

Name of work:

Construction of New Nine storied building for Housing various sections of Madras High Court, Chennai-104.

Sl. No.	Quantity in Figures and in Words	Description	T.N.B. P No. or NBC No.	Rate in Figures and in words	Unit in Figures and in words	Amount
1	2	3	4	5	6	7

1

2.00 Nos.
(Two Numbers only)

Installation Charges inclusive of Transportation to site and the Bored pile equipment employed for the works including setting up of pile driving equipment with all accessories and tools at each of the pile location based on the sequence of operation approved by the departmental Engineers irrespective of the location and distance involved in movement of pile driving equipment etc., complete.

1 No
(Each)

1	2	3	4	5	6	7
2		Installation of Vertical Bored cast in situ RCC piles in all types of soils, using Ready Mix Concrete of M30 grade, with sulphate resistant Cement, fine aggregate, 20mm and down graded HBGS jelly coarse aggregate. The rate includes cost of reinforcing steel, binding wire, fabrication, welding charges, placing of reinforcement cage in bore hole in correct position, cost of boring to the required depth with Bentonite solution with temporary casing of required length, conveyance of RMC to site and pouring concrete using Tremine pipes, conveyance of all materials to the site including all tools and plants, shifting the plants and equipments from one point to another, excavation of mud pits for circulation of Bentonite solution, closing the mud pits to original level and mud removal with initial lead and lift but including dismantling the concrete above the cut off level etc complete as directed by the departmental officers including socketing. The reinforcement cage should be welded properly for lifting. The concrete cubes to be tested as per IS 456-2000. Acceptance criteria by clause 16.1. Frequency of testing should be as per clause 15.2.2. The length of pile for payment shall be measured up to natural ground level. The work should be carried out as per IS 2911. Pile depth should be decided by the departmental office at site.				
a	2240.00 RM (Two thousand two hundred and forty running metres only)	600mm dia pile - having longitudinal reinforcement of 4Nos of 20# + 4Nos of 16# with helical reinforcement of 10# @ 200mm c/c with inner rings of 12mm dia @ 1000mm c/c with lifting hook of 12 mm dia required depth.			1 RM (One running metre)	
b	470.00 RM (Four hundred and seventy running metres only)	450mm dia pile - having longitudinal reinforcement of 4 Nos of 16 # + 4Nos of 12#with helical reinforcement of 8# @ 200 mm c/c with inner rings of 12 mm dia @ 1000 mm c/c with lifting hook of 12 mm dia required depth.			1 RM (One running metre)	
3	2.00 Nos. (Two Numbers only)	Initial load test as per IS 2911 part IV 1995 including cost of single pile (250% of Pile capacity, labour, reinforcement charges and all other incidental charges including excavation, shoring, strutting, dewatering etc., as necessary hire charges for jacks, measuring devices, structural frames work for platform, kent ledges etc, as required and as directed by the departmental officers etc. complete.			1 No (Each)	

1	2	3	4	5	6	7
4	2.00 Nos. (Two Numbers only)	Routine load test as per IS 2911 part IV 1995 (150% of pile capacity) including labour charges for jack, measuring devices, structural frame work plot form, kent ledges etc., as required and as directed by the departmental officers etc. complete.			1 No (Each)	
5		Earth work excavation for foundation in all soils and sub-soils and to full depth as may be directed except in rock requiring blasting inclusive of shoring shuttering, bailing out water wherever necessary and depositing the surplus earth within the compound in places shown by the departmental officers with an initial lead of 10 mts and initial lift of 2 mts. and clearing and levelling the site, etc., complete complying with standard specification.				
a	380.00 cu.m (Three hundred and eighty cubic metres only)	Upto 2m depth			1 cu.m (One cubic metre)	
6	375.00 cu.m (Three hundred and seventy five cubic metres only)	Earth work open excavation in all soils and sub-soils and to full depth as may be directed except in rock requiring blasting inclusive of shoring shuttering, bailing out water wherever necessary and depositing the excavated earth with a lead of 10 mts. within the compound in places shown by the departmental officers and clearing and levelling the site, etc., complete complying with standard specification.			1 cu.m (One cubic metre)	
7	205.00 cu.m (Two hundred and five cubic metres only)	Supplying and filling in foundation, basement, etc with filling M-sand in layers of not more than 15cm thick well watered, rammed and consolidated etc. complete complying with standard specification and as directed by the departmental officers.			1 cu.m (One cubic metre)	

1	2	3	4	5	6	7
8	141.00 cu.m (One hundred and forty one cubic metres only)	Cement Concrete 1:5:10 (One Cement, Five sand and Ten hard broken stone jelly) using 40 mm gauge hard broken granite stone jelly for foundation including dewatering wherever necessary and laid in layers of not more than 15 cm thick well rammed, consolidated and curing etc. complete complying with standard specification			1 cu.m (One cubic metre)	
9	485.00 cu.m (Four hundred and eighty five cubic metres only)	Supplying and filling with conveyed earth in layers of not exceeding 30cm thick, well rammed and consolidated including watering using power roller by hire basis etc.,The rate is conveyance charges, loading and unloading , refilling charges and hire charges for power roller machine etc., complete complying with standard specification and as directed by the departmental officers.			1 cu.m (One cubic metre)	
10	102.00 cu.m (One hundred and two cubic metres only)	Supplying and filling in basement with Stone dust (Quarry dust) in layers of not more than 15 cm thick, well rammed watered and consolidated etc. complete complying with standard specification and as directed by the departmental officers.			1 cu.m (One cubic metre)	
11	30.00 cu.m (Thirty cubic metres only)	Plain Cement Concrete 1:2:4 (one cement, two sand and four hard broken stone jelly) using 20mm jelly for wearing coat including laying, compacting, finishing and curing, etc., complete as per standard specificatins and as directed by the departmental officers.			1 cu.m (One cubic metre)	

1	2	3	4	5	6	7
12	692.00 sq.m (Six hundred and ninety two square metres only)	Supplying and erecting steel centering including necessary supports for plane surfaces for Reinforced Cement Concrete works such as column footings, column pedestals, plinth beams, grade beams, staircase steps, etc. which require only nominal strutting using mild steel sheets of size 90cm x 60cm and 10 BG stiffened with welded mild steel angles of size 25mm x 25mm x 3 mm for boarding, laid over silver oak joists of size 10cm x 6.5cm spaced at about 75cm centre to centre or at suitable intervals etc. complete in all floors complying with standard specification. (Payment for centering shall be given after the concrete is laid)			1 sq.m. (One square metre)	
13		Supplying and erecting centering for sides and soffits including necessary supports and strutting upto 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	3567.00 sq.m (Three thousand five hundred and sixty seven square metres only)	For plane surfaces such as RCC floor slab, roof slab, beams, lintels, bed blocks, landing slab, waist slab, portico slabs and beams, etc.			1 sq.m. (One square metre)	
b	292.00 sq.m (Two hundred and ninety two square metres only)	For plane surfaces such as vertical slab, side slabs of boxing, vertical drops, fascia, vertical wall, etc.			1 sq.m. (One square metre)	
c	2930.00 sq.m (Two thousand nine hundred and thirty square metres only)	For plane surfaces such as rectangular or square RCC columns, sunshades, top and bottom slab of RCC boxing, etc.			1 sq.m. (One square metre)	

1	2	3	4	5	6	7
14		Providing and laying in position, Standardised Concrete Mix M-20 Grade in accordance with IS:456-2000, using 20mm and down graded hard broken granite stone jelly for all RCC items of works with minimum cement content of 325 kg/m ³ and maximum water cement ratio of 0.55, including admixture (plasticiser / super plasticiser) in recommended proportions as per IS:9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability with about (5 cu.m.) 7730 kg. of 20mm machine crushed stone jelly and with about (3.3 cu.m.) 5156 kg. of 10-12mm machine crushed stone jelly and with about (4.79 cu.m.) 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. (No separate payment will be made by the Department for the excess usage of materials).				
a	122.00 cu.m (One hundred and twenty two cubic metres only)	In Foundation and Basement			1 cu.m (One cubic metre)	

1	2	3	4	5	6	7
15		Providing and laying in position, Standardised Concrete Mix M-30 Grade in accordance with IS:456-2000,using 20mm and down graded hard broken granite stone jelly for all RCC items of works with minimum cement content of 400 kglms and maximum water cement ratio of 0.45, including admixture (plasticiser / super plasticiser) in recommended proportions as per IS:9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability with about (5.0 cu.m.) 7730 kg. of 20mm machine crushed stone jelly and with about (3.3 cu.m.) 5156 kg. of 10-12mm machine crushed stone jelly and with about (4.79 cu.m') 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. (No separate payment will be made by the Department for the excess usage of materials).				
a	324.00 cu.m (Three hundred and twenty four cubic metres only)	Foundation & Basement			1 cu.m (One cubic metre)	
b	116.00 cu.m (One hundred and sixteen cubic metres only)	In Ground floor			1 cu.m (One cubic metre)	
c	113.00 cu.m (One hundred and thirteen cubic metres only)	In First Floor			1 cu.m (One cubic metre)	
d	114.00 cu.m (One hundred and fourteen cubic metres only)	In Second Floor			1 cu.m (One cubic metre)	

1	2	3	4	5	6	7
e	114.00 cu.m (One hundred and fourteen cubic metres only)	In Third Floor			1 cu.m (One cubic metre)	
f	114.00 cu.m (One hundred and fourteen cubic metres only)	In Fourth floor			1 cu.m (One cubic metre)	
g	114.00 cu.m (One hundred and fourteen cubic metres only)	In Fifth floor			1 cu.m (One cubic metre)	
h	114.00 cu.m (One hundred and fourteen cubic metres only)	In Sixth floor			1 cu.m (One cubic metre)	
i	114.00 cu.m (One hundred and fourteen cubic metres only)	In Seventh floor			1 cu.m (One cubic metre)	
j	114.00 cu.m (One hundred and fourteen cubic metres only)	In Eight floor			1 cu.m (One cubic metre)	
k	114.00 cu.m (One hundred and fourteen cubic metres only)	In Ninth floor			1 cu.m (One cubic metre)	
l	64.00 cu.m (Sixty four cubic metres only)	In Tenth floor			1 cu.m (One cubic metre)	

1	2	3	4	5	6	7
16	3205.00 Qtl (Three thousand two hundred and five quintals only)	Supplying, fabricating and placing in position Mild Steel / Ribbed Tor Steel grills for all RCC works as per design given including cost of steel and G.I. binding wire in all floors etc. complete complying with standard specification.(Contractor has to make his own arrangements for the supply of steel and binding wire)			1 Qtl. (One quintal)	
17		Brick work in Cement Mortar 1:5 (One cement & Five sand) using best quality of Second Class Ground Moulded Chamber Burnt Bricks 9" x 4-3/8" x 2-3/4" for foundation and basement including curing, etc., complete complying with standard specifiction.				
a	72.00 cu.m (Seventy two cubic metres only)	For foundation & basement			1 cu.m (One cubic metre)	
b	12.00 cu.m (Twelve cubic metres only)	In Ground floor			1 cu.m (One cubic metre)	
18		Brick work in Cement Mortar 1:6 (One cement & Six sand) using best quality of Second Class Ground Moulded Chamber Burnt Bricks 9" x 4-3/8" x 2-3/4" for foundation and basement including curing, etc., complete complying with standard specifiction.				
a	40.00 cu.m (Forty cubic metres only)	In Ground floor			1 cu.m (One cubic metre)	
b	83.00 cu.m (Eighty three cubic metres only)	In First floor			1 cu.m (One cubic metre)	

1	2	3	4	5	6	7
c	92.00 cu.m (Ninety two cubic metres only)	In Second floor			1 cu.m (One cubic metre)	
d	92.00 cu.m (Ninety two cubic metres only)	In Third floor			1 cu.m (One cubic metre)	
e	92.00 cu.m (Ninety two cubic metres only)	In Fourth floor			1 cu.m (One cubic metre)	
f	92.00 cu.m (Ninety two cubic metres only)	In Fifth floor			1 cu.m (One cubic metre)	
g	92.00 cu.m (Ninety two cubic metres only)	In Sixth floor			1 cu.m (One cubic metre)	
h	92.00 cu.m (Ninety two cubic metres only)	In Seventh floor			1 cu.m (One cubic metre)	
i	92.00 cu.m (Ninety two cubic metres only)	In Eight floor			1 cu.m (One cubic metre)	
j	92.00 cu.m (Ninety two cubic metres only)	In Ninth floor			1 cu.m (One cubic metre)	

1	2	3	4	5	6	7
k	55.00 cu.m (Fifty five cubic metres only)	In Tenth floor			1 cu.m (One cubic metre)	
19		Brick partition walls of 11.50cm thickness using best quality II Class Ground Chamber Burnt Bricks of size 9" x 4-3/8" x 2-3/4" in Cement Mortar 1:3 (One Cement and Three Sand) using hoop iron reinforcement if found necessary including curing etc. complete and as directed by the departmental officers. (Hoop iron reinforcement will be measured and paid for separately)				
a	1.00 sq.m (One square metre only)	In Ground floor			1 sq.m. (One square metre)	
b	30.00 sq.m (Thirty square metres only)	In First Floor			1 sq.m. (One square metre)	
c	30.00 sq.m (Thirty square metres only)	In Second Floor			1 sq.m. (One square metre)	
d	30.00 sq.m (Thirty square metres only)	In Third Floor			1 sq.m. (One square metre)	
e	30.00 sq.m (Thirty square metres only)	In Fourth floor			1 sq.m. (One square metre)	
f	30.00 sq.m (Thirty square metres only)	In Fifth floor			1 sq.m. (One square metre)	

1	2	3	4	5	6	7
g	30.00 sq.m (Thirty square metres only)	In Sixth floor			1 sq.m. (One square metre)	
h	30.00 sq.m (Thirty square metres only)	In Seventh floor			1 sq.m. (One square metre)	
i	30.00 sq.m (Thirty square metres only)	In Eight floor			1 sq.m. (One square metre)	
j	30.00 sq.m (Thirty square metres only)	In Ninth floor			1 sq.m. (One square metre)	
20	69.00 cu.m (Sixty nine cubic metres only)	Weathering course in brick jelly lime concrete using broken brick jelly of size 20mm uniform gauge in pure slaked lime (no sand to be used) to the proportion of brick jelly to lime being 32:12.5 by volume and laid over the RCC roof slab in a single layer of required slope and finished by beating the concrete with wooden beaters of approved pattern, keeping the surface constantly wet by sprinkling lime jaggery water, etc., complete as per standard specification and as directed by the departmental officers.			1 cu.m (One cubic metre)	
21	475.00 sq.m (Four hundred and seventy five square metres only)	Finishing the top 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., complete complying with standard specification and as directed by the departmental officers			1 sq.m. (One square metre)	

1	2	3	4	5	6	7
22	65.00 sq.m (Six five square metres only)	Providing granolithic floor finish of the 40mm thickness with plain cement concrete 1:2:4 (One Cement, Two sand and Four aggregate) using 10 to 12mm gauge hard broken stone jelly including laying, finishing and the top rubbed smooth with power trawl, thread lining, curing etc. complete complying with standard specification and as directed by the departmental officers. (The rate is inclusive of necessary planking for panelling wherever necessary and as directed by the departmental officers)			1 sq.m. (One square metre)	
23	665.00 sq.m (Six hundred and sixty five square metres only)	Providing, mixing, laying polymer based water proofing treatment for the Sunken Toilet / Lift well / OHT Rcc wall by applying cement based, flexible, waterproofing compound confirming to IS:2645, to a thickness of 1mm of the prepared surface of the roof slab / floor slab as per specifications mentioned above providing cement mortar 1:3, waterproofing cover plaster to a thickness of 12mm over the membrane coating with admixture of approved make. Rate quoted is inclusive of preparation of surface, which includes cleaning of surface polymer mortar curing, labour, tools and equipment, etc. Rate inclusive of grouting with cement and sand required for the treatment, the cost and labour charges for fixing 25mm dia pressure pipes 15kg/cm ² to a length of 45cm for drip pipes, etc. complete.			1 sq.m. (One square metre)	
24	84.00 cu.m (Eighty four cubic metres only)	Brick jelly Lime Concrete of 1:2:5 (One Lime,Two Sand and Five Brick ielly) with 40 mm hand broken brick ielly for Sunken portions including dewatering wherever necessary and laid in layers of not more than 15cm thick, well rammed, consolidated and curing etc. complete complying with standard specification.			1 cu.m (One cubic metre)	

