

Schedule A

Name of the work : Construction of Greenfield No frills Airport at Orvakal in Kurnool district (A.P.) (Package – 2

Sl. No	Quantity	Description of work	APSS/ MORTH	Unit	Figure	
I. Name of sub work : ESTIMATE FOR PASSENGER TERMINAL BUILDING						
1	36.00	Flooring with 16 to 18mm thick high polished granite stone slabs other than black and regular colours (i.e. of shades like paradiso / bala flower / copper silk / laka red / lavender blue) with borders and design as per the pattern approved by the Engineer-in-Charge of length not less than 2.43 mts set over base coat of cement mortar (1:8) , 20mm thick using screened sand over CC bed already laid or RCC roof slab including neat grey cement slurry of honey like consistency spread @ 3.3 Kg per sqm and jointed neatly with white cement paste mixed with pigment of matching shade to full depth including cost and conveyance of all materials like cement , sand , water , granite slabs etc., to work site and all operational, incidental labour & lift charges, polishing charges and all other taxes on all materials, cost of base coat and overheads & contractors profit complete for finished item of work (S.S.701 & special) First Storey	APSS	1	Sqm	3,929.00
2	8.50	Flooring with 16 to 18 mm thick high polished granite stone slabs black colour as approved by the Engineer-in-Charge of length not less than 2.43 mts set over base coat of cement mortar (1:8) , 20mm thick using screened sand over CC bed already laid or RCC roof slab including neat grey cement slurry of honey like consistency spread @ 3.3 Kg per sqm and jointed neatly with white cement paste mixed with pigment of matching shade to full depth including cost and conveyance of all materials like cement , sand , water , granite slabs etc., to work site and all operational, incidental labour & lift charges, half rounding the edge , polishing charges and all other taxes on all materials, cost of base coat and overheads & contractors profit complete for finished item of work for platforms (S.S.701 & special) First Storey	APSS	1	sqm	4,010.00
3	187.20	Flooring with chequered cement concrete heavy duty tiles confirming to IS: 13801 using aggregates, cement, pigments of size 300mm x 300mm and thickness 25mm of any shade as approved by Engineer - In - Charge set over base coat of cement mortar (1:6), 12 mm thick using screened sand over CC bed already laid or RCC roof slab including neat cement slurry of honey like consistency spread @ 3.3 kgs per sqm and jointed with neat white cement to full depth mixed with pigment of matching shade including cost and conveyance of all materials like cement, sand, water and tiles etc.,and overheads & contractors profit complete for finished item of workFirst Storey.	APSS	1	Sqm	699.00

4	385.05	Providing dadoing to walls with glazed full body ceramic tiles of any size and thickness between 5 to 7mm 1st quality conforming to IS: 13711, IS: 13712, IS: 13630(Parts 1 to 15) of any colour and finish in all shades and designs with borders as approved by Engineer-in-Charge set over base coat of CM(1:5) 12 mm thick using screened sand with cement slurry of honey like consistency spread at the rate of 3.30 kgs per sqm and jointing with white cement paste mixed with pigment of matching shade to full depth, including cost of all materials like tiles, cement, sand and water etc., and overheads & contractors profit complete for finished item of work. First Storey	APSS	1	Sqm	657.00
5	118.54	Supplying and fixing of stainless steel (grade 304) hand railing as per approved drawing with top rail of 50mm dia pipe and 2mm thick medium class and vertical posts of 25mm dia and 1.6mm thick medium class 2 Nos for each step fixed with base plate of 75mm dia using bonding agent and anchor fastner and welding, drilling of 20mm dia holes with pneumatic compressor for fixing railing, buffing, polishing all members of the railing thouroughly , lacquer finishing to present seamless finish including cost and conveyance of all materials, electrodes, welding charges, cost of all consumables, labour charges , overheads & contractors profit etc., complete for finished item of work.	APSS	1	Sqm	4,954.00
6	396.12	Providing and applying Wall putty of White Cement or Polymer or Cement based of average 1 to 2 mm thickness over plastered surface to prepare the surface even and smooth after thoroughly brushing the surface to remove all dirt and remains of loose powdered materials, applying emery paper, Sand the surface, clean & wipe off loose dust, applying knifing paste filler by putty knife / muslin pad, air dry for 2 - 3 hrs, sand with 180 and 320 No., emery paper for the surface preparation including cost and conveyance of all materials to work site and all operational, incidental, labour charges, over heads and contractors profit etc., complete for finished item of work in all floors for Internal walls	APSS	1	Sqm	197.00
7	594.75	Providing and applying PMCC / Deco orient base or Equivalent exterior Texture of average 2 to 3 mm thickness over plastered surface to prepare the surface even and smooth after thoroughly brushing the surface to remove all dirt and remains of loose powdered materials, applying emery paper, Sand the surface, clean & wipe off loose dust, applying putty/ texture paint filler by putty knife / muslin pad, air dry for 2 - 3 hrs for the surface preparation including cost and conveyance of all materials to work site and all operational, incidental, labour charges, scaffolding charges, overheads and contractors profit etc., complete for finished item of work in all floors for external walls	APSS	1	Sqm	246.00

8	1598.73	Supply & application of one coat water based cement primer of interior grade I and two coats of acrylic emulsion paint having VOC (Volatile Organic Compound) content less than 50 grams/litre for internal walls including cost and conveyance of all materials to site, sales & other taxes, incidental, operational and all labour charges etc., and overheads & contractors profit complete for finished item of work in all floors.	APSS	1	Sqm	131.00
9	1077.45	Painting two coats with synthetic enamel paint Grade-I VOC (Volatile Organic Compound) content less than 50 grams/litre to new iron work including cost and conveyance of all materials to site, sales & other taxes, incidental, operational and all labour charges etc., and overheads & contractors profit complete for finished item of work in all floors. (SS No. 1201, 1212 & 1207).	APSS	1	Sqm	89.00
10	9.00	Painting two coats with synthetic enamel paint Grade-II VOC (Volatile Organic Compound) content less than 50 grams/litre over primer coat of red oxide to new iron work including cost and conveyance of all materials to site, sales & other taxes, incidental, operational and all labour charges etc., and overheads & contractors profit complete for finished item of work in all floors. (SS No. 1201, 1212 & 1207).	APSS	1	Sqm	136.00
11	161.87	Supplying and fixing Gyp Board Suspended regular single layer false ceiling (GS-MFSC-4.1) using 12.5 mm thick Gyp Board conforming to IS 2095 - 1993 fixing to Gyp steel GI perimeter channels of size 20 mm x 27 mm x 30 mm(web) of 0.55 mm thick along the perimeter of ceiling screw fixed to brick work/ partition at 610 mm c/c and suspending the frame work using Intermediate channels (45 mm x 15mm x 15mm x 0.9 mm) from soffit at 1220 mm c/c with ceiling angle (25 mm x 10 mm x 0.55 mm) fixed with GI Cleat and steel expansion fasteners & connecting clip to the ceiling channels (with knurled web of 51.5 mm x 26 mm x 10.5 mm x 0.55 mm) fixed in direction perpendicular to the intermediate channel at 457 mm c/c and fixing the 12.5 mm tapered edge Gypboard with 25 mm drywall screws at 230 mm c/c & jointing and finishing using joint compound and paper tape to have a flush look including filling the tapered & square edges with jointing compound, two coats of drywall topcoa including overheads and contractor profit etc., complete for finished item of work	APSS	1	Sqm	969.00
12	59.22	Centering and shuttering including strutting, propping etc. and removal of form for :Shelves (Cast in situ)	DSR	1	sqm	422.30

13	3.20	Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work, using cement content as per approved design mix, manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work, including pumping of R.M.C. from transit mixer to site of laying , excluding the cost of centering, shuttering finishing and reinforcement, including cost of admixtures in recommended proportions as per IS : 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. (Note :- Cement content considered in this item is @ 330 kg/cum. Excess/ less cement used as per design mix is payable/recoverable separately).All works above plinth & up to floor V level.	DSR	1	cum	7,517.20
14	2.45	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills , facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels.Granite of any colour and shade-- Area of slab upto 0.50 sqm	DSR	1	sqm	3,351.95
15	49.52	Providing edge moulding to 18 mm thick marble stone counters, Vanities etc., including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge.granite work Shelves in toilet	DSR	1	Metre	245.70
16	22.51	Extra for fixing marble /granite stone, over and above corresponding basic item, in facia and drops of width upto 150 mm with epoxy resin based adhesive, including cleaning etc. complete.	DSR	1	Metre	266.25
17	22	Extra for providing opening of required size & shape for wash basin/ kitchen sink in kitchen platform, vanity counter and similar location in marble/ Granite/stone work, including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. complete.	DSR	1	each	427.95

18	2.63	Providing and fixing machine cut, mirror / eggshell polished , Marble stone work for wall lining (veneer work) including dado, skirting, risers of steps etc., in required design and pattern wherever required, stones of different finished surface texture, on 12 mm (average) thick cement mortar 1:3 (1 cement : 3 coarse sand) laid and jointed with white cement slurry @ 3.3 kg/sqm including pointing with white cement slurry admixed with pigment of matching shade, including rubbing, curing, polishing etc. all complete as per Architectural drawings, and as directed by the Engineer-in-Charge. a. 18 mm thick Italian Marble stone slab,Perlato, Rosso verona, Fire Red or Dark Emperadore etc.	DSR	1	Sqm	6,647.35
19	29.00	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete.	DSR	1	Each	388.40
20	54.00	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :250x10 mm	DSR	1	Each	88.10
21	4.00	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete 150x10 mm	DSR	1	Each	64.30
22	4.00	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :125 mm	DSR	1	Each	51.10
23	27.00	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete.Twin rubber stopper	DSR	1	Each	38.00
24	4.50	Supply & fixing of Rolling shutter made of 80 x 1.25 mm machine rolled CRCA laths, interlocked			Sqm	3,250.51

25	78.63	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand), including pointing the joints with white cement and matching pigment etc, complete.	DSR	1	Sqm	688.35
26	13.20	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.			RM	148.75
27	4.00	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion.			each	66.10
28	4.00	Providing and fixing to the inlet mouth of rain water pipe PTMT (an Engineering Thermoplastic) grating square (Slit) 150 mm square with a height of 8 mm and weighing not less than 100 gms.			each	66.45
29	508.00	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :For fixed portion Powder coated aluminium (minimum thickness of powder coating 50 micron)	DSR	1	Kg	384.50
30	520.00	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)-Powder coated aluminium (minimum thickness of powder coating 50 micron)	DSR	1	Kg	444.90
31	30.16	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade 1 Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge.-Pre-laminated particle board with decorative lamination on both sides	DSR	1	Sqm	866.60

32	8.10	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. With float glass panes of 4.0 mm thickness	DSR	1	sqm	741.50
33	7.35	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. With float glass panes of 5.50 mm thickness	DSR	1	Sqm	1,003.95
34	12.00	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge With float glass panes of 8 mm thickness	DSR	1	Sqm	1,153.90
35	189.40	Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete. Upto 5mm depth and 5 mm width	DSR	1	Metre	62.45
36	27.00	Providing and fixing 100mm brass locks (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	DSR	1	Each	359.00
37	1.00	Providing and fixing aluminium casement windows fastener of required length for aluminium windows with necessary screws etc. complete. Powder coated minimum thickness 50 micron aluminium	DSR	1	Each	55.50
38	20.00	Providing and fixing aluminium round shape handle of outer dia 100 mm with SS screws etc. complete as per direction of Engineer-in-charge Powder coated minimum thickness 50 micron aluminium	DSR	1	Each	68.30
39	5551.00	Providing and supplying aluminium extruded tubular and other aluminium sections as per the architectural drawings and approved shop drawings, the aluminium quality as per grade 6063 T5 or T6 as per BS 1474, including super durable powder coating of 60-80 microns conforming to AAMA 2604 of required colour and shade as approved by the Engineer-in-Charge. (The item includes cost of material such as cleats, sleeves, screws etc. necessary for fabrication of extruded aluminium frame work. Nothing extra shall be paid on this account). ---	DSR	1	Kg	338.25

40	31.10	Extra for openable side / top hung vision glass panels (IGUs) including providing and supplying at site all accessories and hardwares for the openable panels as specified and of the approved make such as heavy duty stainless steel friction hinges, min 4 -point cremone locking sets with stainless steel plates, handles, buffers etc. including necessary stainless steel screws/ fasteners, nuts, bolts, washers etc. all complete as per the Architectural drawings, as per the approved shop drawings, as specified and as directed by the Engineerin- Charge.	DSR	1	Sqm	3,941.60
41	17	Providing and fixing Greenlam / Merino Sturdo Classique Evergreen Toilet cubicle (of following standard dimensions which includes 600 mm door size width) made of heat, bacteria, water, chemical, scratch, impact and anti bacterial resistant 12mm thick solid compact laminate panels tested by Shriram Test House. Finish of the compact laminate should be suede / raw Silk which includes doors, pilasters and intermediate panels finished with approved textures / shade as per the detailed drawings and as per IS 2046 (Indian Standard) and as per Fire Retardent BS -476 / 97 Standard. The product should have green guard certificate.his also includes providing and fixing in position necessary hardware made out of stainless steel (Grade 304) as per manufacturer's specifications and Architect's Instructions like Door knob, gravity hinges, thumb turn lock set with occupancy indicators, coat hooks with door stoppers, U channels, adjustable foot / padestal, top rail with corner contactor, rubber noise deafening tape and screws and wall plugs etc. - The top fitting should consist of SS round top rail which will get fixed with pilasters, with ss panel tube holder, SS corner bend (connected with top rail) will be used on the corner of cubicle in absence of brick wall, SS wall fixing is used only on the wall which will hold the SS top rail.-This also includes providing and fixing in position necessary hardware made out of stainless steel (Grade 304) as per manufacturer's specifications and Architect's Instructions like Door knob, gravity hinges, thumb turn lock set with occupancy indicators, coat hooks with door stoppers, U channels, adjustable foot / padestal, top rail with corner contactor, rubber noise deafening tape and screws and wall plugs etc. -The top fitting should consist of SS round top rail which will get fixed with pilasters, with ss panel tube holder, SS corner bend (connected with top rail) will be used on the corner of cubicle in absence of brick wall, SS wall fixing is used only on the wall which will hold the SS top rail.-All screws will be of 304 grade in stainless steel with satin finish. All pilasters are supported by stainless steel, bottom cladding. The base of the stainless steel bottom cladding will be anchored to the floor with a clear height upto 150 mm.--Toilet cubicle with a standard dimension of 2025 mm height x 1000 mm width x 1550 mm depth which includes 600 mm door size width.	NS	1	each	32,381.00

42	119.48	<p>Supply and fixing of 75 mm thk. AEROCON panels of size 2400/2700/3000 mm length and 600 mm wide having Tongue & Groove joint system for walls and partitions with a density of 780 kg/cum having K value : 0.21 W/mK, Axial load/metre width : 83 KN/m having a fire rating of 120 minutes and 36 db sound insulation.</p> <p>The panels are made of two fibre reinforced cement sheets enclosing a light weight aerated concrete core composed of cement & binders. The fibre reinforced cement sheets are confirming to IS 13000--1990 / IS 14862-2000 . These panels need to meet transverse load & modulus of rupture requirements as per ASTM-E-72:98 & IS 2380 Part 4. The AEROCON panels should be supported with a rigid frame of MS Steel hollow section with height more than 4.5 m and length of wall more than 4.5 m, or as per drawings including G.I floor channel of 1 mm thick, 150 gsm GI coated and size 14x75x25 mm and ceiling channel of 1 mm thick, 150 gsm GI coated and of size 38x75x38 mm. The panels to be jointed with resin based glue mixed with hardner (SmartBond) for jointing tongue & groove of refabricated panels and glass fibre reinforced mesh tape 16 mm wide to be surfacially fitted at joint and finished with resin based jointing compound 100 mm wide--The rate include all material , labour, T &P, scaffolding folding etc. complete in respect as per drawings and as per site requirement as dircted by enginee-in-charge..</p>	NS	1	Sqm	2,000.00
43	1002.40	<p>Providing and fixing anodised aluminium grill in ceiling (anodised transparent or dyed to required shade according to IS: 1868 with minimum anodic coating of grade AC 15) of approved design/pattern, with approved standard section and fixed to the existing frame with C.P. brass/ stainless steel screws including cutting the grill to proper size, all complete as per site requirement and direction of Engineer-in-charge. (Only weight of grill to be measured for payment).</p>	NS	1	Kg	400.00
44	150.00	<p>Providing & fixing 2 mm thick solid Polycarbonate sheet in roofing on the exiting truss steel structure. The sheet shall be fixid using self drilling/ self taying screws with EPDM sheet exluding the cost of purlins, rafters & trusses & including cutting of size and shape wherever required complete in all respect as per drawing & as per instruction of engineer-in-charge--Area .</p>	NS	1	Sqm	2,500.00
45	342.00	<p>Providing and fixing on wall face unplasticised Rigid PVC rain water pipes 160 mm dia conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.</p>	NS	1	Rmt	430.00

46	18.00	Providing and fixing on wall face unplasticised - PVC moulded 160 mm shoe for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion.	NS	1	Each	315.00
47	36.00	Providing and fixing on wall face unplasticised - PVC moulded 160 mm bend for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion.	NS	1	Each	300.00
48	108.00	Providing and fixing Aluminium composite panel in metallic colour of approved shades made out of 4 mm thick aluminium composite panel material consisting of 3mm thick FR grade mineral core sandwiched between two Aluminium sheets (each 0.5mm thick). The aluminium composite panel cladding sheet shall be coil coated, with Kynar 500 based PVDF/Lumiflon based fluoropolymer resin coating of approved colour and shade on face # 1 and polymer (Service) coating on face # 2 as specified using stainless steel screws, nuts, bolts, washers, cleats, weather silicone sealant, backer rods etc. for false ceiling of approved quality complete including providing & fixing of frame work made of special sections, power pressed from MS sheet and galvanised with zinc coating of 120 gms/sqm (both side inclusive) as per IS 277, one and fixed to the ceiling with dash fastener with bolt, other and fixed to the hangers of required size and length with nuts bolts of required size and other of the hangers fix with intermediate channel running at the required spacing to with the sealing section shall be fix in a direction to perpendicular to intermediate channel with connecting clips of GI wires at every junction, including fixing perimeter channel, the perimeter of ceiling fix to the wall/Partitions with help of rawl plugs with dry wall screws including fixing of ACP to ceiling section and perimeter channel with help of dry wall screws complete including the cost of making opening for light fitting, grills, diffusers, cutout made with frame of perimeter channel suitably fixed, complete in all respects as per drawing, specifications, site requirement and as directed by Engineer-in-charge	NS	1	Sqm	5,000.00
49	4.44	Providing and fixing of 6mm thick lacquer glass Planilaque glass of approved color by architect/ Client with clear neutral silicon on 12mm thick partical board already fixed. The Planilaque lacquered glass to be of 6mm thick highly durable, humid resistance, poly urethane lacquer glass complete in all respect as per architectural drawings and direction of the engineer-in-charge / Architect.	NS	1	sqm	4,000.00

50	6.05	Providing and fixing corian stone on counter on shops on 12mm thick partical board already fixedas per the drawing / design provided by the architect including moulding on three sides as per site requirement complete in all repect as directed by Engineer-in-charge.	NS	1	sqm	7,500.00
51	1146.54	GI Metal Ceiling Clip in plain Beveled edge global white color tiles of size 600x600 and 0.5 mm thick with 25 mm height, made of G I sheet having galvanizing of 100 gms/ sqm (both sides inclusive) and 20% perforation area with 1.8 mm dia holes and having NRC of 0.5, electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending and perforation.			Sqm	1,527.25
52	4.00	Proving & fixing counter of 12mm thick pre-laminated particle board with decorative laminations on both sides on three sides and top eith 2 No. drawers complete including fittings ie handle, powder caoted telescopic drawer channel etc. in the retail shops complete in all respect as per drawings and site requirement as directed by Engineer-in-charge. Approx. size 1000x600x750 mm			Job	7,500.00
53	2.00	Approx. size 1600x600x750 mm			Job	10000

		<p>D). SUB ESTIMATE FOR SIGNAGE WORKS SUBHEAD I- EXTERNAL SIGNAGES Note : Precedence of language to be inscribed on various Signage shall be as under: 1. National (Hindi) language 2. Regional language 3. International (English) language Providing, Supplying & fixing of Sign Boards made of S-304 grade Stainless steel Pipes with braces of SS grade S-304 of square pipe flats rectangular section etc. including , cutting argon welding polishing, buffing complete with necessary holes nuts, bolts & caps, anchor plates of SS grade ASTM – 304 as per size , drawing and to the satisfaction of Engineer in charge. The Signage Substrate shall be of 4mm ACP sheet with face fully covered by RETRO REFLECTIVE MICRO PRISMATIC Type IV Sheeting and messages with overlay sheeting / HIGH INTENSITY PRISMATIC GRADE Type IV / Cast Vinyl to be fixed with Very High Bond tape of 24mm wide and 2.3mm thick, to the back support frame of 19mm X 24mm X1.2mm thick SS Rectagular Pipe. Complete with desired foundations (as per details) including Excavation PCC1:4:8, RCC 1:2:4 , Center shuttering , Foundation bolts and curing . All stainless steel items shall be of S-304 Grade (EXTERNAL SIGNAGES) (Material should be in compliance with Code of practise for Road signs, Indian Road congress 2010, IRC-67-2010)</p>				
54	5	<p>(Design Nos. 1) Providing, Supplying & fixing Single sided Sign Board of size 1930mm x 1320mm (50mm dia SS pipe of S-304 grade 1.6mm thick) with inner frame of 1830mm x 1220mm (of 19 mm x 24mm rectangular, 1.20mm thick SS pipe of S-304 Grade) along with diagonal support also of 19mm x 24mm rectangular, 1.20mm thick SS pipe of S-304 Grade, with sign substrate of 1830mm x 1220mm of 4mm ACP sheet with face fully covered by RETRO REFLECTIVE MICRO PRISMATIC Type IV Sheeting and messages and symbols accordingly, fixed to inner frame with the help of Very High Bond tape of 24mm wide and 2.3mm thick. The board shall have a leg support of 168mm dia 3mm thick SS pipe of S-304 grade of height 4420mm, with necessary holes, nuts bolts & caps. The boards shall be grouted in a foundation size of 1200mm x 900mm x 900m with CC 1: 2: 4 laid with the help of shuttering. All relevant specs to confirming to detail drawing enclosed.</p>	NS	1	Nos.	72000

55	4	<p>(Design Nos. 2) Providing, Supplying & fixing Single sided Sign board of size 974mm x 1284mm (32mm dia SS pipe of S-304 grade 1.6mm thick). with inner frame of 910mm x 1220mm (of 19mm x 24mm rectangle, 1.2mm Thick SS pipe of S-304 Grade) along with diagonal support also of 19mm x 24mm sectangle, 1.2mm Thick SS pipe of S-304 Grade, with sign substrate of size . 910mm x 1220mm, of 4mm ACP sheet with face fully covered with RETRO REFLECTIVE MICRO PRISMATIC Type IV Sheeting, and messages and symbols accordingly, fixed to inner frame of 910mm x 1220mm of (19mm x 24mm square, 1.2mm Thick SS pipe of S-304 Grade) with the help of Very High Bond tape of 24mm wide and 2.3mm thick. .The board shall have a one leg support of 60mm dia 2mm thick SS pipe of S-304 grade of height 4.084m with Hold fast The boards shall be grouted in a foundation size of 600mm x 600mm x 900mm with CC 1: 2: 4 laid with the help of shuttering Complete. All relevant specs confirming to detail drawing enclosed.</p>	NS	1	Nos.	34000
56	3	<p>(Design Nos. 3) Providing Supplying & fixing Double Sided Sign board of size 1930mm x 1320m (50mm dia SS pipe of S-304 grade 1.6mm). with inner frame of 1830mm x 1220mm (of 19mm X 24mm X 1.2mm thick Rectangular SS pipe of S-304 Grade) along with diagonal support also of 19mm X 24mm X 1.2mm thick Rectangular pipe of S-304 Grade, with sign substrate of size 1830mm x 1220mm, of 4mm ACP with face fully covered by RETRO REFLECTIVE MICRO PRISMATIC Type IV Sheeting, and messages and symbols accordingly, fixed to inner frame of 1830mm x 1220mm of (19mm X 24mm X 1.2mm Thick Rectangular pipe of S-304 Grade) with the help of Very High Bond tape of 24mm wide and 2.3mm thick. .The board shall have a two leg support of 73mm dia 2mm thick SS pipe of S-304 grade of height 4.04m and 3.4mmm respectively, with necessary holes, nuts bolts & caps. The boards shall be fixed on two nos. foundations of size 900mm x 900mm x 1200m with CC 1:2:4 laid with the help of shuttering. All relevant specs confirming to detail drawing enclosed.</p>	NS	1	Nos.	75000

57	3	<p>(Design Nos. 4) Providing, Supplying & fixing Single sided Sign board of size 974mm x 673mm & 974mm x 368mm (32mm dia SS pipe of S-304 grade 1.6mm thick). with inner frame of 910mm x 610mm & 910mm x 304mm (of 19mm x 24mm rectangular , 1.2mm Thick SS pipe of S-304 Grade), with sign substrate of size 910mm x 610mm & 910mmx 304mm, of 4mm ACP with face fully covered with RETRO REFLECTIVE MICRO PRISMATIC Type IV Sheeting, and messages and symbols accordingly, fixed to inner frame of 910mm x 610mm & 910mmx 304mm of (19mm x 24mm square, 1.2mm Thick SS pipe of S-304 Grade) with the help of Very High Bond tape of 24mm wide and 2.3 mm thick .The board shall have a one leg support of 60mm dia 2mm thick SS pipe of S-304 grade of height 2840mm with Hold fast The boards shall be grouted in a foundation size of 600mm x 600mm x 600mm with CC 1: 2: 4 laid with the help of shuttering Complete. All relevant specs confirming to detail drawing enclosed.</p>	NS	1	Nos.	28000
58	2	<p>(Design Nos. 5) Providing, Supplying & fixing Single sided Sign board of size 1320mm x 2540mm (50mm dia SS pipe of S-304 grade 1.6mm thick). with inner frame of 1220mm x 2440mm (of 19mm x 24mm rectangle, 1.2mm Thick SS pipe of S-304 Grade) along with diagonal support also of 19mm x 24mm rectangle, 1.2mm Thick SS pipe of S-304 Grade, with sign substrate of size 1220mm x 2440mm, of 4mm ACP with face fully covered by RETRO REFLECTIVE MICRO PRISMATIC Type IV Sheeting, and messages and symbols accordingly, fixed to inner frame of 1220mm x 2440mm of (19mm x 24mm rectangle, 1.2mm Thick SS pipe of S-304 Grade) with the help of Very High Bond tape of 24mm wide and 2.3mm thick. .The board shall have a one leg support of 168mm dia 3 mm thick SS pipe of S-304 grade of height 5000 mm with base plate of 10mm thick SS plate of size 600mm x 600mm with 4 Nos. stiffeners of 10mm SS plate of S-304 grade. The boards shall be fixed on a foundation size of 1500mm x 900mm x 900mm with CC 1: 2: 4 laid with the help of shuttering and 12 Nos. of foundation bolts of 20mm dia SS, S-304 grade of 600mm length Complete. All relevant specs confirming to detail drawing enclosed.</p>	NS	1	Nos.	94000

59	4	WALL/ PILLAR MOUNTED (Design Nos. 7) Providing, Supplying & fixing Single sided Sign Board of size 450 mm x 600 mm with suitable inner frame and proper support, with sign substrate of suitable size of 4mm ACP sheet with face fully covered by RETRO REFLECTIVE MICRO PRISMATIC Type IV Sheeting and messages and symbols accordingly, fixed to inner frame with the help of Very High Bond tape of 24mm wide and 2.3mm thick. The board is to be fixed on RCC wall/pillar with dash fasteners of SS pipe of S-304 grade. All stainless steel items shall be of S-304 Grade (EXTERNAL SIGNAGES) (Material should be in compliance with Code of practise for Road signs, Indian Road cingress 2010, IRC-67-2010)	NS	1	Nos.	6900
60	35	SUBHEAD II- OVERHEAD GANTRY Providing, Supplying & fixing of Single Sided Overhead Retro Reflective Sign Boards made of 4mm thick ACP Sheet with face fully covered by RETRO REFLECTIVE MICRO PRISMATIC Type IV Sheeting and messages with overlay sheeting, with support frame structure of suitable size along with vertical support of 19mm X 24mm X 1.2mm thick Rectangular pipe of S-304 Grade, with signage fixed with Very High Bond tape of 24mm wide and 2.3mm thick and rivets. Size of the board should be as per road width. All relevant specification confirming to detail drawing enclosed.	NS	1	Sqmt.	14000
61	2000	Fabrication Supplying & Erecting of Over Head Gantry structure made of steel work in built up tubular (round, square or rectangular hollow tubes etc. trusses etc. including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete : Hot finished seamless type tubes. The whole gantry shall be painted with 2 Coat of Epoxy paint of desired colour.	NS	1	kg	98
62	3	A gantry shall be erected on 2/3 nos. foundation based on road width and as per site requirement of size 3500mm x 2000mm x 2580mm with pedestal size of 900mm x 900mm x 1830mm and footing of size 3500mm x 2000mm x 600mm of RCC of 1: 2: 4 and PCC of 1:4:8 in size 3550mm x 2050mm x 150mm with reinforced steel as per attached drawing, 12mm dia and 10mm dia TOR steel with 12 foundation bolts of 1220mm length and 25mm dia for one foundation complete with center shuttering. Complete as per approved drawing and to the satisfaction of engineer in charge. (Detail as per enclosed drawing) (Quantity shows total no. of foundations)	NS	1	Nos.	250000

63	35	<p>Facia Board Providing, Supplying & fixing of Facia Sign Boards made of 4mm thick ACP Sheet with face covered with RETRO REFLECTIVE MICRO PRISMATIC Type IV Sheeting and messages with overlay sheeting, with edge support frame structure of 72mm X 72mm X 2mm SS Pipe of S-304 grade and 19mm x 24mm x 1.5mm inner frame with diagonals and bracing. Messages and graphics shall be plotter cut with overlay sheeting or HIGH INTENSITY PRISMATIC GRADE Type IV fixed with Very High Bond tape of 24mm wide and 2.3mm thick and rivets, fixed on to a existing structure with the help of suitable expansion fastners. (Detail as per enclosed drawing) (EXTERNAL SIGNAGES) Material should be in compliance with Code of practise for Road signs, Indian Road congress 2010, IRC-67-2010)</p>	NS	1	Sqmt.	14000
64	15	<p>SUBHEAD III- INTERNAL SIGANGES Supplying & fixing of Emergency Escape signages made of 1mm SS sheet with face fully covered with Photo-luminescent sheet with message and letters Plotter / Electronically cut text of vinyl lamination. (EXTERNAL SIGNAGES) Material should be in compliance with Code of practise for Road signs, Indian Road cingress 2010, IRC-67-2010) (INTERNAL SIGNAGES) Material should be in compliance with Code of practise for Road signs, Indian Road cingress 2010, IRC-67-2010)a) Fire Extingusher Boards size (250 mm x 250 mm)</p>	NS	1	No.	680
65	10	<p>SUBHEAD III- INTERNAL SIGANGES Supplying & fixing of Emergency Escape signages made of 1mm SS sheet with face fully covered with Photo-luminescent sheet with message and letters Plotter / Electronically cut text of vinyl lamination. (EXTERNAL SIGNAGES) Material should be in compliance with Code of practise for Road signs, Indian Road cingress 2010, IRC-67-2010) (INTERNAL SIGNAGES) Material should be in compliance with Code of practise for Road signs, Indian Road cingress 2010, IRC-67-2010) b) Fire Exit (250 mm x 250 mm)</p>	NS	1	No.	680
66	6	<p>Manufacturing, Supplying & fixing of ceiling hung sign board of size 900mm x 300mm (Single Sided) as shown in the drawing with all necessary texts and symbols. Sign Board shall be made of 4mm Thick ACP Fully covered with High Intensity Micro Prismatic Sheting (Type IV) with powder coated aluminium frame work of specified sections. Supported with frame of 19mm x 24mm x 1.2 mm thick SS rectangle pipe and 25 mm dia. pipe stainless steel pipe (S-304 grade). (INTERNAL SIGNAGES) Material should be in compliance with Code of practise for Road Airport signs, Indian Road congress 2010, IRC-67-2010) Entry (2 Nos) Exit (2 Nos) Baggage Claim (1 No.) Security Check (1 No.)</p>	NS	1	Each	22000

67	15	Manufacturing, supplying and fixing of S.S.Plate of followin size made of 2 mm SS sheet with message and letters engraved in black colour with no borders. Board can be ceiling hung from wall/RCC/False ceiling with fancy metallic chain including all necessary fasteners, nuts, bolts and other accessories. (Material should be in compliance with Code of practise for Road and Airport signs, Indian Road congress 2010, IRC-67-2010) 500mm x 200 mm - Security Check , 500mm x 200 mm - Restricted Entry , 500mm x 200 mm - VIP Lounge ,500mm x 200 mm - Bank .	NS	1	Kg	900
68	115	Manufacturing, Supplying & fixing of S.S.Plate of following sizes made of 2mm SS sheet with message and letters engraved in black colour with no borders including all nuts, bolts and other accessories.Board can b+C18e fastened parallel or perpendicular to wall including all necessary fasteners. (Material should be in compliance with Code of practise for Road and Airport signs, Indian Road congress 2010, IRC-67-2010) Ladies Toilet (3 Nos.) (Size 150 mm x 150 mm) (Only figure Based) , Gents Toilet (3 Nos.) (Size 150 mm x 150 mm) (Only figure Based), Handicapped Toilet (3 Nos.) (Size 150 mm x 150 mm), Ladies& Gents toilet (2 Nos.) (Size 150 mm x 150 mm) (Only figure Based), Washroom (Size 300 mm x 100 mm) (Figure + Text based) , Drinking water (Size 300 mm x 100 mm) , Pantry(Size 300 mm x 100 mm) , Rest Room (Size 300 mm x 100 mm) , Server Room (Size 300 mm x 100 mm) , Electrical Room (Size 300 mm x 100 mm) , Conference Room (Size 300 mm x 100 mm) , Panel Room (Size 300 mm x 100 mm) ,Plates for office area (Size 300 mm x 100 mm) , VIP (Size 300 mm x 100 mm) Child Care (Size 300 mm x 100 mm) , Medical room (Size 300 mm x 100 mm) , Security Check (Size 300 mm x 150 mm) , Control Room (Size 300 mm x 150 mm) , Save Water (Local Language+Picture) (Size 300 mm x 150 mm), Save Electricity (Local Language+Picture) (Size 300 mm x 150 mm), Keep Clean (Local Language+Picture) (Size 300 mm x 150 mm), Use Dustbin (Local Language+Picture) (Size 300 mm x 150 mm), Yeh Parisar Aapka he. Kripya isse Swach Rakhne (Local Language) (Size 400 mm x 150 mm) , NO Smoking (Size 400 mm x 250 mm), Yeh Parisar Camera ki nigrani me he (Local Language) (Size 400 mm x 450 mm)	NS	1	Kg	700
		Total				

69	14	E). SUB ESTIMATE FOR HVAC WORKS EQUIPMENT -Supply of split AC unit with high wall mounted indoor unit and outdoor condensing unit Hermetically sealed compressor suitable for operation on 230V, 50Hz, 1Phase AC supply capable of performing cooling dehumidifying air circulating and filtering with cooling and condensing units with 3.5 mts of copper piping, insulation kit and 4 mts of 3 core copper flexible chord , built-in stabilizer (Voltage range 160- 264 volts) and cordless remote control complete as required.1.5 TR 5 Star capable of delivering 18000 BTU/hr and above with operating on refrigerant R-32 / R-410A with COP not less than 3.6 w/w Makes: Daikin FTF50QRV16 or its equivalent model of Carrier / Blue Star.	APSS	1	No.	46258
70	2	EQUIPMENT -Supply of split AC unit with high wall mounted indoor unit and outdoor condensing unit Hermetically sealed compressor suitable for operation on 230V, 50Hz, 1Phase AC supply capable of performing cooling dehumidifying air circulating and filtering with cooling and condensing units with 3.5 mts of copper piping, insulation kit and 4 mts of 3 core copper flexible chord , built-in stabilizer (Voltage range 160- 264 volts) and cordless remote control complete as required1.8 / 2.0 TR 3 Star capable of delivering 21600 BTU/hr and above with operating on refrigerant R-32 / R-22 with COP not less than 3.25 w/w.Makes: Daikin FTC60QRV16 or its equivalent make of Carrier / Blue Star	APSS	1	No.	50016
71	16	Installation of Split Air Conditioners.	APSS	1	No.	1500
72	16	Flushing the line, leak testing, leak stopping, vaccumming, dehydrating and charging the gas in the refrigeration system for 1.5/2.0 Ton Split A.C.Unit.	APSS	1	No.	2100
73	285	REFRIGERANT & DRAIN PIPING- Providing 2 runs of Copper tubes for suction and liquid between indoor and outdoor unit for split/Casseete Air-Conditioner including foaming etc., complete. 5/8" (15.9 mm) O.D. & 3/8" (9.5 mm) O.D.	APSS	1	RM	1000
74	200	Supply of PVC insulated 3 core 2.5 Sqmm sheathed flexible coppereable for voltage up to 1100V as per IS 694/1990. Makes: Finolex / RR Kable.	APSS	100	RM	9227
75	50	Supply installation, testing and fixing of Class'B' PVC pipes ISI as per IS 4985-2000, drain piping complete with insulation fittings, supports as per specifications.50 mm dia	NS	1	RM	625

76	50	Supply installation, testing and fixing of Class'B' PVC pipes ISI as per IS 4985-2000, drain piping complete with insulation fittings, supports as per specifications.32 mm dia	NS	1	RM	486
77	200	Supply installation, testing and fixing of Class'B' PVC pipes ISI as per IS 4985-2000, drain piping complete with insulation fittings, supports as per specifications.25 mm dia	NS	1	RM	382
78	151.8	<p>F). SUB ESTIMATE FOR INTERIOR WORKS</p> <p>SUBHEAD I - ROLLER BLIND, PARTITIONs & TINTED FILM--FULL HEIGHT MODULAR PARTITIONS -Providing and Supplying Full Height Modular Partition of 75mm thickness and should have clear space of 50-55 mm for electrical wiring.The height of partition considered is 3300mm (Approx.). All metallic parts shall undergo a 7 stage anti rust treatment and shall be powder coated in suede finish to a thickness of minimum 45 microns.-Modular Partitions shall be an assembly of the following parts:-Levelers-Each frame shall be provided with two 8-10mm leveling bolts which allow 15mm adjustment for floor unevenness. The levelers shall be concealed inside the skirting and shall be completely retracted inside the skirting in case of uniformly flat floors.--Wall Start- This is a joinery, which is used to fix partition with wall as per requirement. The section is made of 75mm (W) x50/75mm(D) aluminium extrusion/CRCA steel. This should have necessary slots for fixing and can take wire from wall to partition.</p> <p>Frame Gasket- Frame modules shall have PVC foam Gaskets of 2mm thickness and 8mm width pasted with PVA glue along the inner periphery on both sides to prevent sound and dust transmission through the tiles. The frames shall also have 2mm x 10mm foam gaskets pasted with PVA glue on the outer periphery so as to seal the gaps between the adjacent frames.</p>	NS	1	sqm	12750

		<p>Frames shall form the basic support structure for all components and shall be of 75mm x 35mm CRCA Steel section. The main vertical member of the frame bearing the load of brackets and storages shall be made of 1mm thick CRCA steel. The connecting vertical face shall be made up of 0.8mm thick CRCA Steel. The horizontal members shall be made of 0.8mm CRCA steel. Each individual module shall not be more than 700mm in height and shall not be more than 1200mm in width. Frames can have 1-3 modules in prefabricated form. Additional height shall be achieved by mounting modules over them. The bottom module shall be mounted over a skirting of 85mm height. The skirting shall be designed so that switches can be provided on the skirting level. The frames shall also have prefabricated slots for fixing brackets used to support worktops, gable ends, etc. The skirting shall be snap fitted on both sides with Skirting Plates made of 0.6mm thick CRCA steel.</p> <p>Ceiling Rail-The telescopic ceiling rails shall be made of aluminium extrusions of 75mm Cross section with 1.2mm thickness. The height of the ceiling rail shall be of 40-55mm. The ceiling rail should allow an height adjustment of 10-15mm upwards. Posts-The frames shall be connected at the junctions by aluminum connectors. The Junction of frames shall be snap fitted with square Posts. The Posts shall be made of aluminium extrusions of 1.2mm thickness of section 75mm x 75mm for 2-Way & 75mm x 1.2mm for 3-Way. Tile Finish-</p> <p>Tile Finish-Front Partition shall have Glass finish in all Modules. LAMINATED TI</p>				
79	115.5	<p>Tile Finish- Dividing Partition shall have Laminated Finish in all Modules. LAMINATED TILES: The Laminated tiles shall be made of 9mm MDF Board with 0.8mm Post Lamination. FABRIC TILES (Optional): The fabric tiles shall be made of 9mm MDF Board with fabric pasted on them by PVA glue. It should be possible to replace the fabric by peeling it off. Glass Tiles- Glass Tiles shall be 4 mm clear toughened glass are supplied and fixed from both side with all necessary interior trims and gaskets. There are two glass tiles that can be fitted and are completely interchangeable with regular tiles.</p>	NS	1	sqm	13750

80	115	<p>ROLLER BLINDS Providing & fixing roller blinds, with head rail and fabric connector with min gap of 6/8 mm ig required. Faabric 100% glass fibre with PVC coating on both side light transmission 0% with flame retardant.the control unit consists of clutch mechanism.The unit is made of high strength reinforced plastic.The clutch is of Wrap design. High carbon steel springs are provided to transmit motion from the driven mechanism.Clutch is operated directionally by use of endless beached chain to raise and lower the blinds smoothly to decide height.clutch never needs adujstment.Hand rail- to be rprovided of an aluminium-extruded rail on which the control unit and idler are mounted with help of bracket.</p> <p>Idler is high strength reinforced plastic consisting of an outside sleeve and center shaft. sleeve provide bearing surface for center shaft and rotate freely for longer wearing operation. Bracket are powder coated in white.operationg chain is made of 4.5 mm plastic beads molded on 2.2 mm thick polyster cord. the pitch of the beads is 6mm.fixing bracket are L-Bracket(2mm) and Clamp(0.5 mm in zinc plated). Roller tube is made up of high strength aluminium alloy extruded grooved tube which is powder coated or anodized.The fabric of the blind is attached to the tube.incase light duty fabric attached to the with plastic insert and incase of heavy duty the fabric attached using both side tape..Load bar is fixed to the bottom of the fabric and the purpose of it is to keep the fabric in tension and straight is made up of extruded aluminium alloy with a groove for fixing the fabric using plastic. the ends are plugged using ABS ends caps.Complete in all respect.</p>	NS	1	sqm	3200
81	35	<p>FROSTED FILM Location: On Glass partition & DoorsSupplying and placing of approved make frosted film over the glazing as per the design having Thickness of 2Mil, Visible Light Transmittance=77%, Visible Light Reflectance=9%, Solar Energy Transmittance=61%, Solar Energy Reflectance=8%, Solar Energy Absorbance=31%, Ultra Violet Transmittance < 2%, Glare Reduction=15%, Shading Coefficient=0.81, Emissivity=0.85, U Factor (BTU/Hr/Sq. ft.)=1.09 and Total Solar Energy Rejection=30%. complete as per specification and approval of Engineer-in-Charge.</p>	NS	1	sqm	2,080
82	10	<p>SUBHEAD II PORTABLE CABINS, WASTE BINS & MISCELLANEOUS ITEMS-- WASTE BINS (OUTDOOR)Provision, Supply & Installation/fixing of wheeled waste bins moulded from special UV stabilized grades of polyethylene - each of 330 litres capacity of size TOP 570x740 BOTTOM :410x575 H: 1070 COLOUR: Military Green & Dark blue .The bins should be rust free, elegant, light weight, easy to handle and cleaning, hygienic, leak proof & durable etc. complete as per specification and approval of Engineer-in-Charge.</p>	NS	1	each	12500

