA applicable on Class ABC rating 1A-13B as per IS 15683 with ISI Mark.	QRO	Each		
139	4 Nos. of 9 litres capacity round bottom sand buckets along with bucket stand as per local fire officer's standards.	QRO	SET		
140	Supply, erection, testing and commissioning of Cast iron body and Gun metal or stainless steel internal Nonreturn valve of following sizes to control one way flow of water to be installed pump room at delivery line and near overhead tank at terrace level near to jockey pump and motor including necessary MS flange of table „E”, gaskets, bolts & nuts, etc. as per IS 5312 including conveyance, all incidental charges, necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary, etc., complete as per standard specification and as directed by the Departmental Officers.				
	a) 100mm dia	QRO	Each		

	b)150mm dia	QRO	Each		
System : Photoluminescent Safety Signages					
141	The following descriptive photoluminescent Green or Red color safety signages in different sizes / graphics / colours / texts can be made according to the standards accepted by the Local Fire service department.				
	(a) Fire Hydrant - with symbol. Size 6" x 8"	QRO	Each		
	(b) Fire hydrant & Hosereel - with symbol. Size 6" x 8"	QRO	Each		
	(c) Fire extinguisher - with symbol. Size 4" x 4"	QRO	Each		
	(d) In case of fire Do not use lift Size 8" x 8"	QRO	Each		
	(e) Arrow downwards + Running man + Emergency exit - with symbol. Size 6" x 16"	QRO	Each		
	(f) Arrow upwards + Running man + Emergency exit - with symbol. Size 6" x 16"	QRO	Each		
	(g) In case of Fire Break the Glass- with Manual call Point symbol. Size 6" x 8"	QRO	Each		
	(h) Fire alarm panel Size 6" x 8"	QRO	Each		
	(i) Fire door - with symbol Size 6" x 8"	QRO	Each		
System : Fire Alarm System					
A	SUPPLY INSTALLATION TESTING COMMISSIONING OF CONVENTIONAL TYPE FIRE ALARM SYSTEM				
142	Supply, installation, testing and commissioning of Micro Processor based conventional 4 Zone Fire Alarm Control Panel having the rating of 24 volt DC power supply, consisting 230 / 24 volt SMPS unit, 2 Nos. of 12 volt 7 AH standby batteries, suitably mounted on wall using fixing accessories like screws, plug, clamps and etc., as per standard methods and as directed by the Departmental Officers.	QRO	Each		
143	Supply, installation, testing and commissioning of Manual Call Point (MCP) providing on wall using fixing accessories like screws, plug, clamps and etc., as per standard methods and as directed by the Departmental Officers.(Make: Ravel / Equivalent)	QRO	Each		
144	Supply, installation, testing and commissioning of Electronic Hooter / Sounder providing on wall using fixing accessories like screws, plug, clamps and etc., as per standard methods and as directed by the Departmental Officers (Make: Ravel / Equivalent)	QRO	Each		
145	Supply and laying of FRLS PVC insulated 2 core 1.5 Sqmm. Armoured Copper Cable on ceiling / wall using fixing accessories like screws, plug, clamps, etc., as per standard methods and as directed by the Departmental Officers.	QRO	Rmt		
SUMMARY					
A	CIVIL WORKS				
B	PLUMBING AND SANITARY WORK				
C	ELECTRICAL WORKS				
D	LIFT WORKS				
	TOTAL (A+B+C+D)				
	ADD GST.....%	18.00			
	GRAND TOTAL INCLUDING GST				