1	2	3	4	5	6	7
25	260.00 sq.m (Two hundred and sixty square metres only)	Paving the floor with anti-skid parking tiles (required design) of 600x 600x 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. / sq.m., curing, etc., complete complying with standard specification and as directed by the departmental officers. (The make and brand of the tiles (Johnson endura or equivalent) should be got approved by the Executive Engineer before use on works)			1 sq.m. (One square metre)	
26	72.00 sq.m (Seventy two square metres only)	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 mathcing 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 speicification.			1 sq.m. (One square metre)	
27	620.00 sq.m (Six hundred and twenty square metres only)	Paving the floor with best approved quality fine polished Granite Stone Slabs of size 1200 x 600 of 18 / 20mm thick of Synthetic Grey, Paradise and similar varieties with machine cut edges laid over a cement mortar bed of 20mm thick using cement mortar 1:3 (One cement and three 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 mathcing colouring pigments etc., The granite 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 speicification.			1 sq.m. (One square metre)	

1	2	3	4	5	6	7
28	2540.00 sq.m (Two thousand five hundred and forty square metres only)	Paving the floor with best quality Double Charged Vitrified Tiles 600 x 600 x 8mm of approved colour, 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 colour pigments etc., complete complying with standard specification. (The make and brand of the tiles should be Johnson / Kajaria / Somany / Nitco / RAK which has to be got approved by Executive Engineer before use on works)			1 sq.m. (One square metre)	
29	265.00 sq.m (Two hundred and sixty five square metres only)	Flooring with Self design Joint free rectified Ceramic Tiles of size 305 x 305 x 8mm laid over 20mm thick cement mortar 1:3 (One cement and Tree 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. / sq.m. etc., complete complying with standard specification. (The make and brand of the tiles should be Johnson / Kajaria / Somany / Nitco / RAK or Equivalent which has to be got approved by executive Engineer before use on works)			1 sq.m. (One square metre)	
30	950.00 sq.m (Nine hundred and fifty square metres only)	Dadoing walls with Joint free rectified Colour designed digital print ceramic tiles, with borders, with size of 300mm x 450mm x 8mm and above set in Cement Mortar 1:2 (One Cement and Two sand) 20mm thick and pointing the joints with white cement mixed with colouring pigments at the rate of 0.40 Kg. / sq.m. neatly in all floors, curing, etc., complying with standard specification and as directed by the departmental officers. (The make and brand of the tiles should be like Johnson / Kajaria / Somany / Nitco / RAK or Equivalent which has to be got approved by Executive Engineer before use on works)			1 sq.m. (One square metre)	
31	140.00 sq.m (One hundred and forty square metres only)	Dadoing walls with colour design glazed tiles of size 300mm x 200mm x 6mm best approved quality, white / colour glazed tiles of following sizes set in Cement Mortar 1:2 (One Cement and Two sand) 10mm thick and pointing the joints with white cement mixed with colouring pigments at the rate of 0.40 Kg. / sq.m. neatly in all floors, curing, etc., complying with standard specification and as directed by the departmental officers.			1 sq.m. (One square metre)	

1	2	3	4	5	6	7
32	103.00 sq.m (One hundred and three square metres only)	Clading the walls by supplying and fixing of White Galaxy or equivalent quality of granite vertical slab for an average thickness of 17 mm to 20mm for vertical surface over a base layer in cement mortar 1:2 10 mm thick and pointing with the same mortar as directed and agmi,Aroldate and POP Paste for fixing the granite slab in position wherever necessary. The quality and colour of granite slab should be got approved by the Executive Engineer before use on works			1 sq.m. (One square metre)	
33	9.00 Nos. (Nine Numbers only)	Supplying 18 to 20 mm thick white jet blk granite partition slab for urinals of 1200x600 (Avg) mm size fixing to wall using 3Nos.of suitable chromium plated brackets with CP bolt and nets, washers, cutting to required shape polishing to all the expose and surfaces and edge grinding etc;complete as directed by the dept officers.			1 No (Each)	
34	535.00 RM (Five hundred and thirty five running metres only)	Providing grooving to granite slab at the intermediate edges of the vertical face with neat finishing etc complete with standard specification and as directed by the departmental officers. The cost including higher charges of machines and labour charges etc complete			1 RM (One running metre)	
35	535.00 RM (Five hundred and thirty five running metres only)	Providing semi nosing to granite slab at the edges of the vertical space with neat finishing etc complete with standard specification and as directed by the departmental officers.The cost including higher charges of machines and labour charges etc complete			1 RM (One running metre)	
36	415.00 RM (Four hundred and fifteen running metres only)	Providing and Fixing of PVC Trims (Corner beeding) at the outer corner profiles of the tiles including cost of material, labour and handling etc. as directed by departmental engineers at site of work and as per standard specification.			1 RM (One running metre)	

1	2	3	4	5	6	7
37	500.00 sq.m (Five hundred square metres only)	Supplying and fixing in position of Fully Calcium silicate HILUX Board Partition using alu box section and aluminium frame at an interval of 0.75m at the aluminium frame of size 63.50mm x38.10mmx 1.28mm, 1.41mm @ 0.818kg/m with necessary 'L' Angles, screws, nails and fixed in the wall using drilling machine with neat straight alignments etc., after finishing the frame work and fixed with both side 12mm thick HILUX BOARD approved quality and ISI make with necessary screws nails, fevicol and necessary grooves as per instruction of the departmental officers and also cutting the partition for Electrical Switch box and AC Plug Box and telephone Box requirements and finally cleaning the wooden partition for both side with neat position etc. The partition both side should be finished with best wall putty and painting two coats of plastice emulsion paint over one coat of primer including preparation of surface etc. The rate is inclusive of cost of materials, labour charges aluminium frame work and partition work, transporting charges etc., complete as directed by the departmental officers. (The materials quality and colours are approved by the departmental Engineer before use of works)			1 sq.m. (One square metre)	
38	8370.00 sq.m (Eight thousand three hundred and seventy square metres only)	Plastering with Cement Mortar 1:5 (One cement and Five sand), 12mm thick in all floors including curing etc. complete complying with standard specification and as directed by the departmental officers.			1 sq.m. (One square metre)	

1	2	3	4	5	6	7
39	2970.00 sq.m (Two thousand nine hundred and seventy square metres only)	Supplying and applying of two coats of putty of 3mm thick over the exposed RCC surface of ceiling including finishing the joints smoothly with grinding machine and the surface shall be thoroughly cleaned out of dust and scrubbing. The surface shall then be allowed to dry for atleast 48 hours. It shall then be sand papered (waterproof abrasive sheet) to give a smooth and even surface. Any unevenness shall be made good by applying 1st coat of putty mixed with water on the entire surface including filling up the undulations and applying 2nd coat of putty after 6 hours of 1st coat of putty and then sand papering (water proof abrasive sheet) the same after it is dry and finishing the surface smoothly,etc.,complete complying with standard specifications and as directed by the Departmental Officers.The rates are inclusive of hire charges for grinding machine with wheel, cost of sand paper (water proof abrasive sheet), cost of putty blade, labour charges for grinding the joints and sand papering, two coats of putty, scrapping the putty area to level the surface smooth, etc.,complete. The putty should be got approved by the Executive Engineer before			1 sq.m. (One square metre)	
40	3090.00 sq.m (Three thousand and ninety square metres only)	Plastering and finishing the exposed surface of all RCC items of work with Cement Mortar 1:3 (One Cement and Three Sand) 10mm thick including hacking the surfaces, providing cement mortar nosing, beading for sunshades, staircases, steps, landing slabs and curing, etc., in all floors complying with standard specification and as directed by the departmental officers			1 sq.m. (One square metre)	
41	1440.00 sq.m (One thousand four hundred and forty square metres only)	Supplying and painting the walls with two coats of cement paint over one coat of cement primer as instructed by the departmental officers including preparation of surface curing, etc.,complete in all floors complying with standard specifications (The colour and shade of the cement paint shall be got approved by the Executive Engineer before use of work)			1 sq.m. (One square metre)	

1	2	3	4	5	6	7
42	3200.00 sq.m (Three thousand and two hundred square metres only)	Providing the texture finish to the newly plastered wall with ready made texture putty with patterns at all levels including the cost of coating, labour charges and other incidental charges etc., complete as directed by the departmental officers			1 sq.m. (One square metre)	
43	7230.00 sq.m (Seven thousand two hundred and thirty square metres only)	Supplying and applying Putty with two coats of plastered wall surface of first class quality and of approved including thorough scrapping, clean removal of dirt wherever required etc., complete complying with standard specification.			1 sq.m. (One square metre)	
44	10740.00 sq.m (Ten thousand seven hundred and forty square metres only)	Painting two coats of newly plastered wall surface with ready mixed plastic emulsion paint of first class quality and of approved colour over a priming coat including thorough scrapping, clean removal of dirt, and including necessary plaster of paris putty, wherever required etc., complete complying with standard specification.			1 sq.m. (One square metre)	
45		Supplying and fixing Teak Wood frames for doors Windows and Ventilators using required MS angles, flats and rods of approved design and as directed by the departmental officers including cost of MS Grills, labour charges and cost of one coat of red oxide primer with labour charges for priming coat etc. complete complying with standard specification.				
a	1.60 cu.m (One point six zero cubic metres only)	T.W Scantling upto 2m			1 cu.m (One cubic metre)	
b	5.20 cu.m (Five point two zero cubic metres only)	T.W Scantling below 3m & above 2m			1 cu.m (One cubic metre)	

1	2	3	4	5	6	7
46	456.00 Nos. (Four hundred and fifty six Numbers only)	Supplying, hold fast of M.S flats of over all size of 330x50x6mm suitably folded to the required L shape have two end of lap of 50mm long each and overall length of the horizontal portion as 230mm & including making necessary grooves in two end laps to accomadate screws etc., complete.			1 No (Each)	
47	2.85 sq.m (Two point eight five square metres only)	Supplying and fixing in position of Teak wood door shutter using spl quality teak wood planks of 40 mm thick panelled doors with required raw materials, Brass hinges, Brass tower bolt, ornamental Brass handles, Door stopper, Door closer,Brass aldrops and bush with suitable locking arrangements etc. The rate should be inclusive of cost of materials, labour charges for wrought and put up the doors with kadasal charges and transporting charges etc complete complying with standard specification and as directed by the Departmental officers.			1 sq.m. (One square metre)	
48		Supplying and fixing in position of flush shutter with teak wood vener for doors of 35 mm thick block board core with of applied shade and hot pressed bonded with liquid phenol formaldluide resin with internal lifting with TW as per IS 2201/ part I /1991 The rates includes the labour charges for fixing the shutter to the frames and for fixing furniture fiitings.The rate include the cost of furniture fittings etc complete				
a	67.00 sq.m (Sixty seven square metres only)	Single leaf			1 sq.m. (One square metre)	
b	166.00 sq.m (One hundred and sixty six square metres only)	Double leaf			1 sq.m. (One square metre)	

1	2	3	4	5	6	7
49	700.00 sq.m (Seven hundred square metres only)	Polishing the teakwood panelled door with best melamine varnish finishing including labour charges for scrapping the existing T.W panelled throughly on both sides of the door, sand papering without affecting the teakwood plank grooves and natural design with preparation of surface using sand paper and finishing the smooth wooden surface and applying of melamine polishing on the teakwood panelled door/ partition surface using spray machine on uniform layer of smooth surface formed without any air bubbles after finishing the work etc., the rate inclusive of cost of materials ,labour charges ,transportion charges, labour for scrapping charges, etc complete complying with standard specification and as directed by the departmental officer (the materials quality are approved by the EE Before use of work.			1 sq.m. (One square metre)	
50	730.00 sq.m (Seven hundred and thirty square metres only)	Providing the walls with best Novafine spray paint of best and superior quality including labour charges for rubber cleaning and applying first coat of primer applying fully putty after sending applying two coats of Nova board white brush and finally nova fine multi colour etc.,complete complying with standard specification and as directed by the departmental officers.			1 sq.m. (One square metre)	

1	2	3	4	5	6	7
51	1565.00 sq.m (One thousand five hundred and sixty five square metres only)	Providing and fixing 8 mm thick fully designed perforated calcium silicate board 2'x2' panel tiled false ceiling (Hilux) including supplying and fixing true horizontal level false ceiling with 24mm prelude grid system Using hot dipped galvanised steel section exposed surface chemically cleaned capping prefinished in backed polyester paint wall angle of size 3000x19x19mm used in the periphery of the ceiling fixed to the wall, parttion with the help of screws at 600mm c/c. Mainrunner of size 3000x24mm suspended at a 1200mm c/c by using securely fixed to the structural soffit of RCC slab by using 6mm Nylon Rwl plug at every 1200mm(max) and 1200mm long cross tee of size 1200x24mm to interlocked between mainrunner at 600mm c/c(max) to form a grid of size 1200x600mm. 600mm long cross tee of size 600x24mm is inserted to form a grid of 600x600mm and finally laying classic lite regular edge tiles of size 600x600x15mm			1 sq.m. (One square metre)	
52	30.00 sq.m (Thirty square metres only)	Supply and fixing of curtains with MS rod of 25mm dia powder coated finish fire proof curtains with/without lining cloth etc.,complete and as directed by the departmental officers.			1 sq.m. (One square metre)	
53	236.00 RM (Two hundred and thirty six running metres only)	Providing factory made pre-laminated FPVC (Formed Polyvinyl Chloride) Door Frame of the size 105x40mm with a wall thickness of 10mm made out of extruded rigid FPVC profile mitre joined with 6Nos. of 5mm long screw. The door frame shall be fixed to the wall by using 80mm long screws through the frame with the help of PVC fasteners of 3Nos. to be provided for each vertical member, GI stiffeners of ('U'channel of size 29x9,1mm, 150mmlong) -3Nos. at hinge point, frame reinforcement of ('U'GI channel of size 46x22x0.6mm), bottom tie rod of('U'GI channel size of 15x15x1mm),etc., complete complying with the standard specification. The door frame should be got approved from the Executive Engineer before use on work			1 RM (One running metre)	

1	2	3	4	5	6	7
54	89.00 sq.m (Eighty nine square metres only)	Providing of 35mm thick factory made pre-laminated ABS (Acrolonitrile Butadiene Styrene) Door Shutter moulded in different designs, consisting of all round frame made out of water proof solid foam PVC bar of size 20 x 32mm, reinforced by 32 x 32mm -2 Nos., for vertical made out of LVL (Laminated Veneer Lumber), core material of 32mm thick high density craft paper honey comb board, sandwiched on both sides with pre-laminated ABS sheet thickness of 1.5mm. PVC edge banding of size 0.45mm on the vertical sides. Hardware made out of steel coated butterfly hinges - 3 Nos., for each shutter and ISI make SS round lock complete for finished item of work, complete complying with the standard specification. The door shutter and frame should be got approved from the Executive Engineer before use on work			1 sq.m. (One square metre)	
55	217.00 sq.m (Two hundred and seventeen square metres only)	Supplying and fixing UPVC (Un-Plasticized Polyvinyl Chloride) Windows of casement type from the profile the size of outer frame 60mm x 58mm and shutter profile are reinforcement with GI/1mm 125GSM and 100% corrosion free, the profiles are multi chambered sections with wall thick of 2mm. The EPDM rubber (black colour) covered with over all the edges of frame and shutter the shutter will be provided with Espag multi power point locks and also it operates as handle. The corners and joints should be welded and cleaned. Radiations free pin headed plain or brown colour 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 mechanism between sash and outer frame that enables opening of the window. 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			1 sq.m. (One square metre)	

1	2	3	4	5	6	7
56	23.70 sq.m (Twenty three point seven zero square metres only)	Supplying and fixing UPVC (Un-Plasticized Polyvinyl Chloride) Louvered Ventilators of from the profile the size of outer frame 60mm x 58mm and shutter profile size of 60 x 78mm both profiles are reinforced with GI/1mm 125GSM and 100% corrosion free, the profile are multi chambered sections with wall thick of 2mm. The EPDM rubber (black colour) covered with all over the edges of frame and shutter. The corners and joints should be welded and cleaned. Radiations pin headed glass 4mm thick should be provided in the louvers. The window should be fixed to the wall with 100% packing with screws and silicon packing all round the frames. The ventilator should be got approved from the Executive Engineer before use on work			1 sq.m. (One square metre)	
57	250.00 sq.m (Two hundred and fifty square metres only)	Supplying and fixing Terracota jally of size 20X20x0.75cm thick special quality. The jally pointing with cement mortar 1:3 including neat finishing and curing etc., . The rate should be inclusive of cost of all materials, labour charges for fixing of jally and transporting charges etc., complete complying with standard specification and as directed by the departmental officers.			1 sq.m. (One square metre)	
58	130.00 Nos. (One hundred and thirty Numbers only)	Supplying and Fixing Hydraulic Door Closer of various sizes of approved quality using Aluminium Extruded section body tubular type universal hydraulic door closer with double speed adjustment like HARDWYN 'GAZEL' (or) Equivalent (with ISI Monogram)			1 No (Each)	