83	2	<p>PORTABLE SECURITY CABIN Wall & Roof: - Panels manufactured using mscorrugated sheets 1.6mm (18gauge) with inner layer of MDF board 6mm thick & Glass wool 50mm thick in between for insulation. The cabin will be duly painted. These are a water proof, termite, heat and fire resistant and comfortable in extreme hot or cold climate. with lift & shift arrangement from the top.False ceiling with pre laminated boards Panelling for room-like finish, wall to wall laminated board Floor: - MS, angle ISMC (Channels) are tubes of suitable sizes and strength are used to cased the floor grid of size 600x600 the floor is 150mm-185mm (4"-6") above GL and is covered with 16mm cement fibre board finally for floor & vinyl of 1.5mm thick is provided for neat finish.</p> <p>Windows:-Plain aluminium sliding glass windows with aluminium grill & mosquitoes jalli with locking arrangements with rain shed.Quantity - 4nos.Door: -MS corrugated door for main entrance with locking arrangements with rain shed.Quantity - 1nos.Paint work: - Outside enamel paint of desired colour.Electrical:-Cost of electrical points including pvc battens with internal wiring are includedFollowing fixtures are all inclusive: 5 Amp points-4nos.5 Amp point-1no.Ac points-1no.Tube light-2nos.Ceiling fans-2nos.MCB with board.External is out of scope.Cabin Size:3.0mx3.0mx3.0m clear height from FFL</p>	NS	1	each	197500
84	2	<p>PORTABLE TOILET Walls : out side 1.6mm ms sheet walls panels of 50mm thick made out of both sides 8mm thick prelaminted board in between glass wool of 50mm thick .Roof : Sandwithced panels 75mm thick (insulated panels made out of 0.63mm GI Sheets on both sides with insulation of glass wool 50mm thick).Inside Cladding : PVC mounted upto 5ft on walls four sides walls.Ventilator : 1 (One) ventilation.Electrical points : - 5Amp points -3nos. Exhaust Fan – 1 NoToilet Fixtures : 1. European / Anglo Indian type ceramic WC Water cistern.Wash BasinMirrorTowel railSoap holderCRP TapsFalse ceiling with pre laminated boardsProvision for water tank Provision for inlet & outletDoor- 6'X3'Size of cabin 6Ft.x 4Ft (OD)</p>	NS	1	each	125000
85	5	<p>DOOR MAT Supplying and placing of approved make, heavy duty door mat (plastic fiber/grass roll type) near entrance as per manufacturer's specifications. All wastage shall be to contractor's account and only the size as per actual shall be measured and paid for. with approval of Engineer-in-Charge--Dim: 1200mm x 900mm</p>	NS	1	each	10250

86	15	SS WASTE BIN Supply & Installation/fixing of stainless steel of grade SS304 recycle bin,size 760mm height , 18 gauge in glossy/matt. There will be one opening of 250mm dia with/without flip lid.	NS	1	each	7638.76
87	4	<u>SUBHEAD III - GATE COUNTER, CHECK IN COUNTER & X-RAY ROLLER BENCH--CHECK IN COUNTER-950mm WIDE</u> --Full length Stainless steel bag rest and trolley guard. Stainless steel kick plate,Glass front panel (can be embedded with various colours and logos), Stainless steel rails on conveyorside panel, Melteca laminate side panels, interior and work surface. High strength impact resistant acrylic counter top, allows clear view of passenger. CPU hinged cupboard, Conveyor control console, three full extension slides for printers,printer paper and baggage weighing system. Refer to drawing for more details.Size:950W X 1050D X 955H (Table Top) & 1225H (Counter Top)	NS	1	Each	208000
88	2	GATE COUNETR-950mm WIDE --Stainless steel kick plate, Glass front panel (can be embedded with various colours and logos), Melteca laminate side panels, interior and work surface. High strength impact resistant acrylic counter top, allows clear view of passenger. CPU hinged cupboard, three full extension slides for printers and printer paper. Refer to drawing for more details.Size:950W X 825D X 955H (Table Top) & 1225H (Counter Top)	NS	1	Each	188500
89	2	X-RAY ROLLER BENCH --Stainless Steel X-Ray rollerbench with 20 diameter stainless Steel rollers on bearings mounted on square stainless Steel tubular all welded end frame with adjustable feet. **Units will be transported fully assembled at Ex UFL, ready for unpacking and placement at site.Size: 1300W X 800D X 900H	NS	1	Each	320125
90	3	<u>SUBHEAD IV - TOILET ACCESSORIES DISABLED ARM SUPPORT & GRAB BAR FOR WC</u> --Fabrication, supply & installation of Stainless steel floor or wall mounted hand railing of 50mm dia, 1.6mm thick S/S pipe with necessary bend & termination at all height confiming to SS 304 grade, Sating finish, with) fixing at C/C 900mm using neck S/S pipe 19 X 2mm as per direction of Engineer in charge.	NS	1	Each	17086.70
91	3	DISABLED ARM SUPPORT (FIXED) FOR WASH BASIN ---Fabrication, supply & installation of Stainless steel Arm Support System made of round SS 304 grade of dia 38.1 x 1.5 mm thk with 100 x 5 mm thk Flange. Over all size:- 450 x 215mm (fixed on both sides of WB) as per direction of Engineer in charge.----Fabrication, supply & installation of Stainless steel Arm Support System made of round SS 304 grade of dia 38.1 x 1.5 mm thk with 100 x 5 mm thk Flange. Over all size:- 450 x 215mm (fixed on both sides of WB) as per direction of Engineer in charge.	NS	1	Each	15076.5

92	13	<p>HAND DRIER-Supplying and placing of automatic electrically operated Hand Dr</p> <p>1. ON/OFF MODE: The drier goes on when hands approach, automatically, and switches off by itself after drying the hands. Fully hygienic, NO-TOUCH type 2. TIMER: With solid-state time-delay feature to avoid chattering. 3. TIME RATING: Time required to dry a pair of hands upto wrists: Half a minute. 4. DUTY RATING: Rated for continuous repeat use (CRU rated). 5. TEMPERATURE: Temperature of drying air-stream is such that user does not feel uncomfortable and the hands do not feel excessive heat. With SUMMER-WINTER control. 6. SOUND LEVEL: Quiet operation below 70 dB. 7. ENCLOSURE: Sheet metal enclosure multiple grounded electrically and mechanically to avoid danger of shock. Multiple stoved multiple coats spray painted white finish. (Or as mentioned under para 8) 8. COLOUR: Exterior can have a shade which matches the wall or tile color. 9. MOUNT: Indoor wall mounting. With one integral bracket for firm mounting the drier on wall. 10. PROTRUSION: Drier protrudes only 110mm from the wall. Sleek design. 11. ARROW GUIDE: A guiding arrow to indicate the drying position of hands. 12. ELECTRICITY: For 240 volts,1-phase, 50 Hz , 15 amps AC supply.</p> <p>13. CABLE: Sheathed three core flexi cable 1-metre length,1-three pin 15 amps standard plug top.</p> <p>14. PERFORMANCE: Suitable for Heavy Duty performance.</p> <p>15. USER LIST: Submit a list of the users who have used it for not less than 2 years.</p> <p>16. AFTER-SALES ATTENTION: (i) Proven record of prompt after-sales attention and (ii) Organized and established own team for the quick attention.</p> <p>17. LOCK & KEY arrangement to avoid unauthorized movement of the drier</p> <p>18. MUSIC: A musical chime plays while drying hands, with volume and on/off control .</p>	NS	1	Each	13000
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93	8	SUBHEAD V - MODULAR STORAGE ITEMS--FULL HEIGHT STORAGE-- Supplying, Installation and placing of stackable/single unit 1980(H) x 900(W) x 425(D) mm storage , made of 0.8mm thick Prime Quality CRCA Steel, having Sliding/hinged Door with or with out top hanging arrangement to prevent derailment. Each door provided with 2 plastic roller having steel ball bearing for smooth movement of door & less noise. it has to be Snap on type aesthetically appealing die cast 5 Lever Cam Lock for safe Locking & Plastic flush & recessed handle. it has to be Screw type lever with hex plastic base (add in unit height min. 8 mm & additional 5mm max for adjustment), complete as per specification and approval of Engineer-in-Charge.	NS	1	Each	24611.84
94	8	OVERHEAD STORAGES-- Supplying and placing of overhead storage of size 900mm (W) X 450mm (H) X350mm (D) in required lengths, Top/Bottom Panel made of 0.8mm thk MS CRCA Sheet/18mm th. PLB, Side Panel made of 1.2 mm thk MS CRCA Sheet /18mm th. PLB and Door Panel made of 0.6mm thk MS CRCA Sheet/18mm th.PLB. All powder Coated/PLB storages, having Removable key type 10 lever cam door lock with lock lever to lock and open the door, etc complete as per specification and approval of Engineer-in-Charge.	NS	1	Each	9595.03
95	10	SIDE STORAGE & CABINET UNITS-- Providing & supplying approved make, hinged door Free standing Back Side Storage & cabinet units of sizes as specified below resting on floor having door, top, sides, back, & shelves in CRCA powder coated steel. The body and Shelves of the cabinets shall be made of 0.8mm CRCA steel. The top of the cabinets shall be made of 2mm thick CRCA steel and the skirting plate shall be made of 1.2mm CRCA steel. The shelves shall be supported on Spring Steel clips and shall be adjustable at intervals of 12.5mm heights. The cabinet shall be provided with CAM Locks. The handles shall be PVC Moulded and shall be flush fitted. The cabinets shall be provided with 4 Nos. M10 levelers for height adjustment upto 25mm.The shutter shall have self-closing hinges. complete as per Specification and approval of Engineer-in-Charge. Size 900mm(w) x 1200mm(h) x450mm(d) in CRCA steel top.	NS	1	Each	18342.5
96	1	SUBHEAD VI -CONFERENCE TABLE, OFFICE TABLES & COFFEE TABLES CONFERENCE TABLE Supplying and placing of Approved Make, Conference Table-12 seater , U shaped of configuration as per attached drawing and in Two Seater 1350mm (W) X 600mm (D) -09 Nos., Quarter Round (One Seater) -2 Nos., with Wire management facility, MDF top with Membrane foil coated with layer of polyurethane, Waterfall edge complete as per specification and approval of Engineer-in-Charge.	NS	1	Each	136389

		<p>Table Top:- Work Surface:Top thickness should be 35 mm Membrane finish, Edge profile Waterfall Edge 10mm radius on top eadge and 5mm at bottom.</p> <p>Under Structure:- Legs: Made from 25-36mm PPB (18+18) having a straight profile with half round edges and clad with 0.6mm thick Post Forming laminate. Overall thickness of leg is 37.2mm</p> <p>Modesty Panel: Made from PLT (Prelaminated Twin) boards of 18mm thick.</p> <p>Wire Manager:-.Wire Carrier: Made from 0.6mm thick CRCA painted.Carrier Cover: Made from 12mm thick MDF painted overallMaterial:-.Substrate: MDF.Skin: PVC Membrane foil (0.4mm thk) clad on the substrate MDF using PU glue for better adhesion. This foil is pre-coated with layer of polyurethane for better scratch resistance.</p>				
97	7	<p>TABLE FOR OFFICERSSupplying and placing in position Executive Table, Side Unit & Credenza whose top and side panel made up of 25 mm thick plain particle board (PPB) clad with 0.6 mm thick post formed laminate and 1 mm thick Backing Laminate (BDL) Flat edge duly sealed with 2mm thick PVC Beading. The Modesty is 18 mm thick plain particle board (PPB) with 1 mm thick decorative laminate (DL) on both sides. Edge sealed with 2 mm thick PVC Beading. The Hinge door back unit top made up of 25 mm thick plain particle board (PPB) clad with 0.6 mm thick post formed laminate and 1 mm thick Backing Laminate (BDL) Flat edge duly sealed with 2mm thick PVC Beading.</p> <p>The door partitions and shelves are made up of 18mm thick plain particle board (PPB) with 1mm thick decorative laminate (DL) on both sides. Eadge sealed with 2 mm thick PVC beading. It has Black Colour Metal Pedestal without Castors, as per approval of the Engineer-in-charge.Executive Desk, size 1500X900X740mmSide Unit (LHS/RHS), size 1050X520X700-705 mmCredenza (Back Unit), size 1280X520x 700-705mm</p>	NS	1	Each	67043
98	8	<p>STAFF TABLESupplying and placing in position table of the following specifications.</p> <p>The overall size of the table shall be 1200mm (L) x 750mm(W) x 730mm(H). The work top shall be made of 18mm thick Prelaminated Particle Board. All work surface edges shall be duly sealed with 2mm thick PVC edgebanding. The understructure shall be 18mm thick PLB. The rectangular component shall be 1.2mm thick CRCA with powder coating finish. The legs in the table shall be made of 38mm x 25mm x 1.2mm thick Mild Steel ERW tube with powder coating finish. The pedestal shall be made of 0.6mm thick CRCA with drawers with 10lever cam lock. Table shall be provided with vertical & horizontal wire carriers and CPU holder fixed to the frame. Slots shall be provided in the top frame of table for passage of wires ensuring clutter free desk.</p>	NS	1	Each	13964.34

		The handle in the drawers shall be made of injection moulded polypropylene. The above entire unit shall be manufactured as per specifications. The work shall be carried out as per the instructions received from engineer in charge. Size:1200mm (L) x 750mm(W) x 730mm(H)				
99	20	CENTRE/COFFEE TABLE Providing & placing in position center table with sizes 1000 W X 500 D X 428 H mm with top made in 10mm tempered glass with rubberwood frame wok supported with an understructure of MDF & finished with paper laminate.Refer Dwg - 13 of detailed specification. The work shall be carried out as per the instructions received from engineer in charge. Side Table: 450mm W X 450mm D X 450mm H.	NS	1	Each	12973.84
100	3	STUDY TABLE WITH CHAIR FOR GUEST ROOMCHAIR : High Back Dining Chair in solid rubber wood with polished finish. Material : Rubber Wood Finish : Clear lacquer finish Seat with foam cushion of density 28+ and fabric. Dimension : Width 450 mm X Depth 490 mm X Height 935 mm TABLE: Study Table in finger jointed 20mm thick rubber wood with polished finish. Legs in 60X60mm solid wood. Table top size: 900 (W)X 600 (D)X750 (H) mm – 20mm thick. Finish : Clear Melamine coat	NS	1	Each	31250
101	4	SUBHEAD VII - SEATING/RESTING: SOFA SYSTEMS Providing & Supplying of cushioned sofa sets in approved fabric with arm rests & legs in MS ERW piping powder coated/ teakwood and in 3,2 & 1 seat configurations to the satisfaction of Engineer -in -charge. Sofa Set shall be of minimum 100mm thick PU Foam of min. 32kg/m3 density for back foam and 45 kg/m3 density for seat foam shall be of minimum 100mm thick PU Foam of min. density Arms & legs shall be of MS ERW piping powder coated class I teakwood frame of thickness 70mm x 32mm with melamine matt finish One Seater - 700 (W) x 700 (D) x (H) 810 mm	NS	1	Each	19096.9
102	9	SUBHEAD VII - SEATING/RESTING: SOFA SYSTEMS Providing & Supplying of cushioned sofa sets in approved fabric with arm rests & legs in MS ERW piping powder coated/ teakwood and in 3,2 & 1 seat configurations to the satisfaction of Engineer -in -charge. Sofa Set shall be of minimum 100mm thick PU Foam of min. 32kg/m3 density for back foam and 45 kg/m3 density for seat foam shall be of minimum 100mm thick PU Foam of min. density Arms & legs shall be of MS ERW piping powder coated class I teakwood frame of thickness 70mm x 32mm with melamine matt finish Two Seater 1200 (W) x 700 (D) x (H) 810 mm	NS	1	Each	33168.3

103	2	<p>Providing & Supplying of cushioned sofa sets in approved fabric with arm rests & legs in MS ERW piping powder coated/ teakwood and in 3,2 & 1 seat configurations to the satisfaction of Engineer -in -charge. Sofa Set shall be of minimum 100mm thick PU Foam of min. 32kg/m³ density for back foam and 45 kg/m³ density for seat foam shall be of minimum 100mm thick PU Foam of min. density</p> <p>Arms & legs shall be of MS ERW piping powder coated class I teakwood frame of thickness 70mm x 32mm with melamine matt finish three Seater- 1700 (W) x 700 (D) x (H) 810 mm</p>		1	Each	45230
104	9	<p>TOP EXECUTIVE & HEAD CONFERENCE CHAIR Providing and placing in position high back chair of the following specifications. The seat shall be made of insert moulded polyurethane foam upholstered with foam laminated mesh fabric. The seat is made of plywood and upholstered with moulded polyurethane foam and foam laminated mesh fabric. Seat assembly size should be 510mm (W) x 525mm (D). The armrests should be adjustable in nature. chair should be provided with 360 degree revolving, single point control, tilt tension adjustment, 4 position locking. The spine bracket is made of aluminium diecast piece connecting back with mechanism. The twinwheel castors are having injection moulded in black nylon. The chair shall be provided with one headrest for comfortable long hour seating. The work shall be carried out as per instructions received from engineer in charge.</p>	NS	1	Each	27749.04
105	24	<p>TOP EXEC. VISITOR & CONFERENCE CHAIRS Providing and placing in position visitor chair of the following specifications. The seat shall be made of insert moulded polyurethane foam upholstered with foam laminated mesh fabric. The seat is made of plywood and upholstered with moulded polyurethane foam and foam laminated mesh fabric. Seat assembly size should be 510mm (W) x 525mm (D). The armrests should be adjustable in nature. Chair is provided with leg frame assembly made of Mild Steel attached to base of the seat. The work shall be carried out as per instructions received from engineer in charge.</p>	NS	1	Each	18740.98

106	12	<p>STAFF CHAIR The seat shall be made up of 1.2 ± 0.1 cm thick hot pressed plywood and polyurethane foam upholstered with Polyester fabric and shall be covered at bottom with non-woven black fabric.cm.The back shall be injection moulded plastic and shall be upholstered with high tenacity mesh fabric. The Seat Size shall be: 48.0 cm (W) x 48.0cm (D) and Back Size shall be: 44.5 cm (W) x 43.0 cm (H). The armrest shall be one-piece loop type made up of black plastic injection moulded in nylon. The centre tilt mechanism shall be designed with the 360° revolving type with Seat Height Adjustment knob, Upright position locking, Tilt tension adjustment. The pneumatic gas-lift shall be Class 3 category and shall has an adjustment of 12.0 ± 0.5 cm stroke. The pedestal shall be made of moulded plastic GF Nylon and fitted with 5 nos. twin wheel castor. The pedestal shall be of dia 56.0 ± 0.5 cm pitch-center diameter (dia 66.0± 1.0 cm with castors). The twin wheel castors having 0 5.0 ± 0.1 cm shall be injection moulded in Black GF Nylon. Overall Dimensions of Chair shall be Seat Height - min 40.0 to max 52.0cm, Height - min89.0 to max 101.0 cm, Width & Depth of Chair as measured from pedestal - Width-66.0 cm and Depth-66.0</p>	NS	1	Each	10400.00
107	40	<p>PUBLIC LOUNGE CHAIR Supplying and placing of approved make 3 seater public lounge chairs with 2 end armrest complete as per specifications and approval of the Engineer-in-charge. Cross Beam: it should made of black powder coated rectangular M.S. ERW tube having 80X40X2 mm size.Leg and Armrest: These are chrome plated made of cold rolled steel / SS 202 with 1.2 mm thickness. Armrest & leg is assembled to the Cross Beam with 2 Nos. M10X100 mm boltsSeat Back Shell: The 1.6 mm thk powder-coated perforated shell is made from cold rolled M.S. sheet / SS 202. The side bar is made of Chrome plated solid steel 30 X 12 mm (DIN174) with fluting and plastic inserts. The shell is assembled on the Cross Beam with help of M8 Bolts (Per Seat-8nos. Seat to Bracket and 4 nos. Bracket to Cross Beam).Over all Size: 1800mm W X 680mm D X 780mm H. Height: 780mm (+20mm, Adjustability at foot)Individual Seat Width: 540mmSeat Height: 410mm (Perfo Seat) (+20mm, Adjustability at foot)Seat Back Inclusive Angle: 105°. (degree)Component Tolerances: +/-5mm and +/-1° (degree)</p>	NS	1	Each	27764.22

108	4	<p>BED FOR REST ROOM Supplying and placing of bed of the following specifications. Bed with understorage shall be of size 900mm (W) x 2060mm (L) x 450mm (H) x . Bed structure should consist of metal frames made of M.S. Channels in 1.0 mm Thickness. Bed shall be made of 18 mm thick Prelaminated Particle Board with all the exposed edges are edge banded with 0.8 mm thck PVC edge beading. 18mm thck Prelaminated Particle Board in Walnut Shade. Metals frames should be powder coating in shade Mat Black to the Thickness of 50 microns (+ - 10). Head Board (optional) of size 2700mmX750mm shall be made of 25mm thick pre laminated particle board and shall be fixed to the wall.</p> <p>he bed shall be provided with one coir matteress of 4 inch thickness. Brands for Mattress: Dunlop, Godrej, Sleepwell The work shall be carried out as per the instructions received from engineer in charge.</p>	NS	1	each	27484.66
109	2	<p>SUBHEAD VIII - WHEEL CHAIR, BAGGAGE TROLLEY, TAPE BARRIER</p> <p>WHEEL CHAIRSupply and placing of collapsible wheel chair with following specifications : 60cm self-propelling spoke puncture proof tyred rear wheels, 20cm front solid tyre swivel castors, . Nylon cord upholstery - flame retardant, . Detachable desk arms and fold down back, Padded armrests, Swing away detachable footrests, height adjustable with heel loops, Elevating leg rest optional (AC100), Progressive and parking braking system and Crash tested</p>	NS	1	Each	16266.75
110	35	<p>PASSENGER BAGGAGE TROLLEY Trolleys will be of 4 wheel type. Front 2 wheels will be caster swivel type and 2 rear wheels. The Vertical and Horizontal frame will be of AISI grade 304 SS pipes having circular section or elliptical section with thickness 2 mm + 0.12 mm. In case of circular sections the vertical frame dia should not be less than 30 mm and platform horizontal mainframe pipes dia not less than 25 mm. In case of elliptical section the size should not be less than 38 mm X 20 mm. Hand Baggage Basket will be of AISI grade 304 SS Rods / Pipes. The basket should be of the following size :Length: 525 mm + 5 mm Width: 225 mm + 2 mm Height: 132 mm + 1.5 mm</p> <p>Also the projection of the basket beyond the vertical frame should not be more than 60 mm, so that the load platform area is not affected. The advertisement panel can be at front side and at the rear side. The design shall incorporate finger protection clearance.Hand Baggage Basket will consist of frame of SS rods 6mm + 0.25 mm. The basket will be welded to the mainframe by SS welding rods.</p>	NS	1	Each	7500

All wheels will be of moulded synthetic non-marking rubber tyred with precision double ball bearings, dust protected, sealed and self lubricated. Swivel caster will also have dust protected large ball bearings instead of deep grooved ball bearing. Such wheels should be any of the makes as mentioned below ;FLEXELLO ,CONTINENTAL , BASSICK, WANZL , EXPRESSO or CADDIE The axles will be made from EN 8 hardened MS Rods.

10 trolleys should stack with each other in about 3.5 to 4.00 mtrs. length and the design should be such that while stacking and moving in a group of 15 trolleys, the maneuvering should be smooth.

Length - 1025 mm + 10 mm

Maximum carrying weight :300 Kg.

Normal carrying weight 90 Kgs

Overall weight : Minimum 22 Kgs.

Load Area Slope (towards rear) $9^{\circ} + 1^{\circ}$

Load Platform Length (Effective) : > 700 mm

Width (front) -360 mm + 3 mm

Width (rear) - 650 mm + 6mm

Height - 1000 mm + 10 mm

Front Caster Wheel should be moulded synthetic non marking rubber wheel with precision double ball bearing dust protected and hub thickness sufficient to carry a weight of 75 Kg on each wheel. Swivel Caster will have dust protected large ball bearings instead of deep grooved ball bearing. The nuts provided shall have suitable locking arrangement to prevent loosening during normal usage.

Rear Fixed Wheel should be moulded synthetic non marking rubber wheel with double ball bearings dust protected and hub thickness sufficient to carry a weight of 75 Kg on each wheel. The nuts provided shall have suitable locking arrangement to prevent loosening during normal usage. Front bumper guard:

PVC / Exlan plastic minimum 5mm thick Finish: Trolley will have Electro

Polish Shining Finish .Advertisement panel No.1 Advertisement panel of

Aluminum plate

(11 Gauge/3 mm thick) without imprint to be

fixed on Vertical main frame Advertisement panel No.2 Advertisement panel

of Aluminum plate

(11 Gauge/3 mm thick) without imprint to be

fixed on the horizontal member of the basket.

		<p>Identification Plate:Plate of size 100 mm X 80 mm X 1.5 mm thick Aluminium Plate will be riveted on the left side of the basket at the rear side on to the SS Plate fixed on the horizontal member of the basket .Number Plate Aluminium Plate will be riveted on the right side of the basket at the rear side on to the SS Plate fixed on the horizontal member of the basket.</p>				
111	15	<p>QUEUE MANAGEMENT SYSTEM Provision, Supply & Installation/fixing of stainless steel(SS 304 grade or higher) Q-Management system having retractable tape head mechanism comprising of, SS double belt posts of 2 ½” dia, 14” base & 950 mm tall, belt length 2.25m in color as approved and with name printing as specified, complete with wall mounting clips at start points or wherever required.Provision, Supply & Installation/fixing of stainless steel(SS 304 grade or higher) Q-Management system having retractable tape head mechanism comprising of, SS double belt posts of 2 ½” dia, 14” base & 950 mm tall, belt length 2.25m in color as approved and with name printing as specified, complete with wall mounting clips at start points or wherever required.</p>	NS	1	Each	9500
112	6	<p>SUBHEAD IX - WATER COOLER & WATER PURIFIER--WATER COOLER-- Supplying and placing of approved make CFC(Chloro Floro carbon) free floor mounted stainless steel self contained drinking water cooler with 120 ltr storing capacity and 80 ltr cooling capacity Complete with installation & commissioning at site. As per specification and approval of Engineer-in-Charge. Water Storage Capacity : 120-130 litres. Water Cooling Capacity : 80- 85 liters. No. of outlets / faucets : 2 nos. heavy duty type Weight : 78 - 83 kgs Refrigerant : CFC free R-134 or Equivalent Body : made out of Stainless Steel 0.7 mm thick plastic coated stainless steel sheet) Base Feet : Sturdy look with shock proof PVC feet Tank insulation : High density puff insulation of 40 mm. Fan motor : single phase Compressor Rating : 5100 Btu/Hr Compressor (ambient range) : 25 Deg C to 54 Deg.C Condenser size : Fin & tube type – inner groove 7mm 2 rows Fan motor rating : 9 watts Compressor make : Emerson / Tecumseh / Danfoss With suitable three step TDR stabilizer as required Compressor make : Emerson/Tecumseh /Danfoss</p>	NS	1	Each	87020.5

113	6	<p>WATER PURIFIER--Supplying and placing of approved make Water Purifier for attachment with CFC(Chloro Floro carbon) Water Cooler with 120 ltr storing capacity and 80 ltr cooling capacity.Complete with installation & commissioning at site. As per specification and approval of Engineer-in-Charge.</p>	NS	1	Each	30000
114	10	<p>SUBHEAD X-Supply& fixing of flooring for Server Room ANTI STATIC FLOORING Providing and fixing removable raised/false access flooring with system and its components of approved make for different plenum height with possible height adjustment upto 50 mm, comprising of modular load bearing floor panels supported on G.I. rectangular stinger frame work and G.I. Pedestal etc. all complete, as per the architectural drawings, as specified and as directed by Engineer-in-charge consisting of :Providing at required spacing to form modular framework, pedestals made out of GI tube of thickness minimum 2 mm and 25 mm outer diameter, fully welded on to the G.I. Base plate of size 100mmx100mmx3mm at the bottom of the pedestal tube, G.I. pedestal head of size 75mmx75mmx3.5 mm welded with GI fully threaded stud 16mm outer diameter with two GI Check nuts screwed on the stud for level adjustment upto 50mm, locking and stabilizing the pedestal head in position at the required level. The pedestals shall be fixed to the subfloor (base) through base plate using epoxy based adhesive of approved make or the machine screw with rawl plug.</p> <p>Stringers system in all steel construction hot dipped galvanized of rectangular size 570x20x30x0.80mm thick having holes at both ends for securing the stringers on to the pedestal head using fully threaded screws ensuring maximum lateral stability in all directions, the grid formed by the pedestal and stringer assembly shall receive the floor panel, this system shall provide adequate solid, rigid support for access floor panel, the system shall provide a minimum clear uninterrupted clearance between the bottom of the floor for electrical conduits and wiring etc. all complete as per the architectural drawings, as specified and as directed by the Engineer-in-charge.</p>	NS	1	sqm	3983.85

		<p>Providing and fixing Access Floor panel of 600x600x32 mm medium grade Filled Steel anti static high pressure Lamination of 800H grade (FS800H). Access Floor panel shall be steel welded construction with an enclosed bottom pan with uniform pattern of 64 hemispherical cones. The top and bottom plates of Steel Gauges: top 0.6 mm and bottom 0.7mm fused spot welded together (minimum 64 welds in each dome and 20 welds along each flange). The panel should be Corroresist epoxycoated for lifetime rust protection and cavity formed by the top and bottom plate is filled with Pyrogrip noncombustible Portland cementitious core mixed with lightweight foaming compound.</p>				
		<p>The access floor shall be factory finished with Anti-static High Pressure laminate with Non Warp technology upto 1mm thickness for superior adhesion and Surface flatness within 0.75mm. The panel is to withstand a Concentrated Load of 363 kgs applied on area 25mm x 25mm without collapse in the centre of the panel which is placed on four steel blocks. The panel will withstand and Uniformly Distributed Load (UDL) minimum 1250 kg/sqm and an impact load of 50kg all complete as per the approved manufacturers specification and as per the direction of Engineer-in-charge. All specification must be printed on the side of the panel to ensure the quality of the product-- .450 mm Finished Floor Height (FFH). sqm</p>				
115	3	<p>SUBHEAD XI-Supply & fixing of HHMD/DFMD, FIDS & BAGGAGE SCANNER---DFMD Supply, installation, testing & commissioning of Door Frame Metal Detector in compliance with Technical specification (should be NABL certified or other equivalent accredited labs from the country of origin of the equipment) including cabling and conduiting complete in all respect as per the direction of Engineer-in-charge. (CEIA, RAPISCAN U.K., Godrej or approved equivalent)</p>	NS	1	Each	503671
116	5	<p>HHMD--Supply of Hand Held Metal Detector, in compliance with Technical specification (should be NABL certified or other equivalent accredited labs from the country of origin of the equipment) complete in all respect as per the direction of Engineer-in-charge (CEIA, RAPISCAN U.K. Godrej or approved equivalent)</p>	NS	1	Each	5816
117	7	<p>FIDS Supply, Installation, Testing and Commissioning of Flight Information Display System (FIDS) i/c followings as 1 set complete in all respect or as approved by engineer-in-charge. Supply of 32" LED Display Monitor (With in-built Intelligent Controller) for Arrival & Departure with floor / ceiling / wall mount</p>	NS	1	Each	45000

118	3	Supply of Data Entry Terminal with accessories.	NS	1	Each	128965
119	1	Supply of FIDS Servers to work as Main & Standby (Set of 2 Servers) with accessories	NS	1	Each	285000
120	1	Supply of NTP Server with accessories	NS	1	Each	150000
121	2	Supply of 2x8KVA Parallel redundant UPS with 30 minutes back-up on full load and accessories	NS	1	Each	500000
122	1	Supply of L3 Switch with fully populated 8 Nos. Fibre port and 16 Nos. Copper port 100Mbps/1Gbps/10Gbps with LIU, Jack Panel & other accessories	NS	1	Each	600000
123	2	Supply of L2 Switch with fully populated 4 Nos. Fibre port and 24 Nos. Copper port 100/1000 Mbps/1Gbps with 19" wall mount Network Rack of suitable size, LIU, Jack Panel & other accessories	NS	1	Each	164406
124	1	Supply of 19"/ 42 RU Server Rack, integrated 17" TFT with KVM Switch, Keyboard, Mouse, power distribution strip with accessories	NS	1	Each	188105
125	2400	Supply & Laying of 25 mm dia, ISI marked PVC conduit with accessories and including wall cutting and plastering as required	NS	1	Mtr	241.67
126	900	Supply & Laying of UTP Cat 6 cable in conduit/ tray with accessories including termination with wall/ surface mount box as required	NS	1	Mtr	77.78
127	1200	Supply & Laying of 3 Core 2.5 sq mm multi-strand copper conductor PVC insulated PVC sheathed unarmoured power cable in existing conduit/ tray with accessories as required	NS	1	Mtr	112.5
128	700	Supply & Laying of 6 core MMF OFC unarmoured cable on wall/ surface/ tray with accessories as required	NS	1	Mtr	123.12
129	1	Supply of Licensed Operating System (Server Level) with support for all Servers	NS	1	Lot	400000

130	1	Supply of Operating System with support for all clients	NS	1	Lot	352000
131	1	Supply of Licensed Antivirus with support for all Servers	NS	1	Lot	30000
132	1	Supply of Licensed Antivirus (Client Level) with support for all clients	NS	1	Lot	30000
133	1	Supply of FIDS package Software as per requirement of the tender	NS	1	Lot	500000
134	1	Charges for the installation, Integration, Testing and Commissioning of the complete System with necessary power distribution boards, power point boxes etc. as per specifications	NS	1	Lot	1032880
135	1	Charges for Training and documentation	NS	1	Lot	452000
136	2	BAGGAGE SCANNERS Supply, Installation, Integration, Testing and Commissioning of Hand Baggage X-BIS with all accessories, CTP, operating console for monitors and keyboard, mounting arrangement for XBIS, Technical Documentation (soft copy and hard copy), options, overseas patents, and 01 Year onsite warranty after successful SAT etc. Also i/c training and any other miscellaneous item complete in all respect or as approved by engineer-in-charge.S/I/T/C of 03 KVA UPS with 1 hr battery back-up along with each Hand Baggage X BIS--Power Distribution Panel with complete set of accessories	NS	1	Set	3592745
137	1	Supply, Installation, Integration, Testing and Commissioning of Registered Baggage X-BIS with all accessories, CTP, operating console for monitors and keyboard, mounting arrangement for XBIS, Technical Documentation (soft copy and hard copy), options, overseas patents, and 01 Year onsite warranty after successful SAT etc. Also i/c training and any other miscellaneous item complete in all respect or as approved by engineer-in-charge.S/I/T/C of 05 KVA UPS with 1 hr battery back-up along with each Registered Baggage X BIS--Power Distribution Panel with complete set of accessories	NS	1	Set	5440500.00

138	1	<p><u>K) SUB ESTIMATE FOR FIRE FIGHTING</u> SUB HEAD -1 (WET RISER SYSTEM - PUMPING EQUIPMENTS) Supply, Installation, Testing and Commissioning of Electric Driven Main Fire Pump suitable for auto operation & consisting of following: complete in all respect as required.</p> <p>a) Horizontal type, multistage, centrifugal, split casing 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 70 Mtr. head 0 conforming to IS 1520</p> <p>b) Suitable HP SQ cage induction motor, TEFC, synchronous speed 1500 RPM, suitable for operation on 415Volts, 3 phase 50 Hz. AC with IP 55 protection for enclosure, horizontal foot mounted type with Class-'F' insulation, conforming to IS-325</p> <p>c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.</p> <p>d) Suitable cement concrete foundation duly plastered with anti vibration pads. Makes of Pumps: Kirloskar / Mather&Platt. Makes of Motors: Siemens/ ABB/ Kirloskar</p>	APSS	1	Set	390000
139	1	<p>Supply, Installation, Testing and Commissioning of Diesel Engine Driven Main Fire Pump suitable for auto operation and consisting of following: complete in all respect as required.</p> <p>a) Horizontal type, multistage, 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 70 Mtr head conforming to IS 1520</p> <p>b) Suitable HP, 1500 RPM water cooled with radiator, diesel engine conforming to relevant BS & IS standard complete with auto starting mechanism, 12 Volts / 24 Volts electric starting equipment, Diesel Tank, exhaust pipe extended upto 1 m. outside pump house duly insulated with 50mm thick glass wool with 1.0mm thick aluminium sheet cladding, residential silencer, instruments and protection as per specification, stop solenoid for auto stop in the event of fault with audio indications, painted with post office red colour etc as required.</p> <p>c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.</p> <p>d) Suitable cement concrete foundation duly plastered with anti vibration pads. Makes of Engines : Kirloskar / Cummins. Makes of Pumps : Kirloskar / Mather&Platt</p>	APSS	1	Set	678000

140	1	<p>Supplying, Installation, Testing and Commissioning of Electric Driven Pressurization Pump (Jockey Pump) suitable for auto operation and consisting of following: complete in all respects as required.</p> <p>a) Horizontal type, multistage, centrifugal pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal and flow of 180 lpm at 70 Mtr head conforming to IS 1520</p> <p>b) Suitable HP SQ cage induction motor TEFC type suitable for operation on 415Volts, 3 phase 50 Hz. AC with IP 55 class of protection for enclosure, horizontal foot mounted type with Class-'F' insulation, conforming to IS-325.</p> <p>c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.</p> <p>d) Suitable cement concrete foundation duly plastered with anti vibration pads.</p> <p>Makes of Pumps : Kirloskar / Mather&Platt. Makes of Motors : Siemens/ ABB/ Kirloskar</p>	APSS	1	Set	77860
141	1	<p>Supplying, Installation, Testing and Commissioning of electric driven Terrace pump suitable for automatic operation and consisting of following: complete in all respect as required.</p> <p>a) Horizontal type, multistage, centrifugal pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal and flow of 900 lpm at 45 Mtr head conforming to IS 1520</p> <p>b) Suitable HP SQ cage induction motor TEFC type suitable for operation on 415Volts, 3 phase 50 Hz. AC with IP 55 class of protection for enclosure, horizontal foot mounted type with Class-'F' insulation, conforming to IS-325</p> <p>c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.</p> <p>d) Suitable cement concrete foundation duly plastered with anti vibration pads.</p> <p>Makes of Pumps : Kirloskar / Mather&Platt. Makes of Motors : Siemens / ABB / Kirloskar</p>	APSS	1	Set	62450
142	1	<p>Fabricating, Supplying, Installation, Testing and Commissioning Air Vessel of continuous welded construction with flanged discharge header in pump house fabricated out of 10 mm thick MS sheet, Air Release Valve, complete with drain arrangement with 25 mm dia gun metal ball valve complete with all accessories etc. as required of the following sizes</p> <p>2 Meter high and 450 mm dia suitable to operate Jockey Pump, Main Fire Pump & Diesel Engine Driven Fire Pump complete with all pressure switches as per specifications as reqd.</p>	APSS	1	Nos	12080

143	14	SUB HEAD - II - (HYDRANTS SYSTEM) Supplying and fixing single headed Internal / External hydrant valve with instantaneous Gun metal couplings of 63mm dia with Cast iron wheel ISI marked conforming to IS 5290 (Type -A) with blank Gun Metal cap and chain as required. Makes: Audco / Kirloskar / BDK /H Shankar/ Leader/ Zolotto / Intervalve.	APSS	1	Each	8125
144	28	Supplying and fixing 63mm dia, 15 mtr long RRL hose pipe with 63mm dia Male and Female Gun metal / SS couplings duly binded with GI wire, rivets etc conforming to IS 636 (Type -A) as required. Makes: Newage/ Winco/ Padmini / Safex	APSS	1	Each	6140
145	14	Supply and fixing 63mm dia Gun metal branch pipe with 20mm (Nominal internal diameter) size Gun metal / SS nozzle conforming to IS 903, suitable for instantaneous connection to interconnect hose pipe coupling as required. Makes: Newage/ Winco/ Padmini / Safex.	APSS	1	Each	2530
146	10	Supplying and Fixing First Aid Hose Reel , wall mounting swinging type complete with drum & bracket of MS construction, spray painted in Post office Red, confirming to IS 884/1995 with upto date amendments, complete with the following as required. 36 Meter long 20 mm dia water hose Thermoplastic (Textile reinforced) Type - 2 as per IS : 12585 20 mm dia. ball valve & nozzle. Drum and brackets for fixing the equipments on wall. Connection from riser with 40 mm dia (Gun metal) stop valve & M.S. Pipe.	APSS	1	Each	7500
147	6	Supplying and fixing of hose cabinet of size 750mm X 600mm x 250mm made o	APSS	1	Each	3250
148	10	Providing & fixing angle iron (40mm x 40mm x 5mm) door frame and MS sheet (2mm thick) cum glass shutter of size 2.1 mtr x 1.2 mtr (N.S) with 25mm x 25mm x 3 mm angle frame all around & stiffened in between i/c hinges, handle, locking arrangement, painting with approved synthetic enamel paint i/c sign writing on glass at internal hydrant including providing & Fixing MS sheet 2mm thick on remaining portion above door to close opening i/c painting etc as required.	2.27/ DSR	1	Each	4832

149	160	Providing fixing, testing and commissioning of 15mm size quartzoid bulb type sp	6.1.2	1	Each	490
150	1	SITC of sprinkler installation valve Providing, fixing, testing, commissioning of installation control valve of Cast iron body and brass / Bronze working parts comprising of water, motor alarm, bronze seat clapper, and clapper arm, hydraulically driven mechanical gong bell to sound continuous alarm when the Wet riser / Sprinkler system activates, pressure gauges, emergency releases, strainer, pressure switch, cock valve complete with drain valve and bypass , test control box, ball valves, Ms pipe of required size, flanges, orifice plate, gasket etc of size 150mm dia as required. Makes : HD / TYCO / NEWAGE	9.84	1	Each	9500
151	4	Providing and fixing Flow Switches in 100mm dia MS pipe. Makes : System Sens	9.97.2	1	Each	5375
152	1	Providing and fixing Flow Switches in 150 mm dia MS pipe. Makes : System Sensor / Switzer / Approved makes	9.101.2	1	Each	7500
153	1	Supply and fixing 4 way fire brigade connection of cast iron body with 4 Nos Gun	10.2	1	Each	9100
154	1	Supply and fixing 2 way fire brigade connection of cast iron body with 2 Nos Gun metal Male instantaneous inlet couplings complete with cap and chain as required for 100mm dia MS pipe connection, conforming to IS 904 as required.	10.19	1	Each	6900
155	230	SUB HEAD - III - (PIPING, VALVES AND ACCESSORIES) SLTC of M.S. pipe on surface Providing , laying, testing & Commissioning of following classes MS pipes conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts, bolts, gaskets etc., complete. Makes: Jindal / Hissar / Tata pipes (b) 200 mm dia 'C' Class	10.20	1	Meter	3210
156	780	SUB HEAD - III - (PIPING, VALVES AND ACCESSORIES) SLTC of M.S. pipe on surface Providing , laying, testing & Commissioning of following classes MS pipes conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts, bolts, gaskets etc., complete. Makes: Jindal / Hissar / Tata pipes (d) 150 mm dia 'C' Class	10.25.1	1	Meter	2400