1	2	3	4	5	6	7
59	23.50 sq.m (Twenty three point five zero square metres only)	Manufacturing, supplying and fixing of Steel Door with following specification. MS angle of size 40 x 40 x 6mm at 3.5 kg. / m used for outer frame and MS Angle of size 35 x 35 x 5mm at 2.6 kg. / m for the shutter frame. Stiffeners with 32 x 6mm 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. 18G CR Sheets of best quality is laid as panel in the shutter frames. 18 x 5mm at 0.70 kg. / m MS Flat is welded over the 32 x 6mm at 1.50 Kg. / m MS Flat on the rear side of the door, sandwiching the CR Sheet for rigidity. Additional stiffeners with 18 x 5mm at 0.7 Kg. / m MS Flats are provided diagonally on the rear side of the shutter. 300mm length of hinges 2 Nos. for shutter is provided. 6 Nos. of 200mm length hold fasts specified at the ends are welded to the outer frame of the door. Tower bolt 2 Nos. at the top provided. 250 x 16mm size of two aldrops are provided in single leaf door at lock rail section in the door for inner and outer provided and one rotating locking arrangements for the inner side of the door and additional provision for locking arrangements for lock is provided on the rear side of the door at an appropriate place and 1 No. of MS handle of heavy duty. A tie bar is provided at the bottom of the outer frame to prevent twisting of the frame during transportation and fixing. All members are given one coat of red oxide primer as directed by the departmental officers. The rate includes cost of all materials, labour charges, transportation, taxes and all other incidental charges, etc., complete, complying with standard specifications. (Single Leaf)			1 sq.m. (One square metre)	
60	16320.00 Kg (Sixteen thousand three hundred and twenty kilo grams only)	Supplying and fixing of M.S. grill of approved design for open courtyard, grill, grill work to doors and window openings etc., using necessary mild steel flats for inner and outer members which should be fixed on edges including cutting the members, welding, grinding, one coat of priming coat using best approved quality red oxide primer, dismantling of walls / concrete if necessary, fixing and finishing the dismantled portion to original condition etc., complete complying with standard specification.			1 kg. (One kilo gram)	

1	2	3	4	5	6	7
61	524.00 sq.m (Five hundred and twenty four square metres only)	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 red oxide priming coat in all floors excluding cost of priming coat etc., complete complying with standard specification. (The make, quality and colour of paint should be got approved by the Executive Engineer before use on works.)			1 sq.m. (One square metre)	
62	73.00 sq.m (Seventy three square metres only)	Manufacturing, Supplying and Fixing of Stainless Steel Hand rails for staircase using 50mm dia 304L Grade Stainless Steel pipe of 1.60mm thick at required locations to a height of 900mm from finished floor level welded to 38mm dia Stainless Steel pipe post of 1.00mm thick as vertical at 900mm centre with 2 Nos. of 25mm dia intermediate horizontal stainless steel pipe of 1.60mm 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, etc. complete			1 sq.m. (One square metre)	
63		Supplying and fixing in position best approved of BIS quality PVC rain water down fall pipes having a pressure of 4 kg/sq.cm including cost of necessary PVC shoe, PVC bend, cast iron gratings of required diameter and special clamps, brass screws, nails, etc., and fixing of cast iron gratings at junction of parapet and the RCC roof slab including finishing neatly etc., complete. The rate shall be inclusive of cost of removable cast iron grating. The PVC pipe shall be fixed in wall with special type of "U" clamp at the centre of the pipe line in addition to those for more than 3 metre pipe length, etc., complete complying with standard specification.				
a	250.00 RM (Two hundred and fifty running metres only)	160 mm dia			1 RM (One running metre)	

1	2	3	4	5	6	7
b	15.00 RM (Fifteen running metres only)	110 mm dia			1 RM (One running metre)	
64	369.00 sq.m (Three hundred and sixty nine square metres only)	<p>Providing Anti-termite treatment to soil adjacent and under building foundation, plinth periphery of the building by application of chemicals of IS 6313 Part I to IV in stages to suit the progress of work consist as per the detailed specification as below. (Measurements taken for the plinth area for the purpose of payment) including breaking of termite mounds, making holes with crow bar, closing the holes after the treatment and including cost of chemicals, labour charges, transport and storing, etc,complete and as directed by the departmental officers. (The chemical should be got approved by Executive Engineer before use on work).</p> <p>Stage-1: Spraying anti-termite chemical solution for the foundation before laying concrete, in bottom and sides of foundation.Stage-2: Spraying anti-termite chemical solution to the grade beam level, spraying has to done for the grade beam, brick masonry contact with the back fill earth.Stage-3: Spraying anti-termite chemical solution on the sand for the flooring before laying the flooring concrete. This treatment has to be carried out on the sand filling by making holes with crow bar to a depth of 60cms and at 60cms intervals on both direction and at junction of wall and flooring throughout.Stage-4: Spraying anti-termite chemical solution alround building outside by making holes through bar before laying plinth protection and the holes to be closed after the treatment</p>			1 sq.m. (One square metre)	
65	150.00 RM (One hundred and fifty running metres only)	Providing ornamental Sthapathi band of width 150/200 mm (two steps) (Shape and size should be directed by the Engineer-in charge of works) using Cement Mortar 1:2 (One cement and two cement).The shape and size adopted as per the approved drawing and as directed by the departmental officers etc.,complete.			1 RM (One running metre)	

1	2	3	4	5	6	7
66	150.00 RM (One hundred and fifty running metres only)	providing ornamental Sthapathy band and gothic's Of 230mm width for entrance area using country bricks and cement mortar 1:2 (one cement and two cement). the rate inclusive of cost of materials and labour and other incidental charges. the shape and size adopted as per the approved drawing and as directed by departmental officers etc., complete.			1 RM (One running metre)	
67	250.00 Nos. (Two hundred and fifty Numbers only)	Providing Ornamental Architectural Sthapati Arch Slab Works in parapet of size 0.40mx0.75m using cement concrete 1:1.5:3 and the gap filled with country bricks of size 9"x43/8"x 231/4. The top portion made to proper shape as per drawing brick and rough plastering 1" in CM 1:2 (One cement and Two sand) 20mm thick for making smooth finishing including curing, charges for scaffolding to required height & labour charges, material cost and other incidental charges etc, complete and as directed by the departmental officers.			1 No (Each)	
68	8.00 Nos. (Eight Numbers only)	Ornamental Poochu for Parapet top Karna Koodu of size 1.00m width 2.10m height using CM1:2 and brick masonry with country bricks of size 9"x4-3/8"x2-3/4". The top portion made to proper shape as per drawing brick and rough Plastering 1" CM1:2 (one cement and two sand) 20mm Thick and finishing with Five Ornamental Plastering with the Kalasam made of cement mortar of the top. This rate includes the cost of materials, labour charges, lift charges, including curing, etc complete.			1 No (Each)	

1	2	3	4	5	6	7
69	43.00 sq.m (Forty three square metres only)	Designing the Semi Unitised Structural Glazing System with open groove joint as per design intent, preparation of shop drawings for approval, supply, fabricate, erect as per approved shop drawings at all floor levels and all floor heights including conducting field test as per the test criteria set out in the particular specification (Methodology should be got approved by the Dept. Officials.) Design the framing system (i.e. male & Female frame) to support vision panels, spandrel panels either with glass or aluminium composite panel, openable, window panels on a continuous framing supported between floors. Also design the split framing unutilized glazing system in case of strip or punched windows with vision panel proposed with either insulated / Monolithic glass, groove width in the system both in horizontal and vertical shall not be more than 20mm. Glazing of panel shall be done only at factory at the controlled atmosphere			1 sq.m. (One square metre)	
70	1.00 Set. (One Set only)	Supplying and erecting in position of 1000 liters capacity Industrial Model Reverse Osmosis Water-cum-Purifier to deliver Potable Water with World Health Organisation (WHO) Standards with following accessories. (a) MS Skid - 1 No. (b) Media 11054 No. Vessel with 20 nb Multiport Valve (with Media Pubble and Fine Sand and Activated Carbon Filling) set (c) Feed Pump 0.50 HP - 1 No. (d) Vertical Pump 2-9, 2.00 HP / Single Phase - 1 No. (e) Membrane 40 x 40 filmtech (or) equilaents / Osmonic (USA) - 1 No. and Membrane Pressure Vessel 40 x 40 -1 No. & Pressure Gauge - 2 Nos. (f) Flow Meter - 1 No. 20" Filter with Housing - 1 No. Low Pressure Switch - 1 No., Level Switch - 1 No. & Necessary CPVC Pipes and Fittings. The system shall be provide with Two Panel Control System with necessary Stainless Valves and Fittings and Float Control etc. The rate should be inclusive of all civil works, wherever necessary to install the System in position and intact			1 Set (Set)	
71	1.00 No. (One Number only)	Supply and fixing of Automatic Multiport Valve 1" for Media Filters for the RO Plant DMF Backwash and Rinsing Applications etc, complete and as directed by the departmental officers.			1 No (Each)	

1	2	3	4	5	6	7
72	1.00 No. (One Number only)	Supply and fixing of Automatic Flushing Systems for Membrane in RO plant with LPS and microprocessor panel etc, complete and as directed by the departmental officers.			1 No (Each)	
73	1.00 No. (One Number only)	Supply and fixing of Dosing Systems – PH Booster alkaline water & Antiscalant, Dosing Pump – 2 No, Capacity 0 to 4 LPH , Make- PP-Head – 4 Kg/cm2- Accessories -Foot valve Dosing valve etc., Dosing Tank – 2 No, Capacity 30 Liters etc, complete and as directed by the departmental officers.			1 No (Each)	
74	1.00 No. (One Number only)	Supplying and fixing in position of Stainless steel RO product water storage tank of 1000 litres capacity suitable mounted on terrace with all inlet, outlet and drain arrangement and manhole at top of the tank including bottom supporting arrangement etc., complete and as directed by the departmental officers.			1 No (Each)	
75	1.00 No. (One Number only)	Supplying and fixing in position of HDPE RO reject water storage tank of 2000 litres capacity suitable mounted on terrace with all inlet, outlet and drain arrangement and manhole at top of the tank including bottom supporting arrangement etc., complete and as directed by the departmental officers.			1 No (Each)	
76	68.00 Nos. (Sixty eight Numbers only)	Providing the safeguard for the columns for 1m height with rubber corner guard of 3"x3" L type colour of black and yellow approved quality etc. complete complying with standard specification and as directed by the departmental officers.			1 No (Each)	
77	3076.00 sq.m (Three thousand and seventy six square metres only)	Providing two legged pipe scaffolding using 40mm first class M.S pipe including fixing cross bracing. EJP couplers for cross bracing and base plates including erection of scaffolding conveyance charges, loading and unloading charges and removing after completion of the work and taking away from the site et., as directed by the departmental officers.			1 sq.m. (One square metre)	

1	2	3	4	5	6	7
78	130.00 sq.m (One hundred and thirty square metres only)	Painting with two coats of best approved first quality and colour of synthetic enamel paint over the existing red-oxide priming coat in all floors excluding cost of priming coat etc. complete complying with standard specification. (The make, quality and colour of paint should be got approved by the Executive Engineer before use on works.)			1 sq.m. (One square metre)	
79	450.00 sq.m (Four hundred and fifty square metres only)	Supplying and Laying Rubber Moulded paverblock of 60-63mm thick with new one using cement concrete 1:2:4 for manufacturing, finishing, Curing and conveyance to site and laying etc., complete complying with standard specification and as directed by the departmental officers.			1 sq.m. (One square metre)	
WATER SUPPLY & SANITARY ARRANGEMENTS						
80	120.00 RM (One hundred and twenty running metres only)	Drilling of bore wells 150 mm dia any where in Chennai city including transportation from the place with in the above district in alluvial soil sedimentary strata of clay and sand stone shale pebbles boulders etc by first taking pilot of 140mm/150mm/200mm dia and the enlarging to required dia by direct or revise rotary mud circulation method using contractor's rig fuel labour drilling betonies mud and water required for the drilling at the site shown by the departmental officers including construction of mud pit (Water available with in a lead of 1.5 Km) Drilling of 140/150/ 200mm pilot bore.			1 RM (One running metre)	
81	120.00 RM (One hundred and twenty running metres only)	Reaming from 140 / 200mm dia pilot bore to 300mm dia bore as directed by the departmental officers upto 6M depth ending below Ground level			1 RM (One running metre)	
82	64.00 RM (Sixty four running metres only)	Supplying of 160 mm Dia Slotted PVC pipes of 6kg/cm2 (With slot or without slot) in the drilled hole including welding the joints etc., complete supplying and packing the annular space with pebbles size and quality as approved by the EE			1 RM (One running metre)	

1	2	3	4	5	6	7
83	64.00 RM (Sixty four running metres only)	Supplying of 160 mm Dia Plain PVC pipes of 6kg/cm2 (With slot or without slot) in the drilled hole including welding the joints etc., complete supplying and packing the annular space with pebbles size and quality as approved by the EE			1 RM (One running metre)	
84	120.00 RM (One hundred and twenty running metres only)	Labour charges for inserting 165 /168 mm dia PVC casing pipes assemble (with slots or without slots) in the drilled hole including jointing the pipes with PVC coupler and with cement paste etc. complete and supplying and packing the annular space with pebbles of size and quality as approved by the departmental officers. The conveyance charges to work site to be borne by the contractor.			1 RM (One running metre)	
85	32.00 Hrs (Thirty two hours only)	Charges for developing the bore well for entire depth with suitable air compressor of 300RPM capacity (minimum 8 hrs) including transportation labour and fuel charges for compressor and directed by the departmental officers and conducting yield test by "V" notch methods, excluding the cost of bore charges and conveyance charges of handle boring.			1 Hr (One hour)	
86		Supplying laying and jointing HDPE pipes of 10kg/cm2 for borewell motor purpose of approved quality etc., complete and as directed by the departmental officers.				
a	128.00 RM (One hundred and twenty eight running metres only)	40mm Dia			1 RM (One running metre)	
b	128.00 RM (One hundred and twenty eight running metres only)	25mm Dia			1 RM (One running metre)	

1	2	3	4	5	6	7
87	4.00 Nos. (Four Numbers only)	Supplying and fixing 3 HP Double stage Jet Motor with all accessories such as jet, 16 amp main switch and electric starter with ISI mark, Electric main board and giving electric connection with required wire etc. The Motor should be fixed with bolts and nuts in the masonry pedestal of size 450 x 450 x 600 mm using second class chamber burnt bricks 9" x 4 3/8" x 2 3/4" and plastering with cement mortar 1:5 (one cement and five sand), 12mm thick etc including testing etc complete complying with standard specification and as directed by the departmental officers..(The Motor and accessories shall be got approved by the Executive Engineer before use on works).			1 No (Each)	
88	2.00 Nos. (Two Numbers only)	Supplying and fixing of 5.00 HP of approved brand monoblock with accessories of starter, Main switch, panel board etc. complete to suit the need (The pump set should be got approved by the Executive Engineer before supply)			1 No (Each)	
89		Supplying and fixing in position first quality and approved variety of Gun metal Gate Valve / Wheel Valve with BIS make of the following dia including cost of shellac, thread balls, etc., complete complying with standard specifications (for both internal and external water supply arrangements). The valves to be used on work shall be got approved by the Executive Engineer before use on work.				
a	39.00 Nos. (Thirty nine Numbers only)	25 mm dia G.M. Wheel Valve			1 No (Each)	
b	19.00 Nos. (Nineteen Numbers only)	32mm dia G.M. Wheel Valve			1 No (Each)	

1	2	3	4	5	6	7
c	8.00 Nos. (Eight Numbers only)	40 mm dia G.M. Gate Valve			1 No (Each)	
d	6.00 Nos. (Six Numbers only)	50 mm dia G.M. Gate Valve			1 No (Each)	
90		Supplying and fixing in position 15mm dia following taps (heavy duty) of approved make conforming to BIS specifications and quality including cost of shellac, thread, etc., complete complying with standard specification and including cutting and threading wherever necessary.(Taps should be got approved by the Executive Engineer before use on the works)				
a	20.00 Nos. (Twenty Numbers only)	Pillar tap			1 No (Each)	
b	27.00 Nos. (Twenty seven Numbers only)	Long body tap			1 No (Each)	
c	54.00 Nos. (Fifty four Numbers only)	Stop Cock			1 No (Each)	
d	54.00 Nos. (Fifty four Numbers only)	Swan Neck Tap			1 No (Each)	

1	2	3	4	5	6	7
91	27.00 Nos. (Twenty seven Numbers only)	Supplying and fixing in position 15mm dia two way bibcock (heavy duty) with Health faucet of approved make conforming to BIS specifications and quality including cost of shellac, thread, etc., complete complying with standard specification and including cutting and threading wherever necessary. (Taps should be got approved by the Executive Engineer before use on the works)			1 No (Each)	
92	9.00 Nos. (Nine Numbers only)	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 (The CP shower rose should be got approved by the Executive Engineer before use on works).			1 No (Each)	
93	10.00 Nos. (Ten Numbers only)	Supplying and fixing in position best quality approved make Stainless steel sink of size of 600 x 450mm including cost of 32mm dia CP waste coupling, 32mm dia PVC waste pipe with rubber plug and chain, 15mm dia brass nipple including fixing the sink in position and testing for leakages etc., complete complying with standard specifications excluding CI brackets.[The sink and specials should be got approved by the Executive Engineer before use on works]			1 No (Each)	
94	54.00 Nos. (Fifty four Numbers only)	Supplying and fixing in position Indian make bevelled edge mirror of approved quality and brand PVC / Fibre Glass framed 600x450x5.5mm thick mirror, shelf type with hard board backing of approved colour fixed with brass screws, rawl plug, etc., complete complying with standard specification. (The mirror should be got approved by the Executive Engineer before use on woks)			1 No (Each)	

1	2	3	4	5	6	7
95	27.00 Nos. (Twenty seven Numbers only)	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. (The towel rail should be got approved by Executive Engineer before use on works).			1 No (Each)	
96	54.00 Nos. (Fifty four Numbers only)	Supplying and fixing best approved best quality brass CP soap tray of size 150 x 150mm including cost of teak wood plugs, brass screws, etc., complete complying with standard specifications. (The soap tray should be got approved by Executive Engineer before use on works).			1 No (Each)	
97	27.00 Nos. (Twenty seven Numbers only)	Supplying and fixing in position best quality and approved make Indian made white glazed earthenware wash hand basin of size 550 x 400mm (without pedestal) with a pair of cast iron brackets, including cost 15mm dia brass CP pillar tap, 32mm dia "B" class GI waste pipe with rubber plug and chain, 15mm dia GM wheel valve, 15mm brass nipple, 15mm dia nylon connection, 32mm dia CP brass waste coupling including fixing of wash basin using CI brackets on to the wall in position with TW plugs and screws, rubber washers, white lead and giving necessary water supply connection and painting the brackets with two coat of painting over a priming coat of anti-corrosive paint including testing for leakages etc., complete complying with standard specification and as directed by the departmental officers. (The wash hand basin and specials should be got approved by the Executive Engineer before use on works).			1 No (Each)	

1	2	3	4	5	6	7
98	18.00 Nos. (Eighteen Numbers only)	Supplying and fixing in position best quality and approved make under counter oval type wash hand basin of size 560 x 450mm with a pair of cast iron brackets, including cost 15mm dia brass CP pillar tap, 32mm dia "B" class GI waste pipe with rubber plug and chain, 15mm dia GM wheel valve, 15mm brass nipple, 15mm dia nylon connection, 32mm dia CP brass waste coupling including fixing of wash basin using CI brackets on to the wall in position with TW plugs and screws, rubber washers, white lead and giving necessary water supply connection and painting the brackets with two coat of painting over a priming coat of anti-corrosive paint including testing for leakages etc., complete complying with standard specification and as directed by the departmental officers. (The wash hand basin and specials should be got approved by the Executive Engineer before use on works).			1 No (Each)	
99	18.00 Nos. (Eighteen Numbers only)	Supply and fixing in position of best Indian make white glazed earthenware lipped mouth flat back urinal of best quality and approved make of size 430mm x 260mm x 350mm with GI pipe, 32mm dia bell mouth PVC connection and waste pipe, 15mm dia GI pipe of required length, 15mm dia GM wheel valve, 15mm dia brass nipple 2 Nos., and fixing the urinals in position with necessary TW plugs, clamps, screws, etc., including dismantling masnory and re-doing the same to the original condition, etc., including painting the pipe with two coats of best quality approved synthetic enamel paint over one coat of red oxide primer and checked without any leakage etc. complete complying with standard specifications and as directed by the departmental officers. (The urinal should be got approved by the Executive Engineer before use on works.)			1 No (Each)	

1	2	3	4	5	6	7
100	27.00 Nos. (Twenty seven Numbers only)	Supplying and fixing in position White / Colour Glazed Model Floor Mounted European Water Closet of best quality and approved make with 100mm "P" or "S" trap connecting with CI pipe of 100mm dia / PVC pipe of 110mm dia, double flapped rigid PVC black seat and seat cover with CP brass hinges including cost of white cement, cement for packing, spun yarn, teak wood plugs, brass screws, etc., including supplying and fixing 10 litres capacity PVC / 12.5 litres capacity porcelin low level flushing tank with a pair of CI brackets, etc., complete with all fittings, such as, 15mm brass ball valve with polythene float with brass handle, union coupling connected by means of 40mm white PVC flush hand using indian adopter joint including all internal fittings, such as, 15mm bras connections, 15mm GM wheel valve, 15mm brass nipple (2 Nos.), 15mm nylon connection, TW plugs, screws and also giving necessary connection to the PVC pipe and painting the CI brackets with 2 coats of approved paint over one coat of red oxide primer, dismantling the masonry and re-doing the dismantled masonry to original condition, etc., complete complying with standard specifications. (The EWC and flushing tank with all accessories should be got approved by the Executive Engineer before use on works) Floor Fitting			1 No (Each)	
101		Supplying and fixing position CI Nahani Trap / Floor Trap of the following sizes with best stainless steel gratings of approved brand and quality, fixed over a bed of brick jelly lime concrete 1:2:5 (One part of lime, two part of sand and five part of 40mm gauge brick jelly) and finished with Cement Mortar 1:3 (One Cement, Three sand) including dismantling masonry works wherever found necessary and making good the dismantled portions to the original condition and giving connection to the CI / PVC pipes, etc., complete complying with standard specification. (The Nahani Trap should be got approved by the Executive Engineer before use on works)				
a	126.00 Nos. (One hundred and Twenty sixNumbers only)	Nahani Trap of size 100 x 75mm			1 No (Each.)	

1	2	3	4	5	6	7
102	27.00 Nos. (Twenty seven Numbers only)	Supplying and fixing in position 150 x 100mm "P" or "S" stoneware gully trap 'A' grade with CI double gratings of size 150 x 150mm and 230 x 230mm at bottom and top respectively with necessary earth work excavation laid over a bed of brick jelly cement concrete 1:3:6 (One cement, Three sand and Six broken brick jelly) 150mm thick using 40mm size broken brick jelly including necessary brick work and plastering including dismantling masonry wherever necessary and re-doing the damaged portions to the original conditions using cement concrete 1:3:6 using 20mm stone jelly for fixing the gully trap and giving connections to stoneware sewer line etc., complete complying with standard specifications. [Earth work excavation, brick work, plastering shall be measured and paid separately]. The stoneware gully trap should be got approved by the Executive Engineer before use on works.			1 No (Each)	
103		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.(The PVC pipes should be got approved by the Executive Engineer before use on works). The rate for earth work excavation will be measured and paid separately in the cases where the pipe lines are proposed to laid below ground level				
a	340.00 RM (Three hundred and forty running metres only)	75mm dia			1 RM (One running metre)	
b	280.00 RM (Two hundred and eighty running metres only)	110mm dia			1 RM (One running metre)	

1	2	3	4	5	6	7
c	115.00 RM (One hundred and fifteen running metres only)	160mm dia			1 RM (One running metre)	
104		Supplying and fixing in position PVC specials of the following dia and types of approved quality confirming to BIS and providing leak proof joints including fixing to the walls and giving connection to the PVC soil stacks, dismantling the masonry or RCC works and re-doing the dismantled portion to original condition etc., complete complying with standard specifications. (The PVC specials should be got approved by the Executive Engineer before use on works).				
I		PVC Elbow				
a	10.00 Nos. (Ten Numbers only)	160mm dia			1 No (Each)	
b	50.00 Nos. (Fifty Numbers only)	110mm dia			1 No (Each)	
c	65.00 Nos. (Sixty five Numbers only)	75mm dia			1 No (Each)	
II		PVC Elbow with Door				
a	35.00 Nos. (Thirty five Numbers only)	110mm dia			1 No (Each)	

1	2	3	4	5	6	7
b	50.00 Nos. (Fifty Numbers only)	75mm dia			1 No (Each)	
III		PVC Tee				
a	10.00 Nos. (Ten Numbers only)	160mm dia			1 No (Each)	
b	35.00 Nos. (Thirty five Numbers only)	110mm dia			1 No (Each)	
c	50.00 Nos. (Fifty Numbers only)	75mm dia			1 No (Each)	
IV		PVC Tee with Single Door				
a	18.00 Nos. (Eighteen Numbers only)	110mm dia			1 No (Each)	
b	22.00 Nos. (Twenty two Numbers only)	75mm dia			1 No (Each)	
V		PVC Y				
a	20.00 Nos. (Twenty Numbers only)	110mm dia			1 No (Each)	

1	2	3	4	5	6	7
b	25.00 Nos. (Twenty five Numbers only)	75mm dia			1 No (Each)	
VI		PVC "Y" with Single Door				
a	18.00 Nos. (Eighteen Numbers only)	110mm dia			1 No (Each)	
b	22.00 Nos. (Twenty two Numbers only)	75mm dia			1 No (Each)	
VII		PVC bend				
a	22.00 Nos. (Twenty two Numbers only)	110mm dia			1 No (Each)	
b	30.00 Nos. (Thirty Numbers only)	75mm dia			1 No (Each)	
VIII		PVC Reducer				
a	6.00 Nos. (Six Numbers only)	160 mm x 110 mm			1 No (Each)	
b	6.00 Nos. (Six Numbers only)	110 mm x 75 mm			1 No (Each)	

1	2	3	4	5	6	7
105		Supplying and fixing in position PVC cowls of following dia of best approved quality conforming to BIS, etc., complete complying with standard specifications.(The PVC cowl should be got approved by the Executive Engineer before use on works)				
a	6.00 Nos. (Six Numbers only)	110 mm dia			1 No (Each)	
b	6.00 Nos. (Six Numbers only)	75 mm dia			1 No (Each)	
c	6.00 Nos. (Six Numbers only)	50 mm dia			1 No (Each)	
106		Supplying, laying and jointing UPVC pipes of approved quality and best variety conforming to BIS of the following dia including cutting, threading and fixing UPVC specials using UPVC adhesives (but excluding cost of such specials) and fixing into wall with teak wood plugs, SS clamps and screws making holes on the wall (or) drilling holes in the roof and making good the dismantled portion to original condition with necessary brick work / cement concrete and plastering neatly wherever necessary with necessary scaffolding charges upto 4 metre height above ground level, etc., complete complying with standard specifications. The UPVC pipes shall be got approved by Executive Engineer before use on works.				
a	200.00 RM (Two hundred running metres only)	20 mm dia			1 RM (One running metre)	

1	2	3	4	5	6	7
b	237.00 RM (Two hundred and thirty seven running metres only)	25 mm dia			1 RM (One running metre)	
c	177.00 RM (One hundred and seventy seven running metres only)	32 mm dia			1 RM (One running metre)	
d	156.00 RM (One hundred and fifty six running metres only)	40 mm dia			1 RM (One running metre)	
e	66.00 RM (Sixty six running metres only)	50 mm dia			1 RM (One running metre)	
107	Supplying UPVC Specials in water supply arrangements (both in internal and external water supply arrangements)					
I	UPVC Elbow					
a	14.00 Nos. (Fourteen Numbers only)	50 mm dia			1 No (Each)	
b	28.00 Nos. (Twenty eight Numbers only)	40 mm dia			1 No (Each)	
c	56.00 Nos. (Fifty six Numbers only)	32mm dia			1 No (Each)	

1	2	3	4	5	6	7
d	70.00 Nos. (Seventy Numbers only)	25 mm dia			1 No (Each)	
e	84.00 Nos. (Eighty four Numbers only)	20 mm dia			1 No (Each)	
II		UPVC Tee				
a	10.00 Nos. (Ten Numbers only)	50 mm dia			1 No (Each)	
b	14.00 Nos. (Fourteen Numbers only)	40 mm dia			1 No (Each)	
c	28.00 Nos. (Twenty eight Numbers only)	32mm dia			1 No (Each)	
d	42.00 Nos. (Forty two Numbers only)	25 mm dia			1 No (Each)	
e	46.00 Nos. (Forty six Numbers only)	20 mm dia			1 No (Each)	

1	2	3	4	5	6	7
III		UPVC Reducer				
a	10.00 Nos. (Ten Numbers only)	50x40mm dia			1 No (Each)	
b	14.00 Nos. (Fourteen Numbers only)	40x32mm dia			1 No (Each)	
c	42.00 Nos. (Forty two Numbers only)	32x25mm dia			1 No (Each)	
d	46.00 Nos. (Forty six Numbers only)	25 x 20 mm dia			1 No (Each)	
IV		UPVC Reducer Elbow				
a	8.00 Nos. (Eight Numbers only)	50x40mm dia			1 No (Each)	
b	14.00 Nos. (Fourteen Numbers only)	40x32mm dia			1 No (Each)	
c	21.00 Nos. (Twenty one Numbers only)	32x25mm dia			1 No (Each)	

1	2	3	4	5	6	7
d	28.00 Nos. (Twenty eight Numbers only)	25 x 20 mm dia			1 No (Each)	
e	28.00 Nos. (Twenty eight Numbers only)	20 x 15 mm dia			1 No (Each)	
V		UPVC Reducer Tee				
a	8.00 Nos. (Eight Numbers only)	50x40mm dia			1 No (Each)	
b	14.00 Nos. (Fourteen Numbers only)	40x32mm dia			1 No (Each)	
c	21.00 Nos. (Twenty one Numbers only)	32x25mm dia			1 No (Each)	
d	28.00 Nos. (Twenty eight Numbers only)	25 x 20 mm dia			1 No (Each)	
VI		UPVC Hex Nipple				
a	8.00 Nos. (Eight Numbers only)	50 mm dia			1 No (Each)	

1	2	3	4	5	6	7
b	14.00 Nos. (Fourteen Numbers only)	40 mm dia			1 No (Each)	
c	21.00 Nos. (Twenty one Numbers only)	32mm dia			1 No (Each)	
d	28.00 Nos. (Twenty eight Numbers only)	25 mm dia			1 No (Each)	
VII	UPVC Union					
a	8.00 Nos. (Eight Numbers only)	50 mm dia			1 No (Each)	
b	14.00 Nos. (Fourteen Numbers only)	40 mm dia			1 No (Each)	
c	21.00 Nos. (Twenty one Numbers only)	32mm dia			1 No (Each)	
d	28.00 Nos. (Twenty eight Numbers only)	25 mm dia			1 No (Each)	
VIII	UPVC Coupler					

1	2	3	4	5	6	7
a	8.00 Nos. (Eight Numbers only)	50 mm dia			1 No (Each)	
b	14.00 Nos. (Fourteen Numbers only)	40 mm dia			1 No (Each)	
c	20.00 Nos. (Twenty Numbers only)	32mm dia			1 No (Each)	
d	28.00 Nos. (Twenty eight Numbers only)	25 mm dia			1 No (Each)	
108	Construction of Inspection chamber or manhole of the following size including necessary earth work excavation in all soils to full depth as may be directed with sand filling at bottom of the chamber for 10cm thick, concreting CC 1:5:10 using 40 mm guage HBGs jelly 10 cm thick and sode walls 9" thick brick work in cement mortar 1:5 using II class chamber burnt bricks of size 9" x 43/8" x 23/4" filling the size of foundation with excavated earth, plastering with cm 1:3 20mm thick for inside and bottom and making necessary benching with brick jelly cement concrete to the required slope and fifnishing neatly etc., complete.					
a	4.00 Nos. (Four Numbers only)	0.60 x 0.60 x 0.60m			1 No (Each)	
b	4.00 Nos. (Four Numbers only)	0.60 x 0.60 x 0.90m			1 No (Each)	