157	15	SUB HEAD - III - (PIPING, VALVES AND ACCESSORIES) SLTC of M.S. pipe on surface Providing , laying, testing & Commissioning of following classes MS pipes conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts, bolts, gaskets etc., complete. Makes: Jindal / Hissar / Tata pipes (f) 100 mm dia 'C' Class	10.25.2	1	Meter	1515
158	50	SUB HEAD - III - (PIPING, VALVES AND ACCESSORIES) SLTC of M.S. pipe on surface Providing , laying, testing & Commissioning of following classes MS pipes conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts, bolts, gaskets etc., complete. Makes: Jindal / Hissar / Tata pipes (h) 80 mm dia 'C' Class	10.26.1	1	Meter	1000
159	70	SUB HEAD - III - (PIPING, VALVES AND ACCESSORIES) SLTC of M.S. pipe on surface Providing , laying, testing & Commissioning of following classes MS pipes conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts, bolts, gaskets etc., complete. Makes: Jindal / Hissar / Tata pipes (j) 65mm dia 'C' Class	11.3.1	1	Meter	750
160	50	SUB HEAD - III - (PIPING, VALVES AND ACCESSORIES) SLTC of M.S. pipe on surface Providing , laying, testing & Commissioning of following classes MS pipes conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts, bolts, gaskets etc., complete. Makes: Jindal / Hissar / Tata pipes (l) 50 mm dia 'C' Class	21.1.1.2	1	Meter	600
161	45	SUB HEAD - III - (PIPING, VALVES AND ACCESSORIES) SLTC of M.S. pipe on surface Providing , laying, testing & Commissioning of following classes MS pipes conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts, bolts, gaskets etc., complete. Makes: Jindal / Hissar / Tata pipes n) 40 mm dia 'C' Class	21.1.2.2	1	Meter	512
162	40	SUB HEAD - III - (PIPING, VALVES AND ACCESSORIES) SLTC of M.S. pipe on surface Providing , laying, testing & Commissioning of following classes MS pipes conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts, bolts, gaskets etc., complete. Makes: Jindal / Hissar / Tata pipes (o) 32 mm dia 'C' Class	21.3.3	1	Meter	400
163	350	SUB HEAD - III - (PIPING, VALVES AND ACCESSORIES) SLTC of M.S. pipe on surface Providing , laying, testing & Commissioning of following classes MS pipes conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts, bolts, gaskets etc., complete. Makes: Jindal / Hissar / Tata pipes (q) 25 mm dia 'C' Class	21.8.1	1	Meter	300
164	600	Supplying and wrapping the anticorrosive material for buried pipes with coating of Primer and wrapping with 4 mm thick polymer corrosion resistant tape as per IS : 10221 with 15 mm overlap as per specificatio. 150 mm dia	21.13	1	Meter	45
165	10	Supplying and wrapping the anticorrosive material for buried pipes with coating of Primer and wrapping with 4 mm thick polymer corrosion resistant tape as per IS : 10221 with 15 mm overlap as per specificatio. 80 mm dia	21.16.2	1	Meter	30

166	2	Manufacture, Supply and delivery of CI Wafer Lug type Butterfly Valves conform	25.1	1	Each	11849
167	14	Manufacture, Supply and delivery of CI Wafer Lug type Butterfly Valves conform	25.2	1	Each	7631
168	7	Manufacture, Supply and delivery of CI Wafer Lug type Butterfly Valves conform	25.2	1	Each	5088
169	3	Manufacture, Supply and delivery of CI Wafer Lug type Butterfly Valves conform	25.2	1	Each	3812
170	1	Manufacture, Supply and delivery of CI Wafer Lug type Butterfly Valves conform	25.2	1	Each	3067
171	7	Providing, installation, testing and commissioning of dual plate non - return valve of following sizes confirming to IS: 5312 complete with rubber gasket, GI bolts, nuts, washers etc as required Makes: Audco / Kirloskar / BDK / H-Shankar / Leader/ Zolotto / Intervolve. 150 mm dia	25.2	1	Each	4000
172	3	Providing, installation, testing and commissioning of dual plate non - return valve of following sizes confirming to IS: 5312 complete with rubber gasket, GI bolts, nuts, washers etc as required Makes: Audco / Kirloskar / BDK / H-Shankar / Leader/ Zolotto / Intervolve. 100 mm dia	25.2	1	Each	3725
173	2	Providing, installation, testing and commissioning of dual plate non - return valve of following sizes confirming to IS: 5312 complete with rubber gasket, GI bolts, nuts, washers etc as required Makes: Audco / Kirloskar / BDK / H-Shankar / Leader/ Zolotto / Intervolve. 80 mm dia	25.2	1	Each	3500

174	3	Providing and fixing 25 mm dia inspecting & testing assembly with gunmetal v	25.2	1		5633
175	6	Supply, installation, testing and commissioning of 25 / 20mm dia Air Release Va	25.3	1	Each	1250
176	2	Providing and fixing resilient rubber neoprene lined single arch vibration elimina	25.3	1	Each	5436
177	3	Providing and fixing resilient rubber neoprene lined single arch vibration elimina	25.4	1	Each	6644
178	5	Providing and fixing resilient rubber neoprene lined single arch vibration elimina	NS	1	Each	7852
179	8	Providing and fixing M.S. epoxy coated puddle flanges of required size to water tanks as per standard details fabricated from heavy duty pipe and 6 mm thick M.S. Plate & 600 mm length with 3 coats of food grade epoxy paint. 150 mm dia	NS	1	Each	4228
180	2	Providing and fixing M.S. epoxy coated puddle flanges of required size to water tanks as per standard details fabricated from heavy duty pipe and 6 mm thick M.S. Plate & 600 mm length with 3 coats of food grade epoxy paint. 200 mm dia	NS	1	Each	5316
181	5	Supply, installation, testing and commissioning of Bourden type, stainless steel dial type pressure gauge with isolation valve and pipe having calibration of 0-16 kg/cm ² . MAKES: HGURU / FIEBIG and Approved makes	NS	1	Each	675
182	6	Providing and fixing of Pressure Switch in the MS pipe Line including connection	NS	1	Each	2500

183	1	Supplying, installation, testing and commissioning of annunciation panel made out of not less 1.6 mm thick CRCA sheet powder coated in approved colour with locking arrangement, audio and visual indication of fault and operation of automatic sprinkler, system monitoring including providing and fixing the following i/c connections interconnections etc. complete as required. The panel shall be Micro-processor type/solid state type. Monitoring 4 Nos. of flow switches. Monitoring the open circuit, short circuit and earth fault in control cable between panel and flow switches. Battery charger trickle cum boost to take complete load of annunciation panel complete with indication of low Battery voltage, mains failure and other accessories including providing and fixing of 2 Nos. 12 volts 24 AH each sealed maintenance free batteries and with audible alarm as reqd	NS	1	Each	99263
184	2	Supplying, installing, testing and commissioning approved make CI body Foot Valve with brass strainer with necessary flanges, nuts and bolts etc., complete on to the suction line. Rate as per the lowest quotation of Bharat Fire Safety Engineers. Makes: Normex & approved makes 150 mm dia	NS	1	Each	13280
185	5	Supplying and fixing of Fire Man's axe with heavy insulated rubber as per stand	NS	1	Each	846
186	15	Providing, fixing, testing and commissioning of Sprinkler Flexible Joint of 25mm diameter, consisting of - Flexible Tube (SS 304), S.S. Slip nut, Isolated Ring & O Ring - for Sprinklers Drop, which shall include necessary supports with a maximum working pressure of 14 kgf/cm ² and temperature rating of 225oF UL/ FM Listed. The length of Flexible Sprinklers Pipe shall be :- 1200 mm	NS	1	Nos	1208
187	15	Providing, fixing, testing and commissioning of Sprinkler Flexible Joint of 25mm diameter, consisting of - Flexible Tube (SS 304), S.S. Slip nut, Isolated Ring & O Ring - for Sprinklers Drop, which shall include necessary supports with a maximum working pressure of 14 kgf/cm ² and temperature rating of 225oF UL/ FM Listed. The length of Flexible Sprinklers Pipe shall be :- 1500 mm	NS	1	Nos	1450
188	8	SUB HEAD - IV - (FIRE EXTINGUISHERS) Supply and fixing of ABC stored pressure squeeze grip type fire extinguishers, 9 kg capacity, IS:15683 : 2006, filled with ABC Mono Ammonium Phosphate base powder-90 complete with discharge hose and wall mounting bracket, 2mm Mild Steel, EPDM Rubbers, Pressure Guage, which work effectively on all class of fires (A, B, C & Electrical fires) with 5 years warranty Including transportation, all taxes and all labour charges etc complete. Makes : Cease Fire / Minimax	NS	1	Nos	9180

189	8	Supply and fixing of Co2 type Fire Extinguishers 4.5 Kg capacity confirming to IS 2878 made from ISI marked steam less cylinder confirming to IS:7285 & CE certified and fitted with ISI marked controlled valve confirming to IS:3224, high pressure 1 Mtr discharge hose & horn complete with initial gas charged with carrying handle with wheels and wall mounting bracket. Squeeze lever discharge, used un-used indicator, Aphoxy coated paint (Red) with 93% gloss with 2 years warranty Including transportation, all taxes and all labour charges etc complete. Makes: Cease Fire / Minimax	NS	1	Nos	9961
190	8	Supply and fixing of DCP powder type cylindrical shape fire extinguisher 5 Kg with fixing hangers, hose, brackets, screws to required size etc., complete as per IS:13849 - wall mounted type. Makes: Minimax / Safex / Kenex / Reliance	NS	1	Each	3100
191	1	SUB HEAD - V - Gas flooding system (FIRE EXTINGUISHERS) Supply, installation, testing & commissioning of FM-200 Seamless Cylinder CCOE Approved, (100Ltrs.) including Valve assembly and arrangement for supervisory switch connection for monitoring linder pressure, a pressure gauge with a safety burst disc and a safety cap, 75 kg FM-200 Gas (1,1,1,2,3,3,3 Hepta fluoro propane) manufactured by Dupont, Electric Control Head operated electrically from the Detection & Control System or locally with a manual lever on the control head, Manual Operated Control Head, Manual Activation Mechanical box, SS Wire (12 mtrs), Wire Sleeve Aluminum - (12 mtrs.), Corner Pulleys (6 nos.), End of Line (2 nos.), Flexible discharge Hose route the FM-200 Agent from the storage cylinders to the discharge piping by a flexible rubber hose with wire braided reinforcements.This hose is connected to the discharge outlet of FM-200 cylinder valve and terminates at the system piping or discharged manifold, M S Container Strap, Gas Release Panel with battery back up.(1W+1S) 2Nos, Manual Release Switch, Manual Abort Switch, 2 Nos. Conventional Smoke Detector with base, Conventional Hooter, Piping, fittings & supports, etc. Pipe (S) : C.S. Seamless To ASTM A-106, SCH. 40. The detail as per given Below.	NS	1	Nos	105857
		FM-200 Seamless Cylinder CCOE Approved, (100 Ltrs.) (Siemens)				
192	1	Valve assembly and arrangement for supervisory switch connection for monitoring linder pressure, a pressure gauge with a safety burst disc and a safety cap.	NS	1	Nos	135497
193	75	FM-200 Gas (1,1,1,2,3,3,3 Hepta fluoro propane) manufactured by Dupont. (Siemens)	NS	1	Kg	5081

194	1	Electric Control Head operated electrically from the Detection & Control System or locally with a manual lever on the control head.	NS	1	Nos	93154
195	1	Manual Operated Control Head	NS	1	Nos	12703
196	1	Manual Activation Mechanical box.	NS	1	Nos	8469
197	1	SS Wire (12 mtrs), Wire Sleeve Aluminum - (12 mtrs)	NS	1	Lot	6521
198	1	Corner Pulleys (6 nos.), End of Line (2 nos.)	NS	1	Nos	7622
199	3	Discharge Nozzles are designed to provide the proper flow rate and distribution of FM-200 to total flood a hazard area : 180 deg. / 360 Deg.	NS	1	Nos	6775
200	1	Flexible discharge Hose route the FM-200 Agent from the storage cylinders to the discharge piping by a flexible rubber hose with wire braided reinforcements. This hose is connected to the discharge outlet of FM-200 cylinder valve and terminates at the system piping or discharged manifold.	NS	1	Nos	14820
201	2	M S Container Strap	NS	1	Nos	3387
202	1	Gas Release Panel with battery back up. (Raval)	NS	1	Nos	93154
203	1	Manual Release Switch. (Raval)	NS	1	Nos	6351

204	1	Manual Abort Switch (Raval)	NS	1	Nos	6351
205	2	Conventional Smoke Detector with base (Raval)	NS	1	Nos	3260
206	1	Conventional Hooter. (Raval)	NS	1	Nos	7622
207	120	2C x 1.5 Sq.mm Cable	NS	1	Mtr.	169
208	1	Piping, fittings & supports, etc. Pipe (S) : C.S. Seamless To ASTM A-106, SCH. 40	NS	1	Lot	119971
209	492	L) SUB ESTIMATE FOR ELECTRICAL WORKS Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.. Group C	DSR-1.3.3	1	Point	1094
210	16	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.	DSR-1.4	1	Point	1094
211	1465	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit alongwith 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	DSR-1.5	1	Metre	239
212	100	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	DSR-1.6	1	Metre	366

213	494	Wiring for circuit/ submain wiring alongwith earth wire with thefollowing sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required. 2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	DSR-1.7.2	1	Metre	206
214	540	Wiring for circuit/ submain wiring alongwith earth wire with thefollowing sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required. 2 X 6 sq. mm + 1 X 6 sq. mm earth wire	DSR-1.7.4	1	Metre	324
215	300	Wiring for circuit/ submain wiring alongwith earth wire with thefollowing sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required. 4 X 6 sq. mm + 2 X 6 sq. mm earth wire	DSR-1.7.9	1	Metre	518
216	200	Wiring for circuit/ submain wiring alongwith earth wire with thefollowing sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required. 4 X 10 sq. mm + 2 X 6 sq. mm earth wire	DSR-1.7.10	1	Metre	653
217	100	Wiring for circuit/ submain wiring alongwith earth wire with thefollowing sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required. 4 X 16 sq. mm + 2 X 6 sq. mm earth wire	DSR-1.7.11	1	Metre	930
218	5	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. Bell push	DSR-1.24.8	1	Each	114
219	135	Supply of 1 Module Modular type Electronic step type Fan Regulator.	ASOR-ELEC-1.9.30	1	Each	319
220	50	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	DSR-1.26	1	Each	24
221	800	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection etc. as required.	DSR-1.31	1	Each	313
222	688	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 amps modular socket outlet and 15/16 amps modular switch, connection etc. as required.	DSR-1.32	1	Each	406
223	20	Supply and fixing of Push type button motor starter for A.C Units including internal connection and labour charges for Flush Mounting etc.,complete.	ASR-ELEC-11.1.19	1	Each	799
224	33	Supplying and fixing 3 pin, 5 amp ceiling rose on the existing junction box/ wooden block including connection etc as required.	DSR-1.33	1	Each	46
225	33	Supply & fixing of 6A / 10A 1 Module Modular Bell Push with Neon Indicator.	ASR-ELEC-1.9.22	1	Each	90

226	5	Supplying and fixing call bell/ buzzer suitable for single phase, 230 volts, complete as required.	DSR-1.38	1	Each	61
227	135	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, including providing and fixing phenolic laminated sheet cover on the fan box etc. as required.	DSR-1.45	1	Each	132
228	33	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required. Upto 450 mm sweep	DSR-1.50.1	1	Each	224
229	33	Extra for fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	DSR-1.51	1	Each	99
230	15	Supply & fixing of 8 Way SPN DB with IP 43 Protection as per IS:13032 and suitable for 8 Nos S.P out goings and for 1 No Incommer etc complete.	ASR-ELEC-2.12.17	1	Each	956
231	2	Supply & fixing of 7 Segment 4 Way TPN DB with IP 42 Protection with provision for FPMCB / Isolator / RCCB / RCBO as incomer, 3Nos DPMCB / Isolator / RCCB / RCBO as sub incomer and 12 Nos SPMCB's as out going.	ASR-ELEC-2.12.32	1	Each	6500
232	444	Supply & fixing of 6-32A 10KA SP MCB, C/D Curve ISI Mark.	ASR-ELEC-2.9.1	1	Each	201
233	12	Supply & fixing of 40-63A FP MCB, C/D Curve ISI Mark. Makes: Legrand / Schneider.	ASR-ELEC-2.9.8	1	Each	1899
234	36	Supply & fixing of 63A 2 Pole RCCB 30mA.	ASR-ELEC-2.11.2	1	Each	3300
235	12	Supply of 40A 2 Pole RCCB 30mA,	ASR-ELEC-2.11.1	1	Each	2700
236	25	Supply & fixing of 63A 2 Pole RCCB 30mA,	ASR-ELEC-2.11.2	1	Each	3300
237	33	Supply & fixing of 20A SP Plug and Socket in SS enclosure.	ASRELEC-2.12.67	1	Each	590
238	5	Supply & fixing of 20A TP Plug and Socket in SS enclosure.	ASRELEC-2.12.68	1	Each	925

239	5	Supply & fixing of 32A TP Plug and Socket in SS enclosure.	ASRELEC-2.12.69	1	Each	1300
240	50	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	DSR-2.11	1	Each	7
241	12	Providing and fixing M.V. danger notice plate of 200 mm X 150 mm, made of mild steel, at least 2 mm thick, and vitreous enameled white on both sides, and with inscription in single red colour on front side as required.	DSR-2.21	1	Each	149
242	4	Providing and fixing H.T. danger notice plate of 250 mm X 200 mm, made of mild steel, at least 2 mm thick, and vitreous enameled white on both sides, and with inscription in single red colour on front side as required.	DSR-2.22	1	Each	163
243	20	Supply and Installation of 600mm x 50mm x 2mm thick GI perforated cable tray without cover along with required angle supports, with coupler plates, Anchor bolts and nuts etc complete and the tray should be fitted on the wall / Ceiling etc. complete.	ASR-ELEC-4.6.2	1	1RM	672
244	20	Supply and Installation of 450mm x 50mm x 2mm thick GI perforated cable tray with cover along with required angle supports, with coupler plates, Anchor bolts and nuts etc complete and the tray should be fitted on the wall / Ceiling etc. complete.	ASR-ELEC-4.6.3	1	1 RM	591.5
245	200	Supply and Installation of 300mm x 50mm x 2mm thick GI perforated cable tray without cover along with required angle supports, with coupler plates, Anchor bolts and nuts etc complete and the tray should be fitted on the wall / Ceiling etc. complete.	ASRELEC-4.6.4	1	1 RM	507.5
246	100	Supply and Installation of 150mm x 50mm x 2mm thick GI perforated cable tray without cover along with required angle supports, with coupler plates, Anchor bolts and nuts etc complete and the tray should be fitted on the wall / Ceiling etc. complete.	ASR-ELEC-4.6.5	1	1 RM	388
247	40	Supply and Installation of 600mm x 75mm x 2mm thick GI Ladder type cable tray along with required angle supports, with coupler plates, Anchor bolts and nuts etc complete and the tray should be fitted on the wall / Ceiling etc. complete.	ASR-ELEC-4.6.8	1	1 RM	385
248	56	Supply and fixing of 100mm x 38mm G I Raceways of 2mm thick with top cover and required hard ware etc complete.	ASR-ELEC-7.1.33	1	1 RM	460
249	16			1	RM	1035
250	15	Supply and fixing of 172mm x 52mm G.I. Junction box of 2mm thick for direct acces to cables at the inter section of Raceways.	ASR-ELEC-7.1.39	1	Each	340
251	15	Supply and fixing of 222mm x 52mm G.I. Junction box of 2mm thick for direct acces to cables at the inter section of Raceways.	ASR-ELEC-7.1.40	1	Each	430

252	15	Supply and fixing of 372mm x 52mm G.I. Junction box of 2mm thick for direct acces to cables at the inter section of Raceways.	ASR-ELEC-7.1.41	1	Each	830
253	483	Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting of all types, complete with all accessories and tube etc. directly on ceiling/ wall, including connection with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required.	DSR-1.41	1	Each	100
254	135	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable, including providing and fixing phenolic laminated sheet cover on the fan box etc. as required.	DSR-1.45	1	Each	132
255	33	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required. Upto 450 mm sweep	DSR-1.50.1	1	Each	224
256	33	Extra for fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	DSR-1.51	1	Each	99
257	23	Supplying of All Lights fixtures shall be complete with LED lamps, control gear & power factor improvement capacitor complete with all required accessories. Samples of all the fixtures with all available colour shall be submitted to the architect/ client/ Project Manager before supply & approval is taken. Please check the fixtures final quantity from the Architect / Project Manager before ordering and be sure of actual requirement prior to ordering.	ASR-ELEC-3.9.12	1	Each	1680
		Supply and Transportation of 12W Down lighter with system lumens of 1050lm, suitable for Recessed / Surface mounting made of diecast alluminium body with powder coating, acrylic diffuser with Driver, operating voltage range of 150 to 265 Volts AC, P.F > 0.9, Surge protection: 2KV, THD<15%, with high power LED's having efficacy of > 120 lumens/watt,CCT: 3000K - 5700K, minimum CRI>70, .etc., complete with 3 years warranty.				
258	167	Supply and Transportation of 18W Down lighter with system lumens of 1580lm, suitable for Recessed / Surface mounting made of diecast alluminium body with powder coating, acrylic diffuser with Driver, operating voltage range of 150 to 265 Volts AC, P.F > 0.9, Surge protection: 2KV,THD<15%, with high power LED's having efficacy of > 120 lumens/watt,CCT: 3000K - 5700K, minimum CRI>70, .etc., complete.	ASR-ELEC-3.9.13	1	Each	2722

259	40	Supply and transportation of 16W/20W, 1600/2000 lumens, T8,1200mm length LED retrofit tube light, input voltage AC 220 - 260 Volts with PF>0.9, Surge protection: 2KV,THD<15%, with inbuilt driver and frosted cover CCT: 3000K - 5700K, minimum CRI>70, .etc., complete.	ASR-ELEC-3.9.15	1	Each	1548
260	10	Supply of 1 x 11W Mirror light with all standard accessories diffuser.	ASR-ELEC-3.6.1	1	Each	678
261	10	Supply of Bulk head fitting with cast aluminium enamel painted body with water tight, clear glass with wire guard hinged with lock and key arrangements etc., complete.	ASR-ELEC-8.1.4	1	Each	396
262	221	Supply of 40W recess/surface mounted Slim panel LED light.	NS	1	Each	4645
263	10	Supply of LED exit signage of Box size in mm 325x425x365.	NS	1	Each	3694
264	2	Supply of LED aviation light luminaire.	NS	1	Each	8188
265	135	Supply of 48" (1200mm) Sweep , 5 Star rated Ceiling Fan, with double ball bearings , power input not more than 53W , air delivery more than 218 cubic meter/min and service value 4.11, but without Regulator.	ASR-ELEC-5.1.4	1	Each	1870
266	25	Supply of 12" (300mm) Light duty exhaust fan with wire guard etc complete.	ASR-ELEC-5.1.14	1	Each	1350
267	8	Supply of 15" (375mm) ISI, 900 RPM Heavy duty exhaust fan with metallic blades with Mark.	ASR-ELEC-5.1.17	1	Each	3220
268	478	Supply and transportation of LED Driver with input line voltage 120V-270V AC, 50Hz with surge protection more than 2.5 KV, IP20, suitable for 12 / 18 W LED down lighter with 2 Years Warranty.	ASR-ELEC-3.9.25	1	Each	375

269	1	Supply,Installation,Testing & Commissioning of micro processor controlled True On line double conversion, Stand Alone mode 3 Phase input and 3 phase 415V output UPS & each UPS consisting of followings : 1 No. 100% Rectifier + Inverter, Integrated in UPS module, Battery Circuit breaker, Galvanic Isolation transformer at the inverter output of UPS Module , Inbuilt Static switch for bypass and inverter in UPS module, Manual Maintenance bypass, Sealed Maintenance free batteries for 20 minutes backup time with UPS & inerconnectors, Rack and accessories and UPS to battery DC cable upto 10 meters. Ratings of the UPS as follows :- 2x15 kVA UPS operating in parallel redundant configuration(for Emergency Lighting,Work Stations, Fire Alarm, Server and CCTV,OTS).	NS	1	Set	1236238
270	1	Supply and installation of 7.5KVA, 180/192VDC true on line UPS system IGBT technology pure sine wave out put, double conversion with auto and manual static by pass switch single phase input / Single phase output.	ASR-ELEC-11.1.7	1	No.	94500
271	2	Supply of Advanced lighting protection with capturing head of 135 - 210mm diameter, 205 -580mm height and 4.60 - 4.940 kgs , and having Rod length 760mm, weight 1.795 kgs with stainless steel rod, working on the principle of (ESE) Early Streamer Emission technology, having a coverage radius of 79mts when mounted on 10 - 15 mts height of existing lattice tower giving level 1 protection and anticipation emission time of 60 micro seconds/72 micro seconds. The NIMBUS is manufactured according to standard NFC 17 102 and UNE 21186-96 including functional integrity etc Complete.	ASR-ELEC-6.5.16	1	No.s	115200
272	2	Installation and commissioning of advanced lighting protection systems which includes 1. Laying of CC Bed 2. Installation of Lighting Rod 3. Laying of Down conductor 4. Installation of Counter 5. Installation of Earth Electrodes 6. Interconnection between the Electrodes 7. Termination of down conductor to earth bus etc complete.	ASR-ELEC-6.5.17	1	Nos.	31200
273	2	Supply & fixing of electro-Mechanical counter.	ASR-ELEC-6.5.18	1	Nos.	16000
274	2	Providing earth electrode of low carbon steel rod of 17mm dia coated with 250 microns thick copper 3mtr long with clamps and 2 bags of LORESCO ZEROLITE back fill compound etc complete.	ASR-ELEC-6.5.19	1	Nos.	9600
275	1	Supply & fixing of down conductor of 1x70sqmm single core PVC insulated unarmoured copper conductor cable of ISI mark.	ASR-ELEC-6.5.20	1	Nos.	410

276	14	Providing and fixing of lightning conductor finial, made of 25 mm dia 300 mm long, G.I. tube, having single prong at top, with 85 mm dia 6 mm thick G.I. base plate including holes etc. complete as required.	DSR-6.2	1	Metre	304
277	10	Jointing copper / G.I. tape (with another copper/ G I tape, base of the finial or any other metallic object) by riveting / nut bolting/ sweating and soldering etc as required.	DSR-6.4	1	Each	57
278	2100	Providing and fixing G.I. tape 20 mm X 3 mm thick on parapet or surface of wall for lightning conductor complete as required.(For horizontal run)	DSR-6.7	1	Metre	66
279	120	Providing and fixing G.I. tape 20 mm X 3 mm thick on parapet or surface of wall for lightning conductor complete as required.(For vertical run)	DSR-6.8	1	Metre	100
280	22	Providing and fixing testing joint, made of 20 mm X 3 mm thick G.I. strip, 125 mm long, with 4 nos. of G.I. bolts, nuts, chuck nuts and spring washers etc. complete as required.	DSR-6.12	1	Each	73
281	1050	Providing and laying G.I. tape 32 mm X 6 mm from earth electrode directly in ground as required.	DSR-6.14	1	Metre	112
282	1500	Supply & fixing of 2 Pair, 0.5mm telephone copper wire.	ASR-ELEC-7.1.1	1	RM	10.1
283	1500	Supply & fixing of LAN Cable cat - 6 UTP cable.	ASR-ELEC-7.1.3	1	RM	25.8
284	50	Supply & fixing of Cat 6 RJ-45 information outlets including duel face plate.	ASR-ELEC-7.1.4	1	Each	340
285	3	Supply & fixing of 24 Port switches.	ASR-ELEC-7.1.5	1	Each	5200
286	50	Supply & fixing of 7 feet length moulded patch cord.	ASR-ELEC-7.1.8	1	Each	220
287	50	Supply & fixing of 3 feet length moulded patch cord.	ASR-ELEC-7.1.9	1	Each	200
288	3	Supply & fixing of 24 port patch panels.	ASR-ELEC-7.1.10	1	Each	6500
289	100	Supply & fixing of 10 Pair telephone Copper wire	ASR-ELEC-7.1.13	1	RM	40
290	6	Supply & fixing of 10 pair Telephone distribution box with back mount frame, krone connector, powder coated metal body with lock and key arrangement.	ASR-ELEC-7.1.16	1	Each	650

291	2	Supply & fixing of 6U floor mounting net work rack with power spike including all accessories.	ASR-ELEC-7.1.20	1	EACH	4700
292	1	Supply & fixing of 9U floor mounting net work rack with power spike including all accessories.	ASR-ELEC-7.1.21	1	EACH	5580
293	500	Supply & fixing of 12 Core (Indoor / Out door), Single mode armourd, Optic fibre cable.	ASR-ELEC-7.1.27	1	EACH	105
294	1	Supply & fixing of 6 port fibre distribution unit. (FDU / LIU) loaded with couplers etc complete.	ASR-ELEC-7.1.28	1	RM	7500
295	1	Supply & fixing of 12 port fibre distribution unit. (FDU / LIU) loaded with couplers etc complete.	ASR-ELEC-7.1.29	1	EACH	9500
296	1	Supply & fixing of Subscriber connector (SC) to SC / LC patch card of 1 Mtr length.	ASR-ELEC-7.1.30	1	EACH	2000
297	1	Supply & fixing of Pigtails for fibre core connectivity.	ASR-ELEC-7.1.31	1	EACH	350
298	150	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ recessed steel/ PVC conduit as required.	DSR-1.19	1	Metre	29
299	50	Supply & fixing of Modular socket type Telephone jack with Connector.	ASOR-ELEC-1.9.15	1	Each	100
300	10	Supply & fixing of Modular co-Axial socket type TV Antenna outlet.	ASOR-ELEC-1.9.16	1	EACH	98
301	125	Supplying and fixing of Hot Dip Galvanized Modular Box 1 or 2 Module box	ASOR-ELEC-	1	EACH	60
302	3200	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required. 25 mm	DSR-1.21	1	Meter	69

303	1	Supply Installation, Testing and Commissioning of Server Based EPABX Fully Computerized IP System, SIP Compliant. Multi slot 19: U Rack Mountable 2U Rack Expandable upto 700 Ports Presently Configuration as Below CO Line 10 Nos. PRI(30 Channel) 2 Nos. Digital Extension Circuits 10 Nos. Analog Extension Circuits 110 Nos. 64 SIP VOIP Trunk 1 Nos. Integrated Voicemail System 1 Nos.	NS	1	No.s	750300
304	1	Supply Installation, Testing and Commissioning of 4 Level IVR software with 6 different languages and 4 time schedule with Supply Installation, Testing and Commissioning of PC(As per OEM).	NS	1	Nos.	167597
305	1	Supply Installation, Testing and Commissioning of Digital Phone (32Key).	NS	1	Nos.	31988
306	10	Supply Installation, Testing and Commissioning of Digital Phone (12Key).	NS	1	Nos.	18659
307	1	Supply Installation, Testing and Commissioning of Cordless Phone with base dilling minimum 80-100 meters range.	NS	1	Nos.	10663
308	45	Supply Installation, Testing and Commissioning of Analog Speaker Phone with backlight and 4 memorable Key.	NS	1	Nos.	2066
309	30	Supply, installation, testing and commissioning of ceiling mounted indoor colour dome type camera 1/3" or 1/4" CCD 3.8 -10 mm Varifocal lens, auto iris, 580 TVL , Sensitivity 0.05 lux (color) and 0.005 lux (IR cut filter, B/W), Signal-to-Noise Ratio >50 dB ,True Day/ Night, Privacy zone ,OSD Menu for Easy Operation, Varifocal Manual zoom and focus adjustment, Connectors, Lens, Camera Mounts, including all Ancillary Equipment & accessories complete as per specifications. The AC power supply to CCTV as required shall be in electrical vendor scope. (All indoor areas)	NS	1	Nos.	11000

310	8	Supply, installation, testing and commissioning of Outdoor colour Bullet Type Camera 1/3" or 1/4" CCD 3.8-10 mm Varifocal lens, inbuilt IR (infrared) illuminators with 0 lux, 0.15 lux (color) ,720 TVL, high sensivity, high light compensation,wide dynamic range, Signal-to-Noise Ratio >50 dB ,True Day/ Night, Noise Reduction, OSD Menu for Easy Operation, Varifocal Manual zoom and focus adjustment, Connectors, Lens with sun-shield, Connectors, Lens, Camera Mounts, IP 66 housing and mounted on wall including all Ancillary Equipment & accessories complete as per specifications. The AC power supply to CCTV as required shall be in electrical vendor scope.(Outdoor areas-Wall).	NS	1	No.	19001
311	14	Supply, installation, testing and commissioning of Outdoor colour Bullet Type Camera 1/3" or 1/4" CCD 3.8-10 mm Varifocal lens, inbuilt IR (infrared) illuminators with 0 lux, 0.15 lux (color), 720 TVL, high sensivity, masking of vehicle head light, high light compensation, wide dynamic range, Signal-to-Noise Ratio >50 dB ,True Day/ Night, Noise Reduction, OSD Menu for Easy Operation, Varifocal Manual zoom and focus adjustment, Connectors, Lens with sun-shield, Connectors, Lens, Camera Mounts, Power Supply, IP- 66 housing and mounted on existing street light pole including all Ancillary Equipment & accessories complete as per specifications. The AC power supply to CCTV as required shall be in electrical vendor scope(Outdoor areas-Pole).	NS	1	No.	22000
312	52	Supply, installation, testing and commissioning of Surge protector for Video Balun Pairs. (Reputed)	NS	1	No.	1500
313	1	Supply, installation, testing and commissioning of 12VDC Power Supply for 52 nos. CCTV Cameras.	NS	1	No.	16550
314	4	Supply, installation, testing and commissioning of Real time triplex Digital Video Recorder(16 Chanel) for CCTV System as per specification and consisting of 16 camera inputs and 2 no. monitor output, 2 TB Hard disk storage and inbuilt DVD R/W drive.	NS	1	No.	125000
315	3	Supply, Installation and commissioning of 32" Full HD LED Professional Display for Monitoring with mounting accessories.	NS	1	No.	34109
316	1	Supply, installation, testing and commissioning of 42 u/9" width, 650 mm depth, rack assembly made of alluminium channels for the DVR and associated equipment.	NS	1	No.	25000

317	5000	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required. 2 x 1.5 sq. mm	1.17	1	Metre	37
318	4000	Supplying and fixing of following sizes of steel conduit along with accessories in surface/recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required 25 mm	1.2	1	Metre	147
319	1000	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required 25 mm	1.21	1	Metre	69
320	2500	Supply & laying of 75 Ohms (RG 59/U) copper conductor copper screen Co-axial cable in existing conduit as per specification.	NS	1	Metre	19
321	5	Supply, Installation , Testing and Commissioning of Micro processor based access control system Expandable, Networkable . TCP/IP protocol compatible distributed Intelligence, Supporting 2/4 Readers for 2/4 door can be expandable up to 32 Controller / 64 Reader up to distance 1 K.M, memory 20000 user per controller and 30000 event buffer, 24 time zone Levels, complete as per requirement.	5.1	1	Nos	53530
322	10	Supplying,installation, testing & commissioning of Centralised Power Supplying 12 volts DC SMPS minimum suitable for operation on 230 volts AC 50 Hz, inclosed in a painted metallic enclosure and one plug top for tapping power from 5 Amp socket nearby etc.	5.2	1	Nos.	3481
323		Supplying,installation, testing & commissioning of Web Based Access Control Software Access software for unlimited users with 3 branches, Global Antipassback, Area Control, Event and Alarms pop ups, Event and Alarm Email Service, Door Lock Unlock Sheduling, brief description as mentioned below:-				

324	1	Supplying, installation, testing & commissioning of Centralized access control software system for multiple companies and branches • Real Anti-passback, Timed Anti-passback and Global Anti-passback • Full support for any Wiegand based Smart Card Reader, PIN readers, long range readers or Biometric Readers • Map any input or event to any output in various operating modes (close on event close, manual close or timed) to realize BMS functionalities such as CCTV integration, fire alarm integration, alarm on intrusion detection, signal and light management. • Easy integration with any specialized access control hardware such as boom barriers, turnstiles or flap barriers • Remote door alarm monitoring and management Remotely change door lock from Lock to Unlock to Permanent Lock • Automatic detection and highly user friendly interface to configure controllers and interfaces • Comprehensive reports via WEB-INTERFACE (Access Reports) • Useful Tools to automatically manage database size, to take backups and restore • Reporting service for the periodic.	NS	1	Nos.	174582
325	10	Supplying, installation, testing & commissioning of 13.56 MHz Contactless Smart Card Readers Read Range Up to 3.25" (8.9 cm), Dimensions 4.8 cm x 10.3 cm x 2.3 cm, Power Supplying 5-16 VDC, Operating Temperature, Card Compatibility 16k bit (2k Byte), 32k bit (4k Byte) UL 294/cUL, Canada Certification.	5.4	1	Nos.	11834
326	1	Supplying, installation, testing, commissioning of Intel core I-7 (latest) Processor with EISA bus and with 3GHz minimum CPU speed, minimum of 8 GB RAM, 512 KB cache, 52X32X52X DVDRW+Blue ray RW Drive & 2TB HDD, optical Mouse, 106 keys keyboard, 10/100 Mbps Ethernet card, USB connection & internal modem, with for 32" LED HDTV over HDMI Port & Original Vista or Window 7 (Pro.) + M.S. Office (Pro.) loaded, & A4 Color Laser Jet printer. (For Access control).	5.5	1	Nos.	234517
327	50	Supplying, installation, testing & commissioning of I CLASS Smart Card.	5.6	1	Nos.	348
328	10	Supplying, installation, testing and commissioning of Emergency Green Box Unit CE/UL Certification NCOM/FARADAY	5.7	1	Nos.	2019
329	10	Supplying, installation, testing & commissioning of Stainless steel U-Bracket bracket for fully glass door to be used with Electromagnetic Lock CE/UL Certification.	5.8	1	Nos.	1740
330	10	Supplying, installation, testing & commissioning of Single Leaf EM lock with holding force of 600 lbs with LED feedback CE/UL Certification NCOM/FARADAY CE/UL Certification.	5.9	1	Nos.	5917

331	10	Supplying,installation, testing & commissioning of Stainless Steel Door Release Button with No/NC Contact, CE/UL Certification.	5.1	1	Nos.	2297
332	500	Supplying and laying of 8 Core 1.00 sq mm Cable 22 AWG, Shielded Cable.	5.11	1	Metre	177
333	50	Supplying and laying of 4 Core 1.00 sq mm Cable 22 AWG, Shielded Cable.	5.12	1	Mtr.	104
334	10	Supplying and Fixing of "L" Bracket with Accessories.	5.13	1	Nos.	2019
335	10	Supplying,installation, testing and commissioning of Exit push button.	5.14	1	Nos.	1740
336	1	Supply, Installation, testing and commissioning of wall mounting 2 loop micro processor based analog addressable fire alarm Control panel expandable by minimum 2 additional loops with minimum 80 character LCD display 4 access levels 1000 events, historical logging, flash E-PROM, 240 volts A C Power supply, automatic battery charger, 24V SLA batteries suitable for operating the entire system including tack back units and the hooters/strobes for a minimum of 4 hours in battery condition the panel shall have suitable power amplifiers for hooter / strobes the panel shall be capable beeing integrated with the BMS system and shall include cost of supply, installation of any additional modules or interfaces required for the same. The panel shall be completed as per the specification and as required fixing of 2 loop Micro processor based Fire Alarm control panel with zonal indications and battery back up as per detailed specifications.	ASR-ELEC-9.2.10	1	Nos.	215294

337	1	Supply, Installation, testing and commissioning of wall mounting 1 loop micro processor based analog addressable fire alarm Control panel expandable by minimum 2 additional loops with minimum 80 character LCD display 4 access levels 1000 events, historical logging, flash E-PROM, 240 volts A C Power supply, automatic battery charger, 24V SLA batteries suitable for operating the entire system including tack back units and the hooters/strobes for a minimum of 4 hours in battery condition the panel shall have suitable power amplifiers for hooter / strobes the panel shall be capable being integrated with the BMS system and shall include cost of supply, installation of any additional modules or interfaces required for the same. The panel shall be completed as per the specification and as required fixing of 1 loop Micro processor based Fire Alarm control panel with zonal indications and battery back up as per detailed specifications.	ASR-ELEC-9.2.12	1	Nos.	188100
338	1	Supply, Installation, testing and commissioning of intellegent analogue addressable Repeater panel including the cost of mounting accessories complete as per specification as required. Makes: Siemens / Morley / Bosch / Ravel.	ASR-ELEC-9.2.14	1	Nos.	101080
339	16	Supply and fixing of addressable wall mounting strobes cum hooters including the cost of mounting accessories complete as per specifications and as required including testing and commissioning.	ASR-ELEC-9.2.16	1	Nos.	5130
340	16	Supply and installation of addressable analogue manual call point with resetable flexible element to initiate alaram including the cost of mounting accessories etc. complete.	ASR-ELEC-9.2.18	1	Nos.	5325
341	30	Supply and instillation of intallegent analogue addressable photo electric smoke detector including cost of base plate etc., complete as per specification with required fittings and accessories.	ASR-ELEC-9.2.20	1	Nos.	5130
342	2	Supply and installation of intallegent analogue addressable rate of rise cum fixed temparature heat detectors including the cost of base plate. 75mm dia MS outlet box for fixing of the detector base, mounting accessories etc., complete as per specifications and as required.	ASR-ELEC-9.2.22	1	Nos.	4560
343	2	Supply and installation of intallegent analogue addressable multi criterion detectors below false ceiling/on ceiling including the cost of base plate. 75mm dia MS outlet box for fixing of the detector base, mounting accessories etc., complete as per specifications and as required.	ASR-ELEC-9.2.24	1	Nos.	5558
344	20	Supply and Installation of Intallegent analogue addressable Control Modules including the cost of mounting accessories complete as per specifications and as required.	ASR-ELEC-9.2.26	1	Nos.	4655

345	6	Supply and Installation of Intelligent analogue addressable monitor modules including the cost of mounting accessories complete as per specifications and as required.	ASR-ELEC-9.2.28	1	Nos.	4655
346	5	Supply and Installation of Intelligent analogue addressable fault isolator modules including the cost of mounting accessories complete as per specifications and complete as required.	ASR-ELEC-9.2.30	1	Nos.	3800
347	2200	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required. 2 x 1.5 sq. mm	DSR-1.17.2	1	Metre	37
348	100	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required. 4 x 1.5 sq. mm	DSR-1.17.4	1	Metre	64
349	200	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required. 4 x 2.5 sq. mm	DSR-1.17.13	1	Metre	97
350	2500	Supplying and fixing of following sizes of steel conduit along with accessories in surface/recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required 25 mm	DSR-1.2	1	Metre	147
351	1	Supply, Installation, Testing and Commissioning of DSP Based Audio Controller with inbuilt 500Watt Class- D Amplifier System for Public Address & Voice evacuation with:- 6 zones, class AB wiring, 8 monitored speaker circuits, On-panel display & zone keys, 5 audio inputs, Integrated & monitored Fireman microphone,, Event log incident data records upto 2047 incidents, amplifiers monitoring with switchover to backup amplifier, 7 band parametric equalisation. Compliance with EN 60849 , BS 5839 part 8 & EN 54-16 standards(DVA-6 ZONE)	NS	1	Nos.	387659
352	1	Supply, Installation, Testing and Commissioning of 500 Watt RMS single channel Class D Audio Power Amplifiers with following features:- 500W RMS per channel, Amplifier output 100V/ 70V/4 Ohm, Supply input AC 230/240V-50Hz DC 24V, short circuit protection. Thermal shutdown, overload protection, ventilating Fans, THD<0.1%, AC & DC Fuses, SNR > 80dB, (DPA500)	NS	1	Nos.	137132

353	1	Supply, Installation, Testing and Commissioning of Soft addressable microphone console with following features:-6 programmable buttons & 1 all call button, CAT 5e connection, RS-485 communication protocol, in-built pre-amplifier, hold & busy LED's, zone LEDs, any button programmable for zones, group zones, music ON/OFF, music volume, expansion port for adding keypads, 128kB audio storage memory, Unidirectional Condenser Microphone with Cardio Polar Reception, integrated monitoring speaker, 1000 metres distance from central PA rack(DVARM)	NS	1	Nos.	109288
354	1	Supply, Installation, Testing and Commissioning of Music source complete as required.	NS	1	Nos.	17403
355	5	Supply, Installation, Testing and Commissioning of Volume Controller for all the closed areas.	NS	1	Nos.	3411
356	70	Supply, Installation, Testing and Commissioning of 6W 3" dia Recessed Ceiling speakers with following features:- Complete Metal speaker with metal grill, line matching transformer 100/70V line. Variable wattage tapings of 6 / 3 / 1.5, Effective frequency range 120-17,500Hz (BS6840), SPL@1m/1W=92dB, 180 deg dispersion, snap on spring mounting, Peak SPL 97dB complete with necessary mounting hardware & accessories.	NS	1	Nos.	1740
357	4	Supply, Installation, Testing and Commissioning of 6W 3" dia wall mountable speakers with following features:- Complete Metal speaker with metal grill, line matching transformer 100/70V line. Variable wattage tapings of 6 / 3 / 1.5, Effective frequency range 120-17,500Hz (BS6840), SPL@1m/1W=92dB, 180 deg dispersion, snap on spring mounting, Peak SPL 97dB complete with necessary mounting hardware & accessories.	NS	1	Nos.	2297
358	600	Supply & fixing of LAN Cable cat - 6 UTP cable.	ASR-ELEC-7.1.3	1	RM	25.8
359	600	Supplying and fixing of following sizes of steel conduit along with accessories in surface/recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required 25 mm	DSR-1.20.2	1	Metre	147

360	1	<p>Supply, Installation, Testing and Commissioning of 8 Passanger Elevator, Machi</p> <p>1.Type of machine Gearless,MRL 2.Capacity 540kg 3.Speed 1 mps. 4.No of landing 5 Lnadings(G+3) 5.Number of openings 5 on the same side. 6.Travel approx 15.9 meter 7.Power Supplying 415v/240v, 50HZ 8.Acceptable voltage Fluctuation +10 to -20% 9.Rate of Accelaration / 0.6-1.5 (adjustable at site)</p> <p>10.Jerk (m/sec.sq) 0.7-1.5 (adjustable at site) 11.Vibration in car horizontal 20/18 MG maximum vertical 20/18MG maximum 12.Noise level in car 48dbA max. 13.Noise level in machine room 62dbA max. at 1m from machine 14. Door noise level while closing and 52dbA max. opening at a distance of 1mtr. from car door and 1.5 mtr. from floor level.</p>	NS	1	Nos.	2259750
361	1	<p>Supply, delivery, erection, testing and commissioning of a Three panel indoor duty totally enclosed sheet steel clad floor mounting, vermin proof, fully interlocked vertical isolation, extensible, horizontal draw out, air insulated, metal clad switchboard having double isolation features complete with circuits as detailed below. The switchboard would be complete with necessary PVC insulated copper busbars, small wiring, labels, cable eyes, cable termination to receive XLPE cables, foundation bolts and suitable for operation on 11 kV 3 phase, 50 cycle, earthed system with a rupturing capacity of 350 MVA.</p>	NS	1	set	1671024

All Incoming and outgoing feeders shall have fault trip auxiliary contacts for wiring to annunciation fault trip indication panel.