1	2	3	4	5	6	7
c	3.00 Nos. (Three Numbers only)	0.75 x 0.75 x 1.20m			1 No (Each)	
d	3.00 Nos. (Three Numbers only)	0.75 x 0.75 x 1.50m			1 No (Each)	
109		Supplying and fixing in position of Steel fibre reinforced cement concrete (SFRC)manhole / inspection chamber cover slab with following frame sizes including necessary labour charges for fixing the frame in position over the cement mortar base and finishing the joints etc. complete as directed.				
a	12.00 Nos. (Twelve Numbers only)	600x600mm cover slab			1 No (Each)	
b	6.00 Nos. (Six Numbers only)	750x750mm cover slab			1 No (Each)	
110	6.00 Pits. (Six Pits only)	Providing rain water harvesting pit of 1.50m dia and 1.50m depth with necessary earth work excavation,erecting the five nos of Rcc collar of 1.50m dia,sand filling of 0.60m depth,filling of 40mm HBS Jelly of 0.60m depth and covering with Rcc cover slab of 50mm thick and also connecting 110mm dia PVC pipe of 10m legth including transporting charges,fixing,etc. complete.			1 Pit (One Pit)	
111	28.00 Nos. (Twenty eight Numbers only)	Supplying and fixing of PVC mould CI Steps of approved quality including dismantling masonry wherever necessary and redoing the damaged portion to original condition			1 No (Each)	

1	2	3	4	5	6	7
		Furniture arrangements				
112	36.00 Nos. (Thirty six Numbers only)	Supplying, Manufacturing of Linear Workstation Back to Back 4 seater 1200x550x750mm with 75mm thick Partition. Tops and legs made out of 25mm or 18mm thick Prelam Particle board, all exposed edges are Machine pressed Edgebanding finish. 3 Draw mobile pedestals of size 400mm W x 450mm D x 680mm H completely made of 18mm Prelam Particle boards finished with 2mm thick PVC machine pressed edge banding. Mobile unit to have central locking system with wheels. etc., complete complying with standard specification.			1 No (Each)	
113	9.00 Nos. (Nine Numbers only)	Supplying, Manufacturing of Linear Workstation Single side 4 seater 1200x550x750mm with 75mm thick Partition. Tops and legs made out of 25mm or 18mm thick Prelam Particle board, all exposed edges are Machine pressed Edgebanding finish. 3 Draw mobile pedestals of size 400mm W x 450mm D x 680mm H completely made of 18mm Prelam Particle boards finished with 2mm thick PVC machine pressed edge banding. Mobile unit to have central locking system with wheels. etc., complete complying with standard specification.			1 No (Each)	
114	216.00 Nos. (Two hundred and sixteen Numbers only)	Supplying of Workstation Chair Providing S Type Chair with steel frame 16 gauge 25mm round CRCA tubes for the chair frame first quality teak wood frame with nylon knitted fitted for seat and back teak wood polished handle to be fixed necessary nylon floor bushes to be fixed.The rate excluding of all taxes and includes cost of all materials, labour, transports and other incidental charges, including providing in the position to the rooms as directed by departmental officers.			1 No (Each)	
115	63.00 Nos. (Sixty three Numbers only)	Supplying, Manufacturing of Wooden Storage of Size 2100 X 900 X 450mm Storage made out of 25mm or 18mm thick Commercial Plywood with both side 1mm Laminate Finising. All exposed edges are Machine pressed Edgebanding finish. The rate includes labour for manufacturing, supply, transportation, etc., complete complying with standard specification.			1 No (Each)	

1	2	3	4	5	6	7
116	9.00 Nos. (Nine Numbers only)	Manufacturing and Supply of teakwood long bench of size 7' x 1.6' with back rest and handle with good polish finish etc., complete complying with standard specification.			1 No (Each)	
117	9.00 Nos. (Nine Numbers only)	Manufacturing and Supply of Executive Table L2400 x D1050 x H750mm 25mm thk. Table Top E/B L2400mm X D1050mm - 1Nos, 25mm thk. Vertical Leg E/B 1050mm X 750mm - 2Nos, 18mm thk. Modesty 2400mm X 750mm - 1Nos Side Storage unit Size : L1200 x D450 x H750 mm Mobile Pedestal (3 Drawer) Back Storage unit Size : L2400 x D450 x H750 mm. Table Tops and legs made out of 25mm or 18mm thick Commercial Plywood, all exposed edges are Machine pressed Edgebanding finish. 3 Draw mobile pedestals of size 400mm W x 450mm D x 680mm H completely made of 18mm Commercial Plywood finished with 2mm thick PVC machine pressed edge banding. Mobile unit to have central locking system with wheels. The rate includes labour for manufacturing, supply, transportation, etc., complete complying with standard specification.			1 No (Each)	
118	9.00 Nos. (Nine Numbers only)	Supplying of Executive Chair Back : 3/4' round pipe frame covered with 40 Density cushion with selected Upholstery, Seat: 3/4' round pipe with spring and 2" PU Molded Foam with and selected Upholstery covered synchrony Tilting Facility, Hydraulic gas Lift, Stainless steel Base, PU arms Nylon caster Wheels. The rate includes cost of all materials, fabrication, transports and other incidental charges etc., complete complying with standard specification.			1 No (Each)	
119	27.00 Nos. (Twenty seven Numbers only)	Supplying of Executive Visitor Chair with back in frame covered with breathable Mesh in black for back, with arm steel frame and leg chair 14 gauge CR round pipe legs, 18mm compressor plywood for seat with 3" thick high density foam covered with fireproof cloth, fixed arms, legs have nylon bushes. The rate includes labour for manufacturing, supply, transportation, etc., complete complying with standard specification.			1 No (Each)	

1	2	3	4	5	6	7
120	9.00 Nos. (Nine Numbers only)	Supplying of Three seater sofa with basic Silver Wood frame work. The seat have flat type High Density cushions placed on the seat, back rest with fireproof cloth or leatherride. Bottom Legs with Floor Adjustable bush model sofa. The rate includes labour for manufacturing, supply, transportation, etc.,complete complying with standard specification.			1 No (Each)	
121	9.00 Nos. (Nine Numbers only)	Supplying of Teapoy of Size 3X1½ Teakwood with Melamine polish. The rate includes labour for manufacturing, supply, transportation, etc., complete complying with standard specification.			1 No (Each)	
122	18.00 Nos. (Eighteen Numbers only)	Manufacturing and supply of wooden stool made out of teakwood with melamine polish etc., complete complying with standard specification.			1 No (Each)	
123	9.00 Nos. (Nine Numbers only)	Manufacturing and supply of dining table with chair made out of teakwood with melamine polish etc., complete complying with standard specification.			1 No (Each)	
124	9.00 Nos. (Nine Numbers only)	Manufacturing and Supply of dressing table with one cupboard and a drawer with laminated finish with teakwood frame mirror with stool etc., complete complying with standard specification.			1 No (Each)	
125	18.00 Nos. (Eighteen Numbers only)	Supply of Teakwood screen with laminated finish of size 6'6" x 6' etc., complete complying with standard specification.			1 No (Each)	

1	2	3	4	5	6	7
Fire Fighting arrangements						
126	1.00 No. (One Number only)	Supply, erection, testing and commissioning of Fire Fighting Application Horizontal Centrifugal Type Pump Rated for 2280 LPM at 70 metres head with Electrical Motor of 60 HP of 415 volt 3 phase connection complete with base plate and accessories. (Make: Kirloskar or Equivalent). The rate inclusive of necessary vibration, bad mounting etc., as per standard method as directed by the Deparmental Officers				1 No (Each)
127	1.00 No. (One Number only)	Supply, installation, testing and commissioning of Diesel Engine Driven Main Fire Pump suitable for automatic operation and consisting of following and complete in all respects as required. a. End suction, top discharge centrifugal pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal to ensure a minimum pressure of 3.5 kg. / sq. cm at highest and farthest outlet at specified flow of 2280 LPM at 70m head conforming to IS 1520. b.68 BHP,1500 RPM water cooled with radiator, diesel engine conforming to relevant BS & IS standard complete. Auto starting mechanism, 12 volts / 24 volts electric starting equipment like self motor, dyanamo, solenoid switches etc. c.110 litres capacity diesel tank mounted over stand fabricated using 25mmx25mm x6mm size MS angle, providing with level indicator,inlet port, outlet port, drain port and diesel return line port and fuel pre-filter, after filter etc. (Make: Kirloskar / Equivalent). d. Exhaust system having flexible metallic muffler, 100mm dia MS heavy pipe extended upto 1m, outside pump house duly insulated with 50mm thick glass wool with 1mm thick aluminium sheet cladding, residential silencer with necessary MS support arrangements from wall or ceiling as per site condition.e.Dash board consisting the instruments like temperature gauge, galvano type....				1 No (Each)

1	2	3	4	5	6	7
		DC Ammeter, lubricant oil pressure gauge, ignition switch, emergency stop and all other protection equipment as per specification, stop seleneid for auto stop in the event of fault with audio indications, painted with post office red colour etc., as required. f. 12 V / 24 V storage battery, maintenance free tape, 180 AH rating, MS fabricated common base plate, coupling guard, foundation bolts etc., as required.g. Positioning the diesel engine driven fire pump over cement concrete foundation using suitable size anti-vibration mounting arrangement. All works carried out as per standard methods and as instructed by the manufacturer and as directed by the Departmental Officers. (Make: Kirloskar / Equivalent)				
128	1.00 No. (One Number only)	Supply, erection, testing and commissioning Mono Block type Fire Fighting Pressurisation Pump of 180 LPM 110 metres head at 10 HP with suitable base frame including necessary vibration bad mounting etc., including conveying, fixing and incidental charges., etc., complete as per standard specification and as directed by the Departmental Officers. (Make: Kirloskar / Equivalent)				1 No (Each)

1	2	3	4	5	6	7
129	1.00 No. (One Number only)	Supplying, installation, testing and commissioning of Fire Fighting Electrical Control Panel of cubical construction, floor mounted type fabricated using CRCA sheet, compartmentalised with hinged lockable door dust and vermin proof, cable alley, inter connection having switch gears and accessories mounting and internal wiring, earth terminals, numberings, necessary metering protections and indications complete in all respect suitable for operation on 415volt, 3 phase, 50 Hz AC supply with enclosure protection class IP 54 and mounted with the followings. A. Common Panel in Fire Pump House (i). Incomer a. 1 No. 600A TP & N SDFU with HRC fuses b. 1 set of 600A, 4 bar aluminium bus bar, 415 V, 50 HZ AC supply c. 1 No. (0-500A) digital ammeter with selector switch & CTs d. 1 No. (0-500V) digital voltmeter with selector switch and control fuses e. 3 Nos. phase indication lamp LED type with toggle switches with control fuses (ii). Outgoing a. Main Fire Pump 400 A TPN SDFU with HRC fuses with suitable HP fully automatic starter / delta starter with over load protection, digital ammeter with built-in selector switch and suitable CTs, current sensing type single phasing preventer complete with all accessories and internal wiring required for automatic operation, selector switch for auto / manual / OFF operation 1 No.			1 No (Each)	
130		Supply and laying of following sizes of Armoured Aluminium Cables for electrical motor, control panel, pressure switch, jockey motor etc.. The rate inclusive of all incidental charges, neccessary scaffolding and redoing the dismantled portions to its original condition wherever found neccessary, etc., complete as per standard specification and as directed by the Departmental Officers. Make: POLYCAB / PARACON / FINOLEX / EQUIVALENT.				
a	2030.00 RM (Two thousand and thirty running metres only)	2 core 1.5 sq.mm armoured multi strand aluminium			1 RM (One running metre)	

1	2	3	4	5	6	7
b	15.00 RM (Fifteen running metres only)	3 core 10 sq.mm. armoured aluminium cable			1 RM (One running metre)	
131		Supply and laying of following sizes of Armoured Aluminium / Copper Cables for electrical motor, control panel, pressure switch, jockey motor etc., all incidental charges, neccessary scaffolding and re-doing the dismantled portions to its original condition wherever found neccessary, etc., complete as per standard specification and as directed by the Departmental Officers. Make: POLYCAB / PARACON / FINOLEX / EQUIVALENT.				
a	15.00 RM (Fifteen running metres only)	10 core 2.5 sq.mm. armoured aluminium cable			1 RM (One running metre)	
b	40.00 RM (Forty running metres only)	3 core 35 sq.mm. armoured aluminium cable			1 RM (One running metre)	
132	1.00 Lot. (One Lot only)	Earthing arrangements with GI Earth Plate including charcoal and salt with necessary excavation in all soils and to full depth as may be required and masonry work, re-filling the sides of foundation with excavated earth as per the standard specification and as directed by the Departmental Officers.			1 Lot (Lot)	

1	2	3	4	5	6	7
133		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 'El, 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, neccessary scaffolding and re-doing the dismantled portions to its original condition wherever found neccessary, etc.,complete as per standard specification and as directed by the Departmental Officers. Make: JINDAL / EQUIVALENT.				
a	156.00 RM (One hundred and fifty six running metres only)	150mm dia			1 RM (One running metre)	
b	132.00 RM (One hundred and thirty two running metres only)	100mm dia			1 RM (One running metre)	
c	42.00 RM (Forty two running metres only)	80mm dia			1 RM (One running metre)	
d	12.00 RM (Twelve running metres only)	65mm dia			1 RM (One running metre)	
e	72.00 RM (Seventy two running metres only)	50mm dia			1 RM (One running metre)	
f	48.00 RM (Forty eight running metres only)	40mm dia			1 RM (One running metre)	

Contractor

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**Superintending Engineer, PWD.,
Bldgs. (Constn. and Maint. Circle),
Chepauk, Chennai-600 005**

1	2	3	4	5	6	7
g	78.00 RM (Seventy eight running metres only)	25mm dia			1 RM (One running metre)	
134		Wrapping and Coating Anti-Corrosive Treatment for under ground MS pipe having one coat of anti-corrosive metal primer, one layer of asphalt tar tape wound over the MS pipe as per standard methods as per standard specification as directed by the Departmental Officers				
a	152.00 RM (One hundred and fifty two running metres only)	150mm dia			1 RM (One running metre)	
135		Supply, erection, testing and commissioning of cast iron body and bronze internal non-rising spindle sluice 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, neccessary scaffolding and re-doing the dismantled portions to its original condition wherever found neccessary, etc., complete as per standard specification and as directed by the Departmental Officers. Make: NORMEX / KARTAR / EQUIVALENT				
a	6.00 Nos. (Six Numbers only)	150mm NB			1 No (Each)	
b	7.00 Nos. (Seven Numbers only)	100mm NB			1 No (Each)	

1	2	3	4	5	6	7
c	1.00 No. (One Number only)	80mm NB			1 No (Each)	
136	3.00 Nos. (Three Numbers only)	Supply, erection, testing and commissioning of Gun Metal Gate Valve of size 50mm dia size including necessary MS flange of table „E“, gaskets, bolts & nuts etc., installed at pump house delivery line for the purpose of priming water to suction line including conveyance, all incidental charges, neccessary scaffolding and re-doing the dismantled portions to its original condition wherever found neccessary, etc., complete as per standard specification and as directed by the Departmental Officers. Make: LEADER / EQUIVALENT.			1 No (Each)	
137		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, neccessary scaffolding and re-doing the dismantled portions to its original condition wherever found neccessary, etc., complete as per standard specification and as directed by the Departmental Officers				
a	2.00 Nos. (Two Numbers only)	150mm NB			1 No (Each)	
b	2.00 Nos. (Two Numbers only)	100mm NB			1 No (Each)	

1	2	3	4	5	6	7
138		Supply, erection, testing and commissioning of following sizes of Heavy Duty Foot Valve including all accesories, such as, MS flange of table „E“, gaskets, bolts & nuts, etc., installed at end of 150 / 200mm dia suction pipe line at sump including conveyance, all incidental charges, neccessary scaffolding and re-doing the dismantled portions to its original condition wherever found neccessary, etc., complete and as per standard specification and as directed by the Departmental Officers. Make: NORMEX / KARTAR / EQUIVALENT				
a	2.00 Nos. (Two Numbers only)	150mm dia			1 No (Each)	
b	1.00 No. (One Number only)	100mm dia			1 No (Each)	
139	4.00 Nos. (Four Numbers only)	Supply, erection, testing and commissioning of suitable Pressure Switch of reputed make line Indfoss or Donfoss including necessary valves, couplings, etc., connected with electrical main control panel and setup at proper differential so as to auto start and auto stop the electrical motor, jockey motor including conveyance, all incidental charges, neccessary scaffolding and re-doing the dismantled portions to its original condition wherever found neccessary, etc., completed as per standard specification and as directed by the Departmental Officers. Make: DONFOSS / INDFOSS / ISI MAKE / EQUIVALENT.			1 No (Each)	

1	2	3	4	5	6	7
140	2.00 Nos. (Two Numbers only)	Supply, erection, testing and commissioning of Pressure Gauge with 0 to 14 kg. range of reputed make with necessary valve, milling thread MS coupling fixed at delivery pipe line in pump house to read the developing pressure 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: H-GURU / ISI MAKE / EQUIVALENT			1 No (Each)	
141	380.00 Nos. (Three hundred and eighty Numbers only)	Providing, fixing pipe supports from columns/wall or suspenders from roof slab to suit various dia of pipes made out of GI / MS adjustable rods threaded for a sufficient length to adjust the height of support along with clamping arrangement for holding pipes of anchor fastening, arrangement design of hanger and should confirm with specification.100mm			1 No (Each)	
142	1.00 No. (One Number only)	Supply and providing 1000 litres capacity Priming Tank made up of PVC. Make: SINTEX / EQUIVALENT			1 No (Each)	
143	1.00 No. (One Number only)	Priming Tank mounted with the supporting arrangement fabricated using MS angle for the height of 3 metres from the floor level, inlet, outlet, and drain arrangements inside the fire fighting pump room, as directed by the Departmental Officers.			1 No (Each)	

1	2	3	4	5	6	7
144	2.00 Nos. (Two Numbers only)	Supply and fixing in position of 12 Volt 180 AH Lead Acid, Sealed Maintenance Free (SMF) batteries with connecting leads, lugs terminal post, etc., as per standard methods and including conveyance, all incidental charges, neccessary scaffolding and re-doing the dismantled portions to its original condition wherever found neccessary, etc., complete as per standard specification and as directed by the Departmental Officers. Make: EXCELLENT / SAFETY FIRST / EQUIVALENT.			1 No (Each)	
145	4.00 Nos. (Four Numbers only)	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, neccessary scaffolding and re-doing the dismantled portions to its original condition wherever found neccessary, etc., complete as per standard specification and as directed by the Departmental Officers. Make: KARTAR / EQUIVALENT			1 No (Each)	
146	14.00 Nos. (Fourteen Numbers only)	Supply and fixing of Fire fighting application oblique type stainless steel Hydrant Valve of size 63mm dia with oblique type instantaneous coupling with rotating wheel 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, neccessary scaffolding and re-doing the dismantled portions to its original condition wherever found neccessary etc complete as per standard specification and as directed by the Departmental Officers. Make: OMEX / KARTAR / LIFE GUARD / SAFE GUARD / EQUIVALENT.			1 No (Each)	

1	2	3	4	5	6	7
147	28.00 Nos. (Twenty eight Numbers only)	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, neccessary scaffolding and re-doing the dismantled portions to its original condition wherever found neccessary etc complete as per standard specification and as directed by the Departmental Officers. Make: OMEX / KARTAR/ LIFE GUARD / SAFE GUARD / EQUIVALENT.			1 No (Each)	
148	14.00 Nos. (Fourteen Numbers only)	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 incidental charges,neccessary scaffolding and re-doing the dismantled portions to its original condition wherever found neccessary, etc., complete as per standard specification and as directed by the Departmental Officers. Make: OMEX / KARTAR / LIFE GUARD / SAFE GUARD / EQUIVALENT.			1 No (Each)	
149	10.00 Nos. (Ten Numbers only)	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 floor nearer to hydrant valve, including conveyance, all incidental charges, neccessary scaffolding and re-doing the dismantled portions to its original condition wherever found neccessary., etc., complete as per standard specification and as directed by the Departmental Officers. Make: OMEX / KARTAR / LIFE GUARD / SAFE GUARD / EQUIVALENT.			1 No (Each)	

1	2	3	4	5	6	7
150	14.00 Nos. (Fourteen Numbers only)	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, neccessary scaffolding and re-doing the dismantled portions to its original condition wherever found neccessary, etc., complete as per standard specification and as directed by the Departmental Officers. Make: OMEX / KARTAR / LIFE GUARD / SAFE GUARD / EQUIVALENT.			1 No (Each)	
151	10.00 Nos. (Ten Numbers only)	Making through holes in Plain or Reinforced Cement Concrete with Diamond Core Drilling System by using BOSCH power tools of 150mm diameter			1 No (Each)	
152	1.00 No. (One Number only)	Supply, erection, testing and commissioning of Fire Fighting 4 Way Fire Brigade Inlet with necessary gun metal 63mm dia non return spring shutter arrangements, so that to control one way flow at the time of emergency water supply by fire and rescue service fire engine entry including conveyance, all incidental charges, neccessary scaffolding and re-doing the dismantled portions to its original condition wherever found neccessary, etc., complete as per standard specification and as directed by the Departmental Officers. Make: KIARTAR / OMEX / EQUIVALENT			1 No (Each)	

1	2	3	4	5	6	7
153	1.00 No. (One Number only)	Supply, erection, testing and commissioning of fire fighting application monoblock motor pumpset of 900 LPM at 40 metres head to develop 3.5 kg/sq.cm at the heightest and farthest hydrant point to make 30 m water jet at the time of fire fighting emergency circumstances, coupled with 11 KW / 15 HP rated three phase 414 volts, 50 Hz, 2880 rpm electrical motor the pump with cast iron body, bronze impeller, rope gland packaging, suction size of 80 mm dia. delivery size of 65 mm dia., including the cost of foundation concrete anti vibration mounting, rain safety hood and etc. complete as directed by the Departmental Officers (Kirkoskar make KDS 1555+ or Equivalent)			1 No (Each)	
154	1.00 No. (One Number only)	Supply, erection, testing and commissioning of Fire Fighting Electrical Control Panel of 15 HP, 415 V, 50 Hz Rating Wall Mounted Type fabricated using CRCA sheet, hinged lockable door, dust and vermin proof with following provisions: a. 63 Amps, 4 Pole MCB - Incomer, 6 Amps, 2 Pole MCB for Control Circuit - 1 set b. R, Y, B Phase Indication Lamp, Volt Meter (0 - 500 V), Ammeter (0 - 50 A), Volt Meter Selector Switch- 1 set c. 32 Amps Power Contactor with 230 V Coil, 14 - 23 Amps Over Load Relay - 1 set d. Single Phase Preventer - 1 No. e. Indication Lamp for Motor ON / OFF / TRIP - 1 set f. AUTO / MANUAL Selector Switch, ON / OFF Push Button - 1 set g. Add On Block, Terminal Block, Power Wiring, Control Wiring, Connectors, Cable Lugs, Slotted Cable Cover The above panel mounted on wall using anchor fasteners bolts, plugs, incoming and outgoing cable connection and all works carried out as per standard methods and as directed by the Departmental Officers.			1 No (Each)	
155	20.00 RM (Twenty running metres only)	Supply and laying of 4 core 10 sq.mm. 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.			1 RM (One running metre)	

1	2	3	4	5	6	7
156	15.00 RM (Fifteen running metres only)	Supply and laying of 2 core 1.5 sq.mm. 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.			1 RM (One running metre)	
157	48.00 Nos. (Forty eight Numbers only)	Supply and fixing nominal bore quartized bulb type sprinkler bulb 68 Deg C fast response pendent type including GI collar for each sprinkler bulb, mounted in MS pipe line using suitable size MS threaded coupling, thread, shellac etc., as per standard methods and including conveyance, all incidental charges, neccessary scaffolding and re-doing the dismantled portions to its original condition wherever found neccessary, etc., complete as per standard specification and as directed by the Departmental Officers. Make: OMEX / KARTAR / LIFE GUARD / SAFE GUARD / EQUIVALENT.			1 No (Each)	
158	1.00 No. (One Number only)	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			1 No (Each)	
159	20.00 Nos. (Twenty Numbers only)	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)			1 No (Each)	

1	2	3	4	5	6	7
160	21.00 Nos. (Twenty one Numbers only)	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)			1 No (Each)	
161	40.00 Nos. (Forty Numbers only)	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			1 No (Each)	
162	20.00 Nos. (Twenty Numbers only)	Supply & Installation of Gun Metal Ball Valve of size 25mm dia size including necessary Fittings etc, complete as per standard specification			1 No (Each)	
163	40.00 Nos. (Forty Numbers only)	Supply and fixing Zebra crossing board of approved make etc. complete.			1 No (Each)	
Dismantling						
164	35.00 cu.m (Thirty five cubic metres only)	Dismantling the Brickmasonry wall in Cement Mortar and clearing away with carefully stacking the material useful for reuse for any thickness of wall under 3m height etc., complying with standard specification and as directed by the departmental officers.			1 cu.m (One cubic metre)	

1	2	3	4	5	6	7
165	134.00 cu.m (One hundred thirty four cubic metres only)	Dismantling the Brickmasonry wall in Cement Mortar and clearing away with carefully stacking the material useful for reuse for any thickness of wall over the initial height of 3m add for every additional 3m or part there etc.,complete, complying with standard specification and as directed by the departmental officers.			1 cu.m (One cubic metre)	
166	9.00 cu.m (Nine cubic metres only)	Dismantling, clearing away and carefully stacking materials use ful for re-use for any thickness of PCC etc.complete and as directed by the departmental officers.			1 cu.m (One cubic metre)	
167	44.00 cu.m (Forty four cubic metres only)	Dismantling, clearing away and carefully stacking materials use ful for re-use for any thickness of RCC etc.complete and as directed by the departmental officers.			1 cu.m (One cubic metre)	
168	107.00 sq.m (One hundred and seven square metres only)	Dismantling the existing AC sheet / PPGI roof clearing away and carefully stacking materials useful for reuse etc., as directed by the departmental officers.			1 sq.m. (One square metre)	
169	293.00 sq.m (Two hundred and ninety three square metres only)	Dismantling the existing Weathering course with pressed tiles clearing away and carefully stacking materials useful for reuse etc., as directed by the departmental officers.			1 sq.m. (One square metre)	
170	77.00 sq.m (Seventy seven square metres only)	Dismantling the existing Doors and windows and clearing away and carefully stacking materials useful for reuse etc., as directed by the departmental officers.			1 sq.m. (One square metre)	
171	278.00 sq.m (Two hundred and seventy eight square metres only)	Dismantling, clearing away and carefully stacking materials use ful for re-use for any thickness of Floor finish and dadoing walls in cement mortar with mosaic tiles / glazed tiles / Cuddapah slabs etc.complete and as directed by the departmental officers.			1 sq.m. (One square metre)	

1	2	3	4	5	6	7
172	223.00 cu.m (Two hundred and twenty three cubic metres only)	Collecting the scattered debris from the campus and conveying away the same to outside by lorry to a lead of not less than 10km within city limit including loading and unloading charges and dumping in low place and levelling etc., complete complying with standard specification and as directed by the departmental officers			1 cu.m (One cubic metre)	
Electrical arrangements						
173	1043.00 Pts (One thousand and forty three Points only)	Wiring with 2 x 1.5 sq.mm PVC insulated SC unsheathed copper conductor of 1100V grade in suitable PVC rigid pipe concealed in wall and ceiling with PVC accessories and with MS modular box with 6A one way module switch covered with module front plate in flush with wall and making good of the concealed portion with suitable colour for PVC concealed light point / Fan point (modular switches and plates are crabtree/ legrand/ Hager) (5 points/ coil)			1 Pts. (One Points)	
174	111.00 Pts (One hundred and eleven Points only)	Wiring with 2 x 1.5 sq.mm PVC insulated SC unsheathed copper conductor of 1100V grade in suitable PVC rigid pipe concealed in wall and ceiling with PVC accessories and with MS modular box with 6A one way module switch covered with module front plate in flush with wall and making good of the concealed portion with suitable colour for PVC concealed light point / Fan point (modular switches and plates are crabtree/ legrand/ Hager) (6 points/ coil)			1 Pts. (One Points)	
175	21.00 Pts (Twenty one Points only)	Wiring with 3 x 1.5 sq.mm PVC insulated SC unsheathed copper conductor of 1100V grade in suitable PVC rigid pipe concealed in wall and ceiling with PVC accessories and with MS modular box with 2nos 6A Two way module switch covered with module front plate in flush with wall and making good of the concealed portion with suitable colour for PVC concealed light point / Fan point (3 points/coil) (modular switches and plates are crabtree/ legrand/ Hager) (Staircase points)			1 Pts. (One Points)	

1	2	3	4	5	6	7
176	58.00 Pts (Fifty eight Points only)	Wiring with 2 x 1.5 sq.mm PVC insulated SC unsheathed copper conductor of 1100V grade in suitable PVC rigid pipe concealed in wall and ceiling with PVC accessories and with MS modular box with 6A one way module switch and 6A 3 pin module socket covered with module front plate in flush with wall with continuous earth wire connection of 14 SWG TC wire and making good of the concealed portion with suitable colour for concealed PVC plug point (modular switches and plates are crabbtree/ legrand/ Hager)			1 Pts. (One Points)	
LIGHT FIXTURES						
177	32.00 Nos. (Thirty two Numbers only)	supply and fixing of Twin box type fitting with Two nos. 20W LED tubes on conduit pipe suspension from the ceiling with PVC unsheathed copper leads from terminals to the fittings (fittings and bulbs are Philips / Havells/ crompton)			1 No (Each)	
178	97.00 Nos. (Ninety seven Numbers only)	Supply and fixing of 20W, 4 feet LED fitting on wall or ceiling with PVC unsheathed copper leads from terminals to the fitting			1 No (Each)	
179	387.00 Nos. (Three hundred and eighty seven Numbers only)	Supply and fixing of 2 x 2 - 42W LED Recess mounting luminaire (Like Havells ID PLUTO NEO PANEL 2X2 /eq.) on existing false ceiling with PVC unsheathed copper leads from terminal to the fitting			1 No (Each)	
180	36.00 Nos. (Thirty six Numbers only)	Supply and fixing of 42W LED 2x2 LED PLS42WLED857S0720 Surface fitting (Philips/ Havells/eq.) on ceiling with PVC unsheathed copper leads from terminals to the fitting			1 No (Each)	

1	2	3	4	5	6	7
181	327.00 Nos. (Three hundred and twenty seven Numbers only)	Supply and fixing of 18W LED square type Recess / surface fitting on existing false ceiling with PVC unsheathed copper leads from terminal to the fitting			1 No (Each)	
182	30.00 Nos. (Thirty Numbers only)	Supply and fixing of WT bulkhead fitting (Philips/ Bajaj/ Crompton / Wipro/ K lite) with Guard with 7W LED bulb			1 No (Each)	
183	18.00 Nos. (Eighteen Numbers only)	Supply and fixing of 12Watts LED Mirror Light complete (Like LUKER ID LMR13 /eq) on wall with PVC unsheathed copper leads from terminals to the fitting.			1 No (Each)	
184	6.00 Nos. (Six Numbers only)	supply and fixing of 48W LED Street Light fitting complete (Philips /Havells /eq.) with 32mm dia GI pipe (class B) with 1 no. 32 mm dia GI bend complete on the existing wall with PVC unsheathed copper leads , MS clamps and aluminium painting			1 No (Each)	
185	10.00 Nos. (Ten Numbers only)	Supply and fixing of 150W IP65 rated water proof LED flood light fitting (philips uniflood2 - 150W /equ) on suitable angle iron frame work on ceilingl with connection complete.			1 No (Each)	
186	9.00 Nos. (Nine Numbers only)	Supply and fixing of call bell with PVC unsheathed copper leads from terminals to the bell with necessary connection			1 No (Each)	

1	2	3	4	5	6	7
FANS						
187	237.00 Nos. (Two hundred and thirty seven seven Numbers only)	supply and fixing of 1200mm (48 ") sweep High speed AC ceiling fan (crompton/eq.) with module stepped fan regulator with fan down rod with fan clamp			1 No (Each)	
188	38.00 Nos. (Thirty eight Numbers only)	Supply and fixing of 300 mm (12") sweep (light duty) AC exhaust fan complete with necessary wall opening and making good of the wall			1 No (Each)	
189	38.00 Nos. (Thirty eight Numbers only)	Supply and fixing of Louvers shutter arrangments for 300 mm (12") sweep light duty AC Exhaust fan			1 No (Each)	
PLUGS						
190	371.00 Nos. (Three hundred and seventy one Numbers only)	Supply and fixing of 12 modular metal box with suitable Modular front plate with suitable Modular switches in flush with wall comprising the following with connection 6/10A One way Module switch - 3Nos 6A 5 pin socket - 3Nos One way Module switch - 1No 16A 5 pin socket - 1No		16A	1 No (Each)	
191	38.00 Nos. (Thirty eight Numbers only)	Supply and fixing of 1 no. 16A 3 pin wall socket with 1 no. 16A 1way switch covered with module front plate on suitable module GI box concealed in wall with necessary connection.(Module switches and plates are crabtree/ legrand/hager)			1 No (Each)	