11 KV HT Switchboard -Indoor duty-(IP-52)

1 Incoming with 2 outgoing panel rquipt with following items.

1- Air insulated metal clad housing

1- set of 3 phase PVC insulated copper busbars 630 amps.

6- Single pole cluster type isolating contacts; i.e. plug and switches.

1- Triple pole EDO drawout truck mounted 11 kV 350 MVA, 630 amps

Vacuum circuit breaker fitted with arc control devices.

1- Trip free 230 V AC, motor charged spring release closing mechanism complete with necessary auxiliary switches emergency hand trip device and mechanical 'OFF' and 'ON' indicator.

6 NO/NC contacts for remote ON/OFF/TRIP status

1 - 24 volts DC shunt trip coil

3 - Dual Core Cast resin Current transformers of ratio 50/5 Class 5P10 and Class 1.0, 15 VA burden for protection & metering.

1- Strip heater with thermostat to prevent absorption of moisture

1- 3 Phase cast resin horizontal draw out line potential transformer ratio $11000/\sqrt{3} : 110/\sqrt{3}$ volts, connected star/star with H.V. and L.V. connections, H.V. and L.V. fuses, isolating plugs for H.V. and L.V. connection.

The instrument and relay panel fitted with

- 1- Square voltmeter of 96 x 96 mm scaled 0-12000 volt with 3 way and OFF selector switch.
- 1- Square Ammeter of 96 x 96 mm scaled 0-50 amps with 3 way and OFF selector switch.
- 1 no. energy analyser to measure voltage, current, power factor, frequency, kW/kVA, kWh, kVAh, Real time, date with communication module.
- 1- Triple pole numerical I.D.M.T. over current, short circuit and earth fault relay, with two outer elements connected for over current and the middle element for earth fault protection, over current setting 50% - 200%, Earth fault setting 20% -80% and with instantaneous element on all 3 pole settings 500-2000% on over current and 200-800% on earth fault (51, 50, 51N & 50N)
- 1 - Electro mechanical Master trip relay (86)
- 1 - Electro mechanical Anti pumping relay (94)
- 1 - Trip Circuit supervision relay.
- 1- set Electro mechanical auxiliary relay for transformer fault ALARM for winding temperature conditions (63x)
- 1 - no. circuit breaker control switch for electrical (T/N/C)
- 1 - push button on front door for emergency trip
- 1- set of Red/Green indicating lamps for close and open position
- 1- Amber indicating lamp for auto trip
- 1- clear indicating lamp for trip circuit healthy
- 1- set of white indicating lamps one per phase
- 1 - blue indicating lamp for spring charged
- 1- cable termination suitable for Raychem make cable joint to receive 11 KV XLPE cable 3 core 240 sqmm

The switchboard shall be complete with all interconnections, label wiring, etc as required and as per direction

<p>Outgoing:- Each Outgoing feeder consist with the following</p> <ul style="list-style-type: none"> 1- Air insulated metal clad housing 1- set of 3 phase PVC insulated copper busbars 630 amps 6- Single pole cluster type isolating contacts; i.e. plug and switches. 1- Triple pole EDO drawout truck mounted 11 kV 350 MVA, 630 amps Vacuum circuit breaker fitted with arc control devices. 1- Trip free 230 V AC, motor charged spring release closing mechanism complete with necessary auxiliary switches emergency hand trip device and mechanical 'OFF' and 'ON' indicator. 6 NO/NC contacts for remote ON/OFF/TRIP status 1 - 24 volts DC shunt trip coil 3 - Dual Core Cast resin Current transformers of ratio 25/5 Class 5P10 and Class 1.0, 15 VA burden for protection & metering. 1- Strip heater with thermostat to prevent absorption of moisture. 				
<p>The instrument and relay panel fitted with</p> <ul style="list-style-type: none"> 1- Square voltmeter of 96 x 96 mm scaled 0-12000 volt with 3 way and OFF selector switch. 1- Square Ammeter of 96 x 96 mm scaled 0-25 amps with 3 way and OFF selector switch. 1 no. energy analyser to measure voltage, current, power factor, frequency, kW/kVA, kWh, kVAh, kVAh, Real time, date with communication module. 1- Triple pole numerical I.D.M.T. over current and earth fault relay, with two outer elements connected for over current and the middle element for earth fault protection, over current setting 50% - 200%, Earth fault setting 20% -80% and with instantaneous element on all 3 pole settings 500-2000% on over current and 200-800% on earth fault (51, 50, 51N & 50N). 1 - Electro mechanical Master trip relay (86), 1 - Electro mechanical Anti pumping relay (94), 1 - Trip Circuit supervision relay, 1 - set of electro mechanical auxiliary relay for OLTC, 1- set Electro mechanical auxiliary relay for transformer fault ALARM for winding temperature conditions (63x) 1 - no. circuit breaker control switch for electrical (T/N/C), 1- set of Red/Green indicating lamps for close and open position 1- Amber indicating lamp for auto trip 1- clear indicating lamp for trip circuit healthy, 1- set of white indicating lamps one per phase 1 - blue indicating lamp for spring charged 1- cable termination suitable for Raychem make cable joint to receive 11 KV XLPE cable 3 core 240 sqmm <p>The switchboard shall be complete with all interconnections, label wiring, etc as required and as per direction,</p> <p>11 KV Three panel VCB Switchboard as described above</p>				

362	2	<p>Supply, erection, testing and commissioning of 230V, single phase 2 wire AC to</p> <p>Note:- All Meters shall be Digital type Potential free contact to be provided for HT trouble in each breaker to be used for The potential free contacts for transformer troubles annunciation & trips for WT</p>	NS	1	Set	60157
363	2	<p>Supply, installation, testing and commissioning of 400 kVA, 11000/433 volts Delta/Star, vector group Dyn11, indoor mounting, Dry Type, Air Natural transformer with OFF Load Tap Changers, suitable for incoming voltage variation of +5% to -5% . The transformer shall be provided with fittings, accessories, protection etc. winding temperature indicator, alarm/trip protection in LV chamber complete as per specifications and as required. The transformer shall be provided with arrangement to terminate XLPE cable on HT side and to connect Aluminium cable on LT side, complete as required. The losses of the Transformer should be as per latest ECBC guideline. Total 11/. 433 KV Transformer</p>	NS	1	Set	1073865

364	3	<p>Supply, installation, testing & commissioning of 125 KVA continuous rating, silent type (Prime Rating) radiator cooled diesel generating set alongwith complete fuel oil piping, antivibration mounts, base frame, required hardware, Batteries, Engine control panel with accessories, residential silencer, flexible connection, bellow / expansion joints etc.complete with all associated equipment / work as per specifications or requirements as per site.</p> <p>DG set shall be supplied with built in acoustic enclosure as per pollution control board norms and as per specification complete in all respect.The DG Set shall be complete with PCC (Power Command Control) or equivalent DG Controller module suitable for AMF (auto-mains failure), Auto Load Sharing & Interface with PLC mounted in the LT panel for ACB/MCCB switching and Auto load sensing and Auto load Management, including communication card and networking gateway and software as required. Note: Item rate shall be include 1st time filling of Lube oil & diesel and also include the cable termination box suitable for termination of 4 Runs 3.5 C X 300 Sqmm. XLPE AL cables at alternator.</p>	NS	1	Set	1034819
1031	3	<p>Supply, installation, testing & commissioning of 990 litres capacity day oil storage tank fabricated from 6 mm thick MS plates. Tank shall include 450 mm ID manhole cover, level indicator with duly calibrated scale and flanged connection for inlet, outlet, overflow drain and probe provision for level controller & breather.</p>	2.1	1	Set	35000

1032	1	<p>The contractor shall consider the following details in their item rates, wherever required:</p> <p>Supporting rigid steel framework. Cubicle type, 14 gauge CRCA sheet steel enclosure. Complete with interconnections and distribution bus bars. Proper bonding to earth. Painting/lettering on Breakers and distribution boards The location they serve, providing on each panel its circuit diagram Providing cable clamps / supports within distribution boards cable alley. TPN ACB's / MCCB's shall mean 3 pole ACB's / MCCB's with adequate size of neutral link. All MCB's shall be of minimum 10 KA breaking capacity. All motor feeders MCCBs shall be of motor duty. Distribution panels shall be Powder Coated with Siemens gray paint shade no. RAL-7032 of IS-5. Degree of protection for following type of distribution panel enclosure shall be as per IS:13947-1993. IP 42 for indoor panels. IP 54 for kitchen and laundry panels. IP 55 for outdoor panels All MCCB's shall be provided with operating mechanism for door interlock. Current density of aluminium shall be 1 sq mm for 1.0 amps for rated current of bus bars and current density of copper shall be 1 sq.mm for 1.25 amps for rated current of bus bars. Tinned copper earth bus shall be provided through out the length of each board. All measuring instruments (Meters) shall be of digital electronic with LED of approved make and compatible with BAS. All hinged door shall be earthed through 4.0 sq mm tinned braided copper wire.</p>	NS	1	Set	2050683
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All panels shall have provision of the following:

Pad locking of Switch board doors.

Pad locking of MCCB's handles in "OFF" Position.

Additional set of C.T.s, potential free contacts, connectors, contactors with wiring etc are to be provided for BAS including space required for various transducers in Main Switch Board sections. Only transducers shall be supplied by BAS contractor.

All MCB's used for protection of resistive and lightly inductive load shall be type "B" characteristic and inductive (motor) load shall be of type "C" characteristic and discharge lamps and UPS etc. shall be of type D characteristic.

All incoming and outgoing air circuit breakers shall be placed on middle portion of the vertical in single tier formation.

All PTs / control transformer shall be provided with centre tap earth secondary.

All DOL & Star-Delta Starters shall be provided with SPPR (single phase preventor relay) and 2 nos. of Aux.Contacts for Remote operation/monitor. The Panel fabricator shall provide Al./ Copper Bus-bars link from Breakers wherever more than two nos. of cables are terminated in the breakers.

Readymade 16 SWG Sheet steel Enclosure with cutout For MCBs

The breaking capacity of MCCB's are mentioned panel wise. All MCCB's shall be with thermal magnetic releases upto 250 amps and microprocessor based above 250 amps capacity, unless specified otherwise.

Protection Releases Microprocessor based (PRMB) & Thermal magnetic (PRTM) shall be as described below .

<p>Protection Release Microprocessor Based (PRMB-1)</p> <p>Over-current/long time protection range 40% - 100 % with Time setting</p> <p>short circuit /short time protection range 100% - 1000 % with Time setting</p> <p>Instantaneous short circuit Protection range 150% - 1200 % with Time setting</p> <p>Earth Fault Protection range 20% - 100 % with Time setting</p> <p>Under voltage & over voltage protection</p> <p>Reverse power</p> <p>Current unbalance</p> <p>Phase sequence</p> <p>Measurements</p> <p>Voltage</p> <p>Current</p> <p>Power (Active,Reactive & Apparent)</p> <p>Energy ((Active,Reactive & Apparent)</p> <p>Power factor</p> <p>Frequency</p>
<p>Protection Release Microprocessor Based (PRMB-2)</p> <p>Over-current/long time protection range 40% - 100 % with Time setting</p> <p>short circuit /short time protection range 100% - 1000 % with Time setting</p> <p>Instantaneous short circuit Protection range 150% - 1200 % with Time setting</p> <p>Earth Fault Protection range 20% - 100 % with Time setting</p> <p>Measurements</p> <p>Current</p>
<p>Protection Release Microprocessor Based (PRMB-3)</p> <p>Over-current/long time protection range 40% - 100 % with Time setting</p> <p>Instantaneous short circuit Protection range 150% - 1200 % with Time setting</p>
<p>Protection Release Thermal-Magnetic Based (PRTM)</p> <p>Over-current</p> <p>Short circuit</p>

Design, fabrication, assembly, wiring and supply of front operated dead front cubicle type compartmentalised as per Form 3B, rear access free standing, dust and vermin proof (IP 42 ingress protection) main switchboards suitable for use at 415 volts, 3 phase 4 wire 50 Hertz system suitable for a symmetrical fault level of 25 kA at 415 volts, fabricated from 2 mm thick CRCA MS sheets with hinged, gasketed (metal based neoprene) and lockable doors having structural reinforcement with suitable angle/channel/T/flat sections including 3 mm thick gland plates on top and bottom and including lifting hooks and including GI earth strip of required size with 2 nos earthing terminals and including powder coated paint finish of approved shade over metal surface cleaned and treated with seven tank process complete with interconnections etc as per specifications, as required and as below.

(Note: The contractor may select the next higher fault rating of MCCB if it is not readily available, without any extra cost, as the figure indicated within the bracket are required maximum fault level of the panel).

MAIN LT Panel

INCOMER FROM TRANSFORMER From 400 KVA Transformer

2 Nos. 800A 4 pole microprocessor based EDO, ACB(50kA) with integral protection as per PRMB-1 mentioned in Preamble,

1 set of 800/5A, 15 VA, class-1 CTs for APFC relay

1 set of R,Y,B phase indicating lamps each with 3 nos. 2A SP MCBs.

1 No. (0-500V) Voltmeter with Built-in VSS with 3 nos. 2A SP MCB

1 No. (0-800A) Ammeter with ASS with 3 nos. 800/5A CT's

1Set- of ON/OFF/Trip/ Spring Charged & Trip circuit healthy indicating lamps.

240 V AC Motor wound spring closing mechanism

1 - 24 volts DC shunt trip coil

6 nos NO/NC contacts for remote opening & closing

Terminals to receive XLPE insulated Aluminium cables

Class - B transient voltage surge suppression devices suitable for 3 phases as per specification.

<p>INCOMER FROM DG SYNCHRONISATION PANEL</p> <p>2 Nos. 300A 4 pole microprocessor based MCCB(25kA) with integral protection as per PRMB-2 mentioned in Premable</p> <p>2 Nos. 300A 4 pole Contactors for E/M interlocking.</p> <p>Each I/C consist with</p> <p>1 set of R,Y,B phase indicating lamps each with 3 nos. 2A SP MCBs.</p> <p>1 No. (0-500V) Voltmeter with Built-in VSS with 3 nos. 2A SP MCB</p> <p>1 No. (0-300A) Ammeter with ASS with 3 nos. 300/5A CT's</p> <p>1 Set- of ON/OFF/Trip & Trip circuit healthy indicating lamps.</p> <p>240 V AC Motor wound spring closing mechanism</p> <p>1 - 24 volts DC shunt trip coil</p> <p>6 nos NO/NC contacts for remote opening & closing</p> <p>Terminals to receive XLPE insulated Aluminium cables</p> <p>Class – B transient voltage surge suppression devices suitable for 3 phases as per specification.</p>				
<p>BUS BARS</p> <p>Electrolytic high conductivity Aluminium three phase and neutral busbars with earthing rated at 1000 amps having a maximum current density of 1 amp per sq mm suitable to with stand symmetrical fault level of 25 kA at 415 volts. The neutral busbar is to be of 50% capacity.</p>				
<p>BUS COUPLER:-</p> <p>1 No. 800A FP EDO ACB(50kA) with all required accessories.</p> <p>1 Set of Breaker ON-OFF-TRIP, Spring charged indication Lamps as required.</p>				
<p>OUTGOINGS-Bus Section-1</p> <p>3 Nos. 300A TP+NL MCCB (25 KA)</p> <p>1 No. 250A TP+NL MCCB (25 KA)</p> <p>1 No. 100A TP+NL MCCB (25 KA)</p> <p>4 Nos. 63A TP+NL MCCB (25 KA)</p>				
<p>OUTGOINGS-Bus Section-2</p> <p>1 No. 300A TP+NL MCCB (25 KA)</p> <p>2 Nos. 200A TP+NL MCCB (25 KA)</p> <p>6 Nos. 63A TP+NL MCCB (25 KA)</p> <p>2 Nos. 32A TP+NL MCCB (25 KA)</p>				
<p>Micro PLC for Electrimechanical interlocking between Transformer I/C, DG I/C Main LT Panel as described above</p>				

		<p>The outgoing feeders as indicated in SLD shall have suitable range of followings (except capacitor feeders)</p> <p>Three phase indicating lamps protected by 2 amps SP MCBs.</p> <p>All ACB's shall be suitable for minimum 25 kA (Icu=Ics=Icw for 1 sec.)</p> <p>415/110V suitable rating control transformer and shall be provided for aux. control supply.</p> <p>Wiring with space heater, thermostat and control MCB's shall be provided for all vertical sections of main LT panel.</p> <p>All breakers shall be interlocked as per schematic diagram through Mini PLC with Auto load management and Amf operation control (without display)</p> <p>All incoming as well as outgoing feeders shall have pad locking facility.</p> <p>Suitable danger board shall be provided.</p> <p>Incase of Fire, Fire pumps along with other ventilations and pressurization fans designed shall become operational. Interlocking with LT panel shall be carried out accordingly.</p>				
		<p>DG Synchronisation Panel</p> <p>INCOMER FROM DG Set</p> <p>From 125 KVA DG Set</p> <p>3 Nos. 250A 4 pole microprocessor based MCCB(25kA) with integral protection as per PRMB-2 mentioned in Preamble</p> <p>3 Nos. 250A 4 pole Contactors for E/M interlocking.</p> <p>Each I/C consist with</p> <p>1 set of R,Y,B phase indicating lamps each with 3 nos. 2A SP MCBs.</p> <p>1 No. (0-500V) Voltmeter with Built-in VSS with 3 nos. 2A SP MCB</p> <p>1 No. (0-250A) Ammeter with ASS with 3 nos. 250/5A CT's</p> <p>1 Set- of ON/OFF/Trip & Trip circuit healthy indicating lamps.</p> <p>240 V AC Motor wound spring closing mechanism</p> <p>1 - 24 volts DC shunt trip coil</p> <p>6 nos NO/NC contacts for remote opening & closing</p> <p>Terminals to receive XLPE insulated Aluminium cables</p> <p>Class - B transient voltage surge suppression devices suitable for 3 phases as per specification.</p>				
1033	1	<p>BUS BARS</p> <p>Electrolytic high conductivity Aluminium three phase and neutral busbars with earthing rated at 600 amps having a maximum current density of 1 amp per sq mm suitable to with stand symmetrical fault level of 25 kA at 415 volts. The neutral busbar is to be of 50% capacity.</p>	NS	1	Set	630078

		<p>OUTGOINGS</p> <p>2 Nos. 300A TP+NL MCCB (25 KA)</p> <p>PLC FEEDER- AUTO ON/OFF AND AUTO LOAD MANAGEMENT & DG SYNCHRONISATION : Hardware using PLCs for Monitoring of all Electrical Software and for operations,synchronisation, controlling and interlocking Parameters of 3 Nos. DG sets with Window based software & Engineering & Software Development. Required Aux. Relays, Push Buttons & Indication lamps, 1KVA UPS for Black start & maintenance free Batteries, Power monitors, Programmable Logic controller, Annunciator and status Fascia, MIMIC with LED circuit etc as required completing the system.(As per SLD). The Switchboard with Logic control panel shall be complete with all interconnections, risers, internal wiring, labels, control/circuit fuses etc. complete as required.</p> <p>DG Synchronisation Panel as described above</p>				
1034	2	<p>Capacitor Panel (150 kVAR)</p> <p>INCOMER</p> <p>1 No. 300A TPN MCCB (25 KA) as per PRMB-3 as mentioned in Preamble.</p> <p>METERING & INDICATION</p> <p>1 set of phase indicating lamps</p> <p>1 No. 8 step-Microprocessor APFC controller/Relay(Dual source purpose) shall continuously monitoring all three phases and LCD displays for various Electrical Parameters like voltage, input current, capacitive current, KVA demand, KW, Power Factor, self diagnostic error code indication with printout facility of the above with RS 232/RS 485 port. Controller should mounted on the front side of the panel. Capacitor bank having 3 phase MPP based mix dielectric low loss ISI marked power capacitor and provided with Electronic Thirstier based switching to suppress switching of inrush current and reducing harmonics capacitor life.</p> <p>BUS-BAR</p> <p>1 Set of 400A TPN Aluminium Bus Bar with colour coded PVC Sleeves</p>	NS	1	Set	250174

OUTGOINGS

1 No.of 125A TP MCCB (25 KA) each with
1 No. 50 KVAR capacitor Bank each with 7% harmonic & discharge resistor with thyristor module suitable capacity to carry expected current continuously.
3 Nos.of 80A TP MCCB (25 KA) each with
3 Nos. 25 KVAR capacitor Bank each with 7% harmonic & discharge resistor with thyristor module suitable capacity to carry expected current continuously.
2 Nos. of 32A TP MCCB (25 KA) each with
2 Nos. 10 KVAR capacitor Bank each with 7% harmonic & discharge resistor with thyristor module suitable capacity to carry expected current continuously.
1 No. of 25A TP MCCB (25 KA) each with
1No. 5 KVAR capacitor Bank each with 7% harmonic & discharge resistor with thyristor module suitable capacity to carry expected current continuously.
Capacitor Panel (150 kVAR) as described above

Note:The capacitor panel shall also stipulate the following

- (i) All the capacitors shall be suitable for 525 V
- (ii) Necessary control and firing card with proper wiring and lugs of the required rating to be provided.
- (iii) Heavy duty exhaust fans to be provided for cooling Thyristors.
- (iv) LED indication for number of capacitor banks 'ON & Power Factor lagging or leading.
- (v) The APFC shall be protected from following
 - * over-voltage & voltage unbalance
 - * Over temperature-system should be in standby mode and automatically restart after above condition restored.
 - * Total Harmonic Distortion

1035	1	<p>FRONT OPERATED PANEL Design, manufacture, supplying fixing in position of the following front operated cubicle type, compartmentalised with front access, dead back, 2mm thick steel enclosed free standing, dust and vermin proof, switchboard with IP42 protection with hinged and lockable doors complete with interconnections, tinned copper crimping lugs, bonding to earth and painting, suitable for use at 415 volts, 3 phase 4 wire 50 Hertz system, and suitable for a fault level of 25 KA symmetrical at 415 volts. All switchboards shall be modular type and have provision for entry of cables from the top /bottom as required. The cost shall include providing and fixing of 100 x 50 x 6 mm channels for switchboard support. All live accessible parts shall be shrouded and all equipment shall be finger touch proof. The Busbars insulation shall be with heat shrinkable sleeves. SMC/DMC shrouds and busbar supports shall be used. All MCCB shall have phase barriers, rotary handles and extension terminal as required . All unbalanced kWh meter shall have communication module for BMS connectivity</p>	NS	1	Set	102326
		<p>MDB- 1 (Terminal Block) INCOMER 1 No. 300 amps 4P MCCB(25 KA) with protection release (PRMB-2) with Class-C transient voltage surge suppression device suitable for 3 phases as per specifications.</p>				
		<p>METERING & INDICATION 1 set of R,Y,B phase indicating lamps 1 No. (0-500V) Voltmeter with Built-in VSS with 3 nos. 2A SP MCB 1 No. (0-300A) Ammeter with ASS with 3 nos. 300/5A CT's 1 No. Digital Electronic KWH meter(Dual Source).</p>				
		<p>BUS-BAR 1 Set of 400A TPN Aluminium Bus Bar with colour coded PVC Sleeves</p>				
		<p>OUTGOINGS 4 Nos. 63A TP+NL MCCB (25 KA) 1 No. 40A TP+NL MCCB (25 KA) 5 Nos. 63A 4P MCB (10 KA) 6 Nos. 40A 4P MCB (10 KA) MDB- 1 (Terminal Block) as described above</p>				

1036	1	<p>SDB- 1.1 (UPS Panel- Terminal Block) INCOMER 2 Nos. 63 amps 4P MCCB(25 KA) with thermal Magnetic release (PRMB-3) with Class-C transient voltage surge suppression device suitable for 3 phases as per specifications. 2 Nos. 63 amps 4P Contactor for E/M interlocking.</p> <p>METERING & INDICATION 1 set of R,Y,B phase indicating lamps 1 No. (0-500V) Voltmeter with Built-in VSS with 3 nos. 2A SP MCB 1 No. (0-63A) Ammeter with ASS with 3 nos. 60/5A CT's 1 No. Digital Electronic KWH meter(Dual Source).</p> <p>BUS-BAR 1 Set of 100A TPN Aluminium Bus Bar with colour coded PVC Sleeves</p> <p>BUS COUPLER 1 No. 63 amps 4P MCCB(25 KA) with thermal Magnetic release (PRMB-3) 1 Nos. 63 amps 4P Contactor for E/M interlocking.</p> <p>OUTGOINGS 4 Nos. 63A 4P MCB (10 KA) 4 Nos. 40A 4P MCB (10 KA) SDB- 1.1 (UPS Panel- Terminal Block) as described above</p>	NS	1	Set	108270
1037	1	<p>1 No. 200 amps 4P MCCB(25 KA) with protection release (PRMB-2) with Class-C transient voltage surge suppression device suitable for 3 phases as per specifications.</p> <p>METERING & INDICATION 1 set of R,Y,B phase indicating lamps 1 No. (0-500V) Voltmeter with Built-in VSS with 3 nos. 2A SP MCB 1 No. (0-200A) Ammeter with ASS with 3 nos. 200/5A CT's 1 No. Digital Electronic KWH meter(Dual Source).</p> <p>BUS-BAR 1 Set of 300A TPN Aluminium Bus Bar with colour coded PVC Sleeves</p> <p>OUTGOINGS 1 No. 63A TP+NL MCCB (25 KA) 1 No. 40A TP+NL MCCB (25 KA) 3 Nos. 63A 4P MCB (10 KA) 6 Nos. 40A 4P MCB (10 KA) MDB- 2 (ATC Block) as described above</p>	NS	1	Set	82267
1038	1	<p>MDB - 3 (Pump Room Panel) INCOMER 1No. 100A FP MCCB (25 KA) with thermal Magnetic release (PRTM) with Class-C transient voltage surge suppression device suitable for 3 phases as per specifications.</p>	NS	1	Set	224913

		<p>METERING & INDICATION 1 set of R,Y,B phase indicating lamps 1 No. (0-500V) Voltmeter with Built-in VSS with 3 nos. 2A SP MCB 1 No. (0-100A) Ammeter with ASS with 3 nos. 100/5A CT's 1 No. Digital Electronic KWH meter(Dual Source).</p> <p>BUS-BAR 1 Set of 160A TPN Aluminium Bus Bar with colour coded PVC Sleeves</p> <p>OUTGOING 3 Nos. 9-13A (50KA) TP MPCB . 4 Nos.1.6-2.5A (50KA) TP MPCB . 3 No.2.5-4A (50KA) TP MPCB . 1 No. 32A TPN MCB(10KA. The Switchboard shall be complete with all interconnections, risers, internal wiring, labels etc complete as required. Fully automatic DOL starters (for 1 to 5 H.P.motors) with push buttons and on/off indicating lights with MN type relay, contactors, direct type ammeter (1.6-13A for 1.5 to 5 HP), single phase preventors for all motors, with selector switch and fuses overload relay as required. 5 HP - 3 No.Starter 1.5 HP -4 Nos.Starter 2 HP -3 Nos.Starter Spare N.O. - N.C. contacts for each starter - 3Set. G.I. strip 25 x 3 mm throughout the length of MCC. All internal wiring with colour coding from incoming mains to various switchgear, starter, meter, indicating lamp and bus bar. All starters shall be compatible for remote operation.All Switch gears offered must be compatible with the H.P. of the motors offered MDB - 3 (Pump Room Panel) as described above</p>				
1039	1	<p>MDB - 4 (Fire Pump) INCOMER 1No. 250A FP MCCB (25 KA) with thermal Magnetic release (PRTM) with Class-C transient voltage surge suppression device suitable for 3 phases as per specifications.</p> <p>METERING & INDICATION 1 set of R,Y,B phase indicating lamps 1 No. (0-500V) Voltmeter with Built-in VSS with 3 nos. 2A SP MCB 1 No. (0-250A) Ammeter with ASS with 3 nos. 250/5A CT's 1 No. Digital Electronic KWH meter(Dual Source).</p> <p>BUS-BAR 1 Set of 300A TPN Aluminium Bus Bar with colour coded PVC Sleeves</p>	NS	1	Set	278406

		<p>OUTGOING 3 Nos.160A(15kA) TP MCCB . 1 No. 9-13A (50KA)TPN MPCB . 1 No. 25A TPN MCB(10KA).</p> <p>The Switchboard shall be complete with all interconnections, risers, internal wiring, labels etc complete as required. Fully automatic DOL starters (for 6 H.P. motors) with push buttons and on/off indicating lights with MN type relay, contactors, direct type ammeter (9-13A for 6 HP), single phase preventors for all motors, with selector switch and fuses overload relay as required. Fully automatic Star Delta starters (for 70 H.P. motors) with push buttons and on/off indicating lights with MN type relay, contactors, direct type ammeter (0-160A for 70 HP), single phase preventors for all motors, with selector switch and fuses overload relay as required. 70 HP -2 Nos.(Main Electrical pump & Main Sprinkler Pump) Starter. 6 HP - 1 No.(Jockey Pumps) Starter Spare N.O. - N.C. contacts for each starter - 3Set. G.I. strip 25 x 3 mm throughout the length of MCC. All internal wiring with colour coding from incoming mains to various switchgear, starter, meter, indicating lamp and bus bar. All starters shall be compatible for remote operation.All Switch gears offered must be compatible with the H.P. of the motors offered</p> <p>MDB - 4 (Fire Pump) as described above</p>				
1040	6	<p>MDB- 5 (External Lighting Feeder Pillar) Supply and fixing of suitable feeder pillar box made with 14 SWG CRCA sheet including S & F of Legrand / Schnieder / Siemens / ABB / L&T make 63A TP MCB, 8 Nos SP MCB's, bus bars, 6 Sqmm 3 core copper cable for invidual light control, contactor, suitable timer and connectors and provision for energy meter etc., complete for finished item of work.</p>	ASR-ELEC-6.1.29	1	Set	30473
1041	1	<p>Main Feeder Pillar for Approach Lighting Incoming: One No. 32A,4P MCCB (16kA) and ON/OFF indicating lamps.One from normal supply & one from solar system. One (1) No. 32A, 3 phase Timer Switch on each phase for automatic operation.</p> <p>Metering & Indication: Combined digital Ammeter/Voltmeter with Selector Switch and 30/5A, CL-1, 10VA CTs and 2A control MCB. Sets of phase indicating lamp with 2A control MCBs. Sets of ON/OFF/Trip indicating lamp with 2A control MCBs.</p>	NS	1	Set	62207

		<p>Bus Bar: Electrolytic high conductivity Aluminium three pole and neutral busbars rated at 63 amps(after deration) having a maximum current density of 0.8 amp per sq mm insulated with heat shrinkable PVC sleeves.</p>				
		<p>Outgoing: Eight(8) nos 6 Amp DP MCB, 10 KA. Main Feeder Piller for Approach Lighting described as above</p>				
1042	1	<p>Main Feeder Piller for Periferal Lighting Incoming: One No. 32A,4P MCCB (16kA) and ON/OFF indicating lamps.One from normal supply & one from solar system. One (1) No. 32A, 3 phase Timer Switch on each phase for automatic operation.</p>	NS	1	Set	62207
		<p>Metering & Indication: Combined digital Ammeter/Voltmeter with Selector Switch and 30/5A, CL-1, 10VA CTs and 2A control MCB. Sets of phase indicating lamp with 2A control MCBs. Sets of ON/OFF/Trip indicating lamp with 2A control MCBs.</p>				
		<p>Bus Bar: Electrolytic high conductivity Aluminium three pole and neutral busbars rated at 63 amps(after deration) having a maximum current density of 0.8 amp per sq mm insulated with heat shrinkable PVC sleeves.</p>				
		<p>Main Feeder Piller for Periferal Lighting described as above</p>				

1043	40	<p>Sub Feeder Pillar for Approach & Periferal Lighting</p> <p>Incoming: Supply, installation, testing and commissioning of cubicle type feeder pillar (out -door type) suitable for 440 Volts 3 phase 4 wire 50 Hz AC Supply system fabricated in design from CRCA sheet steel 2 mm thick for frame work and covers 3 mm thick for gland plates i/c cleaning & finishing complete with 7 tank process for powder coating in approved shade having 63 Amps insulated bus bar with shrouds aluminium alloy bus bars, bottom base channel of MS section not less than 100 mm x 50mmx5 mm thick complete with earth stud the control wiring shall be with 2.5 sq. mm PVCinsulated copper conductor s/c cable complete with cable alloys, cable gland plates in two half i/c providing following switch gears. (Sub Feeder Pillar for Approach Light - 4 No.; Main Feeder Pillar for Peripheral Lights - 1 No.; Sub Feeder Pillar for Peripheral Lights - 4 No.)</p> <p>Incomer 6 Amp 4P MCB -10KA 1 no.</p> <p>Outgoing 6 Amps DP MCB 10KA- 4 nos.</p> <p>Sub Feeder Pillar for Approach & Periferal Lighting</p>	NS	1	Set	38433
1044	37	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.	DSR-5.2	1	Set	3672
1045	18	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	DSR-5.4	1	Set	4327
1046	10	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	DSR-5.6	1	Set	8289
1047	27000	Supplying and laying 6 SWG G.I. wire at 0.50 metre below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required.	DSR-5.7	1	Metre	28
1048	1500	Providing and fixing 25 mm X 5 mm copper strip in 40 mm dia G.I. pipe FRLSom earth electrode including connection with brass nut, bolt, spring, washer excavation and re-filling etc. as required.	DSR-5.1	1	Metre	872
1049	7400	Providing and fixing 25 mm X 5 mm G.I. strip in 40 mm dia G.I. pipe from earth electrode including connection with G.I. nut, bolt, spring, washer excavation and re-filling etc. as required.	DSR-5.11	1	Metre	351

1050	100	Providing and laying earth connection from earth electrode with 6 SWG dia G.I. Wire in 15 mm dia G.I. pipe from earth electrode including connection with G.I. thimble excavation and re-filling as required.	DSR-5.12	1	Metre	134
1051	50	Providing and fixing 25 mm X 5 mm copper strip on surface or in recess for connections etc. as required.	DSR-5.14	1	Metre	698
1052	50	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	DSR-5.15	1	Metre	129
1053	100	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	DSR-5.16	1	Metre	37
1054	18605	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. Upto 35 sq. mm	DSR-7.1.1	1	Metre	206
1055	3846	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. Above 35 sq. mm and upto 95 sq. mm	DSR-7.1.2	1	Metre	214
1056	2415	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. Above 95 sq. mm and upto 185 sq. mm	DSR-7.1.3	1	Metre	223
1057	2210	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. Above 185 sq. mm and upto 400 sq. mm	DSR-7.1.4	1	Metre	248
1058	4567.9375	Laying of one number additional PVC insulated & PVC sheathed /XLPE power cable of 1.1 KV grade of following size direct in ground in the same trench in one tier horizontal formation including excavation, sand cushioning, protective covering & refilling the trench etc. as required. Upto 35 sqmm	DSR - 7.2.1	1	Metre	141
1059	1435.6375	Laying of one number additional PVC insulated & PVC sheathed /XLPE power cable of 1.1 KV grade of following size direct in ground in the same trench in one tier horizontal formation including excavation, sand cushioning, protective covering & refilling the trench etc. as required. Above 35 sqmm and upto 95 sqmm	DSR- 7.2.2	1	Metre	149

1060	522.05	Laying of one number additional PVC insulated & PVC sheathed /XLPE power cable of 1.1 KV grade of following size direct in ground in the same trench in one tier horizontal formation including excavation, sand cushioning, protective covering & refilling the trench etc. as required. Above 95 sqmm and upto 185 sqmm	DSR- 7.2.3	1	Meter	158
1061	350	Laying of one number PVC insulated & PVC sheathed /XLPE power cable of 1.1 KV grade of following size in the existing RCC Hume / Stoneware / Metal pipe as required. Upto 35 sqmm	DSR - 7.5.1	1	Meter	18
1062	110	Laying of one number PVC insulated & PVC sheathed /XLPE power cable of 1.1 KV grade of following size in the existing RCC Hume / Stoneware / Metal pipe as required. Above 35 sqmm and upto 95 sqmm	DSR- 7.5.2	1	Meter	28
1063	40	Laying of one number PVC insulated & PVC sheathed /XLPE power cable of 1.1 KV grade of following size in the existing RCC Hume / Stoneware / Metal pipe as required. Above 95 sqmm and upto 185 sqmm	DSR- 7.5.3	1	Meter	37
1064	70	Laying of one number PVC insulated & PVC sheathed /XLPE power cable of 1.1 KV grade of following the existing masonary open duct as required. Upto 35 sqmm	DSR - 7.6.1	1	Meter	14
1065	20	Laying of one number PVC insulated & PVC sheathed /XLPE power cable of 1.1 KV grade of following the existing masonary open duct as required. Above 35 sqmm and upto 95 sqmm	DSR - 7.6.2	1	Meter	22
1066	100	Laying of one number PVC insulated & PVC sheathed /XLPE power cable of 1.1 KV grade of size upto 35 Sqmm on cable tray as required.	DSR - 7.8.1	1	Meter	21
1067	20	Supplying and fixing cable route marker with 10 cm X 10 cm X 5 mm thick G. I. plate with inscription there on, bolted /welded to 35 mm X 35 mm X 6 mm angle iron, 60 cm long and fixing the same in ground as required.	DSR-7.10	1	Each	269
1068	300	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 11 kV grade of following size in the existing RCC/ HUME/ METAL pipe as required. Above 120 sq. mm and upto 400 sq. mm	DSR-8.3.2	1	Meter	65
1069	20	Supply of 4 Sqmm 2 Core XLPE insulated, 1100V grade armoured alluminium cable as per specification confirming to IS:7098 (Part - I).	ASR-ELEC-4.1.1	1	1RM	92
1070	18155	Supply of 6 Sqmm 2 Core XLPE insulated, 1100V grade armoured alluminium cable as per specification confirming to IS:7098 (Part - I).	ASR-ELEC-4.1.4	1	1RM	108
1071	350	Supply of 6 Sqmm 4 Core XLPE insulated, 1100V grade armoured alluminium cable as per specification confirming to IS:7098 (Part - I)	ASR-ELEC-4.1.10	1	1RM	130
1072	2300	Supply of 16 Sqmm 4 Core XLPE insulated, 1100V grade armoured alluminium cable as per specification confirming to IS:7098 (Part - I)	ASR-ELEC-4.1.16	1	1 RM	162

1073	2684	Supply of 25 Sqmm 3.5 Core XLPE insulated, 1100V grade armoured aluminium cable as per specification confirming to IS:7098 (Part - I)	ASR-ELEC-4.1.19	1	1 RM	207
1074	3800	Supply of 35 Sqmm 3.5 Core XLPE insulated, 1100V grade armoured aluminium cable as per specification confirming to IS:7098 (Part - I)	ASR-ELEC-4.1.22	1	1 RM	247
1075	20	Supply of 50 Sqmm 3.5 Core XLPE insulated, 1100V grade armoured aluminium cable as per specification confirming to IS:7098 (Part - I)	ASR-ELEC-4.1.25	1	1 RM	326
1076	1300	Supply of 120 Sqmm 3.5 Core XLPE insulated, 1100V grade armoured aluminium cable as per specification confirming to IS:7098 (Part - I).	ASR-ELEC-4.1.36	1	1 RM	537
1077	220	Supply of 150 Sqmm 3.5 Core XLPE insulated, 1100V grade armoured aluminium cable as per specification confirming to IS:7098 (Part - I).	ASR-ELEC-4.1.37	1	1 RM	762
1078	160	Supply of 185 Sqmm 3.5 Core XLPE insulated, 1100V grade armoured aluminium cable as per specification confirming to IS:7098 (Part - I).	ASR-ELEC-4.1.41	1	1 RM	806
1079	230	Supply of 240 Sqmm 3.5 Core XLPE insulated, 1100V grade armoured aluminium cable as per specification confirming to IS:7098 (Part - I).	ASR-ELEC-4.1.43	1	1 RM	1023
1080	350	Supply of 300 Sqmm 3.5 Core XLPE insulated, 1100V grade armoured aluminium cable as per specification confirming to IS:7098 (Part - I)	ASR-ELEC-4.1.44	1	1 RM	1449
1081	900	Supply of 3 Core 11 KV 185 Sqmm HT XLPE (E) armoured Cable, as per IS specification confirming to IS 7098/II/85 with latest ammendments.	ASR-ELEC-4.1.54	1	1 RM	1475
1082	12	Supply and Fixing of Single compression brass cable glands for 3.5 core XLPE armoured cable for 185Sqmm with brass washers complete.	ASR-ELEC-4.2.1	1	Nos.	327
1083	16	Supply and Fixing of Single compression brass cable glands for 3.5 core XLPE armoured cable for 240Sqmm with brass washers complete.	ASR-ELEC-4.2.2	1	Nos.	491
1084	2	Supply and Fixing of Single compression brass cable glands for 3.5 core XLPE armoured cable for 300Sqmm with brass washers complete.	ASR-ELEC-4.2.3	1	Nos.	578
1085	1182	Supply and Fixing of single compression brass cable glands for 4 core XLPE armoured cable up to 16.0 Sq.mm with brass washers complete.	ASR-ELEC-4.2.5	1	Nos.	94

1086	30	Supply and Fixing of single compression brass cable glands for 3.5 core XLPE armoured cable from 25 Sqmm to 50.0 Sq.mm with brass washers complete.	ASR-ELEC-4.2.6	1	Nos.	138
1087	12	Supply and Fixing of Single compression brass cable glands for 3.5 core XLPE armoured cable from 70 Sqmm to 150.0 Sq.mm with brass washers complete.	ASR-ELEC-4.2.7	1	Nos.	264
1088	1178	Supply and fixing of crimping type aluminium lugs confirming to I.S specifications for cable upto 16 Sq.mm including nuts and bolts with connections.	ASR-ELEC-4.3.13	1	Nos.	60
1089	14	Supply and fixing of crimping type aluminium lugs confirming to I.S specifications for cable of 25 Sq.mm including nuts and bolts with connections.	ASR-ELEC-4.3.14	1	Nos.	14
1090	16	Supply and fixing of crimping type aluminium lugs confirming to I.S specifications for cable of 35 Sq.mm including nuts and bolts with connections.	ASR-ELEC-4.3.15	1	Nos.	17
1091	2	Supply and fixing of crimping type aluminium lugs confirming to I.S specifications for cable of 50 Sq.mm including nuts and bolts with connections.	ASR-ELEC-4.3.16	1	Nos.	20
1092	12	Supply and fixing of crimping type aluminium lugs confirming to I.S specifications for cable of 120 Sq.mm including nuts and bolts with connections.	ASR-ELEC-4.3.19	1	Nos.	35
1093	4	Supply and fixing of crimping type aluminium lugs confirming to I.S specifications for cable of 150 Sq.mm including nuts and bolts with connections.	ASR-ELEC-4.3.20	1	Nos.	40
1094	12	Supply and fixing of crimping type aluminium lugs confirming to I.S specifications for cable of 185 Sq.mm including nuts and bolts with connections.	ASR-ELEC-4.3.21	1	Nos.	46
1095	16	Supply and fixing of crimping type aluminium lugs confirming to I.S specifications for cable of 240 Sq.mm including nuts and bolts with connections.	ASR-ELEC-4.3.22	1	Nos.	71
1096	4	Supply and fixing of crimping type aluminium lugs confirming to I.S specifications for cable of 300 Sq.mm including nuts and bolts with connections.	ASR-ELEC-4.3.23	1	Nos.	92
1097	6	Supplying and making outdoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for following size of 3 core, XLPE aluminium conductor cable of 11 KV grade as required. 185 sq. mm	NS	1	Each	10769

1098	2	Supply and transportation of 30W LED Street light Luminaire made of pressure diecast alluminium body with powder coated, having protective toughned glass, Supply Input voltage 120 - 270 V AC, P.F > 0.90, high power LED's having efficacy >120 lumines/watt, System efficacy >95lm/W and junction temprature < 70°C, with Ingrees protection IP65, Driver surge protection 4KV, external Surge protection ≥ 5KV with optics distribution Type II medium, THD<10% at 110 Volts AC, driver efficiency >90%, CCT: 3000K - 5700K, minimum CRI>70, etc., complete	NS	1	Each	11626
1099	394	Supply and transportation of 30W LED Street light Luminaire made of pressure diecast alluminium body with powder coated, having protective toughned glass, Supply Input voltage 120 - 270 V AC, P.F > 0.90, high power LED's having efficacy >120 lumines/watt, System efficacy >95lm/W and junction temprature < 70°C, with Ingrees protection IP65, Driver surge protection 4KV, external Surge protection ≥ 5KV with optics distribution Type II medium, THD<10% at 110 Volts AC, driver efficiency >90%, CCT: 3000K - 5700K, minimum CRI>70, etc., complete	ASR-ELEC-3.9.32	1	Each	9370
1100	51	Supply and transportation of 60W LED Street light Luminaire made of pressure diecast alluminium body with powder coated, having protective toughned glass, Supply Input voltage 120 - 270 V AC, P.F > 0.90, high power LED's having efficacy >120 lumines/watt, System efficacy >95lm/W and junction temprature < 70°C, with Ingrees protection IP65, Driver surge protection 4KV, external Surge protection ≥ 5KV with optics distribution Type II medium, THD<10% at 110 Volts AC, driver efficiency >90%, CCT: 3000K - 5700K, minimum CRI>70, etc., complete	ASR-ELEC-3.9.33	1	Each	13000
1101	10	Supply and transportation of 90 LED Flood light Luminaire made of pressure diecast alluminium housing with powder coated, having protective toughned glass, Supply Input voltage 120 - 270 V AC, P.F > 0.90, high power LED's having efficacy >120 lumines/watt, System efficacy >95lm/W and junction temprature < 70°C, with Ingrees protection IP65, IK05, Driver surge protection 4KV, external Surge protection ≥ 5KV with wide/ Narrow beam optics, THD<10% at 110 Volts AC, driver efficiency >90%, , CCT: 3000K - 5700K, minimum CRI>70, etc.,	ASR-ELEC-3.9.47	1	Each	21500
1102	140	Fabrication, Transportation and supply of hot-dip galvanized Octogonal Pole with BSEN - 10025 grade S 355 JO steel plate for shaft, IS 2062 for base plate with door opening arrangement, including the supply of suitable boards with bakelite sheet as per IS specification suitable to withstand the wind speed of 180 KMPH for 9 Mtrs height Pole having dimensions Bottom 155 mm,. Top 70mm with 3mm thick, base plate 260 x 260 x 16mm and 4 Nos of M24 x 750 long 'J' bolts along with template.	ASR-ELEC-6.1.8	1	Each	15329

1103	420	Fabrication, Transportation and supply of hot-dip galvanized Octogonal Pole with BSEN - 10025 grade S 355 JO steel plate for shaft, IS 2062 for base plate with door opening arrangement, including the supply of suitable boards with bakelite sheet as per IS specification suitable to withstand the wind speed of 180 KMPH for 4 Mtrs height Pole with all required nut bolts etc.	NS	1	Each	8371
1104	510	Fabrication, Transportation and supply of 1.50 Mtr Length Single Arm Bracket made with MS galvanized 40mm / 50mm dia Pipe.	ASR-ELEC-6.1.15	1	Each	1604
1105	471	Foundation and erection charges for 9 mtrs / 10 Mtrs long Octagonal/Conical pole duly erecting on base plate 290mm x 290mm x 16mm thick duly providing 4 Nos. foundation bolts with nuts with providing of M20 c.c work vibrated concreting mixing with necessary steel (15kgs) reinforcement as directed by the field engineers during execution including all labour charges and cost and conveyance of materials etc. complete.	ASR-ELEC-6.1.21	1	Each	4950
1106	3	Fabrication, transportation and supply of 12 Mtrs Polygon High Mast with single section of 3mm thick of Bottom 360mm and Top 150mm dia with BSEN - 10025 grade S 355 JO steel plate for shaft, IS 2062 for base plate, having a base plate of size 520mm dia 16mm thick with its accessories. Mast shall be in single section for 12 Mtrs and 2 sections for 16 and 20 Mtrs. Mast shall be hot dip galvanized and suitable for wind velocity of 180 KMPH as per IS 875 part 3 including head frame, 2 point suspension system with steel rope 6mm dia (7/19) construction double drum winch / power tool operating speed of 900 RPM, and necessary cable trailer connections and single speed motor with M 24 x 800 mm foundation bolts of required quantity, suitable for 6 luminaires with GLS type aviation twin lamp.	ASR-ELEC-6.1.22	1	Each	103354
1107	3	Earth work excavation with a approximate quantity of 4.0 Cum for erection of 12 Mtrs high mast and refilling with a quantity of 0.53 Cum of PCC 1:4:8, 1.50 Cum M 20 grade concrete and (80 Kgs) reinforced steel of 12mm / 10mm / 8mm, Soil bearing capacity of 10 T/Sqm, Anchor plate with cost and conveyance of all above materials including labour charges for erection of High Mast and Carraige etc complete.	ASR-ELEC-6.1.31	1	Each	35794
1108	1	Supply, Installation, testing & Commissioning of solar module, necessary electrical cables to connect solar cells together and to the DB's as well as inverters to have a complete operational circuit, Conduits, cable trays, trucking, earthing system and complete Main Junction Box according to the drawings and engineer's instruction and approval. Price will include all materials needed to connect from modules to inverter and have complete job ready for installing high quality PV modules connected. Price shall include costs of repairing any damaged works.	0	1	Set	2606175

		<p>Supply, Installation, testing & Commissioning of Module mounting Structure according to the detailed drawing and approval by the Engineer. Contractor should submit shop drawing for proper mounting structure. Rate shall include aluminium anodized/ HD galvanized structure, supports, plates & screws, bracing and angles for dividers etc to complete the structure. Rate shall include excavation, concreting and fixing of structure.</p> <p>Supply, Installation, testing & Commissioning of 30kW 1P grid tie inverter with minimum 2 MPPT inputs. The inverter depending on the system design and installation proposed. The inverter unit shall be suitable for indoor and outdoor installations. Cable terminations to inverter shall be of type DC plug and socket connectors. Technical literature has to be provided as generated by the inverters manufacturer software. Inverter shall allow an adjustable power factor outdoor, minimum AC output power 30 kw, with all necessary electrical cables, Conduits and trays and all other materials and workmanship needed to connect with the main distribution panel according according to the drawings and engineer's instruction and approval and have a complete job ready.</p> <p>Supply, install, connect and operate 20KA DC SPD DC surge protector for grid connected system . The Surge protector unit shall be suitable for indoor and outdoor installations. The surcharge protector system shall include all necessary electrical cables, Conduits and trays and all other materials and workmanship needed to the system according to the drawings and engineer's instruction and approval and have a complete job ready.</p>		
1109	250	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.		Mtr. 366
1110	1000	Supply of 95 Sqmm 3.5 Core XLPE insulated, 1100V grade armoured alluminium cable as per specification confirming to IS:7098 (Part - I).		Rm 550

1111	441.45	B). SUB ESTIMATE FOR UG WATER TANK & PUMP ROOM Plain Cement Concrete (1:4:8) (cement: fine aggregate: Coarse aggregate) for foundations and under flooring bed using coarse aggregate 40mm size hard, machine crushed granite from approved quarry including cost and conveyance of all materials like cement, sand, coarse aggregate, water etc. to site, including sales & other taxes on all materials and including all charges for machine mixing, laying concrete in foundations and under flooring bed, ramming in 15 cm layers finishing top surface to the required level curing etc., and overheads & contractors profit complete for finished item of work. (APSS No. 402)				
		Qty Vide Page No 2 of MB No 27/A				
		Entrance steps				
	4.01	Pump room			Cum	3,459.00
#REF!	210.02	Plastering 12mm thick single coat in CM(1:5) using screened sand including cost and conveyance of all materials like cement, sand, water etc., to site, including sales & other taxes on all materials, and all operational, incidental charges on materials and including cost of all labour charges for mixing mortar, finishing, curing as directed by Engineer-in-charge etc., and overheads & contractors profit complete for finished item of work.(SS 901,903 & 904) - First Storey	APSS	1	Sqm	114.00
#REF!	124.55	Plastering 20mm thick single coat in CM(1:5) using screened sand including cos	APSS	1	Sqm	166.00
#REF!	120.66	Providing dadoing to walls with glazed full body ceramic tiles of any size and thickness between 5 to 7mm 1st quality conforming to IS: 13711, IS: 13712, IS: 13630(Parts 1 to 15) of any colour and finish in all shades and designs with borders as approved by Engineer-in-Charge set over base coat of CM(1:5) 12 mm thick using screened sand with cement slurry of honey like consistency spread at the rate of 3.30 kgs per sqm and jointing with white cement paste mixed with pigment of matching shade to full depth, including cost of all materials like tiles, cement, sand and water etc., and overheads & contractors profit complete for finished item of work. - First Storey	APSS	1	Sqm	657.00

#REF!	13.90	Supplying and fixing of stainless steel (grade 304) hand railing as per approved drawing with top rail of 50mm dia pipe and 2mm thick medium class and vertical posts of 25mm dia and 1.6mm thick medium class 2 Nos for each step fixed with base plate of 75mm dia using bonding agent and anchor fastner and welding, drilling of 20mm dia holes with pneumatic compressor for fixing railing, buffing, polishing all members of the railing thouroughly , lacquer finishing to present seamless finish including cost and conveyance of all materials, electrodes, welding charges, cost of all consumables, labour charges , overheads & contractors profit etc., complete for finished item of work.	APSS	1	Sqm	4,954.00
#REF!	6.30	Providing 110 mm Dia ISI marked PVC down water take pipes with socket , 2.5 mm thick 4.0 kg/sq.cm pressure of ISI marked including cost of necessary PVC Bends, shoes, iron / PVC clamps and all other accessories and fixing in position including cost and conveyance of all materials, sales & other taxes on materials to site, operational & incidental charges including all labour charges for fixing at site etc., and overheads & contractors profit complete for finished item of work. (APSS No. 1328)	APSS	1	Metre	274.00
#REF!	160.37	Providing and applying Wall putty of White Cement or Polymer or Cement based of average 1 to 2 mm thickness over plastered surface to prepare the surface even and smooth after thoroughly brushing the surface to remove all dirt and remains of loose powdered materials, applying emery paper, Sand the surface, clean & wipe off loose dust, applying knifing paste filler by putty knife / muslin pad, air dry for 2 - 3 hrs, sand with 180 and 320 No., emery paper for the surface preparation including cost and conveyance of all materials to work site and all operational, incidental, labour charges, over heads and contractors profit etc., complete for finished item of work in all floors for Internal walls	APSS	1	Sqm	197.00
#REF!	132.58	Providing and applying PMCC / Deco orient base or Equivalent exterior Texture of average 2 to 3 mm thickness over plastered surface to prepare the surface even and smooth after thoroughly brushing the surface to remove all dirt and remains of loose powdered materials, applying emery paper, Sand the surface, clean & wipe off loose dust, applying putty/ texture paint filler by putty knife / muslin pad, air dry for 2 - 3 hrs for the surface preparation including cost and conveyance of all materials to work site and all operational, incidental, labour charges, scaffolding charges, overheads and contractors profit etc., complete for finished item of work in all floors for external walls	APSS	1	Sqm	246.00

#REF!	160.37	Painting to new walls with 2 coats of Acrylic based Oil bound Washable Distemper having VOC content less than 50 grams/litre over primer coat using white cement as approved by Engineer-In-Charge, making 3 coats in all to give an even shade after thoroughly brushing the surface to remove all dirt and remains of loose powdered materials, including cost and conveyance of all materials to work site and all operational, incidental, labour charges etc., and overheads & contractors profit complete for finished item of work as per APSS 911 for internal walls in all floors.	APSS	1	Sqm	92.00
#REF!	42.52	Making plinth protection 50 mm thick of cement concrete 1:3:6 (1 cement: 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including finishing the top smooth.	DSR	1	Sqm	450.35
#REF!	17.72	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in :Cement mortar 1:6 (1 cement : 6 coarse sand)	DSR	1	Cum	5,582.85
#REF!	8.00	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick -:Ply wood 7 ply, 9 mm thick	DSR	1	Sqm	1,845.00
#REF!	1.00	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete.	DSR	1	Each	388.40
#REF!	1	Providing and fixing aluminium sliding door bolts, ISI marked anodised anodic coating not less than grade AC 10 as per IS : 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete :250x16 mm	DSR	1	Each	189.20
#REF!	2	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :250x10 mm	DSR	1	Each	88.10
#REF!	8	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :150x10 mm	DSR	1	Each	64.30
#REF!	8	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :125 mm	DSR	1	Each	51.10

#REF!	1	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete.Twin rubber stopper	DSR	1	Each	38.00
#REF!	5.67	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters-.80x1.20 mm M.S. laths with 1.20 mm thick top cover	DSR	1	Sqm	2,316.10
#REF!	5.67	Extra for providing grilled rolling shutters manufactured out of 8 mm dia M.S. bar instead of laths as per design approved by Engineer-in- charge, (area of grill to be measured).	DSR	1	Sqm	313.60
#REF!	61.75	52 mm thick cement concrete flooring with concrete hardener topping, under layer 40 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6 mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 kg of cement or as per manufacturer's specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete.	DSR	1	Sqm	555.25
#REF!	7.80	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :25 mm thick	DSR	1	Sqm	1,158.10
#REF!	3.68	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement: 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.	DSR	1	Sqm	1,238.20
#REF!	24.53	Extra for pre finished nosing in treads of steps of Kota stone/ sand stone slab.	DSR	1	Metre	84.85
#REF!	11.54	Extra for Kota stone/ sand stone in treads of steps and risers using single length up to 1.05 metre.	DSR	1	Sqm	18.95

#REF!	56.38	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand), including pointing the joints with white cement and matching pigment etc, complete.	DSR	1	Sqm	688.35
#REF!	28.28	Providing gola 75x75 mm in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 stone aggregate 10 mm and down gauge), including finishing with cement mortar 1:3 (1 cement : 3 fine sand) as per standard design :In 75x75 mm deep chase	DSR	1	Metre	153.00
#REF!	2	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1 m x1 m x 400 micron, finished with 12 mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet complete.	DSR	1	Each	187.60
#REF!	2	Providing and fixing to the inlet mouth of rain water pipe PTMT (an Engineering Thermoplastic) grating square (Slit) 150 mm square with a height of 8 mm and weighing not less than 100 gms.	DSR	1	Each	66.45
#REF!	118.20	6 mm cement plaster of mix :1:3 (1 cement : 3 fine sand)	DSR	1	Sqm	143.80
#REF!	30	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910, on 12 mm dia steel bar conforming to IS: 1786, having minimum cross section as 23 mmx25 mm and over all minimum length 263 mm and width as 165 mm with minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete as per design.	DSR	1	Each	327.90

#REF!	94.00	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :For fixed portion Powder coated aluminium (minimum thickness of powder coating 50 micron)	DSR	1	Kg	384.50
#REF!	47.00	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)-Powder coated aluminium (minimum thickness of powdercoating 50 micron)	DSR	1	Sqm	444.90
#REF!	1.91	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade 1 Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge.Pre-laminated particle board with decorative lamination on both sides	DSR	1	Sqm	866.60
#REF!	7.75	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge.With float glass panes of 5.50 mm thickness	DSR	1	Sqm	1,003.95
#REF!	34.46	Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete. Upto 5mm depth and 5 mm width	DSR	1	Metre	62.45
#REF!	1	Providing and fixing 100mm brass locks (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	DSR	1	Each	359.00
#REF!	4	Providing and fixing aluminium casement windows fastener of required length for aluminium windows with necessary screws etc. complete.Powder coated minimum thickness 50 micron aluminium	DSR	1	Each	55.50
#REF!	2	Providing and fixing aluminium round shape handle of outer dia 100 mm with SS screws etc. complete as per direction of Engineerin-charge Powder coated minimum thickness 50 micron aluminium	DSR	1	Each	68.30

#REF!	45.70	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer- n-charge over the RCC slab including adjoining walls upto 300mm height including cleaning the surface before treatment. b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep. e)The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineerin- Charge :With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	DSR	1	Sqm	1,034.65
#REF!	3	Supplying and fixing C.I. cover without frame for manholes :455 x 610 mm recta	NS	1	Each	2,000.00
#REF!	70.34	C). SUB ESTIMATE FOR SUB-STATION : Flooring with chequered cement conc	APSS	1	Sqm	699.00

#REF!	63.59	Providing cladding to walls with High Polished Granite 16 to 18 mm thick up to 8'-00 (2.43 M) other than black and regular colours, length equal to flooring slabs set over base coat of CM(1:5) 12 mm thick using screened sand with cement slurry of honey like consistency spread at the rate of 3.30 kgs per sqm and jointing with white cement paste mixed with pigment of matching shade to full depth, including cost of all materials like tiles, cement, sand and water etc., and overheads & contractors profit complete for finished item of work. First Storey	APSS	1	Sqm	3,816.00
#REF!	20.50	Providing dadoing to walls with glazed full body ceramic tiles of any size and thickness between 5 to 7mm 1st quality conforming to IS: 13711, IS: 13712, IS: 13630(Parts 1 to 15) of any colour and finish in all shades and designs with borders as approved by Engineer-in-Charge set over base coat of CM(1:5) 12 mm thick using screened sand with cement slurry of honey like consistency spread at the rate of 3.30 kgs per sqm and jointing with white cement paste mixed with pigment of matching shade to full depth, including cost of all materials like tiles, cement, sand and water etc., and overheads & contractors profit complete for finished item of work. First Storey	APSS	1	Sqm	657.00
#REF!	574.52	Providing and applying Wall putty of White Cement or Polymer or Cement based of average 1 to 2 mm thickness over plastered surface to prepare the surface even and smooth after thoroughly brushing the surface to remove all dirt and remains of loose powdered materials, applying emery paper, Sand the surface, clean & wipe off loose dust, applying knifing paste filler by putty knife / muslin pad, air dry for 2 - 3 hrs, sand with 180 and 320 No., emery paper for the surface preparation including cost and conveyance of all materials to work site and all operational, incidental, labour charges, over heads and contractors profit etc., complete for finished item of work in all floors for Internal walls	APSS	1	Sqm	197.00
#REF!	275.03	Providing and applying PMCC / Deco orient base or Equivalent exterior Texture of average 2 to 3 mm thickness over plastered surface to prepare the surface even and smooth after thoroughly brushing the surface to remove all dirt and remains of loose powdered materials, applying emery paper, Sand the surface, clean & wipe off loose dust, applying putty/ texture paint filler by putty knife / muslin pad, air dry for 2 - 3 hrs for the surface preparation including cost and conveyance of all materials to work site and all operational, incidental, labour charges, scaffolding charges, overheads and contractors profit etc., complete for finished item of work in all floors for external walls	APSS	1	Sqm	246.00

#REF!	574.52	Supply & application of one coat water based cement primer of interior grade I and two coats of acrylic emulsion paint having VOC (Volatile Organic Compound) content less than 50 grams/litre for internal walls including cost and conveyance of all materials to site, sales & other taxes, incidental, operational and all labour charges etc., and overheads & contractors profit complete for finished item of work in all floors.	APSS	1	Sqm	131.00
#REF!	134.35	Painting two coats with synthetic enamel paint Grade-I VOC (Volatile Organic Compound) content less than 50 grams/litre to new iron work including cost and conveyance of all materials to site, sales & other taxes, incidental, operational and all labour charges etc., and overheads & contractors profit complete for finished item of work in all floors. (SS No. 1201, 1212 & 1207).	APSS	1	Sqm	89.00
#REF!	69.73	Painting two coats with synthetic enamel paint Grade-II VOC (Volatile Organic Compound) content less than 50 grams/litre over primer coat of red oxide to new iron work including cost and conveyance of all materials to site, sales & other taxes, incidental, operational and all labour charges etc., and overheads & contractors profit complete for finished item of work in all floors. (SS No. 1201, 1212 & 1207).	APSS	1	Sqm	136.00
#REF!	53.06	Making plinth protection 50 mm thick of cement concrete 1:3:6 (1 cement: 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including finishing the top smooth.	DSR	1	Sqm	450.35
#REF!	55.06	Brick edging 7cm wide 11.4 cm deep to plinth protection with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 including grouting with cement mortar 1:4 (1 cement : 4 fine sand).	DSR	1	Metre	39.20
#REF!	4.00	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete.	DSR	1	Each	388.40
#REF!	3	Providing and fixing aluminium sliding door bolts, ISI marked anodised anodic coating not less than grade AC 10 as per IS : 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete :300x16 mm	DSR	1	Each	212.45
#REF!	9	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :250x10 mm	DSR	1	Each	88.10
#REF!	28	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :150x10 mm	DSR	1	Each	64.30

#REF!	28	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :125 mm	DSR	1	Each	51.10
#REF!	4	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete.Twin rubber stopper	DSR	1	Each	38.00
#REF!	32.40	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters.80x1.25 mm M.S. laths with 1.25 mm thick top cover	DSR	1	Sqm	2,316.10
#REF!	37.85	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregates)	DSR	1	Sqm	362.60
#REF!	17.69	Tile work in skirting, risers of steps and dado up to 2 m height over 12 mm thick bed of cement mortar 1:3 (1 cement :3 coarse sand) and jointed with grey cement slurry @ 3.3 kg/sqm, including pointing in white cement mixed with pigment of matching shade complete.Marble tiles (polished) Raj Nagar 1 8 mm thick	DSR	1	Sqm	909.70
#REF!	176.85	Marble stone flooring with 18 mm thick marble stone, as per sample of marble approved by Engineer-in-charge, over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with grey cement slurry, including rubbing and polishing complete with :Udaipur green marble	DSR	1	Sqm	1,589.40
#REF!	17.80	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS : 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), including grouting the joints with white cement and matching pigments etc., completeSize of Tile 600x600 mm.	DSR	1	Sqm	1,119.40

#REF!	2.04	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I. S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), including grouting the joint with white cement & matching pigments etc. complete. Size of Tile 600x600 mm	DSR	1	Sqm	1,135.20
#REF!	310	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :For fixed portion Powder coated aluminium (minimum thickness of powder coating 50 micron)	DSR	1	Kg	384.50
#REF!	159	Providing and fixing aluminium work For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately) Powder coated aluminium (minimum thickness of powder coating 50 micron)	DSR	1	Kg	444.90
#REF!	6.81	Providing and fixing 12 mm thick prelaminated particle board flat pressed three	DSR	1	Sqm	866.60
#REF!	115.23	G). SUB ESTIMATE FOR CONSTRUCTION OF AIR TRAFFIC CONTROL (ATC) BUILDING: Plastering 12mm thick single coat in CM(1:5) using screened sand including cost and conveyance of all materials like cement, sand, water etc., to site, including sales & other taxes on all materials, and all operational, incidental charges on materials and including cost of all labour charges for mixing mortar, finishing, curing as directed by Engineer-in-charge etc., and overheads & contractors profit complete for finished item of work. (SS 901,903 & 904) First Storey	APSS	1	Sqm	115.00

#REF!	8.55	Providing 16 to 18mm thick high polished granite stone slabs other than black and regular colours (i.e. of shades like paradiso / bala flower / copper silk / laka red / lavender blue) with borders and design as per the pattern approved by the Engineer-in-Charge of length not less than 2.43 mts set over base coat of cement mortar (1:5) , 12mm thick using screened sand over CC bed already laid or RCC roof slab including neat grey cement slurry of honey like consistency spread @ 3.3 Kg per sqm and jointed neatly with white cement paste mixed with pigment of matching shade to full depth including cost and conveyance of all materials like cement , sand , water , granite slabs etc., to work site and all operational, incidental labour & lift charges, half rounding the edges of treads , polishing charges and all other taxes on all materials, cost of base coat and overheads & contractors profit complete for finished item of work for treads and risers (S.S.701 & special) for Tread First Storey	APSS	1	Sqm	5,084.00
#REF!	8.55	Providing 16 to 18mm thick high polished granite stone slabs other than black and regular colours (i.e. of shades like paradiso / bala flower / copper silk / laka red / lavender blue) with borders and design as per the pattern approved by the Engineer-in-Charge of length not less than 2.43 mts set over base coat of cement mortar (1:5) , 12mm thick using screened sand over CC bed already laid or RCC roof slab including neat grey cement slurry of honey like consistency spread @ 3.3 Kg per sqm and jointed neatly with white cement paste mixed with pigment of matching shade to full depth including cost and conveyance of all materials like cement , sand , water , granite slabs etc., to work site and all operational, incidental labour & lift charges, half rounding the edges of treads , polishing charges and all other taxes on all materials, cost of base coat and overheads & contractors profit complete for finished item of work for treads and risers (S.S.701 & special) for Tread Second Storey	APSS	1	Sqm	5,136.00

#REF!	4.95	Providing 16 to 18mm thick high polished granite stone slabs other than black and regular colours (i.e. of shades like paradiso / bala flower / copper silk / laka red / lavender blue) with borders and design as per the pattern approved by the Engineer-in-Charge of length not less than 2.43 mts set over base coat of cement mortar (1:5) , 12mm thick using screened sand over CC bed already laid or RCC roof slab including neat grey cement slurry of honey like consistency spread @ 3.3 Kg per sqm and jointed neatly with white cement paste mixed with pigment of matching shade to full depth including cost and conveyance of all materials like cement , sand , water , granite slabs etc., to work site and all operational, incidental labour & lift charges, half rounding the edges of treads , polishing charges and all other taxes on all materials, cost of base coat and overheads & contractors profit complete for finished item of work for treads and risers (S.S.701 & special) for Riser First Storey	APSS	1	Sqm	3,816.00
#REF!	4.95	Providing 16 to 18mm thick high polished granite stone slabs other than black and regular colours (i.e. of shades like paradiso / bala flower / copper silk / laka red / lavender blue) with borders and design as per the pattern approved by the Engineer-in-Charge of length not less than 2.43 mts set over base coat of cement mortar (1:5) , 12mm thick using screened sand over CC bed already laid or RCC roof slab including neat grey cement slurry of honey like consistency spread @ 3.3 Kg per sqm and jointed neatly with white cement paste mixed with pigment of matching shade to full depth including cost and conveyance of all materials like cement , sand , water , granite slabs etc., to work site and all operational, incidental labour & lift charges, half rounding the edges of treads , polishing charges and all other taxes on all materials, cost of base coat and overheads & contractors profit complete for finished item of work for treads and risers (S.S.701 & special) for riser Second Storey	APSS	1	Sqm	3,847.00
#REF!	61.27	Providing dadoing to walls with glazed full body ceramic tiles of any size and thickness between 5 to 7mm 1st quality conforming to IS: 13711, IS: 13712, IS: 13630(Parts 1 to 15) of any colour and finish in all shades and designs with borders as approved by Engineer-in-Charge set over base coat of CM(1:5) 12 mm thick using screened sand with cement slurry of honey like consistency spread at the rate of 3.30 kgs per sqm and jointing with white cement paste mixed with pigment of matching shade to full depth, including cost of all materials like tiles, cement, sand and water etc., and overheads & contractors profit complete for finished item of work. First Storey	APSS	1	Sqm	657.00

#REF!	80.90	Providing dadoing to walls with glazed full body ceramic tiles of any size and thickness between 5 to 7mm 1st quality conforming to IS: 13711, IS: 13712, IS: 13630(Parts 1 to 15) of any colour and finish in all shades and designs with borders as approved by Engineer-in-Charge set over base coat of CM(1:5) 12 mm thick using screened sand with cement slurry of honey like consistency spread at the rate of 3.30 kgs per sqm and jointing with white cement paste mixed with pigment of matching shade to full depth, including cost of all materials like tiles, cement, sand and water etc., and overheads & contractors profit complete for finished item of work. Second Storey	APSS	1	Sqm	664.00
#REF!	55.80	Providing dadoing to walls with glazed full body ceramic tiles of any size and thickness between 5 to 7mm 1st quality conforming to IS: 13711, IS: 13712, IS: 13630(Parts 1 to 15) of any colour and finish in all shades and designs with borders as approved by Engineer-in-Charge set over base coat of CM(1:5) 12 mm thick using screened sand with cement slurry of honey like consistency spread at the rate of 3.30 kgs per sqm and jointing with white cement paste mixed with pigment of matching shade to full depth, including cost of all materials like tiles, cement, sand and water etc., and overheads & contractors profit complete for finished item of work Third Storey	APSS	1	sqm	671.00
#REF!	33.30	Supplying and fixing of stainless steel (grade 304) hand railing as per approved drawing with top rail of 50mm dia pipe and 2mm thick medium class and vertical posts of 25mm dia and 1.6mm thick medium class 2 Nos for each step fixed with base plate of 75mm dia using bonding agent and anchor fastner and welding, drilling of 20mm dia holes with pneumatic compressor for fixing railing, buffing, polishing all members of the railing thouroughly , lacquer finishing to present seamless finish including cost and conveyance of all materials, electrodes, welding charges, cost of all consumables, labour charges , overheads & contractors profit etc. complete for finished item of work.	APSS	1	Sqm	4,954.00
#REF!	2726.19	Providing and applying Wall putty of White Cement or Polymer or Cement based of average 1 to 2 mm thickness over plastered surface to prepare the surface even and smooth after thoroughly brushing the surface to remove all dirt and remains of loose powdered materials, applying emery paper, Sand the surface, clean & wipe off loose dust, applying knifing paste filler by putty knife / muslin pad, air dry for 2 - 3 hrs, sand with 180 and 320 No., emery paper for the surface preparation including cost and conveyance of all materials to work site and all operational, incidental, labour charges, over heads and contractors profit etc., complete for finished item of work in all floors for Internal walls	APSS	1	Sqm	197.00

#REF!	1293.17	Providing and applying PMCC / Deco orient base or Equivalent exterior Texture of average 2 to 3 mm thickness over plastered surface to prepare the surface even and smooth after thoroughly brushing the surface to remove all dirt and remains of loose powdered materials, applying emery paper, Sand the surface, clean & wipe off loose dust, applying putty/ texture paint filler by putty knife / muslin pad, air dry for 2 - 3 hrs for the surface preparation including cost and conveyance of all materials to work site and all operational, incidental, labour charges, scaffolding charges, overheads and contractors profit etc., complete for finished item of work in all floors for external walls.	APSS	1	Sqm	246.00
#REF!	1369.87	Supply & application of one coat water based cement primer of interior grade I and two coats of acrylic emulsion paint having VOC (Volatile Organic Compound) content less than 50 grams/litre for internal walls including cost and conveyance of all materials to site, sales & other taxes, incidental, operational and all labour charges etc., and overheads & contractors profit complete for finished item of work in all floors.	APSS	1	Sqm	131.00
#REF!	134.82	Supplying and fixing Gyp Board Suspended regular single layer false ceiling (GS-MFSC-4.1) using 12.5 mm thick Gyp Board conforming to IS 2095 - 1993 fixing to Gyp steel GI perimeter channels of size 20 mm x 27 mm x 30 mm(web) of 0.55 mm thick along the perimeter of ceiling screw fixed to brick work/ partition at 610 mm c/c and suspending the frame work using Intermediate channels (45 mm x 15mm x 15mm x 0.9 mm) from soffit at 1220 mm c/c with ceiling angle (25 mm x 10 mm x 0.55 mm) fixed with GI Cleat and steel expansion fasteners & connecting clip to the ceiling channels (with knurled web of 51.5 mm x 26 mm x 10.5 mm x 0.55 mm) fixed in direction perpendicular to the intermediate channel at 457 mm c/c and fixing the 12.5 mm tapered edge Gypboard with 25 mm drywall screws at 230 mm c/c & jointing and finishing using joint compound and paper tape to have a flush look including filling the tapered & square edges with jointing compound, two coats of drywall topcoa including overheads and contractor profit etc., complete for finished item of work.	APSS	1	Sqm	969.00
#REF!	59.54	Making plinth protection 50 mm thick of cement concrete 1:3:6 (1 cement: 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including finishing the top smooth.	DSR	1	Sqm	450.35
#REF!	76.83	Centering and shuttering including strutting, propping etc. and removal of form for : Suspended floors, roofs, landings, balconies and access platform	DSR	1	Sqm	422.30

#REF!	6.67	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in : Cement mortar 1:6 (1 cement : 6 coarse sand)	DSR	1	cum	5,582.85
#REF!	63.54	Brick edging 7cm wide 11.4 cm deep to plinth protection with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 including grouting with cement mortar 1:4 (1 cement : 4 fine sand).	DSR	1	Metre	39.20
#REF!	8.51	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills , facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels. Granite of any colour and shade' Area of slab upto 0.50 sqm	DSR	1	Sqm	3,351.95
#REF!	65.17	Providing edge moulding to 18 mm thick marble stone counters, Vanities etc., including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge. Granite work	DSR	1	Sqm	245.70
#REF!	32.50	Extra for fixing marble /granite stone, over and above corresponding basic item, in facia and drops of width upto 150 mm with epoxy resin based adhesive, including cleaning etc. complete.	DSR	1	Sqm	266.25
#REF!	15.00	Extra for providing opening of required size & shape for wash basin/ kitchen sink in kitchen platform, vanity counter and similar location in marble/ Granite/stone work, including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. complete.	DSR	1	Each	427.95
#REF!	12.94	Providing and fixing machine cut, mirror / eggshell polished , Marble stone work for wall lining (veneer work) including dado, skirting, risers of steps etc., in required design and pattern wherever required, stones of different finished surface texture, on 12 mm (average) thick cement mortar 1:3 (1 cement : 3 coarse sand) laid and jointed with white cement slurry @ 3.3 kg/sqm including pointing with white cement slurry admixed with pigment of matching shade, including rubbing, curing, polishing etc. all complete as per Architectural drawings, and as directed by the Engineer-in-Charge. a. 18 mm thick Italian Marble stone slab,Perlato, Rosso verona, Fire Red or Dark Emperadore etc.	DSR	1	Sqm	6,647.35

#REF!	42.45	ovinding and fixing Polished Granite stone flooring in required design and pattern, in linear as well as curvilinear portions of the building, all complete as per the architectral drawing, with 18mm thick stone slab over 20 mm (avrage) thick base of cement mortar 1:4 (1 cement:4coarse sand), laid and jointed with cement slurry of maching with white cement slurry admixed with pigment of matching shade, including rubbing, curind and polished etc. all complete as specified and as directed by the Enginner-in-charge. Polished Granite stone slab jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent.	DSR	1	Sqm	2,937.70
#REF!	18.00	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete.	DSR	1	each	388.40
#REF!	75.00	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete : 250x10 mm	DSR	1	each	88.10
#REF!	80.00	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete : 150x10 mm	DSR	1	each	64.30
#REF!	80.00	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete : 125 mm	DSR	1	each	51.10
#REF!	18.00	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete. Twin rubber stopper	DSR	1	each	38.00
#REF!	50.55	52 mm thick cement concrete flooring with concrete hardener topping, under layer 40 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6 mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 kg of cement or as per manufacturer's specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete.	DSR	1	sqm	555.25
#REF!	13.43	Cement plaster skirting up to 30 cm height, with cement mortar 1:3 (1 cement : 3 coarse sand), finished with a floating coat of neat cement. 18 mm thick	DSR	1	sqm	350.05

#REF!	35.89	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand), including pointing the joints with white cement and matching pigment etc, complete.	DSR	1	sqm	688.35
#REF!	463.36	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS : 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), including grouting the joints with white cement and matching pigments etc., complete. Size of Tile 600x600 mm	DSR	1	Sqm	1,119.40
#REF!	52.48	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I. S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), including grouting the joint with white cement & matching pigments etc. complete. Size of Tile 600x600 mm	DSR	1	Sqm	1,135.20
#REF!	87.35	Providing and laying machine cut, mirror polished, Italian Marble stone flooring laid in required pattern in linear portion of the building all complete as per architectural drawings, with 18 mm thick stone slab laid over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with white cement slurry @ 4.4 kg/sqm including pointing with white cement slurry admixed with pigment to match the marble shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge. a. 18 mm thick Italian Marble stone slab,Perlato, Rosso verona, Fire Red or Dark Emperadore etc.	DSR	1	sqm	5,006.10
#REF!	135.71	Providing gola 75x75 mm in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 stone aggregate 10 mm and down gauge), including finishing with cement mortar 1:3 (1 cement : 3 fine sand) as per standard design : In 75x75 mm deep chase	DSR	1	Mtr	153.00
#REF!	10.00	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1 m x1 m x 400 micron, finished with 12 mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet complete.	DSR	1	Each	187.60
#REF!	10	Providing and fixing to the inlet mouth of rain water pipe PTMT (an Engineering Thermoplastic) grating square (Slit) 150 mm square with a height of 8 mm and weighing not less than 100 gms.	DSR	1	Each	66.45

		Providing and fixing GI Clip in Metal Ceiling System of 600x600 mm module which includes providing and fixing 'C' wall angle of size 20x30x20 mm made of 0.5 mm thick pre painted steel along the perimeter of the room with help of nylon sleeves and wooden screws at 300 mm center to centre, suspending the main C carrier of size 10x38x10 mm made of G.I steel 0.7 mm thick from the soffit with help of soffit cleat 37x27x25x1.6 mm, rawl plugs of size 38x12 mm and C carrier suspension clip and main carrier bracket at 1000 mm c/c. Inverted triangle shaped Spring Tee having height of 24 mm and width of 34 mm made of GI steel 0.45 mm thick is then fixed to the main C carrier and in direction perpendicular to it at 600 mm centers with help of suspension brackets. Wherever the main C carrier and spring T have to join, C carrier and spring T connectors have to be used. All sections to be galvanized @ 120 gms/sqm (both side inclusive), fixing with clip in tiles into spring 'T' with :				
#REF!	414.35	GI Metal Ceiling Clip in plain Beveled edge global white color tiles of size 600x600 and 0.5 mm thick with 25 mm height, made of G I sheet having galvanizing of 100 gms/ sqm (both sides inclusive) and 20% perforation area with 1.8 mm dia holes and having NRC of 0.5, electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending and perforation.	DSR	1	Sqm	1,527.25
#REF!	1438.00	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) : for fixed portion, Powder coated aluminium (minimum thickness of powder coating 50 micron)	DSR	1	kg	384.50
#REF!	598.00	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately) Powder coated aluminium (minimum thickness of powder coating 50 micron)	DSR	1	kg	444.90

#REF!	17.69	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade 1 Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge. Pre-laminated particle board with decorative lamination on both sides	DSR	1	sqm	866.60
#REF!	61.17	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. With float glass panes of 5.50 mm thickness	DSR	1	sqm	1,003.95
#REF!	63.50	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. With float glass panes of 8 mm thickness	DSR	1	sqm	1,153.90
#REF!	399.75	Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete. Upto 5mm depth and 5 mm width	DSR	1	metre	62.45
#REF!	28.00	Providing and fixing 100mm brass locks (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	DSR	1	each	359.00
#REF!	48.00	Providing and fixing aluminium casement windows fastener of required length for aluminium windows with necessary screws etc. complete. Powder coated minimum thickness 50 micron aluminium	DSR	1	each	55.50
#REF!	55.00	Providing and fixing aluminium round shape handle of outer dia 100 mm with SS screws etc. complete as per direction of Engineerin-charge Powder coated minimum thickness 50 micron aluminium	DSR	1	each	68.30

#REF!	395.80	<p>Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment. b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs</p> <p>c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep. e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineerin- Charge : With average thickness of 120 mm and minimum thickness at khurra as 65 mm.</p>	DSR	1	Sqm	1035
#REF!	95.60	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes 160 mm dia conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.	NS	1	Metre	430.00
#REF!	10.00	Providing and fixing on wall face unplasticised - PVC moulded shoe (plain) 160 mm dia for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion. 160 mm dia	NS	1	Each	315.00