1	2	3	4	5	6	7
192	72.00 Nos. (Seventy two Numbers only)	supply and fixing of 1 no. 25A 3 pin wall socket covered with module front plate in suitable module GI box concealed in wall with necessary connection.(Module switches and plates are crabtree/legrand/hager) For split ACs			1 No (Each)	
193	72.00 Nos. (Seventy two Numbers only)	supply and fixing of 1 no. 25A motor starter covered with module front plate in suitable module GI box concealed in wall with necessary connection. (Module switches and plates are crabtree/legrand/hager) For split ACs			1 No (Each)	
RUN OF MAINS						
194	16000.00 RM (Sixteen thousand running metres only)	supply and run of 2 x 4 sq.mm PVC insulated SC unsheathed copper conductor of 1100V grade in suitable PVC rigid pipe concealed in wall and ceiling with continuous earth connection of 14 SWG TC wire with painting of suitable colour (For power plugs&computer Plug)			1 RM (One running metre)	
195	3200.00 RM (Three thousand and two hundred running metres only)	supply and run of 2 x 6 sq.mm PVC insulated SC unsheathed copper conductor of 1100V grade in suitable PVC rigid pipe concealed in wall and ceiling with continuous earth connection of 14 SWG TC wire with painting of suitable colour (For Lighting DB)			1 RM (One running metre)	
196	600.00 RM (Six hundred running metres only)	Supply and run of 4 x 10 sq.mm PVC insulated SC unsheathed copper conductor of 1100V grade in suitable PVC rigid pipe concealed in wall and ceiling with continuous earth connection of 14 SWG TC wire with painting of suitable colour (from Lighting Raising main 100A MCCB to 7 Segment DB)			1 RM (One running metre)	

1	2	3	4	5	6	7
197	600.00 RM (Six hundred running metres only)	Supply and run of 4 x 16 sq.mm PVC insulated SC unsheathed copper conductor of 1100V grade in suitable PVC rigid pipe concealed in wall and ceiling with continuous earth connection of 14 SWG TC wire with painting of suitable colour (from Power Raising main 125A MCCB to 6Way Vertical DB)			1 RM (One running metre)	
Distribution boards						
198	36.00 Nos. (Thirty six Numbers only)	Supply and fixing of 8way single pole and neutral MCB sheet steel enclosure with metal door coverwith 1no. 32A DP MCB switch as incoming and 6 nos. 6-32A SP MCB switch outgoing on wall with earth connection (MCB DB and MCBs are Legrand/Hager make) Ground floor-2 Nos, First Floor-1 Nos and Lift room -2Nos			1 No (Each)	
199	39.00 Nos. (Thirty nine Numbers only)	Supply and fixing of 12 way SPMCB Distribution board with metal door with IP 42 Protection in flush with wall with 1No 32 Amps DB MCB as incoming and 6 Nos 10Amps 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 Hager make)(SPMCB DB)			1 No (Each)	
200	18.00 Nos. (Eighteen Numbers only)	supply and fixing of 4 way vertical TPN MCB DB in sheet steel enclosure (with MCCB incomer) with metal door cover with 1 no.100A 4P MCCB as incoming and 12 nos. 6A -32A SP MCB as outgoing on wall with necessary earth connection (MCB DB and MCBs are Hager/Legrand / L&T make) (For 2 Ton AC circuits)Third floor to 9th Floor-1 No Each)			1 No (Each)	
201	1.00 No. (One Number only)	supply and fixing of 4 way vertical TPN MCB DB in sheet steel enclosure (with MCCB incomer) with metal door cover with 1 no.100A 4P MCCB as incoming and 12 nos. 32A -3pole ,32A-6nos SP MCB as outgoing on wall with necessary earth connection (MCB DB and MCBs are Hager/Legrand / L&T make)			1 No (Each)	

1	2	3	4	5	6	7
Main Switches						
202	2.00 Nos. (Two Numbers only)	supply and fixing of 100A TPN doble break switch with HRC fuse and neutral on suitable angle iron frame work with MS cable entry and out boxes with earth connection only (for Lifts - 2 Nos)			1 No (Each)	
203	1.00 No. (One Number only)	supply and fixing of 400A TPN doble break switch with HRC fuse and neutral on suitable angle iron frame work with MS cable entry and out boxes with earth connection only (for Power CT Service connection)			1 No (Each)	
204	1.00 No. (One Number only)	supply and fixing of 250A TPN doble break switch with HRC fuse and neutral on suitable angle iron frame work with MS cable entry and out boxes with earth connection only (for Lighting CT Service connection)			1 No (Each)	
Raising mains - The BBT Systems is of Sandwich type with RYBN copper conductor and IP55 Protection (Legrand/equ)						
205	31.00 RM (Thirty one running metres only)	Supply of 4W, 400A, IP54 copper BBT with all accessories and supports for installation. (For Power)			1 RM (One running metre)	
206	31.00 RM (Thirty one running metres only)	Supply of 4W, 250A, IP54 copper BBT with all accessories and supports for installation. (For Lighting)			1 RM (One running metre)	
207	1.00 No. (One Number only)	Supply of End feed unit with 400A 65kA FP ACB			1 No (Each)	

1	2	3	4	5	6	7
208	1.00 No. (One Number only)	Supply of End feed unit with 250A 65kA FP ACB			1 No (Each)	
209	40.00 Nos. (Forty Numbers only)	Supply of 125A , 36 KA FP MCCB plug in box			1 No (Each)	
210	10.00 Nos. (Ten Numbers only)	Supply of Rigid supports bracket			1 No (Each)	
211	40.00 Nos. (Forty Numbers only)	Supply of Spring Support bracket			1 No (Each)	
212	186.00 Nos. (One hundred and eighty six Numbers only)	Supply of Walls support bracket			1 No (Each)	
213	2.00 Nos. (Two Numbers only)	Supply of End box			1 No (Each)	
214	62.00 RM (Sixty two running metres only)	Erection, testing and commissioning of 400A, 250A, Bus bar Trucking with M.S End unit			1 RM (One running metre)	
215	2.00 Nos. (Two Numbers only)	Fixing of flange End unit			1 No (Each)	

1	2	3	4	5	6	7
216	40.00 Nos. (Forty Numbers only)	Fixing of top off box			1 No (Each)	
217	10.00 Nos. (Ten Numbers only)	Fixing of Rigid support bracket			1 No (Each)	
218	124.00 RM (One hundred and twenty four running metres only)	Fixing of external earth flat with galvanized clamp etc.			1 RM (One running metre)	
219	40.00 Nos. (Forty Numbers only)	Fixing of spring support bracket			1 No (Each)	
220	186.00 Nos. (One hundred and eighty six Numbers only)	Fixing of wall support bracket			1 No (Each)	
221	5.00 Nos. (Five Numbers only)	Fixing of End box unit			1 No (Each)	
222	2.00 Nos. (Two Numbers only)	CT SERVICE PANEL AS PER TANGEDCO SPEC.			1 No (Each)	

1	2	3	4	5	6	7
223	300.00 RM (Three hundred running metres only)	Supply and laying of 3 1/2 x 185 sqmm PVC armoured LTUG cable in a trench to be excavated at a depth of 0.75 meters putting 0.15 meter layer of sand and covering the cable complete with bricks and sand and refilling the earth to make good. (From TNEB Pillar to 2Nos CT Service connection			1 RM (One running metre)	
224	100.00 RM (One hundred running metres only)	Supply and clamping of 3 1/2 x 185 sq.mm PVC LTUG armoured LTUG cable on post or on wall with MS Clamps.			1 RM (One running metre)	
225	12.00 Nos. (Twelve Numbers only)	Supply and fixing of brass cable gland for 3 1/2 x 185sqmm PVC armoured LTUG cable with earth connection.			1 No (Each)	
226	12.00 Nos. (Twelve Numbers only)	Supply and providing cable end termination of 3 1/2 x 185 sqmm PVC LTUG Aluminium armoured cable with necessary aluminium cable sockets by crimping etc. with electrical connection complete.			1 No (Each)	
227	200.00 RM (Two hundred running metres only)	Supply and laying 3-1/2 x 25 sqmm PVC armoured LTUG cable in a trench to be excavated at a depth of 0.75 meters putting 0.15 meter layer of sand and covering the cable complete with bricks and sand and refilling the earth to make good. (For Water pump motors)			1 RM (One running metre)	
228	50.00 RM (Fifty running metres only)	Supply and clamping of 3 1/2 x 25 Sqmm PVC LTUG armoured LTUG cable on post or on wall with MS clamps.			1 RM (One running metre)	

1	2	3	4	5	6	7
229	4.00 Nos. (Four Numbers only)	Supply and fixing of brass cable gland suitable for 3 ½ x 25 sq.mm PVC armoured LTUG cable on wall with earth connections.			1 No (Each)	
230	4.00 Nos. (Four Numbers only)	Supply and providing cable end termination for 3 ½ x 25 sq.mm PVC armoured LTUG cable with necessary aluminium cable sockets by crimping ext. with electrical connections complete.			1 No (Each)	
231	4.00 Nos. (Four Numbers only)	Supply and providing of maintenance free earthing electrode dual pipe flat technology model maintenance free earth 502 consist of 2mtr long 47mm dia outer pipe with 3.2mm thick 25mm dia inner pipe 2.6mm thick terminal flat of 30x10/12x12mm, the entire construction processed with hot tip galvanizing outer surface up to 100 microns all inner annular space filled with highly conductive and non- corrosive nature crystalline materials along with electrode moisture booster compound of 1x25 kg bags will be supplied to fill surround the pipe at the time of installation. (moisture retention, conduction and non- corrosive nature (Galaxy/ashok or eq) for 250 Genset Neutral /Computer earth)			1 No (Each)	
232	8.00 Nos. (Eight Numbers only)	Earthing as per ISI specification with an earth electrode of 2.1m 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.			1 No (Each)	
233	64.00 RM (Sixty four running metres only)	Supply and run of 25mm x 6mm (1" X 1/4") copper flat with porcelain insulator with screws on wall/floor for earth connection (For 500 KVA Genset Body earth)			1 RM (One running metre)	

1	2	3	4	5	6	7
234	175.00 RM (One hundred and seventy five running metres only)	Supply and run of 25mm x3mm(1" X 1/ 8") copper flat with porcelain insulator with screws on wall/floor for earth connection.			1 RM (One running metre)	
235	100.00 RM (One hundred running metres only)	Supply and run of 1No 8 SWG copper wire for earth connection			1 RM (One running metre)	
236	2.00 Nos. (Two Numbers only)	supply and fixing of Gate light fitting like Endura Spring 35W fitting (Like Havells ID ENDURA SPRING 6 PT35W LED 757SYMTOTG/eq) with suitable GI pipe of length 1feet on gate pillar with necessary connection			1 No (Each)	
Lightning Arrestor						
237	2.00 Nos. (Two Numbers only)	Supply and installation of Convention type Lightning arrestor made of copper 80mm dia , 1 mtr. Long five spike with base plate arragments with suitable GI pole on the roof top			1 No (Each)	
238	2.00 Nos. (Two Numbers only)	Supply and installation of maintenance free GI earthing system comprising of 50 mm dia and 2 mtr. Long earth electrode of low carbon steel rod with 100 micron bonding and 25 kgs. Of carbon based environment friently backfill compound and suitable clamp.			1 No (Each)	
239	180.00 RM (One hundred and eighty running metres only)	Supply and run of 25 mm x 6mm GI flat down conductor with necessary clamps / supports on wall / floor / ground for earth connection.			1 RM (One running metre)	

1	2	3	4	5	6	7
240	1.00 No. (One Number only)	Supply installation testing and commissioning of aviation obstructing light, single I lamp type with red omni - directional steady glow, based on LED technology, complete with photovoltaic ON / OFF control, earthing lead, wiring to power source up to 5 , away drawn through mettalic conduit all complete as per apecifications, drawings and or directed by the engineer in charges.			1 No (Each)	
Air conditioning arrangements						
241	72.00 Nos. (Seventy two Numbers only)	Supply and installation of 2.0TR (6000K Cal/hr) capacity 5 star rated energy efficient Hi-wall mounting split type Air-conditioning unit consisting of outdoor condensing unit complete with hermetically sealed Air compressor with R32/R410A refrigerant air cooled condenser ,fan etc., and 1 number indoor unit comprising evaporator unit with cooling coil,blower motor and connected accessories,control etc., with copper refrigerant piping and cord wire connecting indoor and outdoor unit with drain pipe suitable for operation on 230V +/- 10% 50 Hz single phase A.C. supply adhering following norms a) Nominal Cooling capacity -23300 BTU/Hr b) Air flow rate - 635 CFM c) Noise level -48/40/32 db (Make:- Carrier / Voltas / Bluestar)			1 No (Each)	
242	720.00 RM (Seven hundred and twenty running metres only)	Supply and laying of 5/8" and 3/8" copper pipe (beyond 3 mts length)			1 RM (One running metre)	
243	72.00 Nos. (Seventy two Numbers only)	Supply and fixing of MS stand for fixing out door unit,			1 No (Each)	

1	2	3	4	5	6	7
244	400.00 RM (Four hundred running metres only)	Supply and fixing of water drain pipeline (1" PVC pipe)			1 RM (One running metre)	
245	72.00 Nos. (Seventy two Numbers only)	Supply and installation of 5KVA capacity Automatic Voltage stabilizer with time delay relay (V-Guard/Equivalent)			1 No (Each)	
Lift Arrangements						
246	2.00 Nos. (Two Numbers only)	<p>Supply, Erection, Testing, Commissioning and Handing over of 1No 13 Persons Passenger Lift as per following technical specifications including all taxes and duties Technical Specifications: 1. Location: High court campus</p> <p>2. No of Lift: One No</p> <p>3. Type of Lift: Gearless with Machine Room</p> <p>4. Capacity of Lift : 13 Persons. (884Kgs)</p> <p>5. Speed: 1.00 mtr / Sec</p> <p>6. Type of Drive: Microprocessor based specific variable voltage variable frequency V3F with enhanced ride comfort and near zero leveling functions. VVVF Drive.</p> <p>7. No of floor:Ground + 9 floors.</p> <p>8. Total Travel: 32 mtrs approximate</p> <p>9. Leveling Accuracy: High level accuracy with smooth & Jerk free stopping.</p> <p>10. Construction of car: Special car made of Stainless Steel hairline finish No.4 hair line finish & panels with Direct lighting and New Beautiful Single Tile false ceiling with Tubular Handrail and mirror.</p> <p>11. Position of Machine: Directly above the lift well shaft gearless.</p> <p>12. No. of Landing Entrance: One in front - 10 Nos only.</p> <p>13. No. of Car Entrance: One in front only.</p> <p>14. Car Entrance Door: Centre opening automatic power door with stainless steel Hair Line finish with view panel</p>			1 No (Each)	

1	2	3	4	5	6	7
		<p>15. Landing Entrance Door: Centre opening automatic power door with stainless steel Hair Line finish with view panel with provision for emergency key opening at all landing.</p> <p>16. Car size: 2000mm widex 1100mm depth</p> <p>17. Car clear Opening: 800mm x2000mm (as per IS 14665 (part 1)</p> <p>18. Lift well existing : 2300mm(width)x1800mm (depth) available size</p> <p>19. Lift pit depth available: 1600mm</p> <p>20. Power supply : 415V,400/440v, 3 phase, 50 cy / Sec A.C supply for power and 230V, 50 Hz single phase AC supply for light.</p> <p>21. Control: Micro processor Computer based - simplex selective collective logic system with or without attendant mode.</p> <p>22. Car fittings:LED light & Fan.</p> <p>23. Lift Well: RCC construction with Brick masonry .</p> <p>24. Lift Machine Room: As per standard specification 1700mm (Width) x 4400mm(depth) (as per IS 14665 (Part-5) - 2000)</p> <p>25. Induction: Up / Down Digital Direction scroll type and position indicator for all landing and in car.</p> <p>26. Emergency Alarm Bell: Battery Operated Alarm Bell to be provided with automatic charging device.</p> <p>27. Emergency Light: Battery operated Light to be provided with automatic charging device.</p> <p>28. Fireman's switch: To be provided at ground floor.</p>				

1	2	3	4	5	6	7
		<p>29. Minor Builders Work, Scaffolding, Stainless Steel still angles and facia Plates, Steel for lift Machinery, Provision of 1+3 EPABX intercom with phone to be provided at the following places vide 1. Lift Head Room 2. Reception Room and 3. Inside the Lift are to be provided by lift contractor.</p> <p>30.Servicing and maintenance: Free comprehensive servicing and maintenance should be provided by lift contractor during the guarantee period of one year</p> <p>31. Automatic rescue device: To facilitate the landing of the nearest floor at the time of power failure. This shall consist of suitable type battery system with charger inverter under voltage protection system etc.</p> <p>32.Floor annuciation system with music. 33.Special features:</p> <p>a)Infra red door sensor with full height screen</p> <p>b)Full with half height rear panel mirror c)Voltage stabilizer for circuit control .</p> <p>d)Tubular stainless steel hand rail in car.</p> <p>e)signal fixtures</p> <p>f)Vandal proof S.S button with S.S cover.</p> <p>g)Stainless steel door frames.</p> <p>h)V3F door operator</p> <p>i)Call register signal</p> <p>j)Pit ladder</p> <p>k)Braille buttons</p> <p>l)Stainless steel facia for car operating panel and landing fixtures</p> <p>m)ON-OFF switch for fan and light</p>				