#REF!	162.00	Supply and Fixing of Slim Glass partition of 10mm Toughened Glass using DORMA Alexa System-45 Frames to a height of maximum 3m or as per drawing.The Fixed glass to be fixed using DORMA Alexa BP45 Profiles at Top & Bottom & Alexa SP45 at sides. The profile size to be 45x25MM to be fixed on to the floor/wall/ ceiling as per the architect design. DORMA Alexa H Junction profile to be used at all Glass to Glass vertical joints, 90 Deg L Junction Profiles and T Junction profiles necessary as per design.In case of Glass overall panel Alexa MP45 & BP45 Overpanel Profile to be used.In case of Open glass edges EP45 End Profile to be used. The Alexa profiles shall be suitable for Glass thickness of 10/12/13.52mm.The Profile shall be matt natural anodized, the Profile Manufacturer to supply all the necessary clips, seals and fixing accessories for the system. All Profiles to be with 2 mm Gauge thickness Excluding 20 Micron of Anodizing. Approved Manufacturer: Profiles/Frames: DORMA, Glass : Saint Giobain/Asahi	NS	1	Sqm	6,800.00
#REF!	7.50	Supply & installation of frameless glass Door of approved make with overpanel / sidelight using 12mm thick toughened glass of approved make with die cast patch fitting with stainless steel cover PT -30 , PT-40 ,PT 10 , PT 20 , US 10 Lock. Pull Handle TGDI-H 450 back to back with 350mm CTC, adjustable fixing for glass. Length =450mm, 25mm dia, -SS304 Finish: mill, Floor spring BTS 65 with std. spindle and cover plate. As per DIN EN 1154.(500,000 cycle tested) , Finish: Satin stainless steel. Floor stop half dome with 45mm dia with fixing accessories, in satin Chrome. The work should be executed as per manufacturer's specifications and complete in all respect as per approved drawings and to the satisfaction of Architect /Engineer-in-Charge.	NS	1	Sqm	18,000.00
#REF!	28.98	Supply & Fixing of Glass Door of 10mm toughened glass with DORMA Alexa System-45 frames all around the door. Alexa DP45 Door Profile frame of size 45X50mm with seals with DORMA Junior Office Hinges (3nos) & Studio Gala Locks (1no) in aluminium silver (EV1) finish and DORMA TS 89 Slide Channel Door closer with (as per EN 1154) and saddle plate for fixing on the Glass door and necessary seals to be provided all around the door frames. In case of Glass over panel Alexa OHP-DP45 Over Panel Door profile to be used. The Alexa profiles shall be suitable for Glass thickness of 10/12/13.52mm.The Profile shall be matt natural anodized, the Profile Manufacturer to supply all the necessary clips, seals and fixing accessories for the system. All Profiles to be with 2 mm Gauge thickness Excluding 20 Micron of Anodizing. Approved Manufacturer: Profiles/Frames: DORMA, Glass : Saint Giobain/Asahi	NS	1	sqm	26,450.00

#REF!	8.00	<p>Providing and fixing Greenlam / Merino Sturdo Classique Evergreen Toilet cubicle (of following standard dimensions which includes 600 mm door size width) made of heat, bacteria, water, chemical, scratch, impact and anti bacterial resistant 12mm thick solid compact laminate panels tested by Shriram Test House. Finish of the compact laminate should be suede / raw Silk which includes doors, pilasters and intermediate panels finished with approved textures / shade as per the detailed drawings and as per IS 2046 (Indian Standard) and as per Fire Retardent BS -476 / 97 Standard. The product should have green guard certificate.</p> <p>This also includes providing and fixing in position necessary hardware made out of stainless steel (Grade 304) as per manufacturer's specifications and Architect's Instructions like Door knob, gravity hinges, thumb turn lock set with occupancy indicators, coat hooks with door stoppers, U channels, adjustable foot / pedestal, top rail with corner contactor, rubber noise deafening tape and screws and wall plugs etc.</p> <p>The top fitting should consist of SS round top rail which will get fixed with pilasters, with ss panel tube holder, SS corner bend (connected with top rail) will be used on the corner of cubicle in absence of brick wall, SS wall fixing is used only on the wall which will hold the SS top rail.</p> <p>All screws will be of 304 grade in stainless steel with satin finish. All pilasters are supported by stainless steel, bottom cladding. The base of the stainless steel bottom cladding will be anchored to the floor with a clear height upto 150 mm. Toilet cubicle with a standard dimension of 2025 mm height x 1000 mm width x 1550 mm depth which includes 600 mm door size width.</p>	NS	1	Each	32381
#REF!	80.50	<p>H.)CONSTRUCTION OF ATC TOWER Reinforced Brick Masonry for partition walls (11.0 cm thick) in CM (1:4) prop. (Cement : Sand) using common burnt clay bricks of class as per Table- I of IS:1077-1992, Non- Modular or traditional size 23 x 11 x 7 cms from approved source having minimum crushing strength of 40 Kg/Sq.cm and placing 2 Nos. of 6mm M.S plain rods in every third layer with free ends of the reinforcement pegged into mortar joints of main brick walls where applicable including cost and conveyance of all materials like cement, steel, sand, bricks, water etc., to site, including sales & other taxes on all materials, all operational, incidental charges such as labour charges for mixing cement mortar, scaffolding charges, constructing masonry, lift charges, curing, etc., and overheads & contractors profit but excluding cost of steel and its fabrication charges complete for finished item of work. (APSS No. of 501 & 509) First Storey</p>	APSS	1	Sqm	714.00

#REF!	80.51	Reinforced Brick Masonry for partition walls (11.0 cm thick) in CM (1:4) prop. (Cement : Sand) using common burnt clay bricks of class as per Table- I of IS: 1077-1992, Non- Modular or traditional size 23 x 11 x 7 cms from approved source having minimum crushing strength of 40 Kg/Sq.cm and placing 2 Nos. of 6mm M.S plain rods in every third layer with free ends of the reinforcement pegged into mortar joints of main brick walls where applicable including cost and conveyance of all materials like cement, steel, sand, bricks, water etc., to site, including sales & other taxes on all materials, all operational, incidental charges such as labour charges for mixing cement mortar, scaffolding charges, constructing masonry, lift charges, curing, etc., and overheads & contractors profit but excluding cost of steel and its fabrication charges complete for finished item of work. (APSS No. of 501 & 509) Second Storey	APSS	1	Sqm	760.00
#REF!	80.50	Reinforced Brick Masonry for partition walls (11.0 cm thick) in CM (1:4) prop. (Cement : Sand) using common burnt clay bricks of class as per Table- I of IS: 1077-1992, Non- Modular or traditional size 23 x 11 x 7 cms from approved source having minimum crushing strength of 40 Kg/Sq.cm and placing 2 Nos. of 6mm M.S plain rods in every third layer with free ends of the reinforcement pegged into mortar joints of main brick walls where applicable including cost and conveyance of all materials like cement, steel, sand, bricks, water etc., to site, including sales & other taxes on all materials, all operational, incidental charges such as labour charges for mixing cement mortar, scaffolding charges, constructing masonry, lift charges, curing, etc., and overheads & contractors profit but excluding cost of steel and its fabrication charges complete for finished item of work. (APSS No. of 501 & 509) Third Storey	APSS	1	Sqm	806.00
#REF!	80.50	Reinforced Brick Masonry for partition walls (11.0 cm thick) in CM (1:4) prop. (Cement : Sand) using common burnt clay bricks of class as per Table- I of IS: 1077-1992, Non- Modular or traditional size 23 x 11 x 7 cms from approved source having minimum crushing strength of 40 Kg/Sq.cm and placing 2 Nos. of 6mm M.S plain rods in every third layer with free ends of the reinforcement pegged into mortar joints of main brick walls where applicable including cost and conveyance of all materials like cement, steel, sand, bricks, water etc., to site, including sales & other taxes on all materials, all operational, incidental charges such as labour charges for mixing cement mortar, scaffolding charges, constructing masonry, lift charges, curing, etc., and overheads & contractors profit but excluding cost of steel and its fabrication charges complete for finished item of work. (APSS No. of 501 & 509) Fourth Storey	APSS	1	Sqm	853.00

#REF!	80.50	Reinforced Brick Masonry for partition walls (11.0 cm thick) in CM (1:4) prop. (Cement : Sand) using common burnt clay bricks of class as per Table- I of IS: 1077-1992, Non- Modular or traditional size 23 x 11 x 7 cms from approved source having minimum crushing strength of 40 Kg/Sq.cm and placing 2 Nos. of 6mm M.S plain rods in every third layer with free ends of the reinforcement pegged into mortar joints of main brick walls where applicable including cost and conveyance of all materials like cement, steel, sand, bricks, water etc., to site, including sales & other taxes on all materials, all operational, incidental charges such as labour charges for mixing cement mortar, scaffolding charges, constructing masonry, lift charges, curing, etc., and overheads & contractors profit but excluding cost of steel and its fabrication charges complete for finished item of work. (APSS No. of 501 & 509) Fifth Storey	APSS	1	Sqm	962.00
#REF!	184.77	Plastering 12mm thick single coat in CM(1:5) using screened sand including cost and conveyance of all materials like cement, sand, water etc., to site, including sales & other taxes on all materials, and all operational, incidental charges on materials and including cost of all labour charges for mixing mortar, finishing, curing as directed by Engineer-in-charge etc., and overheads & contractors profit complete for finished item of work.(SS 901,903 & 904) First Storey	APSS	1	Sqm	114.00
#REF!	170.18	Plastering 12mm thick single coat in CM(1:5) using screened sand including cost and conveyance of all materials like cement, sand, water etc., to site, including sales & other taxes on all materials, and all operational, incidental charges on materials and including cost of all labour charges for mixing mortar, finishing, curing as directed by Engineer-in-charge etc., and overheads & contractors profit complete for finished item of work.(SS 901,903 & 904) Second Storey	APSS	1	Sqm	123.00
#REF!	185.65	Plastering 12mm thick single coat in CM(1:5) using screened sand including cost and conveyance of all materials like cement, sand, water etc., to site, including sales & other taxes on all materials, and all operational, incidental charges on materials and including cost of all labour charges for mixing mortar, finishing, curing as directed by Engineer-in-charge etc., and overheads & contractors profit complete for finished item of work.(SS 901,903 & 904) Third Storey	APSS	1	Sqm	133.00
#REF!	185.60	Plastering 12mm thick single coat in CM(1:5) using screened sand including cost and conveyance of all materials like cement, sand, water etc., to site, including sales & other taxes on all materials, and all operational, incidental charges on materials and including cost of all labour charges for mixing mortar, finishing, curing as directed by Engineer-in-charge etc., and overheads & contractors profit complete for finished item of work.(SS 901,903 & 904) Fourth Storey	APSS	1	Sqm	143.00

#REF!	185.61	Plastering 12mm thick single coat in CM(1:5) using screened sand including cost and conveyance of all materials like cement, sand, water etc., to site, including sales & other taxes on all materials, and all operational, incidental charges on materials and including cost of all labour charges for mixing mortar, finishing, curing as directed by Engineer-in-charge etc., and overheads & contractors profit complete for finished item of work.(SS 901,903 & 904) Fifth Storey	APSS	1	Sqm	153.00
#REF!	131.53	Plastering 20mm thick single coat in CM(1:5) using screened sand including cost and conveyance of all materials like cement, sand, water etc., to site, including sales & other taxes on all materials, and all operational, incidental charges on materials and including cost of all labour charges for mixing mortar, finishing, curing as directed by Engineer-in-charge etc., and overheads & contractors profit complete for finished item of work .(SS 901,903 & 904) FIRST STOREY	APSS	1	Sqm	166.00
#REF!	131.38	Plastering 20mm thick single coat in CM(1:5) using screened sand including cost and conveyance of all materials like cement, sand, water etc., to site, including sales & other taxes on all materials, and all operational, incidental charges on materials and including cost of all labour charges for mixing mortar, finishing, curing as directed by Engineer-in-charge etc., and overheads & contractors profit complete for finished item of work .(SS 901,903 & 904) SECOND STOREY	APSS	1	Sqm	180.00
#REF!	145.28	Plastering 20mm thick single coat in CM(1:5) using screened sand including cost and conveyance of all materials like cement, sand, water etc., to site, including sales & other taxes on all materials, and all operational, incidental charges on materials and including cost of all labour charges for mixing mortar, finishing, curing as directed by Engineer-in-charge etc., and overheads & contractors profit complete for finished item of work .(SS 901,903 & 904) THIRD STOREY	APSS	1	Sqm	193.00
#REF!	145.28	Plastering 20mm thick single coat in CM(1:5) using screened sand including cost and conveyance of all materials like cement, sand, water etc., to site, including sales & other taxes on all materials, and all operational, incidental charges on materials and including cost of all labour charges for mixing mortar, finishing, curing as directed by Engineer-in-charge etc., and overheads & contractors profit complete for finished item of work .(SS 901,903 & 904) FOURTH STOREY	APSS	1	Sqm	207.00

#REF!	145.28	Plastering 20mm thick single coat in CM(1:5) using screened sand including cost and conveyance of all materials like cement, sand, water etc., to site, including sales & other taxes on all materials, and all operational, incidental charges on materials and including cost of all labour charges for mixing mortar, finishing, curing as directed by Engineer-in-charge etc., and overheads & contractors profit complete for finished item of work .(SS 901,903 & 904) FIFTH STOREY	APSS	1	Sqm	221.00
#REF!	10.44	Providing 16 to 18mm thick high polished granite stone slabs other than black and regular colours (i.e. of shades like paradiso / bala flower / copper silk / laka red / lavender blue) with borders and design as per the pattern approved by the Engineer-in-Charge of length not less than 2.43 mts set over base coat of cement mortar (1:5) , 12mm thick using screened sand over CC bed already laid or RCC roof slab including neat grey cement slurry of honey like consistency spread @ 3.3 Kg per sqm and jointed neatly with white cement paste mixed with pigment of matching shade to full depth including cost and conveyance of all materials like cement , sand , water , granite slabs etc., to work site and all operational, incidental labour & lift charges, half rounding the edges of treads , polishing charges and all other taxes on all materials, cost of base coat and overheads & contractors profit complete for finished item of work for treads and risers (S.S.701 & special) for Tread First Storey	APSS	1	Sqm	5,084.00
#REF!	10.44	Providing 16 to 18mm thick high polished granite stone slabs other than black and regular colours (i.e. of shades like paradiso / bala flower / copper silk / laka red / lavender blue) with borders and design as per the pattern approved by the Engineer-in-Charge of length not less than 2.43 mts set over base coat of cement mortar (1:5) , 12mm thick using screened sand over CC bed already laid or RCC roof slab including neat grey cement slurry of honey like consistency spread @ 3.3 Kg per sqm and jointed neatly with white cement paste mixed with pigment of matching shade to full depth including cost and conveyance of all materials like cement , sand , water , granite slabs etc., to work site and all operational, incidental labour & lift charges, half rounding the edges of treads , polishing charges and all other taxes on all materials, cost of base coat and overheads & contractors profit complete for finished item of work for treads and risers (S.S.701 & special) for Tread Second Storey	APSS	1	Sqm	5,136.00

#REF!	10.44	Providing 16 to 18mm thick high polished granite stone slabs other than black and regular colours (i.e. of shades like paradiso / bala flower / copper silk / laka red / lavender blue) with borders and design as per the pattern approved by the Engineer-in-Charge of length not less than 2.43 mts set over base coat of cement mortar (1:5) , 12mm thick using screened sand over CC bed already laid or RCC roof slab including neat grey cement slurry of honey like consistency spread @ 3.3 Kg per sqm and jointed neatly with white cement paste mixed with pigment of matching shade to full depth including cost and conveyance of all materials like cement , sand , water , granite slabs etc., to work site and all operational, incidental labour & lift charges, half rounding the edges of treads , polishing charges and all other taxes on all materials, cost of base coat and overheads & contractors profit complete for finished item of work for treads and risers (S.S.701 & special) for Tread Third Storey	APSS	1	Sqm	5,187.00
#REF!	10.44	Providing 16 to 18mm thick high polished granite stone slabs other than black and regular colours (i.e. of shades like paradiso / bala flower / copper silk / laka red / lavender blue) with borders and design as per the pattern approved by the Engineer-in-Charge of length not less than 2.43 mts set over base coat of cement mortar (1:5) , 12mm thick using screened sand over CC bed already laid or RCC roof slab including neat grey cement slurry of honey like consistency spread @ 3.3 Kg per sqm and jointed neatly with white cement paste mixed with pigment of matching shade to full depth including cost and conveyance of all materials like cement , sand , water , granite slabs etc., to work site and all operational, incidental labour & lift charges, half rounding the edges of treads , polishing charges and all other taxes on all materials, cost of base coat and overheads & contractors profit complete for finished item of work for treads and risers (S.S.701 & special) for Tread Fourth Storey	APSS	1	Sqm	5,239.00

#REF!	10.44	Providing 16 to 18mm thick high polished granite stone slabs other than black and regular colours (i.e. of shades like paradiso / bala flower / copper silk / laka red / lavender blue) with borders and design as per the pattern approved by the Engineer-in-Charge of length not less than 2.43 mts set over base coat of cement mortar (1:5) , 12mm thick using screened sand over CC bed already laid or RCC roof slab including neat grey cement slurry of honey like consistency spread @ 3.3 Kg per sqm and jointed neatly with white cement paste mixed with pigment of matching shade to full depth including cost and conveyance of all materials like cement , sand , water , granite slabs etc., to work site and all operational, incidental labour & lift charges, half rounding the edges of treads , polishing charges and all other taxes on all materials, cost of base coat and overheads & contractors profit complete for finished item of work for treads and risers (S.S.701 & special) for TreadFifth Storey	APSS	1	Sqm	5,290.00
#REF!	3.78	Providing 16 to 18mm thick high polished granite stone slabs other than black and regular colours (i.e. of shades like paradiso / bala flower / copper silk / laka red / lavender blue) with borders and design as per the pattern approved by the Engineer-in-Charge of length not less than 2.43 mts set over base coat of cement mortar (1:5) , 12mm thick using screened sand over CC bed already laid or RCC roof slab including neat grey cement slurry of honey like consistency spread @ 3.3 Kg per sqm and jointed neatly with white cement paste mixed with pigment of matching shade to full depth including cost and conveyance of all materials like cement , sand , water , granite slabs etc., to work site and all operational, incidental labour & lift charges, half rounding the edges of treads , polishing charges and all other taxes on all materials, cost of base coat and overheads & contractors profit complete for finished item of work for treads and risers (S.S.701 & special) for Riser First Storey	APSS	1	Sqm	3,816.00

#REF!	3.78	Providing 16 to 18mm thick high polished granite stone slabs other than black and regular colours (i.e. of shades like paradiso / bala flower / copper silk / laka red / lavender blue) with borders and design as per the pattern approved by the Engineer-in-Charge of length not less than 2.43 mts set over base coat of cement mortar (1:5) , 12mm thick using screened sand over CC bed already laid or RCC roof slab including neat grey cement slurry of honey like consistency spread @ 3.3 Kg per sqm and jointed neatly with white cement paste mixed with pigment of matching shade to full depth including cost and conveyance of all materials like cement , sand , water , granite slabs etc., to work site and all operational, incidental labour & lift charges, half rounding the edges of treads , polishing charges and all other taxes on all materials, cost of base coat and overheads & contractors profit complete for finished item of work for treads and risers (S.S.701 & special) for RiserSecond Storey	APSS	1	Sqm	3,847.00
#REF!	3.78	Providing 16 to 18mm thick high polished granite stone slabs other than black and regular colours (i.e. of shades like paradiso / bala flower / copper silk / laka red / lavender blue) with borders and design as per the pattern approved by the Engineer-in-Charge of length not less than 2.43 mts set over base coat of cement mortar (1:5) , 12mm thick using screened sand over CC bed already laid or RCC roof slab including neat grey cement slurry of honey like consistency spread @ 3.3 Kg per sqm and jointed neatly with white cement paste mixed with pigment of matching shade to full depth including cost and conveyance of all materials like cement , sand , water , granite slabs etc., to work site and all operational, incidental labour & lift charges, half rounding the edges of treads , polishing charges and all other taxes on all materials, cost of base coat and overheads & contractors profit complete for finished item of work for treads and risers (S.S.701 & special) for RiserThird Storey	APSS	1	Sqm	3,877.00

#REF!	3.78	Providing 16 to 18mm thick high polished granite stone slabs other than black and regular colours (i.e. of shades like paradiso / bala flower / copper silk / laka red / lavender blue) with borders and design as per the pattern approved by the Engineer-in-Charge of length not less than 2.43 mts set over base coat of cement mortar (1:5) , 12mm thick using screened sand over CC bed already laid or RCC roof slab including neat grey cement slurry of honey like consistency spread @ 3.3 Kg per sqm and jointed neatly with white cement paste mixed with pigment of matching shade to full depth including cost and conveyance of all materials like cement , sand , water , granite slabs etc., to work site and all operational, incidental labour & lift charges, half rounding the edges of treads , polishing charges and all other taxes on all materials, cost of base coat and overheads & contractors profit complete for finished item of work for treads and risers (S.S.701 & special) for RiserFourth Storey	APSS	1	Sqm	3,907.00
#REF!	3.78	Providing 16 to 18mm thick high polished granite stone slabs other than black and regular colours (i.e. of shades like paradiso / bala flower / copper silk / laka red / lavender blue) with borders and design as per the pattern approved by the Engineer-in-Charge of length not less than 2.43 mts set over base coat of cement mortar (1:5) , 12mm thick using screened sand over CC bed already laid or RCC roof slab including neat grey cement slurry of honey like consistency spread @ 3.3 Kg per sqm and jointed neatly with white cement paste mixed with pigment of matching shade to full depth including cost and conveyance of all materials like cement , sand , water , granite slabs etc., to work site and all operational, incidental labour & lift charges, half rounding the edges of treads , polishing charges and all other taxes on all materials, cost of base coat and overheads & contractors profit complete for finished item of work for treads and risers (S.S.701 & special) for RiserFifth Storey	APSS	1	Sqm	3,937.00
#REF!	14.51	Providing cladding to walls with High Polished Granite 16 to 18 mm thick up to 8'-00 (2.43 M) other than black and regular colours, length equal to flooring slabs set over base coat of CM(1:5) 12 mm thick using screened sand with cement slurry of honey like consistency spread at the rate of 3.30 kgs per sqm and jointing with white cement paste mixed with pigment of matching shade to full depth, including cost of all materials like tiles, cement, sand and water etc., and overheads & contractors profit complete for finished item of work. First Storey	APSS	1	Sqm	3,816.00

#REF!	14.50	Providing cladding to walls with High Polished Granite 16 to 18 mm thick up to 8'-00 (2.43 M) other than black and regular colours, length equal to flooring slabs set over base coat of CM(1:5) 12 mm thick using screened sand with cement slurry of honey like consistency spread at the rate of 3.30 kgs per sqm and jointing with white cement paste mixed with pigment of matching shade to full depth, including cost of all materials like tiles, cement, sand and water etc., and overheads & contractors profit complete for finished item of work. Second Storey	APSS	1	Sqm	3,847.00
#REF!	14.50	Providing cladding to walls with High Polished Granite 16 to 18 mm thick up to 8'-00 (2.43 M) other than black and regular colours, length equal to flooring slabs set over base coat of CM(1:5) 12 mm thick using screened sand with cement slurry of honey like consistency spread at the rate of 3.30 kgs per sqm and jointing with white cement paste mixed with pigment of matching shade to full depth, including cost of all materials like tiles, cement, sand and water etc., and overheads & contractors profit complete for finished item of work. Third Storey	APSS	1	Sqm	3,877.00
#REF!	14.50	Providing cladding to walls with High Polished Granite 16 to 18 mm thick up to 8'-00 (2.43 M) other than black and regular colours, length equal to flooring slabs set over base coat of CM(1:5) 12 mm thick using screened sand with cement slurry of honey like consistency spread at the rate of 3.30 kgs per sqm and jointing with white cement paste mixed with pigment of matching shade to full depth, including cost of all materials like tiles, cement, sand and water etc., and overheads & contractors profit complete for finished item of work. Fourth Storey	APSS	1	Sqm	3,907.00
#REF!	22.34	Providing dadoing to walls with glazed full body ceramic tiles of any size and thickness between 5 to 7mm 1st quality conforming to IS: 13711, IS: 13712, IS: 13630(Parts 1 to 15) of any colour and finish in all shades and designs with borders as approved by Engineer-in-Charge set over base coat of CM(1:5) 12 mm thick using screened sand with cement slurry of honey like consistency spread at the rate of 3.30 kgs per sqm and jointing with white cement paste mixed with pigment of matching shade to full depth, including cost of all materials like tiles, cement, sand and water etc., and overheads & contractors profit complete for finished item of work. First Storey	APSS	1	Sqm	657.00

#REF!	22.34	Providing dadoing to walls with glazed full body ceramic tiles of any size and thickness between 5 to 7mm 1st quality conforming to IS: 13711, IS: 13712, IS: 13630(Parts 1 to 15) of any colour and finish in all shades and designs with borders as approved by Engineer-in-Charge set over base coat of CM(1:5) 12 mm thick using screened sand with cement slurry of honey like consistency spread at the rate of 3.30 kgs per sqm and jointing with white cement paste mixed with pigment of matching shade to full depth, including cost of all materials like tiles, cement, sand and water etc., and overheads & contractors profit complete for finished item of work. Second Storey	APSS	1	Sqm	664.00
#REF!	22.34	Providing dadoing to walls with glazed full body ceramic tiles of any size and thickness between 5 to 7mm 1st quality conforming to IS: 13711, IS: 13712, IS: 13630(Parts 1 to 15) of any colour and finish in all shades and designs with borders as approved by Engineer-in-Charge set over base coat of CM(1:5) 12 mm thick using screened sand with cement slurry of honey like consistency spread at the rate of 3.30 kgs per sqm and jointing with white cement paste mixed with pigment of matching shade to full depth, including cost of all materials like tiles, cement, sand and water etc., and overheads & contractors profit complete for finished item of work. Third Storey	APSS	1	Sqm	671.00
#REF!	22.34	Providing dadoing to walls with glazed full body ceramic tiles of any size and thickness between 5 to 7mm 1st quality conforming to IS: 13711, IS: 13712, IS: 13630(Parts 1 to 15) of any colour and finish in all shades and designs with borders as approved by Engineer-in-Charge set over base coat of CM(1:5) 12 mm thick using screened sand with cement slurry of honey like consistency spread at the rate of 3.30 kgs per sqm and jointing with white cement paste mixed with pigment of matching shade to full depth, including cost of all materials like tiles, cement, sand and water etc., and overheads & contractors profit complete for finished item of work. Fourth Storey	APSS	1	Sqm	678.00
#REF!	22.34	Providing dadoing to walls with glazed full body ceramic tiles of any size and thickness between 5 to 7mm 1st quality conforming to IS: 13711, IS: 13712, IS: 13630(Parts 1 to 15) of any colour and finish in all shades and designs with borders as approved by Engineer-in-Charge set over base coat of CM(1:5) 12 mm thick using screened sand with cement slurry of honey like consistency spread at the rate of 3.30 kgs per sqm and jointing with white cement paste mixed with pigment of matching shade to full depth, including cost of all materials like tiles, cement, sand and water etc., and overheads & contractors profit complete for finished item of work. Fifth Storey	APSS	1	Sqm	685.00

#REF!	120.83	Supplying and fixing of stainless steel (grade 304) hand railing as per approved drawing with top rail of 50mm dia pipe and 2mm thick medium class and vertical posts of 25mm dia and 1.6mm thick medium class 2 Nos for each step fixed with base plate of 75mm dia using bonding agent and anchor fastner and welding, drilling of 20mm dia holes with pneumatic compressor for fixing railing, buffing, polishing all members of the railing thouroughly , lacquer finishing to present seamless finish including cost and conveyance of all materials, electrodes, welding charges, cost of all consumables, labour charges , overheads & contractors profit etc. complete for finished item of work.	APSS	1	Sqm	4,954.00
#REF!	50.00	Providing 110 mm Dia ISI marked PVC down water take pipes with socket , 2.5 mm thick 4.0 kg/sq.cm pressure of ISI marked including cost of necessary PVC Bends, shoes, iron / PVC clamps and all other accessories and fixing in position including cost and conveyance of all materials, sales & other taxes on materials to site, operational & incidental charges including all labour charges for fixing at site etc., and overheads & contractors profit complete for finished item of work. (APSS No. 1328)	APSS	1	Sqm	274.00
#REF!	1,029.90	Providing and applying Wall putty of White Cement or Polymer or Cement based of average 1 to 2 mm thickness over plastered surface to prepare the surface even and smooth after thoroughly brushing the surface to remove all dirt and remains of loose powdered materials, applying emery paper, Sand the surface, clean & wipe off loose dust, applying knifing paste filler by putty knife / muslin pad, air dry for 2 - 3 hrs, sand with 180 and 320 No., emery paper for the surface preparation including cost and conveyance of all materials to work site and all operational, incidental, labour charges, over heads and contractors profit etc. complete for finished item of work in all floors for Internal walls	APSS	1	Sqm	197.00
#REF!	385.60	Providing and applying PMCC / Deco orient base or Equivalent exterior Texture of average 2 to 3 mm thickness over plastered surface to prepare the surface even and smooth after thoroughly brushing the surface to remove all dirt and remains of loose powdered materials, applying emery paper, Sand the surface, clean & wipe off loose dust, applying putty/ texture paint filler by putty knife / muslin pad, air dry for 2 - 3 hrs for the surface preparation including cost and conveyance of all materials to work site and all operational, incidental, labour charges, scaffolding charges, overheads and contractors profit etc., complete for finished item of work in all floors for external walls.	APSS	1	Sqm	246.00

#REF!	1,151.75	Supply & application of one coat water based cement primer of interior grade I and two coats of acrylic emulsion paint having VOC (Volatile Organic Compound) content less than 50 grams/litre for internal walls including cost and conveyance of all materials to site, sales & other taxes, incidental, operational and all labour charges etc., and overheads & contractors profit complete for finished item of work in all floors.	APSS	1	Sqm	131.00
#REF!	135.98	Painting two coats with synthetic enamel paint Grade-I VOC (Volatile Organic Compound) content less than 50 grams/litre to new iron work including cost and conveyance of all materials to site, sales & other taxes, incidental, operational and all labour charges etc., and overheads & contractors profit complete for finished item of work in all floors. (SS No. 1201, 1212 & 1207).	APSS	1	Sqm	89.00
#REF!	121.85	Supplying and fixing Gyp Board Suspended regular single layer false ceiling (GS-MFSC-4.1) using 12.5 mm thick Gyp Board conforming to IS 2095 - 1993 fixing to Gyp steel GI perimeter channels of size 20 mm x 27 mm x 30 mm(web) of 0.55 mm thick along the perimeter of ceiling screw fixed to brick work/ partition at 610 mm c/c and suspending the frame work using Intermediate channels (45 mm x 15mm x 15mm x 0.9 mm) from soffit at 1220 mm c/c with ceiling angle (25 mm x 10 mm x 0.55 mm) fixed with GI Cleat and steel expansion fasteners & connecting clip to the ceiling channels (with knurled web of 51.5 mm x 26 mm x 10.5 mm x 0.55 mm) fixed in direction perpendicular to the intermediate channel at 457 mm c/c and fixing the 12.5 mm tapered edge Gypboard with 25 mm drywall screws at 230 mm c/c & jointing and finishing using joint compound and paper tape to have a flush look including filling the tapered & square edges with jointing compound, two coats of drywall topcoa including overheads and contractor profit etc., complete for finished item of work.	APSS	1	Sqm	969.00
#REF!	200.00	Supplying and fixing of Pre-painted Galvalume Trapezoidal Profile Roofing sheets with 0.50mm thickness, Coating: Alu-Zinc coating AZ150 GSM. Tensile Strength: 550 MPA. Paint coating: Regular Modified Polyester painting. Painting Thickness (Top): 18 to 20 Microns, (Bottom): 5 to 7 Microns. Sheet Width: 1.020, Length: Maximum 12 Meters with Regular Range Colours fixed with G.I 'J' bolts & nuts 8 mm dia with bitumen & G.I limpet washers filled with white lead & including a coat of approved steel primer and two coats of approved paint on over lapping of sheets complete (up to a pitch of 600) etc., complete, excluding the cost of purlins, rafters, trusses including cost and conveyance of all materials , labour charges , overheads and contractors profit etc., complete for finished item of work in all floors.	APSS	1	Sqm	716.00

#REF!	8.25	Filling with carted Stonedust in trenches,sides of foundations and basement w	2.27/DSR	1	Cum	828.00
#REF!	33.74	Making plinth protection 50 mm thick of cement concrete 1:3:6 (1 cement: 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including finishing the top smooth.	4.17	1	Sqm	450.35
#REF!	609.63	Centering and shuttering including strutting, propping etc. and removal of form for : Walls (any thickness) including attached pilasters, butteresses, plinth and string courses etc.	5.9.2	1	Sqm	378.60
#REF!	8.95	Centering and shuttering including strutting, propping etc. and removal of form for : Shelves (Cast in situ)	5.9.4	1	Sqm	422.3
#REF!	0.42	Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work, using cement content as per approved design mix, manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work, including pumping of R.M.C. from transit mixer to site of laying , excluding the cost of centering, shuttering finishing and reinforcement, including cost of admixtures in recommended proportions as per IS : 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. (Note :- Cement content considered in this item is @ 330 kg/cum. Excess/ less cement used as per design mix is payable/recoverable separately). All works above plinth & up to floor V level.	5.37.2	1	Cum	7,517.20
#REF!	33.75	Brick edging 7cm wide 11.4 cm deep to plinth protection with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 including grouting with cement mortar 1:4 (1 cement : 4 fine sand).	6.44	1	Metre	39.20

#REF!	8.50	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills , facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels Granite of any colour and shade. Area of slab upto 0.50 sqm	8.2.2.1	1	Sqm	3,351.95
#REF!	30.00	Providing edge moulding to 18 mm thick marble stone counters, Vanities etc., including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge. Granite work	8.3.2	1	Metre	245.70
#REF!	26.00	Extra for fixing marble /granite stone, over and above corresponding basic item, in facia and drops of width upto 150 mm with epoxy resin based adhesive, including cleaning etc. complete.	8.4	1	Metre	266.25
#REF!	10	Extra for providing opening of required size & shape for wash basin/ kitchen sink in kitchen platform, vanity counter and similar location in marble/ Granite/stone work, including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. complete.	8.5	1	Each	427.95
#REF!	21	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete.	9.84	1	Each	388.40
#REF!	52	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete : 250x10 mm	9.97.2	1	Each	88.10
#REF!	21	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete. Twin rubber stopper	9.101.2	1	Each	38
#REF!	90.25	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	10.2	1	Kg	6,172.00
#REF!	160.00	Providing and fixing mild steel round holding down bolts with nuts and washer plates complete.	10.19	1	Kg	0.00
	90.25	Steel work in builtup tubular(round,square,rectangular hallow tubesetc)trusses etc including cutting hoist				5,599.44

#REF!	30.00	Extra for pre finished nosing to treads of steps of marble stone.	11.24	1	Metre	306.25
#REF!	22.50	Extra for marble stone flooring in treads of steps and risers using single length up to 2.00 metre.	11.25	1	Sqm	357.95
#REF!	20.75	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand), including pointing the joints with white cement and matching pigment etc, complete.	11.37	1	Sqm	688.35
#REF!	281.51	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS : 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), including grouting the joints with white cement and matching pigments etc., complete. Size of Tile 600x600 mm	11.41.2	1	Sqm	1,119.40
#REF!	28.15	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I. S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), including grouting the joint with white cement & matching pigments etc. complete. Size of Tile 600x600 mm	11.46.2	1	Sqm	1,135.20
#REF!	75.81	Providing and laying machine cut, mirror polished Marble stone flooring, in required design (Simple geometrical, abstract etc.) and in patterns in combination with Italian marble stones of different colours, shades and finished surface texture etc., in linear portions of the building, all complete as per the architectural drawings, with 18 mm thick stone slab laid over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with white cement slurry @ 4.4 kg/sqm including pointing with white cement slurry admixed with pigment to match the marble shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge. a. 18 mm thick Italian Marble stone slab,Perlato, Rosso verona, Fire Red or Dark Emperadore etc. 18 mm thick Italian Marble stone slab, Perlato, Rosso Verona, Fire Red or Dark Emperadore etc.	11.52.1	1	Sqm	5,233.75

#REF!	28.00	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes. 75 mm diameter	12.41.1	1	Metre	148.75
#REF!	4	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion. 75 mm Shoe (Plain)	12.42.6.1	1	Each	66.10
#REF!	24	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. screws of required length, including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete. 75 mm	12.43.1	1	Each	182.55
#REF!	36	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. screws of required length, including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete. 110 mm	12.43.2	1	Each	181.40
#REF!	6	Providing and fixing to the inlet mouth of rain water pipe PTMT (an Engineering Thermoplastic) grating square (Slit) 150 mm square with a height of 8 mm and weighing not less than 100 gms.	12.46	1	Each	66.45
#REF!	163.84	<p>Providing and fixing GI Clip in Metal Ceiling System of 600x600 mm module which includes providing and fixing 'C' wall angle of size 20x30x20 mm made of 0.5 mm thick pre painted steel along the perimeter of the room with help of nylon sleeves and wooden screws at 300 mm center to centre, suspending the main C carrier of size 10x38x10 mm made of G.I steel 0.7 mm thick from the soffit with help of soffit cleat 37x27x25x1.6 mm, rawl plugs of size 38x12 mm and C carrier suspension clip and main carrier bracket at 1000 mm c/c. Inverted triangle shaped Spring Tee having height of 24 mm and width of 34 mm made of GI steel 0.45 mm thick is then fixed to the main C carrier and in direction perpendicular to it at 600 mm centers with help of suspension brackets. Wherever the main C carrier and spring T have to join, C carrier and spring T connectors have to be used. All sections to be galvanized @ 120 gms/sqm (both side inclusive), fixing with clip in tiles into spring 'T' with :</p> <p>GI Metal Ceiling Clip in plain Beveled edge global white color tiles of size 600x600 and 0.5 mm thick with 25 mm height, made of G I sheet having galvanizing of 100 gms/ sqm (both sides inclusive) and 20% perforation area with 1.8 mm dia holes and having NRC of 0.5, electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending and perforation.</p>	12.54.2	1	Sqm	1527.25

#REF!	197.37	Extra for plastering exterior walls of height more than 10 m from ground level for every additional height of 3 m or part thereof.	13.22	1	Sqm	40.65
#REF!	675.00	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) For Fixed Portion : Powder coated aluminium (minimum thickness of powder coating 50 micron)	21.1.1.2	1	Kg	384.50
#REF!	673.00	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately) Powder coated aluminium (minimum thickness of powder coating 50 micron)	21.1.2.2	1	Kg	444.90
#REF!	49.01	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade 1 Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge. Pre-laminated particle board with decorative lamination on both sides	21.2.2	1	Sqm	866.60
#REF!	2.40	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item): With float glass panes of 5.50 mm thickness	21.3.2	1	Sqm	1,003.95
#REF!	8.28	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item): With float glass panes of 5.50 mm thickness With float glass panes of 8 mm thickness	21.3.3	1	Sqm	1,153.90
#REF!	191.70	Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete. Upto 5mm depth and 5 mm width	21.8.1	1	Metre	62.45

#REF!	4	Providing and fixing aluminium tubular handle bar 32 mm outer dia, 3.0 mm thick & 2100 mm long with SS screws etc .complete as per direction of Engineer-in-Charge. Powder coated minimum thickness 50 micron aluminium tubular handle bar	21.12.2	1	Each	509.30
#REF!	16	Providing and fixing 100mm brass locks (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	21.13	1	Each	359.00
#REF!	82	Providing and fixing aluminium round shape handle of outer dia 100 mm with SS screws etc. complete as per direction of Engineerin-charge Powder coated minimum thickness 50 micron aluminium	21.16.2	1	Each	68.30
#REF!	4460.00	Providing and supplying aluminium extruded tubular and other aluminium sections as per the architectural drawings and approved shop drawings, the aluminium quality as per grade 6063 T5 or T6 as per BS 1474,including super durable powder coating of 60-80 microns conforming to AAMA 2604 of required colour and shade as approved by the Engineer-in-Charge. (The item includes cost of material such as cleats, sleeves, screws etc. necessary for fabrication of extruded aluminium frame work. Nothing extra shall be paid on this account).	25.1	1	Kg	338.25
532	422.89	<p>Designing, fabricating, testing, protection, installing and fixing in position semi (grid) unitized system of structural glazing (with open joints) for linear as well as curvilinear portions of the building for all heights and all levels, including:</p> <p>Structural analysis & design and preparation of shop drawings for the specified design loads conforming to IS 875 part III (the system must passed the proof test at 1.5 times design wind pressure without any failure), including functional design of the aluminum sections for fixing glazing panels of various thicknesses, aluminium cleats, sleeves and splice plates etc. gaskets, screws, toggles, nuts, bolts, clamps etc., structural and weather silicone sealants, flashings, fire stop (barrier)- cum-smoke seals, microwave cured EPDM gaskets for water tightness, pressure equalisation & drainage and protection against fire hazard including:</p> <p>Providing and fixing in position flashings of solid aluminium sheet 1 mm thick a</p>	25.2	1	sqm	2409.9

Providing and filling, two part pump filled, structural silicone sealant and one part weather silicone sealant compatible with the structural silicone sealant of required bite size in a clean and controlled factory / work shop environment , including double sided spacer tape, setting blocks and backer rod, all of approved grade, brand and manufacture, as per the approved sealant design, within and all around the perimeter for holding glass.

Providing and fixing in position flashings of solid aluminium sheet 1 mm thick a

Making provision for drainage of moisture/ water that enters the curtain glazing system to make it watertight, by incorporating principles of pressure equalization, providing suitable gutter profiles at bottom (if required), making necessary holes of required sizes and of required numbers etc. complete. This item includes cost of all inputs of designing, labour for fabricating and installation of aluminium grid, installation of glazed units, T&P, scaffolding and other incidental charges including wastages etc., enabling temporary structures and services, cranes or cradles etc. as described above and as specified. The item includes the cost of getting all the structural and functional design including shop drawings checked by a structural designer, dully approved by Engineer-in-charge. The item also includes the cost of all mock ups at site, cost of all samples of the individual components for testing in an approved laboratory, field tests on the assembled working structural glazing as specified, cleaning and protection till the handing over of the building for occupation. In the end, the Contractor shall provide a water tight structural glazing having all the performance characteristics etc. all complete as required, as per the Architectural drawings, as per item description, as specified, as per the approved shop drawings and as directed by the Engineerin-Charge.

Note:- 1. The cost of providing extruded aluminium frames, shadow boxes, extruded aluminium section capping for fixing in the grooves of the curtain glazing and vermin proof stainless steel wire mesh shall be paid for separately under relevant items under this subhead. However, for the purpose of payment, only the actual area of structural glazing (including width of grooves) on the external face shall be measured in sqm. up to two decimal

		<p>Note:-2. The following performance test are to be conducted on structural glazing system if area of structural glazing exceeds 2500 Sqm from the certified laboratories accredited by NABL(National Accreditation Board for Testing and Calibration Laboratories), Department of Science & Technologies, India. Cost of testing is payable separately. The NIT approving authority will decide the necessity of testing on the basis of cost of the work, cost of the test and importance of the work. Performance Testing of Structural glazing system Tests to be conducted in the NBL Certified laboratories</p> <p>Performance Laboratory Test for Air Leakage Test (-50pa to - 300pa) & (+50pa to</p> <p>Static Water Penetration Test. (50pa to 1500pa) as per ASTM E- 331- 09 testing m</p> <p>Dynamic Water Penetration (50pa to 1500pa) as per AAMA 501.01- 05 testing m</p> <p>Structural Performance Deflection and deformation by static air pressure test (1</p> <p>Seismic Movement Test (upto 30 mm) as per AAMA 501.4-09 testing method for Qualitative test” Tests to be conducted on site 6. Onsite Test for Water Leakage for a pressure range 50 kpa to 240 kpa (35psi)upto 2000ml”</p>				
533	422.89	<p>Providing, assembling and supplying vision glass panels (IGUs) comprising of hermetically-sealed 6-12- 6 mm insulated glass (double glazed) vision panel units of size and shape as required and specified, comprising of an outer heat strengthened float glass 6mm thick, of approved colour and shade with reflective soft coating on surface # 2 of approved colour and shade, an inner Heat strengthened clear float glass 6mm thick, spacer tube 12mm wide, dessicants, including primary seal and secondary seal (structural silicone sealant) etc. all complete for the required performances, as per the Architectural drawings, as per the approved shop drawings, as specified and as directed by the Engineer-in-Charge. The IGUs shall be assembled in the factory/ workshop of the glass processor. (Payment for fixing of IGU Panels in the curtain glazing is included in cost of item No.25.2) For payment, only the actual area of glass on face # 1 of the glass panels (excluding the areas of the grooves and weather silicone sealant) provided and fixed in position, shall be measured in sqm.</p>	25.30	1.00	Sqm	3,730.70

		(i) Coloured tinted float glass 6mm thick substrate with reflective soft coating on face # 2, + 12mm Airgap + 6mm Heat Strengthened clear Glass of approved make having properties as visible Light transmittance (VLT) of 25 to 35 %, Light reflection internal 10 to 15%, light reflection external 10 to 20 %, shading coefficient (0.25- 0.28) and U value of 3.0 to 3.3 W/m2 degree K etc. The properties of performance glass shall be decided by technical sanctioning authority as per the site requirement.				
534	42.29	Extra for openable side / top hung vision glass panels (IGUs) including providing and supplying at site all accessories and hardwares for the openable panels as specified and of the approved make such as heavy duty stainless steel friction hinges, min 4 -point cremone locking sets with stainless steel plates, handles, buffers etc. including necessary stainless steel screws/ fasteners, nuts, bolts, washers etc. all complete as per the Architectural drawings, as per the approved shop drawings, as specified and as directed by the Engineerin- Charge.	25.4	1	Sqm	2,941.60
535	39.00	Providing, fabricating and supplying shadow box of required size and shape, for fixing in the spandrel portion of the structural glazing, in linear as well as curvilinear portions of the building by providing semi -rigid, inorganic, non-combustible fibre glass wool insulation 50 mm thick, conforming to IS: 8183 and BS: 3958 Part 5. The insulation layer shall have facing (factory bonded on surface # 1of the fibre glass insulation layer), of black nonwoven fibre glass tissue of nominal thickness 0.5 mm and nominal mass not less than 60 gm / sqm, made of randomly oriented glass fibres distributed in a binder by a wet-lay process including fixing 1.5 mm thick solid aluminum sheet backing using, 6 mm thick cement board including SS rivets, nuts, bolts, washers etc complete.	25.5	1	Sqm	1,542.60
536	39.00	Providing and supplying Spandrel Glass Panels comprising of 6 mm thick heat strengthened monolithic float glass of approved colour and shade with reflective soft coating on surface # 2 of approved colour and shade so as to match the colour and shade of the IGUs in the vision panels etc. ,all complete for the required performances as specified, as per the Architectural drawings, as per the approved shop drawings, as specified, and as directed by the Engineer- in- harge. For payment, only the actual area of glass on face # 1 of the glass panels (but excluding the area of grooves and weather silicone sealant) provided and fixed in position, shall be measured in sqm.(Payment for fixing of Spandrel Glass Panels in the curtain glazing is included in cost of relevent Item*).	25.6	1	Sqm	2,798.70

		(i) Coloured tinted float glass 6mm thick substrate with reflective soft coating on face # 2, having properties as visible Light transmittance (VLT) of 25 to 35%, Light reflection internal 10 to 15%, light reflection external 10 to 20%, shading coefficient (0.25- 0.28) and U value of 3.0 to 3.3 W/m2 degree K etc. The properties of performance glass shall be decided by technical sanctioning authority as per the site requirement.				
537	225.13	<p>Designing, fabricating, testing, installing and fixing in position Curtain Wall with Aluminium Composite Panel Cladding, with open grooves for linear as well as curvilinear portions of the building, for all heights and all levels etc. including:</p> <p>Structural analysis & design and preparation of shop drawings for pressure equalisation or rain screen principle as required, proper drainage of water to make it watertight including checking of all the structural and functional design.</p> <p>Providing, fabricating and supplying and fixing panels of aluminium composite panel cladding in pan shape in metallic colour of approved shades made out of 4mm thick aluminium composite panel material consisting of 3mm thick FR grade mineral core sandwiched between two Aluminium sheets (each 0.5mm thick). The aluminium composite panel cladding sheet shall be coil coated, with Kynar 500 based PVDF / Lumiflon based fluoropolymer resin coating of approved colour and shade on face # 1 and polymer (Service) coating on face # 2 as specified using stainless steel screws, nuts, bolts, washers, cleats, weather silicone sealant, backer rods etc.</p>	25.7	1	Sqm	3,405.90

	<p>The fastening brackets of Aluminium alloy 6005 T5 / MS with Hot Dip Galvanised with serrations and serrated washers to arrest the wind load movement, fasteners, SS 316 Pins and anchor bolts of approved make in SS 316, Nylon separators to prevent bi-metallic contacts all complete required to perform as per specification and drawing The item includes cost of all material & labour component, the cost of all mock ups at site, cost of all samples of the individual components for testing in an approved laboratory, field tests on the assembled working curtain wall with aluminium composite panel cladding, cleaning and protection of the curtain wall with aluminium composite panel cladding till the handing over of the building for occupation. Base frame work for ACP cladding is payable under the relevant aluminium item.s The Contractor shall provide curtain wall with aluminium composite panel cladding, having all the performance characteristics all complete , as per the Architectural drawings, as per item description, as specified, as per the approved shop drawings and as directed by the Engineer-in-Charge. However, for the purpose of payment, only the actual area on the external face of the curtain wall with Aluminum Composite Panel Cladding (including width of groove) shall be measured in sqm. up to two decimal places.</p>				
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538	30.56	<p>“Design supply & installation of suspended Spider Glozing system designed to withstand the wind pressure as pr IS 875 (Part-III). The Suspended System held with Spider Fittings of SS-316 Grade Steel of approved manufacturer with glass panel having 12 mm thick clear toughened glass held together with SS-316 Grade Stainless steel Spider & bolt assembly with laminated glass fins 21 mm thick. The Glass fins and glass panel assembly shall be connected to Slab/beams by means of SS- 316 Grade stainless steel brackets & Anchor bolts and at the bottom using SS channel of 50x25x2mm using fastener & anchor bolts, non staining weather sealants of approved make, Teflon/ nylon bushes and separators to prevent bi-metallic contacts, all complete to perform as per specification and approved drawings. The complete system to be designed to accommodate thermal expansion & seismic movements etc. The joints between glass panels (6 to 8 mm) and gaps at the perimeter & in U channel of the assembly to be filled with non staining weather sealant, so as to make the entire system fully water proof & dust proof.</p> <p>The rate shall include all design, Engineering and shop drawing including approval from structural designer, labour, T&P, scaffolding, other incidentalcharges including wastage, enabling temporary services all fitting fixers nut bolts, washer, Buffer plates, fastener, anchors, SS channel laminated glass etc. all complete. For the purpose of payment, actual elevation area of Glazing including thickness of joints and the portion of Glass panel inside the SS channel shall be measured. “</p>	25.8	1	Sqm	6,928.55
539	66.20	<p>Design, supply and erection of gutters manufactured out of High tensile galvalume steel to required lengths as per designed profile and size . The steel shall be high tensile 550 Mpa yield strength , and manufactured to As 1397 standard. The external side shall have 20 micron colour coating of SMP and internal side a backing coat over epoxy primer. The end laps shall be joined using nut bolts and the gutter straps shall be fixed using self drilling and self tapping screws 3.complete in all respects, for proper completion of the work.</p>	N.S	1	Sqm	1,800.00

540	3.75	Supply & installation of frameless glass Door of approved make with overpanel / sidelight using 12mm thick toughened glass of approved make with die cast patch fitting with stainless steel cover PT -30 , PT-40 ,PT 10 , PT 20 , US 10 Lock. Pull Handle TGDI-H 450 back to back with 350mm CTC, adjustable fixing for glass. Length =450mm, 25mm dia, -SS304 Finish: mill, Floor spring BTS 65 with std. spindle and cover plate. As per DIN EN 1154.(500,000 cycle tested) , Finish: Satin stainless steel. Floor stop half dome with 45mm dia with fixing accessories, in satin Chrome. The work should be executed as per manufacturer's specifications and complete in all respect as per approved drawings and to the satisfaction of Architect /Engineer-in-Charge.	NS	1	Sqm	18,000.00
541	5.58	I).CONSTRUCTION OF OVER HEAD TANK Supplying and filling in plinth with stone dust under floors, including watering, ramming, consolidating and dressing complete.	APSS	1	Cum	851.00
542	5.58	Plain Cement Concrete (1:4:8) (cement: fine aggregate: Coarse aggregate) for foundations and under flooring bed using coarse aggregate 40mm size hard, machine crushed granite from approved quarry including cost and conveyance of all materials like cement, sand, coarse aggregate, water etc. to site, including sales & other taxes on all materials and including all charges for machine mixing, laying concrete in foundations and under flooring bed, ramming in 15 cm layers finishing top surface to the required level curing etc., and overheads & contractors profit complete for finished item of work. (APSS No. 402)	APSS	1	Cum	3,459.00
543	1,233.65	Painting two coats with synthetic enamel paint Grade-I VOC (Volatile Organic Compound) content less than 50 grams/litre to new iron work including cost and conveyance of all materials to site, sales & other taxes, incidental, operational and all labour charges etc., and overheads & contractors profit complete for finished item of work in all floors. (SS No. 1201, 1212 & 1207).	APSS	1	Sqm	89.00
544	81.00	52 mm thick cement concrete flooring with concrete hardener topping, under layer 40 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6 mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 kg of cement or as per manufacturer's specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete.	APSS	1	Sqm	555.25

545	2	Providing & fixing SMC Panel Tank of approximate Capacity 50,000 lt. of standard approved make including installation at approximate height of 15.00 mtr. complete in all respect as per site requirement and as directed by Engineer-in-charge.	APSS	1	Each	725,000.00
546	192.83	JCONSTRUCTION OF WATCH TOWER Earth work excavation for foundations (Mechanical Means) for buildings in ordinary soils and depositing on bank for all lifts and with an initial lead of 10m and up to 3m depth including all operational, incidental, labour charges such as shoring, sheeting, planking, strutting etc., and overheads & contractors profit complete for finished item of work excluding dewatering charges etc., as per SS 20 B (APSS 308)	APSS	1	Cum	94.00
547	321.39	Earth work excavation for foundations for buildings in hard rock (requiring blasting) and depositing on bank			Cum	596.00
548	0.00	Filling with useful available excavated earth (excluding rock) with a lead of 50 m in trenches, sides of foundations and basement with initial lead in layers not exceeding 15cm thick, watering and ramming including cost and conveyance of water to work site and all operational, incidental, labour charges, hire charges of T&P etc., and overheads & contractors profit complete for finished item of work (APSS NO.309&310)	APSS	1	Cum	0.00
549	612.35	Filling with carted gravel in trenches, sides of foundations and basement with initial lead in layers			Cum	537
550	11.91	Filling with carted Stonedust in trenches, sides of foundations and basement with initial lead in layers			Cum	828

551	71.61	Plain Cement Concrete (1:4:8) (cement: fine aggregate: Coarse aggregate) for foundations and under flooring bed using coarse aggregate 40mm size hard, machine crushed granite from approved quarry including cost and conveyance of all materials like cement, sand, coarse aggregate, water etc. to site, including sales & other taxes on all materials and including all charges for machine mixing, laying concrete in foundations and under flooring bed, ramming in 15 cm layers finishing top surface to the required level curing etc., and overheads & contractors profit complete for finished item of work. (APSS No. 402)	APSS	1	Cum	3,459.00
552	72.06	Supply and placing of the Design Mix Concrete M 25 grade corresponding to IS 456 with minimum cement content of 380 kgs per 1 cum of concrete using WEIGH BATCHER / MIXER with 20mm size graded machine crushed hard granite metal (coarse aggregate - as per IS 383 - 1970 and IS 2386 Part 1 to Part 8) from approved quarry including cost and conveyance of all materials like cement, fine aggregate (sand) coarse aggregate, water etc., to site and sales & other taxes on all materials , centering using Steel scaffolding pipes , jack props , wallers , Foot plates , brackets , steel centering plates etc., including all operational, incidental and labour charges such as weigh batching, machine mixing, lifting of concrete manually, laying concrete, vibrating, curing etc., and overheads & contractors profit complete but excluding cost of steel and its fabrication charges for finished item of work (APSS No. 402) Footing	APSS	1	Cum	7,768.00
553	36.79	Supply and placing of the Design Mix Concrete M 25 grade corresponding to IS 456 with minimum cement content of 380 kgs per 1 cum of concrete using WEIGH BATCHER / MIXER with 20mm size graded machine crushed hard granite metal (coarse aggregate - as per IS 383 - 1970 and IS 2386 Part 1 to Part 8) from approved quarry including cost and conveyance of all materials like cement, fine aggregate (sand) coarse aggregate, water etc., to site and sales & other taxes on all materials , centering using Steel scaffolding pipes , jack props , wallers , Foot plates , brackets , steel centering plates etc., including all operational, incidental and labour charges such as weigh batching, machine mixing, lifting of concrete manually, laying concrete, vibrating, curing etc., and overheads & contractors profit complete but excluding cost of steel and its fabrication charges for finished item of work (APSS No. 402) Column Padestals	APSS	1	Cum	8,129.00

554	18.72	Supply and placing of the Design Mix Concrete M 25 grade corresponding to IS 456 with minimum cement content of 380 kgs per 1 cum of concrete using WEIGH BATCHER / MIXER with 20mm size graded machine crushed hard granite metal (coarse aggregate - as per IS 383 - 1970 and IS 2386 Part 1 to Part 8) from approved quarry including cost and conveyance of all materials like cement, fine aggregate (sand) coarse aggregate, water etc., to site and sales & other taxes on all materials , centering using Steel scaffolding pipes , jack props , wallers , Foot plates , brackets , steel centering plates etc., including all operational, incidental and labour charges such as weigh batching, machine mixing, lifting of concrete manually, laying concrete, vibrating, curing etc., and overheads & contractors profit complete but excluding cost of steel and its fabrication charges for finished item of work (APSS No. 402) Plinth Beams	APSS	1	Cum	9,729.00
555	19.14	Providing Thermo Mechanically Treated (TMT) (Fe 500 grade as per IS 1786-1979) of different diameters for RCC works , including labour charges for straightening, cutting, bending to required sizes and shapes, placing in position with cover blocks of approved materials and size and tying and lap-splicing with binding wire of 18 SWG, forming grills for reinforcement work as per approved designs and drawings, including cost and conveyance of steel bars, including all wastages such as overlaps, couplings, chairs, spacer bars including cost and conveyance of binding wire, cover blocks and all incidental, operational, labour charges such as cutting, bending, placing in position, tying including sales and other taxes on all materials etc. ,and overheads & contractors profit complete for finished item of work.(APSS No.126) First Storey	APSS	1	MT	50,973.00
556	62.40	Plastering 12mm thick single coat in CM(1:5) using screened sand including cost and conveyance of all materials like cement, sand, water etc., to site, including sales & other taxes on all materials, and all operational, incidental charges on materials and including cost of all labour charges for mixing mortar, finishing, curing as directed by Engineer-in-charge etc., and overheads & contractors profit complete for finished item of work.(SS 901,903 & 904) For basment	APSS	1	Sqm	114.00
557	62.40	Painting to new walls with 2 coats of water proof cement paint of shade as approved by the Engineer-In-Charge over a base coat of aproved white cement base coat making 3 coats in all to give an even shade after thouroughly brushing the surface to remove all dirt and remains of loose powdered materials, including cost and conveyance of all materials to work site and all operational, incidental, labour charges etc., and overheads & contractors profit complete for finished item of work as per SS 912 in all floors	APSS	1	Sqm	114.00

558	1656.37	Painting two coats with synthetic enamel paint Grade-I VOC (Volatile Organic Compound) content less than 50 grams/litre to new iron work including cost and conveyance of all materials to site, sales & other taxes, incidental, operational and all labour charges etc., and overheads & contractors profit complete for finished item of work in all floors. (SS No. 1201, 1212 & 1207).	APSS	1	Sqm	89.00
559	8.39	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in: Cement mortar 1:6 (1 cement : 6 coarse sand)	6.1.2	1	Sqm	4,751.65
560	16.00	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete.	9.84	1	each	388.40
561	32.00	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete : 250x10 mm	9.97.2	1	Each	88.10
562	16.00	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete. Twin rubber stopper	9.101.2	1	Each	38.00
563	0.00	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete. Details Attached (For 1 No. Watch Tower)	10.2	1	Kg	0.00
564	15,984.00	Steel work in builtup tubular(round,square,rectangular hallow tubesetc)trusses etc including cutt			Kg	90.25
565	803.88	Providing and fixing mild steel round holding down bolts with nuts and washer plates complete.	10.19	1	Kg	68.00
566	7730.24	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required. In stringers, treads, landings etc. of stair cases, including use of chequered plate wherever required, all complete	10.25.1	1	Kg	65.80
567	13114.80	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	10.25.2	1	Kg	85.95

568	79.38	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete. 40 mm thick with 20 mm nominal size stone aggregate	11.3.1	1	Sqm	362.60
569	120.00	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) : Powder coated aluminium (minimum thickness of powder coating 50 micron)	21.1.1.2	1	Kg	384.50
570	150.00	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately) Powder coated aluminium (minimum thickness of powder coating 50 micron)	21.1.2.2	1	Kg	444.90
571	72.00	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item): With float glass panes of 8 mm thickness	21.3.3	1	Sqm	1,153.90
572	214.00	Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete. Upto 5mm depth and 5 mm width	21.8.1	1	Metre	62.45
573	8.00	Providing and fixing 100mm brass locks (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	21.13	1	Each	359.00
574	16.00	Providing and fixing aluminium round shape handle of outer dia 100 mm with SS screws etc. complete as per direction of Engineerin-charge Powder coated minimum thickness 50 micron aluminium	21.16.2	1	Each	68.30

575	288.00	<p>Supply and fixing of 75 mm thk. AEROCON panels of size 2400/2700/3000 mm length and 600 mm wide having Tongue & Groove joint system for ceiling with a density of 780 kg/cum having K value : 0.21 W/mK, Axial load/metre width : 83 KN/m having a fire rating of 120 minutes and 36 db sound insulation.</p> <p>The panels are made of two fibre reinforced cement sheets enclosing a light weight aerated concrete core composed of cement & binders. The fibre reinforced cement sheets are confirming to IS 13000--1990 / IS 14862-2000 .These panels need to meet transverse load & modulus of rupture requirements as per ASTM-E-72:98 & IS 2380 Part 4. The AEROCON panels should be supported on the existing grid frame of MS Steel hollow section, as per drawings. The panels to be jointted with resin based glue mixed with hardner (SmartBond) for jointing tongue & groove of refabricated panels and glass fibre reinforced mesh tape 16 mm wide to be surfacially fitted at joint and finished with resin based jointing compound 100 mm wide complete in all respects as per sit requirement and as per directions of the Engineer-in-Charge.For watch towers</p>			Sqm	2,000.00
576	576.00	<p>Providing and applying Wall putty of White Cement or Polymer or Cement based of average 1 to 2 mm thickness over plastered surface to prepare the surface even and smooth after thoroughly brushing the surface to remove all dirt and remains of loose powdered materials, applying emery paper, Sand the surface, clean & wipe off loose dust, applying knifing paste filler by putty knife / muslin pad, air dry for 2 - 3 hrs, sand with 180 and 320 No., emery paper for the surface preparation including cost and conveyance of all materials to work site and all operational, incidental, labour charges, over heads and contractors profit etc., complete for finished item of work in all floors for Internal walls</p>			Sqm	197.00
577	576.00	<p>Supply & application of one coat water based cement primer of interior grade I and two coats of acrylic emulsion paint having VOC (Volatile Organic Compound) content less than 50 grams/litre for internal walls including cost and conveyance of all materials to site, sales & other taxes, incidental, operational and all labour charges etc., and overheads & contractors profit complete for finished item of work in all floors.</p>			Sqm	136.00

578	184.32	Supplying and fixing of Pre-painted Galvalume Trapezoidal Profile Roofing sheets with 0.50mm thickness, Coating: Alu-Zinc coating AZ150 GSM. Tensile Strength: 550 MPA. Paint coating: Regular Modified Polyester painting. Painting Thickness (Top): 18 to 20 Microns, (Bottom): 5 to 7 Microns. Sheet Width: 1.020, Length: Maximum 12 Meters with Regular Range Colours fixed with G.I 'J' bolts & nuts 8 mm dia with bitumen & G.I limpet washers filled with white lead & including a coat of approved steel primer and two coats of approved paint on over lapping of sheets complete (up to a pitch of 600) etc., complete, excluding the cost of purlins, rafters, trusses including cost and conveyance of all materials , labour charges , overheads and contractors profit etc., complete for finished item of work in all floors.			Sqm	716.00
579	43	K.) SUB ESTIMATE PUBLIC HEALTH Supply, Installation and commissioning approved make floor mounted Close coupled EWC suit CASCADE model 'P' or 'S' trap with dual flush porcelain cistern fixed on EWC with all internal parts of dual flush cistern, ultra solid seat cover of approved make with rubber buffer and cap 15 mm angle stop cock 450 mm long PVC inter connection pipe wall flanges all of approved make etc. complete for finished item of work in all respects: White Colour	APSS	1	Each	9689
580	43	Supply & fixing bib cock cum health faucet with 1 m long flexible tube and wall hook of Jaquar make queen series with 7 years warranty Chrome plated	APSS	1	Each	4360
581	43	Supply & fixing of toilet paper holder Jaquar make Queen series. with 7 years warranty: Chrome plated	APSS	1	Each	1350
582	43	Supply & Fixing of towel coat hook Jaquar make Queen series with 7 years warranty: Chrome plated	APSS	1	Each	944
583	30	Supply & Fixing of Towel ring Jaquar make Queen series with 7 years warranty: Chrome plated	APSS	1	Each	1269
584	30	a) S & F liquid soap container NP metallic with NP brackets and screws.	APSS	1	Each	243
585	44	Supplying & fixing oval shape basin white (520x410mm) parry or equivalent	APSS	1	Each	2481

586	46	Supply & fixing of Bottle trap Jaquar make with 7 years warranty: Chrome plated	APSS	1	Each	1704
587	44	Supply & fixing pillar cock Jaquar make Queen series with 7 years warranty: Chrome plated	APSS	1	Each	1806
588	30	a) Supplying and fixing TV shape mirror with plastic frame size 609.6 mm x 457 .2 mm	APSS	1	Each	513
589	2	Supplying & Fixing Indian make white glazed vitreous china porcelain sink conforming to IS:2556-Part-5-1994 on cantilever brackets with waste fittings like rubber plug, chain, 32 mm nominal size C.P. Fitting with parallel pipe thread conforming to IS:2963-1979 : 600 x 400 x 250	APSS	1	Each	4959
590	2	S & F CP Long body bib cock fancy type deluxe heavy duty 12.7 mm dia Indian make	APSS	1	Each	637
591	21	Supplying & Fixing white glazed flat back half stall urinals 1st quality conforming to IS:2556-1995 with standard C.P. Spreader of overall size 95 x 95 x 57 mm conforming to IS:2556-Part6, Sec-6-1974 fixed with screws complete Indian make : 590 x 375 x 390 mm	APSS	1	Each	3100
592	2	Supply, Transportation and fixing of storage / Pressure type Vertical / Horizontal 230/250V single phase 2000watts ISI mark 5 Star rated water heater with SS tank and ABS plastic body of 15 Ltrs capacity to withstand up to 6.5 bar of water pressure including all standard accessories and dead weight pressure reducing valve on out let side, including cost of 2 Nos nylon / PVC / Metallic hose pipe, testing and all labour charges etc., complete. Makes: Crompton model No. solarium plus SWH 725, Class 1 rated or its equivalent make of Bajaj / Venus / Racold / Usha / V luard / Havells.	APSS	1	Each	8866
593	46	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 a) 15 mm nominal bore	18.53.1 DSR	1	Each	475.7
594	47	Providing and fixing uplasticised PVC connection pipe with brass unions : 15 mm nominal bore	18.21.2.1	1	Each	67.80

595	16	Providing and fixing stone slab with table rubbed, edges rounded and polished, of size 75x50 cm deep and 1.8 cm thick, fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6 mm nominal size) as per direction of Engineer-in-charge and finished smooth. Granite Stone of approved shade	8.10.2	1	Sqm	2831.95
596	2	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete : 20 mm nominal bore	18.18.2	1	Each	327.05
597	2	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete : 25 mm nominal bore	18.18.3	1	Each	331.95
598	29	Providing, fixing & testing fully automatic "No touch" hand drier suitable to operate on 230 volts, single phase, 50 Hz AC power supply complete with brackets including cutting and making good the walls wherever required.	NS-1	1	Each	7395
599	29	Providing and Fixing Toilet paper Dispenser with wooden cleats and C.P. brass screws including cutting and making good the wall wherever required.	NS-2	1	Each	7395
600	2	Providing and Fixing 600 mm long Hand rail (Grab bar) for Handicap Toilets with Stainless Steel Screws on wooden cleats complete as per instructions of the engineer-in-charge or as per equivalent make .	NS-3	1	Each	1275
601	60	Providing and fixing chrome plated grating with ring and two S.S screws of approved design with grating screwed down to the ring with s/s screws and embedding and setting ring into the floor with cement mortar .(As per approved make or equivalent)	NS-4	1	Each	525
602	1	Providing and fixing C.I double flanged equilibrium float valve with M.S. lever high pressure, copper ball and flanges including nuts, bolts, 3mm thick rubber insertions complete. in all respect as per direction of the Engineer-in-Charge. 40mm dia	NS-5	1	Each	4020
603	1	Providing and fixing C.I double flanged equilibrium float valve with M.S. lever high pressure, copper ball and flanges including nuts, bolts, 3mm thick rubber insertions complete. in all respect as per direction of the Engineer-in-Charge. 50mm dia	NS-5	1	Each	4675

604	25	75 mm dia. Centrifugally cast (spun) iron socket & spigot (S&S) pipes per IS: 3989	17.35.2.2	1	Mtr	794.55
605	405	100 mm dia. Centrifugally cast (spun) iron socket & spigot (S&S) pipes per IS: 3989	17.35.1.2	1	Mtr	921.65
606	25	Painting sand cast iron/ centrifugally cast (spun) iron soil, waste vent pipes and fittings with two coats of synthetic enamel paint of any colour such as chocolate grey, or buff etc. over a coat of primer (of approved quality) for new work : 75 mm dia.	17.65.2	1	Mtr	31
607	405	Painting sand cast iron/ centrifugally cast (spun) iron soil, waste vent pipes and fittings with two coats of synthetic enamel paint of any colour such as chocolate grey, or buff etc. over a coat of primer (of approved quality) for new work : 100 mm dia.	17.65.1	1	Mtr	40.65
608	6	Providing and fixing M.S. holder-bat clamps of approved design to Sand Cast iron/cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10 cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including cost of cutting holes and making good the walls etc. : For 100 mm dia pipe	17.37.1	1	Eacch	167.35
609	45	Providing and fixing M.S. holder-bat clamps of approved design to Sand Cast iron/cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10 cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including cost of cutting holes and making good the walls etc. : For 75 mm dia pipe	17.37.2	1	Eacch	165.05
610	25	Providing and fixing bend of required degree withh access door, insertion rubber washer 3 mm thick, bolts and nuts complete. 100 mm dia sand cast iron S&S as per 3989.	17.38.1.2	1	Eacch	384.9
611	25	Providing and fixing plain bend of required degree. 100 mm dia sand cast iron S&S as per 3989.	17.39.1.2	1	Eacch	334.95
612	25	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3mm thick, bolts and nuts complete. 100x100x100 mm sand cast iron S&S as per IS 3989	17.43.1.2	1	Eacch	623
613	10	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3mm thick, bolts and nuts complete. 75x75x75 mm sand cast iron S&S as per IS 3989	17.43.2.2	1	Eacch	472.35

614	25	Providing and fixing door piece, insertion rubber washer 3mm thick, bolts & nuts complete : 100 mm dia sand cast iron S&S as per 3989.	17.55.1.2	1	Eacch	512.65
615	25	Providing and Fixing collar: - 100 mm dia sand cast iron S&S as per 3989.	17.57.1.1	1	Eacch	187.45
616	15	Providing and Fixing collar: - 75 mm dia sand cast iron S&S as per 3989.	17.57.2.2	1	Eacch	219.15
617	25	Providing and fixing M.S. stays and clamps for sand cast iron/ centrifugally cast (spun) iron pipes of diameter : 100 mm dia	17.59.1	1	Eacch	62
618	15	Providing and fixing M.S. stays and clamps for sand cast iron/ centrifugally cast (spun) iron pipes of diameter : 75 mm dia	17.59.2	1	Eacch	56.55
619	65	Providing and Fixing floor trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors. 100 mm inlet and 100 mm outlet Sand cast iron S&S as per IS: 3989	17.60.1.1	1	Eacch	1034.45
620	90	Providing and Fixing G.I. Class "B" pipe complete with G.I. Fittings and angle supports, clamps, including cutting and making good the walls etc. 32 mm dia	18.10.4	1	Metre	308.35
621	40	Providing and Fixing G.I. Class "B" pipe complete with G.I. Fittings and angle supports, clamps, including cutting and making good the walls etc. 40 mm dia	18.10.5	1	Metre	394.15
622	20	Providing and Fixing G.I. Class "B" pipe complete with G.I. Fittings and angle supports, clamps, including cutting and making good the walls etc. 50 mm dia	18.10.6	1	Metre	472.4
623	90	Painting of G.I. Pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality. 32 mm dia	18.40.4	1	Metre	10.85
624	40	Painting of G.I. Pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality. 40 mm dia	18.40.5	1	Metre	12.35
625	20	Painting of G.I. Pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality. 50 mm dia	18.40.6	1	Metre	14.8

626	15	Providing and Fixing G.I. Reducing elbow of 100 x 50 mm in cement concrete 1:2:4 at all levels for floor drains (exlcuding cost of grating) for connection to floor traps in sunken portions, complete as per drawings and as per approval of the engineer-in-charge.(GI Pipe for connecting elbow with floor trap shall be measured seperatly)	NS	1	Nos.	1650
627	65	Providing and fixing G.I. Inlet fitting with maximum 3 inlets 32,40 & 50 mm size fabricated from 100 mm dia G.I.pipes and welded G.I. sockets as per site locations, fixed to C.I. Trap and set with proper sealing compound as per drawing complete as per approval of the engineer-in-charge.	NS	1	Nos.	1135
628	25	Providing and fixing cast brass Floor Clean Out plug withh suitable insert keys for opening, male threaded joint withh G.I. socket drip seal to soil pipe / waste pipe of C.I. pipe as required complete as per drawing, approved sample and direction by Engineer-in-charge: 100 mm dia	NS	1	Nos.	1835
629	160	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes. 110 mm diameter	12.41.2	1	Metre	236.35
630	10	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion. Single Push fit coupler 110 mm diameter	12.42.2.2	1	Each	94.55
631	10	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion. Single Tee with door 110x110x110 mm dia	12.42.3.2	1	Each	181.55
632	10	Bend 87.5 Deg 110 mm dia	12.42.5.2	1	Each	113.1
633	15	Providing and Fixing on wall face unplasticised - PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50 x 50 x 50 mm hard wood plugs, screwed with M.S. screws of required length including cutting brick work and fixing in cement mortar 1:4 (1 Cement: 4 Coarse sand) and making good the walls etc. complete 110 mm dia	12.43.2	1	Each	181.4
634	10	Providing and Fixing to the inlet mouth of rain water pipe cast iron grating 15 cm diameter and weighing not less then 440 grams.	12.44	1	Each	40.9

635	90	Providing and fixing UPVC rain water pipes of 6 kg./cm ² conforming to IS: 4985 including all fittings with or without access door or without access i.e bends, junctions, cowls, offsets, etc., and jointing with solvent cement and excavation, refilling and disposal of surplus earth, including cutting holes in walls and floors, excavation, refilling and disposal of surplus earth wherever required and making good the same, complete as directed by the Engineer-in-Charge. 160 mm dia	NS	1	Mtr	815
636	75.00	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. Internal work - Exposed on wall and terrace 15 mm dia	18.7.1	1	Metre	142.95
637	180.00	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. Internal work - Exposed on wall and terrace 20mm dia	18.7.2	1	Metre	179.95
638	105.00	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. Internal work - Exposed on wall and terrace 25mm dia	18.7.3	1	Metre	216.2
639	95.00	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. Internal work - Exposed on wall and terrace 32mm dia	18.7.4	1	Metre	289.05
640	115.00	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. Internal work - Exposed on wall and terrace 40mm dia	18.7.5	1	Metre	385.5

641	80.00	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. Internal work - Exposed on wall and terrace 50mm dia	18.7.6	1	Metre	548.55
642	170.00	Providing and Fixing Chlorinated Polyvinyl Chloride (CPVC) Pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings including fixing the pipe with supports, clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer-In-Charge. Concealed work including cutting chases and making good the walls etc.15 mm dia	18.8.1	1	Metre	270
643	170.00	Concealed work including cutting chases and making good the walls etc. 20 mm dia	18.8.2	1	Metre	296.4
644	45.00	Concealed work including cutting chases and making good the walls etc. 25 mm dia	18.8.3	1	Metre	351.3
645	25.00	Concealed work including cutting chases and making good the walls etc. 32 mm dia	18.8.4	1	Metre	412.9
646	10.00	Providing and fixing brass stop cock of approved quality 15mm nominal bore	18.16.1	1	Each	260.1
647	16.00	Providing and fixing brass stop cock of approved quality 20mm nominal bore	18.16.2	1	Each	280.4
648	23.20	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) : 25mm dia nominal bore	18.17.1	1	Each	428.85
649	10.00	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) : 32mm dia nominal bore	18.17.2	1	Each	501.5
650	5.00	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) : 40mm dia nominal bore	18.17.3	1	Each	585.5

651	1.00	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :50mm dia nominal bore	18.17.4	1	Each	750.75
652	250	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, addressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m : Pipes, cables etc, not exceeding 80 mm dia.	2.10.1.1	1	Metre	138.05
653	1100	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, addressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m : Pipes, cables etc. exceeding 80 mm dia but not exceeding 300 mm dia	2.10.1.2	1	Metre	225.45
654	50	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, addressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m : Pipes, cables etc. exceeding 300 mm dia but not exceeding 600 mm	2.10.1.3	1	Metre	352
655	500	Extra for excavating trenches for pipes, cables etc. in all kinds of soil for depth exceeding 1.5 m, but not exceeding 3 m. (Rate is over corresponding basic item for depth upto 1.5 metre). Pipes, cables etc. exceeding 80 mm dia but not exceeding 300 mm dia	NS	1	Metre	286.32
656	50	Extra for excavating trenches for pipes, cables etc. in all kinds of soil for depth exceeding 1.5 m, but not exceeding 3 m. (Rate is over corresponding basic item for depth upto 1.5 metre). Pipes, cables etc. exceeding 300 mm dia but not exceeding 600 mm	NS	1	Metre	1108.8
657	30	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W./RCC pipes including bed concrete as per standard design: 100 mm dia	19.2.1	1	Metre	622.95

658	700	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W./RCC pipes including bed concrete as per standard design: 150 mm dia	19.2.2	1	Metre	761.85
659	130	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W./RCC pipes including bed concrete as per standard design:200 mm dia	19.2.3	1	Metre	888.1
660	160	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W./RCC pipes including bed concrete as per standard design: 250 mm dia	19.2.4	1	Metre	1027
661	10	Centering and shuttering including strutting, propping etc. and removal of form for all heights as per architectural drawings and direction of Engineer-in- Charge complete. Foundations, footings, bases of columns, etc. for mass concrete	4.3.1	1	Sqm	193.95
662	15	Providing and fixing square-mouth S.W. gully trap class SP-1 complete withh C.I. grating brick masonry chamber withh water tight C.I. cover withh frame o f 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design: 100x100 mm size P type withh common burnt clay F.P.S. (non modular) bricks of class designation 7.5	19.4.1	1	Each	1602.4
663	20	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete : 100 mm diameter	19.1.1	1	Metre	216.25
664	200	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete : 150 mm diameter	19.1.2	1	Metre	327.05
665	130	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete :200 mm diameter	19.1.3	1	Metre	423.35
666	500	Providing and laying non-pressure NP2 class (light duty) R.C.C pipes jointed withh stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. Complete 150 mm dia. R.C.C. pipe	19.6.2	1	Metre	355.7
667	160	Providing and laying non-pressure NP2 class (light duty) R.C.C pipes jointed withh stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. Complete 250 mm dia. R.C.C. pipe	19.6.3	1	Metre	482.05

668	70	Providing and laying non-pressure NP2 class (light duty) R.C.C pipes jointed withh stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. Complete 300 mm dia. R.C.C. pipe	19.6.4	1	Metre	518.55
669	10	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) withh R.C.C. top slab withh 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick withh cement mortar 1:3 (1 cement : 3 coarse sand) finished withh floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4graded stone aggregate 20 mm nominal size) finished withh a floating coat of neat cement complete as per standard design : Inside size 90x80 cm and 45 cm deep including C.I. cover withh frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) : Withh common burnt clay F.P.S. (non-modular) bricks of class designation 7.5	19.7.1.1	1	Each	8634.1
670	5	Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (medium duty) 500 mm internal diameter, total weight of cover and frame to be not less than 116 kg (weight of cover 58 kg and weight of frame 58 kg) : Withh common burnt clay F.P.S. (non-modular) bricks of class designation 7.5	19.7.2.1	1	Each	18422.4
671	5	Extra for depth for manholes : Size 90x80 cm With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	19.8.1.1	1	Metre	5718.6
672	5	Extra for depth for manholes Size 120x90 cm With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	19.8.2.1	1	Metre	6850.7
673	10	Constructing brick masonry circular type manhole 0.91 m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement : 4 Coarse sand), in side cement plaster 12 mm thick withh cement mortar 1:3 (1 cement : 3 coarse sand) finished withh a floating coat of neat cement, foundation concrete 1:3:6 mix (1 Cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) and making necessary channel in cement concrete 1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished withh a floating coat of neat cement all complete as per stander design.	19.9.1.1	1	Each	8684

		<p>0.91 m deep with S.F.R.C . cover and frame (heavy duty, HD-20 grade designation) 560 mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182 Kg. fixed in cement concrete 1:2:4 (1 cement :2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including centering shuttering all complete. (Excavation , foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately)</p>				
		<p>Withh common burnt clay F.P.S. (non modular) bricks of class designation 7.5</p>				
674	5	<p>Extra depth for circular type manhole 0.91m internal dia (at bottom) beyond 0.91 m to 1.67 m Withh common burnt clay F.P.S. (non modular) bricks of class designation 7.5</p>	19.10.1	1	Metre	4911.8
675	5	<p>Constructing brick masonry circular manhole 1.22 m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement :4 coarse sand) inside cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement foundation concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) and making necessary channel in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement, all complete as per standard design :</p>	19.11.1	1	each	16720.9
		<p>1.68 m deep with SFRC Cover and frame (heavy duty HD-20 grade designation) 560 mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182 kg. fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including centering, shuttering all complete. (Excavation, foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately) : With Sewer bricks conforming IS : 4885</p>				
676	5	<p>Extra depth for circular type manhole 1.22 m internal dia (at bottom) beyond 1.68 m to 2.29 m : With Sewer bricks conforming IS : 4885</p>	19.12.2	1	each	6505.15

677	5	Constructing brick masonry circular manhole 1.52 m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement : 4 coarse sand)inside cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) and making necessary channel in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement, all complete as per standard design :	19.13.1	1	each	35845.05
		2.30 m deep with SFRC Cover and frame (heavy duty HD- 20 grade designation) 560 mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182 kg. fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including centering, shuttering all complete. (Excavation, foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately) : With Sewer bricks conforming IS : 4885				
678	5	Extra depth for circular type manhole 1.52 m internal dia (at bottom) beyond 2.30 m : With Sewer bricks conforming IS : 4885	19.14.2	1		15397
679	15	Constructing brick masonry road gully chamber 50x45x60 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	19.27.1	1	Each	4043.1
680	10	Constructing brick masonry road gully chamber 45x45x77.5 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) with precast R.C.C. vertical grating complete as per standard design : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	19.28.1	1	Each	4384.5
681	5	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc External Works . 20 mm dia	18.12.2	1	Metre	186.3
682	5	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc External Works 25 mm dia	18.12.3	1	Metre	205.85
683	15	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc External Works 32 mm dia	18.12.4	1	Metre	247.4

684	100	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc External Works 40 mm dia	18.12.5	1	Metre	301.05
685	100	Providing and fixing G.I. pipes complete with G.I. fittings including trenching an	18.12.6	1	Metre	342.7
686	25	Providing and fixing G.I. pipes complete with G.I. fittings including trenching an	18.12.7	1	Metre	451.7
687	50	Providing and fixing G.I. pipes complete with G.I. fittings including trenching an	18.12.8	1	Metre	576.3
688	5	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint	18.40..2	1	Metre	7.1
689	5	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint	18.40.3	1	Metre	9.1
690	15	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint	18.40.4	1	Metre	10.85
691	100	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint	18.40.5	1	Metre	12.35
692	100	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint	18.40.6	1	Metre	14.8
693	25	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint	18.40.7	1	Metre	18.25
694	50	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint	18.40.8	1	Metre	21.2
695	5	Providing and filling sand of grading zone V or coarser grade around the GI pipes in external work. 20 mm dia nominal bore	18.41.2	1	Metre	67.7
696	5	Providing and filling sand of grading zone V or coarser grade around the GI pipes in external work. 25 mm dia nominal bore	18.41.3	1	Metre	69.5
697	15	Providing and filling sand of grading zone V or coarser grade around the GI pipes in external work.32 mm dia nominal bore	18.41.4	1	Metre	71.3

698	100	Providing and filling sand of grading zone V or coarser grade around the GI pipes in external work.40 mm dia nominal bore	18.41.5	1	Metre	72.25
699	100	Providing and filling sand of grading zone V or coarser grade around the GI pipes in external work.50 mm dia nominal bore	18.41.6	1	Metre	74.95
700	25	Providing and filling sand of grading zone V or coarser grade around the GI pipes in external work.65 mm dia nominal bore	18.41.7	1	Metre	118.3
701	50	Providing and filling sand of grading zone V or coarser grade around the GI pipes in external work.80 mm dia nominal bore	18.41.8	1	Metre	121.9
702	1	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) : 20mm dia nominal bore	18.17.1a	1	Nos	396.55
703	1	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) : 25mm dia nominal bore	18.17.1	1	Nos	428.2
704	2	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) : 32mm dia nominal bore	18.17.2	1	Nos	500.75
705	2	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :40mm dia nominal bore	18.17.3	1	Nos	584.7
706	1	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) : 50mm dia nominal bore	18.17.4	1	Nos	749.9
707	5	Providing and fixing G.I. Union heavy class in G.I. Pipe including cutting and threading the pipe and making long screws etc. complete (new work) 15 mm dia	18.46.1	1	Metre	147.75

708	5	Providing and fixing G.I. Union heavy class in G.I. Pipe including cutting and threading the pipe and making long screws etc. complete (new work) 20mm dia nominal bore	18.46.2	1	Nos.	170.95
709	5	Providing and fixing G.I. Union heavy class in G.I. Pipe including cutting and threading the pipe and making long screws etc. complete (new work) 25mm dia nominal bore	18.46.3	1	Nos.	205.8
710	5	Providing and fixing G.I. Union heavy class in G.I. Pipe including cutting and threading the pipe and making long screws etc. complete (new work) 32mm dia nominal bore	18.46.4	1	Nos.	240.65
711	5	Providing and fixing G.I. Union heavy class in G.I. Pipe including cutting and threading the pipe and making long screws etc. complete (new work) 40mm dia nominal bore	18.46.5	1	Nos.	298.75
712	5	Providing and fixing G.I. Union heavy class in G.I. Pipe including cutting and threading the pipe and making long screws etc. complete (new work) 50 mm dia nominal bore	18.46.6	1	Nos.	384.9
713	2	Providing and fixing G.I. Union heavy class in G.I. Pipe including cutting and threading the pipe and making long screws etc. complete (new work) 65 mm dia nominal bore	18.46.7	1	Nos.	617.2
714	2	Providing and fixing G.I. Union heavy class in G.I. Pipe including cutting and threading the pipe and making long screws etc. complete (new work) 80 mm dia nominal bore	18.46.8	1	Nos.	698.5
715	4	Constructing masonry Chamber 30x30x60 cm inside, in brick work in cement mortar 1:4 (1 cement :4 coarse sand) for stop cock, with C. I. surface box 100x100 x75 mm (inside) with hinged cover fixed in cement concrete slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12mm thick, finished with a floating coat of neat cement complete as per standard design : With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	18.32.1	1	Nos	1195.35

716	2	Constructing masonry Chamber 60x60x75 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100mm top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) , i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design : With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	18.33.1	1	Nos.	6849.6
717	2	Providing and fixing C.I double flanged equilibrium float valve with M.S. lever high pressure, copper ball and flanges including nuts, bolts, 3mm thick rubber insertions complete. in all respect as per direction of the Engineer-in-Charge.	NS-10	1	Nos.	4020
718	80	Boring/drilling bore well of required dia for casing/ strainer pipe, by suitable method prescribed in IS: 2800 (part I), including collecting samples from different strata, preparing and submitting strata chart/ bore log, including hire & running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer -in-charge, upto 90 metre depth below ground level. 400 mm dia	23.1.1.3	1	Metre	518.95
719	80	Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC (Slotted / Plain pipe) medium well casing (CM) pipe of required dia, conforming to IS: 12818, including required hire and labour charges, fittings & accessories etc. all complete, for all depths, as per direction of Engineer -in-charge 200 mm nominal size dia	23.3.3	1	Metre	610.65
720	12	Supplying, filling, spreading & leveling stone boulders of size range 5 cm to 20 cm, in recharge pit, in the required thickness, for all leads & lifts, all complete as per direction of Engineer-in-charge.	23.5	1	Cum	921.9
721	12	Supplying, filling, spreading & leveling gravels of size range 5 mm to 10 mm, in the recharge pit, over the existing layer of boulders, in required thickness, for all leads & lifts, all complete as per direction of Engineer-incharge.	23.6	1	Cum	1038.05
722	12	Supplying, filling, spreading & leveling coarse sand of size range 1.5 mm to 2 mm in recharge pit, in required thickness over gravel layer, for all leads & lifts, all complete as per direction of Engineer -in-charge.	23.7	1	Cum	1038.05

723	24	Gravel packing in Rainy well construction in accordance with IS: 4097, including providing gravel fine/ medium/ coarse, in required grading & sizes as per actual requirement, all complete as per direction of Engineerin- charge.	23.8	1	Cum	1175.6
724	2	Providing and fixing Bail plug/ Bottom plug of required dia to the bottom of pipe assembly of tubewell as per IS:2800 (part I). 200 mm dia	23.15.3	1	Each	253.95
725	150	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910, on 12 mm dia steel bar conforming to IS:1786, having minimum cross section as 23 mmx25 mm and over all minimum length 263 mm and width as 165 mm withh minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to withh stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing, including fixing in manholes withh 30x20x15 cm cement concrete block 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete as per design.	19.16	1	Each	327.9
726	100	Providing and fixing in position pre-cast R.C.C. manhole cover and frame of requ	19.19.4.1	1	Kg	1655.2
727	2	Construction of brick masonry desilting chamber of size 200x100x60cm (effective depth) before rainy well with 75 class designation bricks in cement mortar 1:4 (1 cement : 4 coarse sand) , foundation concrete 1:4:8 mix (1 cement : 4 coarse sand; 8 graded stone aggregate 40mm nominal size), inside and outside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand), finished with a floating coat of neat cement inside and rough plaster on outside, including fixing of grating , neatly finished complete in all respects including necessary excavation, refilling and disposal of surplus earth, complete as per attached Sketch.		1	Each	48000
728	1	Design, Engineering, supplying, installation, testing and commissioning of Aerobic Sewage Treatment Plant based on MBBR Technology (Air Diffuser System), with total effluent handling capacity of 70 KLD per day. The raw effluent collection / equalization sump with screen shall be a part of the STP. The STP shall be designed as water retaining structures in MS FRP as required by the manufacturer's design.	NS	1	Job	750000

The Plant shall be complete with a central Electrical Power and Control panel fully pre/site wired and with all power and control cables to all pumps and equipment including all instrumentation, water level controllers and other controls. All the equipment, piping, pumps, blowers and electrical are to be housed in front of the MS Tanks in the Basement Area (after fabrication), inlet, outlet overflow, drain runs, Ladders Etc.