1	2	3	4	5	6	7
		<p>n)Over load warning indicator, Call register signal, Stainless steel facia plate for car operating panel and landing fixtures, ON-OFF switch for fan and light, Over load warning indicator with audio annunciator.</p> <p>34. Over speed governor, phase failure and phase reversal relay, alarm bell, Guide brackets for car and counter weight, rubber padding under winding unit, Motor of adequate capacity, electromagnetic brake with compression springs, car safety gears, buffer, electro mechanical door locks, emergency key, side supproting angles, motor over load protection devices, final limit switch, main suspension ropes, counter weights, lifting joint joist for mounting the machineries.</p> <p>36. Guarantee: Guarantee for the Materials & workmanship of equipments complete should be offered by the Lift firm for a period of not less than one year.</p> <p>37. Site testing in accordance with IS 14665 should be carried out at the time of handing over.</p>				

1	2	3	4	5	6	7
		250KVA Genset with AMF				
247	1.00 No. (One Number only)	<p>Supply, Erection, Testing, Commissioning and Handing over of 1 No 250KVA Diesel Generator set of 0.8P.f, Three Phase, 415/420Volts, 50c/s, 1500RPM as detailed below 1.ENGINE: Water cooled Diesel engine suitable for generator application with a shaft Output of 600 BHP at 1500 RPM under NTP Condition as per BSS 5514/IS 10000. The engine shall comprise the following standard scope of supply: (Make Kirloskar/ Cummins/ Ashok Leyland/ Greaves /Equivalent)</p> <ol style="list-style-type: none"> 1. Dry type Air cleaner 2. Expansion bellow 3. Radiator, Radiator fan and mounting 4. Air to air charge cooler 5. Exhaust Gas turbo charger 6. Lube oil cooler and Lube oil filter 7. Fuel filter(pre and micro) 8. In-line Mono-block fuel injection pump with governor and fuel feed pump 9. Electronic governor 10. 24V Battery charging alternator 11. 24V Volt electric starter motor 12. Engine test Certificate 13. Residential Mufler 14. Fly wheel with starter ring. 			1 No (Each)	

1	2	3	4	5	6	7
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ENGINE INSTRUMENT PANEL MOUNTED.

Engine control panel consisting of ON/OFF/START Key Lube oil pressure guage , oil temperature gauge, high water temperature guage and electronic hour meter and RPM indicator

SAFETY SYSTEM OF ENGINE :-The Engine shall trip for the following conditions with visual alarm device

1. Low lubricating oil pressure
 2. High Water temperature
 3. Vee-belt failure and over speed
 4. The visual indicator should be provide for Low battery indication.
- The engine should be capable of providing 10% over load for one hour for every 11 hours continuous running at full load.

2. ALTERNATOR : Alternator capacity of 500 KVA/400 KW,AC 3 phase, 50HZ, 415/420V, 0.8P.F.4 wire self excited, self regulated designed to run at 1500 RPM under NTP conditions confirming to BS 5000/ IS 13364 (part-II) 1992 to be coupled directly to the Diesel engine and test certificate (Make: Kirloskar/ Crompton/ Greaves/ Equivlent.)

3.ACOUSTIC ENCLOSURE:- Acoustic enclosure shall be powder coated and fabricated of 16 SWG CRCA MS sheet.The silent canopy shall be of nut bolt type construction. Critical processes of punching are done on CNC Machine to maintain dimensional accuracy of hole within 0.1mm Powder coating done after seven – tank surface preparation process of sheet metal. Canopy panel and doors shall have inside lining of FIRE RETARDANT 64 Kg/m density mineral wool of 100mm thickness as Acoustic material. Four hinged doors shall be provided to canopy.

1	2	3	4	5	6	7
		<p>The average sound level at 1 Mt distance shall be less than 75 DBA average or as per CPCB norms. Surface treatment – Painting: The enclosure surface shall be suitably treated for degreasing de-rusting and posphating. The canopies are passed through seven – tank treatment thoroughly. Additional features of canopies: Canopy fabricated on CNC machines with dimensional accuracy of 0.1 mm so as to increase its durability. Special designed supporting ribs/structures are used in canopies so as to give sturdiness and to reduce the vibrations of the DG sets if any World class Cooling package: Canopies shall have cooling package for which it can also perform at 45 degree C/ambient temperature. No grouting required on the ground, only a level surface capable of with standing the DG weight.Lifting hooks shall be provided for the acoustic enclosure, which should be unloaded independently of the DG set. 1150.00 30250.00 The Gen set frame shall also be provided with hooks for unloading Temperature rise inside the canopy: Canopies shall be designed so as to maintain the temperature difference between ambient and air inlet at cleaner within the enclosure well within 5-7 deg centigrade.</p> <p>4. FUEL TANK : 900 liters. Removable fuel tank shall be fabricated out of 14 SWG CRCA MS sheet and is part of base frame. It is duly painted and fitted with inlet and outlet connection and mechanical fuel gauge. Fuel tank can be easily removed for clearing or any maintenance.</p> <p>5. BASE FRAME : The base frame should be fabricated in sheet metal. The base frame is rugged in construction and designed for mounting engine and brush less alternator closely coupled, with cross members mounted on AVM. The base frame shall be have provision for mounting of acoustic enclosure on it. The supply of generator set includes loading. Unloading and transportation charges.</p> <p>6. Battery: 2 Nos 12V 180AHR Battery. (Make: Kirloskar/Caterpillar/Cummins) Equivalent.</p>				

1	2	3	4	5	6	7
248	3.00 RM (Three running metres only)	Supply and Installation of exhaust piping of sufficient length with suitable MS pipes so as to extend outside the generator room with necessary thermal insulations			1 RM (One running metre)	
249	1.00 Job. (One Job only)	Supply of lubricating oil and first filling with charging of starting battery and supply of 900 Ltrs diesel for 250 KVA to run the geneset for minimum of 8 hours			1 Job (Job)	
250	46.00 RM (Forty six running metres only)	Supply and Run of 12 core 2.5 sqmm armoured copper control cable FRLS in suitable PVC rigid pipe on wall/Ground/ceiling with connection (For AMF to 250KVA Genset)			1 RM (One running metre)	
251	1.00 Set. (One Set only)	Supply of tools such as 1No 15"cutting plier,1No 6" screw driver, 1 set of 6Nos double ended spanner,1no adjustable spanner, 1No Ib hammer,1no spanner for removing engine oil plug,1No line tester are required for the mainetance and operation of generator set complete etc.			1 Set (Set)	
252	600.00 RM (Six hundred running metres only)	supply and laying of HDPE pipe 120mm/103.50			1 RM (One running metre)	
253	1.00 Set. (One Set only)	2m X 1m Rubber Mat Suitable for EB Panel Room (Panel Room)			1 Set (Set)	

1	2	3	4	5	6	7
254	1.00 Set. (One Set only)	<p>Design, Supply, erection, testing and commissioning of 250 A floor / Wall mounted MV cubical panel board suitable for operation on 415 V 3 phase, 50 Hz A.C supply, dust and vermin proof and accommodating the following Switches as Incomer unit with the following items of work complete to satisfy the latest IE rules and CEIG guidelines with Bus bar chambers, Main switches chambers and cable entry chambers.</p> <p>Bus bar chamber: Supply and fixing of suitable bus bar chamber made up of 16SWG MS sheet steel(1.8mm) with 4Nos. 1" X 1/4" tinned copper Main bus bar for 3 phases and neutral, 2 Nos. of earth bus of size 1" X 1/8 tinned copper bus on suitable bus bar insulator (Epoxy insulator) with maximum creepage distance and supported on MS Base channel frame work of size 4"X 2"X 1/4"-1Set</p> <p>Main Switches Chamber:</p> <p>Incoming</p> <p>1)Supply and fixing of 1 No. 250 A 3 pole 433V LT MCCB confirming to IS13947-2 IEC 60947- with suitable capacity and breaking capacity.</p> <p>Outgoing</p> <p>1) 125A Four Pole MCCB — 2 Nos</p> <p>2) 63 A Four Pole MCCB — 4 Nos</p> <p>Inter connecting the all LT Incomer MCCB's and Switches to bus bar with suitable insulated tinned copper flats and painting/PVC sleeve colour coding of phases and neutral indication.</p> <p>Instrument chamber 5/9/2022 A Separate chamber on Top of one side should be built with (0- 500 V) Voltmeter (0-600A) Ammeter with C.T and selector switches with one Set of LED pilot lamps Set with fuse base, top with 5A HRC link for 3 phases, 1 Set of Earth Fault relay for protection, Mains CTs for 3 phases lockout, features, separate mold base for each pole for easy maintenance all relevant protection safety accessories as per CEIG, IE rules in force with inter connection and terminations as required in specification Supply and fixing of danger board with Siemens grey powder coating with super scribing the names of places to which supply is fed feeder sizes of cables direction of cables etc. Erection of panel board complete with suitable foundation bolts and nuts including suitable M.S Channel, concreting ,testing and commissioning (I & T STEMFENS ARR)</p>			1 Set (Set)	

Contractor

**Superintending Engineer, PWD.,
Bldgs. (Constn. and Maint. Circle),
Chepauk, Chennai-600 005**

1	2	3	4	5	6	7
255	1.00 Set. (One Set only)	<p>Design, Supply, erection, testing and commissioning of 630 A floor / Wall mounted MV cubical panel board suitable for operation on 415 V 3 phase, 50 Hz A.C supply, dust and vermin proof and accommodating the following Switches as Incomer unit with the following items of work complete to satisfy the latest IE rules and CEIG guidelines with Bus bar chambers, Main switches chambers and cable entry chambers.</p> <p>Bus bar chamber: Supply and fixing of suitable bus bar chamber made up of 16SWG MS sheet steel(1.8mm) with 4Nos. 2.5" X 1/4" tinned copper Main bus bar for 3 phases and neutral, 2 Nos. of earth bus of size 1" X 1/8 tinned copper bus on suitable bus bar insulator (Epoxy insulator) with maximum creepage distance and supported on MS Base channel frame work of size 4"X 2"X 1/4"-1Set</p> <p>Main Switches Chamber: Incoming 1)Supply and fixing of 1 No. 630 A 3 pole 433V LT MCCB confirming to IS13947-2 IEC 60947- with suitable capacity and breaking capacity.</p>			1 Set (Set)	

1	2	3	4	5	6	7
		<p>Outgoing</p> <p>1) 400A Four Pole MCCB — 3 Nos</p> <p>2) 250 A Four Pole MCCB — 2 Nos</p> <p>Inter connecting the all LT Incomer MCCB's and Switches to bus bar with suitable insulated tinned copper flats and painting/PVC sleeve colour coding of phases and neutral indication.</p> <p>Instrument chamber:</p> <p>A Separate chamber on Top of one side should be built with (0-500 V) Voltmeter (0-600A) Ammeter with C.T and selector switches with one Set of LED pilot lamps Set with fuse base, top with 5A HRC link for 3 phases, 1 Set of Earth Fault relay for protection, Mains CTs for 3 phases lockout, features, separate mold base for each pole for easy maintenance all relevant protection safety accessories as per CEIG, IE rules in force with inter connection and terminations as required in specification Supply and fixing of danger board with Siemens grey powder coating with super scribing the names of places to which supply is fed feeder sizes of cables direction of cables etc. Erection of panel board complete with suitable foundation bolts and nuts including suitable M.S Channel, concreting ,testing and commissioning (L&T, SIEMENS,ABB)</p>				
256	1.00 Job. (One Job only)	Towards provision of CEIG preparing drawing to obtain electrical safety certificate				1 Job (Job)
		LAN and EPABX intercom System and CCTV Camera System arrangements				
257	18.00 Nos. (Eighteen Numbers only)	supply and fixing of 16 port unmanaged 10/100/1000 Mbps switch with fibre port connectivity.Make: D-Link/Eq.				1 No (Each)

1	2	3	4	5	6	7
258	2.00 Nos. (Two Numbers only)	supply and fixing of 24 port fully managed 10/100/1000 Mbps Layer-2 switch with 10G uplink.Make: D-Link/Eq.			1 No (Each)	
259	20.00 Nos. (Twenty Numbers only)	Supply and Installaion of 16 port fully loaded patch panel.Make:D-link/Eq.			1 No (Each)	
260	351.00 Nos. (Three hundred and fifty one Numbers only)	Supply, fixing and termination of RJ 45 I/O box with face plate and back box for LAN. Make:D-Link/Eq.			1 No (Each)	
261	11000.00 RM (Eleven thousand running metres only)	Supply and laying of CAT 6 cable in existing 1" PVC pipe including numbering and ferruling. Make:D-Link/Eq.			1 RM (One running metre)	
262	20.00 Nos. (Twenty Numbers only)	Supply and fixing of 6U Rack (Wall Mounting) with power sockets, cable manager and 0.6KVA UPS. Make: D-Link/Eq.			1 No (Each)	
263	3500.00 RM (Three thousand and five hundred running metres only)	Supply and laying of 25 mm dia1" PVC pipe on wall and ceiling.			1 RM (One running metre)	
264	1.00 Set. (One Set only)	Supply and fixing of digital ISDN EPABX system with 3 P & T line 24 Nos of analog extension expandable upto 96 analog extension with voice control and operator console, multilingual menu driven and keys name display on LCD and 1 KVA UPS.Make: NEC/Eq.			1 Set (Set)	

1	2	3	4	5	6	7
265	50.00 Nos. (Fifty Numbers only)	Supply, fixing and termination of RJ11 I/O box with face plate and back box for LAN. Make: D-Link/Eq.			1 No (Each)	
266	1.00 No. (One Number only)	Supply, fixing and termination of 100 pair DB with krone module and necessary connections.			1 No (Each)	
267	9.00 Nos. (Nine Numbers only)	Supply, fixing and termination of 10 pair DB with krone module and necessary connections.			1 No (Each)	
268	30.00 RM (Thirty running metres only)	Supply and laying of 0.5mm 10 pair telephone cable with suitable PVC pipe.make:Finolex/ eq.			1 RM (One running metre)	
269	2000.00 RM (Two thousand running metres only)	Supply and laying of 0.5mm 2 pair telephone cable with suitable PVC pipe.Make:Finolex / eq.			1 RM (One running metre)	
270	50.00 Nos. (Fifty Numbers only)	Supply and Installaion of caller ID telephone instrumen t . Make:Beetel/Eq.			1 No (Each)	
271	351.00 Nos. (Three hundred and fifty one Numbers only)	Supply and Installaion of 1mtr patch cord. Make:D-link/Eq.			1 No (Each)	
272	55.00 Nos. (Fifty five Numbers only)	Supply and Installation of 4MP IP bullet Camera ,WDR 3.6 mm Fixed lens. Make:Neous/Eq.			1 No (Each)	

1	2	3	4	5	6	7
273	3.00 Nos. (Three Numbers only)	Supply and installation of 32 channel Network Video recorder , bandwidth support 2 SATA HDDs up to 8 TB. Make : D-link/Eq.			1 No (Each)	
274	3.00 Nos. (Three Numbers only)	Supply and Installation of 24-port poE 2 Gigabit managed switch, which supports IEEE802.3 af/at poE standard. make: D-link/Eq.			1 No (Each)	
275	3.00 Nos. (Three Numbers only)	Supply and Installation of 6U wall rack, with front glass door with lock and key facilities and 0.6 KVA UPS. Make: D -link/Eq.			1 No (Each)	
276	6.00 Nos. (Six Numbers only)	Supply and Installation of 4TB built in Hard Disc Drive. Make: Seagate/Eq.			1 No (Each)	
277	2.00 Nos. (Two Numbers only)	Supply and Installation of 40 inches LED TV with following features:1.USB Input 2.HDMI Port 3.Clear audio+ 4.Motion flow XR 200 5.Full HD 1080. Make : SONY/Eq.			1 No (Each)	
278	1.00 Job. (One Job only)	Testing, Programming and commissioning of LAN system and software for the EPABX intercom system, ,number allotment,testing of caller ID telephone, assignment of zero dialing, linking of DB's and LAN switches, voice caller settings and RJ 45 and RJ 11 I/Os,single mode media converter,splicing charges,necessary cables and connectors etc.			1 Job (Job)	

ADD 12% GST

**// Total Number of Items Two hundred and seventy eight
Only//**