Nature of Effluent : Domestic sewage from toilet and kitchen waste etc

The Rates will include MS Tanks all pumps, piping, valves, MBBR & Tube Settler Media, Blowers, Diffusers, Central Electrical Power and Control panel with all power and control cables to all pumps and equipment including all instrumentation, water level controllers and other controls.

BASIC DATA ON INFLUENT RAW WASTE WATER		Total
Suspended Solids (TSS)	: 250 - 450 mg/lit	
BOD5	: 250 - 350 mg/lit	
COD	: 500 - 700 mg/lit	pH
	: 6.0 - 8.5	
Oil / Grease	: upto 50 mg/lit	
Inflow time	: 20 HRS	Peak
factor	: 3	
Temperature	: Ambient	

TREATED EFFLUENT WATER QUALITY

As stipulated by State Pollution Control Board (PCB), the treated effluent quality shall be within the following values for various parameters, for both present and future.

The treated water quality should be fit for Recycling in Flushing and Landscaping -		PH
	: 7 - 8	
Total Suspended Solids (TSS)	: < 10 mg/lit	
BOD5	: < 10 mg/lit	
COD	: < 50 mg/lit	
Oil / Grease	: < 10 mg/lit	Colour
: 5 hazen units	Odor	:
unobjectionable	Taste	: agreeable

The STP shall be designed based on the above details and parameters. The capacities of various tanks and pumps are guidelines to the vendor. The contractor has to submit detailed calculations of system and equipment he proposes to install.

		<p>The inlet of raw sewage pipe is about 3.00 to 3.50 meter from ground level. However, the exact Invert level of incoming sewage should be taken before start of work.</p> <p>The STP shall consist of following units but not limited to these unit as may be required by the manufacturer's design to achieve the desired quality parameters in treated effluent.</p> <p>ASSOCIATED MS STRUCTURAL WORK Bar Screen chamber , Oil / Grease removal Chamber Raw sewage Collection cum Equalization tank for housing of submersible sewage lifting pumps, Provision for aeration of Tank will be kept with adequate numbers of coarse air bubble air diffusers to avoid any smell and sedimentation problems, MBBR Tanks with air diffusion system and piping complete of adequate capacity, Secondary settling tank (clarifier) having hopper bottom, baffle wall, outlet launders with arrangement of lifting sludge from the bottom complete as required, Filter Feed Tank with suitable inlet, outlet, drain, overflow connections etc as required, Sludge thickener cum digester (Sludge Holding tank) with provision of inlet, outlet, drain, overflow, supernatant withdrawal arrangement with provision of air diffusers for aeration, Treated water storage tank to collect treated water with inlet, outlet, drain, overflow facility complete.</p>				
729	2	Supply, installation, testing and commissioning of following electro mechanical works and equipments - 2 nos. S.S. 304 bar screen having 10 mm opening of suitable size with suitable lifting arrangements complete as required.	NS	1	Nos	5000
730	2	Supply, installation, testing and commissioning of following electro mechanical works and equipments - Air diffuser system with Twin type rotary air blowers capable of delivering min. 50 cum/hr (each) of free air at 0.5 kg/cm2 driven through "V" belt or directly coupled through flexible coupling to a TEFC motor of suitable HP Suitable for 415 + 10% volts, 3 phase, 50 cycles A/C supply fine bubble membrane type diffusers complete with valves & air distribution grid complete as required. Qty : 2 nos (1W+1S)	NS	1	Nos	110000

731	1	Supply, installation, testing and commissioning of following electro mechanical works and equipments - Non clog type air dispersion system capable of handling desired cfm of air. Air dispersion grid shall be assembled in modular form so that they can be replaced/ repaired easily from platform at the top. Air dispersion system shall be provided for raw sewage equilization sump, sludge holding tank & MBBR Tank.	NS	1	Lot	20000
732	2	Supply, installation, testing and commissioning of following electro mechanical works and equipments - Non clogging type submersible raw sewage pumps for transfer of raw sewage to aeration tank capable of handling solids up to 30-40 mm, in CI casing and impeller, SS shaft, IP 68, Class F insulation, mechanical seal complete with all accessories, motor of required capacity, Pressure gauge on delivery line with isolation valve, level controller (with wiring) to control the level of sump automatically including bypass line from pump outlet to outer sewer line as per site with all valves. Flow rate : 3 Cu M / Hr at 10 meter head. Qty : 2 nos (1W+1S)	NS	1	Nos	40000
733	2	Supply, installation, testing and commissioning of following electro mechanical works and equipments - Non clogging type horizontal centrifugal Sludge transfer / disposal / recirculation pumps capable of handling solids upto 8 mm, having C.I. casing, Bronze impeller, SS shaft, chrome steel shaft sleeve, IP 55, Class B insulation, mechanical seal complete with all accessories, motor of required capacity, Pressure gauge on delivery line with isolation cock, level controller (with wiring) to control the level of sump automatically. Flow rate : 2 Cu M / Hr at 10 meter head. Qty : 2 nos (1W+1S)	NS	1	Nos	25000
734	1	Supply, installation, testing and commissioning of following electro mechanical works and equipments -Providing, fixing, testing and commissioning of 1 nos. filter press with manual operation mechanism, for drying the organic sludge from tube settler of 10 nos of 12"x 12" sizes PP/PVC plates. The filter press should be with filter cloth, handle effluent water tray, sludge disposal tray complete in all respects.	NS	1	Nos	65000

735	2	Providing, fixing, testing and commissioning of single stage, horizontal, centrifugal, 2 pole, 50 HZ, AC, monoblock pumps (as per IS : 9079) incorporating C.I. casing and frame, stainless steel shaft, bronze impeller, TEFC induction motor directly coupled to the pump, IP44 protection, class B insulated, C.I. body, hydraulically and dynamically balanced to give vibration free operation, with mechanical seal arrangement, fixed on a base plate with suitable vibration eliminator pads complete with PCC foundation, bolts grouted in CC blocks of 1:2:4, suitably rated DOL / star-delta starter fixed inside main electrical panel complete with level controller, necessary wiring, pressure gauge on the delivery side and strainer on suction side, including non-return valve and isolating valves on suction and delivering sides as required, including suction and delivery headers complete in all respects. (i) Filter Feed Pumps - 2 nos (1W+1S), having discharge : 3000 Ltr/hr (each) at 35 meter head	NS	1	Nos	35000
736	2	(ii) Treated Water Transfer Pumps to irrigation network - 2 nos (1W+1S), having discharge : 4000 Ltr/hr (each) at 35 meter head	NS	1	Nos	35000
737	2	Plant room drainage sump with 2 nos submersible dewatering pumps having 3 m3/hr discharge at 12 meter head in CI / PP casing and impeller, SS shaft, 12 mm max particle size, 50 Hz, 400 volts, IP68, F class insulation to lift plant room waste water into the outer MH or as directed with float valve / level controller, piping, valves, nrv etc complete.	NS	1	Nos	45000
738	1	Supply, installation, testing & commissioning of Random Media for attached growth process (MBBR Technology) MOC = PP, Specific Gravity = 0.93 - 0.95, Surface Area = 400 sq.mtr / cum.mtr.	NS	1	Lot	80000
739	1	Supply, installation, testing and commissioning of PVC tube deck settling media to be installed in secondary settling tank	NS	1	Lot	35000
740	1	Supply, installation & testing and commissioning of vertical floor mounted mild steel Epoxy pressure type Multi Grade filter of suitable size for required flow and head, provided with an inlet distributor. The vessel is painted externally and internally with epoxy paint with primer with frontal piping & valves, back wash system & filter media etc. complete with standard fittings like cover, pressure gauge at inlet & outlet, sampling cock, rinse drain valve, air vent valve with piping, bolts, nuts & rubber gaskets, Flow rate = 4 M3 / hr at 20 hrs. operation, Vessel Dia = 500 mm, Filtration rate = 16 M3/M2/Hr, Shell / Dish thickness = 6 / 8 mm, Working pressure = 3.5 Kg/Sq.cm, Test pressure = 5.5 Kg/Sq.cm.	NS	1	Set	70000

741	1	Supply, installation & testing and commissioning of vertical floor mounted mild steel Epoxy pressure type Activated carbon filter of suitable size for required flow and head, provided with an inlet distributor. The vessel is painted externally and internally with epoxy paint with primer with frontal piping & valves, back wash system & filter media etc. complete with standard fittings like cover, pressure gauge at inlet & outlet, sampling cock, rinse drain valve, air vent valve with piping, bolts, nuts & rubber gaskets, Flow rate = 4M3 / hr at 20 hrs. operation, Vessel Dia = mm, Filtration rate = 15 M3/M2/Hr, Shell / Dish thickness = 6 / 8 mm, Working pressure = 3.5 Kg/Sq.cm, Test pressure = 5.5 Kg/Sq.cm.	NS	1	Set	80000
742	1	Supply, installation, testing & commissioning of Ultraviolet Dis Infection Unit. The Unit shall have over 99.9% bacterial reduction from inlet to outlet. The disinfection chamber shall be constructed of SS 316 L on all welded parts. The UV LAMP shall be of low pressure mercury vapour type with hard glass enclosure. The sockets shall be water tight & vibration resistant. The Lamp life shall be rated for 6000 hours. The unit shall be complete with temperature safety control, lamp out alert circuit & UV radiometer with 4-20 ma output The UV doses should be >60,000 Uw-Sec/sq.cm. The lamp should be selected based upon the flow requirement of respective Unit. The UV unit shall have with reactor cabinet housing, cabinet cooling, treatment chamber, electrical panel, temperature safety control, lampout alert, UV radiometer along with UV Monitoring system.	NS	1	Set	70000
743	1	Providing and fixing all piping (as described below) and isolation control Ball / butterfly valves of required sizes and numbers with all accessories, fittings, supports, clamps, double flanged flexicon rubber expansion joint with rubber gasket as per system pressure, nuts, bolts, washers, puddle flanges for all tanks, other flanges, NRV's, flow control valves, flow measurement device, SS 304 screen strainers at suction of clear water pumps, level sensors for automatic operation of all kind of pumps with necessary control wiring upto the control panel, for making the system complete in all respects with anti corrosive protection. CPVC Piping for Submerged Piping MS (Class 'B') : All non submerged piping	NS	1	Lot	190000

744	1	Supply Installation, testing & commissioning of Electrical Control Panel suitable for 415 V, 3 Phase, 4 wires, 50Hz, fabricated out of 16 SWG CRCA sheet steel, IP52, wall / floor mounting type. The sheet steel shall undergo minimum seven tank treatment followed by finishing powder coating of min 60 micron thickness. The board includes removable gland plates, cable glands, including connection with outgoing feeders complete in all respect. The outgoing from the panel shall be suitable for all equipments, various pumps, blowers with suitable capacity star delta / DOL starters, plant lighting, ventilation, treated water transfer pumps to horticulture and flushing system etc. Adequate size cable alley shall be provided for each cable bending & termination. (Panel Make : Advance / Adlec / Ambit / Tricolite / Milestone / Vidyut control, Swithgear & accessories make : ABB / Schnieder / L&T / Seimens)	NS	1	Lot	140000
		The incoming MCCB's shall be Four pole thermomagnetic type. All outgoing MCCB's shall be Three pole thermomagnetic type and all outgoing MCB's shall be C type with 10 KA breaking capacity. The MCCB's shall be of min Ics = 25 KA breaking capacity, Ics = 100% Icu, with rotary handle & pad locking arrangement, with trip setting as per load requirement. TP MCCB shall be provided with solid isolable neutral link. Cyclic timers will be provided for Air Blowers Only for alternate working of stand by Blower.. The control panel will also include plant room Dewatering Sump Pump Controls With Magnetic Water Level Controllers (For three Phase Three Pumps) To Operate Pumps Alternatively And In Case Of Excess inflow into the Sump, all three Pumps Will Start Automatically With Audio, Visual & Alarm Including All Standard Accessories Complete In All Respect. The board includes suitable capacity, 500 Volts, 3 phase 50 HZ TPN high conductivity electrolytic Aluminium bus bar of suitable length, insulated by heat shrinkable sleeves. The current density of bus bar shall not exceed 1 amp/sqmm.				
		The above board shall be complete with 3 nos. phase indicating lights, flush mounted Ammeter, Voltmeter, CT's, PT's, selector switches, protective fuses etc. at Incomer with all inter connections by min. 2.5 sq.mm. Copper wires. The following pumps shall be controlled by the Panel. (a) Raw Sewage Pumps - 2 Nos. (b) Air Blowers - 2 Nos. (c) Sludge Disposal Pumps - 2 Nos. (d) Screw Pumps - 1 Nos. (e) Filter Feed Pumps - 2 Nos. (f) Dewatering Pumps - 2 Nos. (g) UV System - 1 Nos.				

745	1	Supply, Transportation, installation, testing and commissioning of 2.00HP Three phase ISI self priming Mono block IP44 motor pumpset (40x40mm). Makes: Kirloskar / Crompton / Texmo / CRI / KSB. No. of Pumps : 2 (1W + 1S), Capacity :170 LPM of Each Pump, Head : 25 M Note:-1 set consists of 2 nos. of pumps (1Working + 1Standby)	Elec-5.4.59	1	Set	50220
746	1	Supply, Transportation installation testing and commissioning of 3.00HP Three phase ISI self priming Mono block IP44 motor pumpset (50x50mm). Makes: Kirloskar / Crompton / Texmo / CRI / KSB. Dom. water transfer pumps No. of Pumps : 2 (1 Working + 1 Stand by) Capacity : app. 170 LPM each Head : 45 M (complete set as mentioned above)	Elec-5.4.61	1	Set	62 270
747	1	Flushing water transfer pumps No. of Pumps : 2 (1 Working + 1 Stand by) Capacity : app. 170 LPM each Head : 45 M (complete set as mentioned above)	Elec-5.4.61	1	Set	62 270
748	2	Water Trasfer hydro Pump Supply Of Vertical Multistage Pump With (One VFD, PLC & HMI) Based Control Panel, 100Ltrs Of Pressure Tank, Header & Footer, BFV's, NRV's Type: HPNLCR 5-07, MOC: Head & Base-CI, Casing, Impeller, Shaft-SS304 Rated Flow: 100LPM, Rated Head: 30Mtrs Suction X Discharge: DN50 X DN50 Motor: 1.50HP, 2900RPM, 3-Phase, 50Hz Duty of each pump suitable for:- No. of Pumps : 2 nos. (1 W + 1 S) Capacity : 100 LPM of Each Pump Head : 30 Meters Air Vessel : 1 Nos of Min. 100 Liters Cap. Note:-1 set consists of 2 nos. of pumps (1 Working + 1Standby)	Elec-5.4.61	1	Set	2 20 620

749	1	<p>Providing and fixing vertical Pressure Sand Filter (comprising of minimum 750mm media in four graded layer and minimum Height on Straight 1500mm) fabricated from high performance M.S plate of minimum 10mm thick for shell & 12mm thick for dished ends,(Quality of Steel as per IS:2062 Grade B, thickness as per ASME Section 8),Tested to 5.0 Kg/m² , internally treated with coal-tar epoxy, air scouring, collection system initial charge of media, M.S face piping with necessary flanges, gaskets, isolating valves, accessories, nuts & bolts, external painting with 2 coats of red oxide primer and enamel paint etc. with suitable foundation boits & other accessories, mounting frame, complete as required & as specified as per directions of the engineer-in-charge. with the following: Discharge : 10 m³/Hour Each Filtration Rate : 17500 lit./m²/h Suggested dia app. : 1 m</p>	NS	1	Each	82 400
750	1	<p>Providing and fixing 'Cation' ION exchange water softener fabricated from minimum 8 mm thick M.S. plate on min. shell and 10 mm thick M.S. plate on dished ends (Quality of Steel as per IS:2062 Grade B, thickness as per ASME Section 8) complete with initial charge of filter media and ION exchange resins, face piping accessories, diaphragm valves of approved specifications, HDPE Brine tank of min. 500 Liters, piping testing and commissioning complete with resins of approved quality and make and regeneration assembly complete with valves, ejector, brine suction valves and piping. (Bidder must indicate type and quantity of resin used and quantity of salt required per regeneration). All internal parts of the softener shall be rubber lined as per approved specifications. Minimum expected rate of flow: App. 8000 lph Total soft water to be produced between two regenerations: app. 64 Cum Expected raw water hardness : app. 450-500 ppm Expected treated water hardness: less than 5 ppm (Zero Commercial Hardness) Max. working pressure : 4 Kg/cm²</p>	NS	1	Each	212070

751	1	<p>Providing and fixing Salt Saturator assembly (for supply of salt solution) consisting of HDPE/PVC tanks with automatic agitators and all required accessories for holding and supplying salt for softener complete in all respects, including providing and fixing vertical, inline multistage centrifugal pumping set with stainless steel SS-316 L stage casing and SS-316 L impellers with stainless steel shaft and suction & discharge casing . The effective capacity of the system to be of minimum 10% greater than actual salt required for approx. 3 Days with complete structural arrangement including RCC foundation etc. as per instructions of engineer-in-charge and approved fabrication shop drawings.</p> <p>(i) Recommended no. of tanks = 1 Nos. (ii) Total Capacity of each Tank = 5 000 Liters (complete set as mentioned above)</p>	NS	1	Set	35290
752	1	<p>Providing and fixing chemical dosing system consisting of 2 nos. electronic dosing pumps (1W+1S) of approved make with all accessories, suitable to doze chemical solution upto 1 ppm doze (of Sodium Hypo-chloride solution) to a filtered water flow of 15,000 lph. against a pressure of 1.5 kg/cm² complete with FRP moulded solution holding tank of min. 200 litre with all standard accessories & structural arrangement including suitable foundation bolts & other accessories etc.complete as required and as specified. Note:1 set consists of 2 nos. of pumps(1W+1S)</p>	NS	1	Set	29380
753	1	<p>Providing and fixing compact monoblock dry motor submersible pumps of suitable rating, with non-clog free flow open impeller, solid handling capacity of upto at least 28mm suitable for operation on 415 volts \pm10% , 3 Phase, 50Hz, A.C supply, speed 2900 RPM including oil chamber, guide wire for lifting & lowering of pump, M.S. galvanized lifting chain, complete. The pump sets shall be supplied with required accessories & as per specification with the following :</p> <p>(a) Complete piping 80 mm dia common delivery upto 7.5 m in heavy Duty Class 'C' G.I. -- 1 Set (b) 65mm dia Butterfly valve.-- 2 Nos (c) 65 mm dia Flap type Non-return valve.-- 2 Nos (d) Necessary cables from pump set to control panel (position of panel marked on enclosed drawings).- 1 Set</p>	NS	1	Set	145900

		<p>(e) Electrical control panel having all necessary accessories & safety devices of standard specifications and suitable for receiving incommer cable from main plumbing panel to connctet sump pump panel complete as required. (Panels with sump pumps near each sump as per site conditions). --1 No.</p> <p>Each set consist of 2 nos.of pumps - 1 working & 1 stand by (Complete set as above with 2 nos. pumps including cost for valves, piping, Control Panel and Cabling, Level Controllers etc as required and as specified)</p> <p>Discharge - 250 LPM Each</p> <p>Total head - 10-15 Meters (minimum)</p>				
754	10	<p>Provding and fixing heavy duty G.I. pipe (For Suction & Delivery of pumps and equipment) confiming to IS. 1239 upto 150 mm and IS 3589 for dia 200 mm and above with reducers, tees, flanges, elbow, crosses, union etc. and fixing the pipes on wall / ceiling / beam / floor including Clamping/Supporting the same, including painting with 2 coats of synthetic enamel paint as per the site requirement and shall be duly painted with two coats of approved quality synthetic enamel paint & shade over a readymix primer coat complete as required & as per directions of the engineer-in-charge for the size: 40mm dia</p>	NS	1	Metre	695
755	10	<p>Provding and fixing heavy duty G.I. pipe (For Suction & Delivery of pumps and equipment) confiming to IS. 1239 upto 150 mm and IS 3589 for dia 200 mm and above with reducers, tees, flanges, elbow, crosses, union etc. and fixing the pipes on wall / ceiling / beam / floor including Clamping/Supporting the same, including painting with 2 coats of synthetic enamel paint as per the site requirement and shall be duly painted with two coats of approved quality synthetic enamel paint & shade over a readymix primer coat complete as required & as per directions of the engineer-in-charge for the size: 50mm dia</p>	NS	1	Metre	930
756	10	<p>Provding and fixing heavy duty G.I. pipe (For Suction & Delivery of pumps and equipment) confiming to IS. 1239 upto 150 mm and IS 3589 for dia 200 mm and above with reducers, tees, flanges, elbow, crosses, union etc. and fixing the pipes on wall / ceiling / beam / floor including Clamping/Supporting the same, including painting with 2 coats of synthetic enamel paint as per the site requirement and shall be duly painted with two coats of approved quality synthetic enamel paint & shade over a readymix primer coat complete as required & as per directions of the engineer-in-charge for the size: 65mm dia</p>	NS	1	Metre	1 130

757	10	Providing and fixing heavy duty G.I. pipe (For Suction & Delivery of pumps and equipment) conforming to IS. 1239 upto 150 mm and IS 3589 for dia 200 mm and above with reducers, tees, flanges, elbow, crosses, union etc. and fixing the pipes on wall / ceiling / beam / floor including Clamping/Supporting the same, including painting with 2 coats of synthetic enamel paint as per the site requirement and shall be duly painted with two coats of approved quality synthetic enamel paint & shade over a readymix primer coat complete as required & as per directions of the engineer-in-charge for the size: 80mm dia	NS	1	Metre	1 380
758	15	Providing and fixing heavy duty G.I. pipe (For Suction & Delivery of pumps and equipment) conforming to IS. 1239 upto 150 mm and IS 3589 for dia 200 mm and above with reducers, tees, flanges, elbow, crosses, union etc. and fixing the pipes on wall / ceiling / beam / floor including Clamping/Supporting the same, including painting with 2 coats of synthetic enamel paint as per the site requirement and shall be duly painted with two coats of approved quality synthetic enamel paint & shade over a readymix primer coat complete as required & as per directions of the engineer-in-charge for the size: 100mm dia	NS	1	Metre	1 875
759	2	Supplying, installing, testing and commissioning approved make CI body Foot Valve with brass strainer with necessary flanges, nuts and bolts etc., complete on to the suction line.Rate as per the lowest quotation of Bharat Fire Safety Engineers. Makes:Normex & approved makes 100mm dia	ELEC-9.5.77	1	Each	7 450
760	2	Supplying, installing, testing and commissioning approved make CI body Foot Valve with brass strainer with necessary flanges, nuts and bolts etc., complete on to the suction line.Rate as per the lowest quotation of Bharat Fire Safety Engineers. 80mm dia	ELEC-9.5.78	1	Each	5 100
761	4	Manufacture, Supply and delivery of CI Wafer Lug type Butterfly Valves conforming to IS 13095/1991 (Reaffirmed 1998) excluding transportation, CED and taxes etc., complete. Operation done with worm actuator ISI marked Rate at Ex-Factory Makes: Audco / Kirloskar / BDK / H-Shankar / Leader/ Zolotto / Intervolve. 50mm dia	ELEC-9.5.52	1	Each	3 067
762	8	Manufacture, Supply and delivery of CI Wafer Lug type Butterfly Valves conforming to IS 13095/1991 (Reaffirmed 1998) excluding transportation, CED and taxes etc., complete. Operation done with worm actuator ISI marked Rate at Ex-Factory Makes: Audco / Kirloskar / BDK / H-Shankar / Leader/ Zolotto / Intervolve. 80mm dia	ELEC-9.5.53	1	Each	3 812

763	6	Manufacture, Supply and delivery of CI Wafer Lug type Butterfly Valves conforming to IS 13095/1991 (Reaffirmed 1998) excluding transportation, CED and taxes etc., complete. Operation done with worm actuator ISI marked Rate at Ex-Factory Makes: Audco / Kirloskar / BDK / H-Shankar / Leader/ Zolotto / Intervale. 100mm dia	ELEC-9.5.53	1	Each	5 088
764	2	Providing, installation, testing and commissioning of dual plate non - return valve of following sizes confirming to IS: 5312 complete with rubber gasket, GI bolts, nuts, washers etc as required Makes: Audco / Kirloskar / BDK / H-Shankar / Leader/ Zolotto / Intervale. 50 mm nominal bore	ELEC-9.5.45	1	Each	1 723
765	3	Providing, installation, testing and commissioning of dual plate non - return valve of following sizes confirming to IS: 5312 complete with rubber gasket, GI bolts, nuts, washers etc as required Makes: Audco / Kirloskar / BDK / H-Shankar / Leader/ Zolotto / Intervale. 80 mm dia	ELEC-9.5.46	1	Each	3 500
766	2	Providing, installation, testing and commissioning of dual plate non - return valve of following sizes confirming to IS: 5312 complete with rubber gasket, GI bolts, nuts, washers etc as required Makes: Audco / Kirloskar / BDK / H-Shankar / Leader/ Zolotto / Intervale. 100 mm dia	ELEC-9.5.45	1	Each	3 725
767	250	Providing and fixing M.S. grating and preferably in 600mm long pieces, fabricated with 16x16mm square bars, @ 20mm clear spacing and welded to angle iron 25x25x5mm and placed firmly on angle iron frame of 30x30x5mm with 25x3mm hold fasts approximately 75mm long welded at intervals of 500mm including two or more coats of synthetic enamel paint of approved quality and shade over one coats of primer and set in cement mortar 1:3 (1 cement : 3 coarse sand) complete as per attached details for drain.	NS	1	Kg.	260

Total

)	
Rate	Amount
Word	
Rupees three thousand nine hundred and twenty nine only	141444.00
Rupees four thousand and ten only	34085.00
Rupees six hundred and ninety nine only	130852.80

Rupees six hundred and fifty seven only	252977.85
Rupees four thousand nine hundred and fifty four only	587247.16
Rupees one hundred and ninety seven only	78035.64
Rupees two hundred and forty six only	146308.50

Rupees one hundred and thirty one only	209433.63
Rupees eighty nine only	95893.05
Rupees one hundred and thirty six only	1224.00
Rupees nine hundred and sixty nine only	156852.03
Rupees four hundred twenty two and thirty paise only	25007.66

Rupees seven thousand five hundred seventeen and twenty paise only	24062.26
Rupees three thousand three hundred fifty one and ninety five paise only	8204.14
Rupees two hundred forty five and seventy paise only	12167.06
Rupees two hundred sixty six and twenty five paise only	5993.29
Rupees four hundred twenty seven and ninety five paise only	9414.90

Rupees six thousand six hundred forty seven and thirty five paise only	17474.69
Rupees three hundred eighty eight and forty paise only	11263.60
Rupees eighty eight and ten paise only	4757.40
Rupees sixty four and thirty paise only	257.20
Rupees fifty one and ten paise only	204.40
Rupees thirty eight only	1026.00
Rupees three thousand two hundred and fifty and fifty one paise only	14627.30

New item

Rupees six hundred eighty eight and thirty five paise only	54124.96
Rupees one hundred forty eight and seventy five paise only	1963.50
Rupees sixty six and ten paise only	264.40
Rupees sixty six and forty five paise only	265.80
Rupees three hundred eighty four and fifty paise only	195326.00
Rupees four hundred forty four and ninety paise only	231348.00
Rupees eight hundred sixty six and sixty paise only	26136.66

New item

New item

New item

Rupees seven hundred forty one and fifty paise only	6006.15
Rupees one thousand three and ninety five paise only	7379.03
Rupees one thousand one hundred fifty three and ninety paise only	13846.80
Rupees sixty two and forty five paise only	11828.03
Rupees three hundred and fifty nine only	9693.00
Rupees fifty five and fifty paise only	55.50
Rupees sixty eight and thirty paise only	1366.00
Rupees three hundred thirty eight and twenty five paise only	1877625.75

Rupees three thousand nine hundred forty one and sixty paise only	122583.76
Rupees thirty two thousand three hundred and eighty one only	550477.00

Rupees two thousand only	238960.00
Rupees four hundred only	400960.00
Rupees two thousand and five hundred only	375000.00
Rupees four hundred and thirty only	147060.00

Rupee three hundred and fifteen only	5670.00
Rupees three hundre only	10800.00
Rupees five thousand only	540000.00
Rupees four thousand only	17760.00

Rupees seven thousand and five hundred only	45375.00
	1751053.22
	30000.00
	20000.00
	8661742.10

	0.00
Rupees seventy two thousand only	360000.00

Rupees thirty four thousand only	136000.00
Rupees seventy five thousand only	225000.00

Rupees twenty eight thousand only	84000.00
Rupees ninety four thousand only	188000.00

Rupees six thousand and nine hundred only	27600.00
Rupees fourteen thousand only	490000.00
Rupees ninety eight only	196000.00
Rupees two lakhs and fifty thousand only	750000.00

Rupees fourteen thousand only	490000.00
Rupees six hundred and eighty only	10200.00
Rupees six hundred and eighty only	6800.00
Rupees twenty two thousand only	132000.00

Rupees nine hundred only	13500.00
Rupee seven hundred only	80500.00
	3189600.00

Rupee forty six thousand two hundred and fifty eight only	647612.00
Rupees fifty thousand and sixteen only	100032.00
Rupees one thousand and five hundred only	24000.00
Rupees two thousand and one hundred only	33600.00
Rupees one thousand only	285000.00
Rupees nine thousand two hundred and twenty seven only	1845400.00
Rupees six hundred and twenty five only	31250.00

Rupees four hundred and eighty six only	24300.00
Rupees three hundred and eighty two only	76400.00
	3067594.00
Rupees twelve thousand seven hundred and fifty only	1935450

Rupees thirteen thousand seven hundred and fifty only	1588125.00

Rupees three thousand and two hundred only	368000.00
Rupees two thousand and eighty only	72800.00
Rupees twelve thousand and five hundred only	125000.00

Rupees one lakhs ninety seven thousand and five hundred only	395000
Rupees one lakhs and twenty five thousand only	250000.00
Rupees ten thousand two hundred and fifty only	51250.00

Rupees seven thousand six hundred thirty eight and seventy six paise only	114581.40
Rupees two laksh and eight thousand only	832000.00
Rupees one lakh eighty eight thousand and five hundred only	377000.00
Rupees three lakhs twenty thousand one hundred and twenty five only	640250.00
Rupees seventeen thousand eighty six and seventy paise only	51260.10
Rupees fifteen thousand seventy six and fifty paise only	45229.50

Rupees thirtee thousand only	169000
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Rupees twenty four thousand six hundred eleven and eighty four paise only	196894.72
Rupees nine thousand five hundred ninety five and three paise only	76760.24
Rupees eighteen thousand three hundred forty two and fifty paise only	183425.00
Rupees one lakh thirty six thousand three hundred and eighty nine only	136389.00

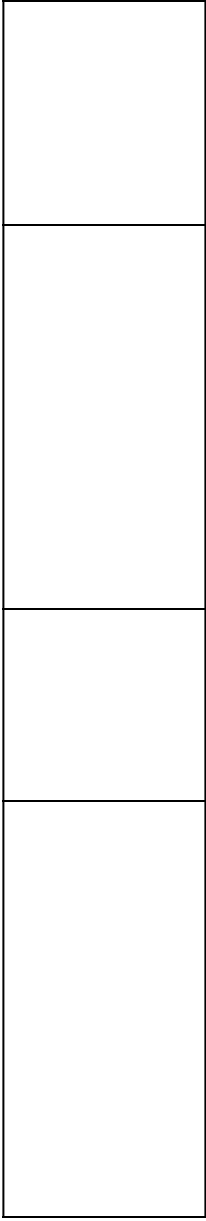
Rupees sixty seven thousand and forty three only	469301.00
Rupees thirteen thousand nine hundred sixty four and thirty four paise only	111714.72

Rupees twelve thousand nine hundred seventy three and eighty four paise only	259476.80
Rupees thirty one thousand two hundred and fifty only	93750.00
Rupees nineteen thousand ninety six and ninety paise only	76387.60
Rupees thirty three one hundred sixty eight and thirty paise only	298514.70

	90460.00
Rupees twenty seven thousand seven hundred forty nine and four paise only	249741.36
Rupees eighteen thousand seven hundred forty and ninety eight paise only	449783.52

Rupees ten thousand and four hundred only	124800.00
Rupees twenty seven thousand seven hundred sixty four and twenty two paise only	1110568.80

Rupees twenty seven thousand four hundred eighty four and sixty six paise only	109938.64
Rupees sixteen thousand two hundred sixty six and seventy five paise only	32533.50
Rupees seven thousand and five hundred only	262500.00



Rupees nine thousand and five hundred only	142500.00
Rupees eighty seven thousand twenty and fifty five paise only	522123.00

Rupees thirty thousand only	180000.00
Rupees three thousand nine hundred and eighty four only	39838.5

Rupees five lakhs three thousand six hundred and seventy one only	1511013.00
Rupees five thousand eight hundred and sixteen only	29080.00
Rupees forty five thousand only	315000.00

Rupees one lakhs twenty eight thousand nine hundred and sixty five only	386895.00
Rupees two lakhs and eighty five thousand only	285000.00
Rupees one lakh and fifty thousand only	150000.00
Rupees five laksh only	1000000.00
Rupees six lakhs only	600000.00
Rupees one lakhs sixty four thousand four hundred and six only	328812.00
Rupees one lakh eighty eight thousand one hundred and five only	188105.00
Rupees two hundred forty one and sixty seven paise only	580000.00
Rupees seventy seven and seventy eight paise only	70000.00
Rupees one hundred twelve and fifty paise only	135000.00
Rupees one hundred twenty three and twelve paise only	86184.00
Rupees four lakhs only	400000.00

Rupees three laksh and fifty two thousand only	352000.00
Rupees thirty thousand only	30000.00
Rupees thirty thousand only	30000.00
Rupees five lakhs only	500000.00
Rupees ten laksh thirty two thousand eight hundred and eighty only	1032880.00
Rupees four lakhs and fifty two thousand only	452000.00
Rupees thirty five laksh ninety two thousand seven hundred and forty five only	7185490.00
Rupees fifty four lakhs forty thousand and five hundred only	5440500.00
	33320306.10

Rupees three lakhs and ninety thousand only	390000.00
Rupees six lakhs and seventy eight thousand only	678000.00

Rupees seventy thousand and eight hundred and sixty only	77860.00
Rupees sixty two thousand four hundred and fifty only	62450.00
Rupees twelve thousand and eighty only	12080.00

Rupees eight thousand one hundred and twenty five only	113750.00
Rupees six thousand one hundred and forty only	171920.00
Rupees two thousand five hundred and thirty only	35420.00
Rupees seven thousand and five hundred only	75000.00
Rupees three thousand two hundred and fifty only	19500.00
Rupees four thousand eight hundred and thirty two only	48320.00

Rupees four hundred and ninety only	78400.00
Rupees nine thousand and five hundred only	9500.00
Rupees five thousand three hundred and seventy five only	21500.00
Rupees seven thousand and five hundred only	7500.00
Rupees nine thousand and one hundred only	9100.00
Rupees six thousand and nine hundred only	6900.00
Rupees three thousand two hundred and ten only	738300.00
Rupees two thousand and four hundred only	1872000.00

Rupees one thousand five hundred and fifteen only	22725.00
Rupees one thousand only	50000.00
Rupees seven hundred fifty only	52500.00
Rupees six hundred only	30000.00
Rupees five hundred and twelve only	23040.00
Rupees four hundred only	16000.00
Rupees three hundred only	105000.00
Rupees forty five only	27000.00
Rupees thirty only	300.00

Rupees eleven thousand eight hundred and forty nine only	23698.00
Rupees seven thousand six hundred and thirty one only	106834.00
Rupees five thousand and eighty eight only	35616.00
Rupees three thousand eight hundred and twelve only	11436.00
Rupees three thousand and sixty seven only	3067.00
Rupees four thousand only	28000.00
Rupees three thousand seven hundred and twenty five only	11175.00
Rupees three thousand five hundred only	7000.00

Rupees five thousand six hundred and thirty three only	16899.00
Rupees one thousand two hundred and fifty only	7500.00
Rupees five thousand four hundred and thirty six only	10872.00
Rupees six thousand six hundred and forty four only	19932.00
Rupees seven thousand eight hundred and fifty two only	39260.00
Rupees four thousand two hundred and twenty eight only	33824.00
Rupees five thousand three hundred and sixteen only	10632.00
Rupees six hundred seventy five only	3375.00
Rupees two thousand and five hundred only	15000.00

Rupees ninety nine thousand two hundred and sixty three only	99263.00
Rupees thirteen thousand two hundred and eighty only	26560.00
Rupees eight hundred and forty six only	4230.00
Rupees one thousand two hundred and eight only	18120.00
Rupees one thousand four hundred and fifty only	21750.00
Rupees nine thousand one hundred and eighty only	73440.00

Rupees nine thousand nine hundred and sixty one only	79688.00
Rupees three thousand and one hundred only	24800.00
Rupees one lakh five thousand eight hundred and fifty seven only	105857
Rupees one lakh thirty five thousand four hundred and ninety seven only	135497.00
Rupees five thousand and eighty one only	381075.00

Rupees ninety three thousand one hundred and fifty four only	93154.00
Rupees twelve thousand seven hundred and three only	12703.00
Rupees eight thousand four hundred and sixty nine only	8469.00
Rupees six thousand five hundred and twenty one only	6521.00
Rupees seven thousand six hundred and twenty two only	7622.00
Rupees six thousand seven hundred and seventy five only	20325.00
Rupees fourteen thousand eight hundred and twenty only	14820.00
Rupees three thousand three hundred and eighty seven only	6774.00
Rupees ninety three thousand one hundred and fifty four only	93154.00
Rupees six thousand three hundred and fifty one only	6351.00

Rupees six thousand three hundred and fifty one only	6351.00
Rupees three thousand two hundred sixty only	6520.00
Rupees seven thousand six hundred and twenty two only	7622.00
Rupees one hundred and sixty nine only	20280.00
Rupees one lakh nineteen thousand nine hundred and seventy one only	119971.00
	6539102.00
Rupees one thousand and ninety four only	538248.00
Rupees one thousand and ninety four only	17504.00
Rupees two hundred and thirty nine only	350135.00
Rupees three hundred and sixty six only	36600.00

Rupees two hundred and six only	101764.00
Rupees three hundred and twenty four only	174960.00
Rupees five hundred and eighteen only	155400.00
Rupees six hundred and fifty three only	130600.00
Rupees nine hundred and thirty only	93000.00
Rupees one hundred and fourteen only	570.00
Rupees three hundred and nineteen only	43065.00
Rupees twenty four only	1200.00
Rupees three hundred and thirteen only	250400.00
Rupees four hundred and six only	279328.00
Rupees seven hundred and ninety nine only	15980.00
Rupees forty six only	1518.00
Rupees ninety only	2970.00

Rupees sixty one only	305.00
Rupees one hundred and thirty two only	17820.00
Rupees two hundred and twenty four only	7392.00
Rupees ninety nine only	3267.00
Rupees nine hundred and fifty six only	14340.00
Rupees six thousand and five hundred only	13000.00
Rupees two hundred and one only	89244.00
Rupees one thousand eight hundred and ninety nine only	22788.00
Rupees three thousand and three hundred only	118800.00
Rupees two thousand and seven hundred only	32400.00
Rupees three thousand and three hundred only	82500.00
Rupees five hundred and ninety only	19470.00
Rupees nine hundred and twenty five only	4625.00

Rupee one thousand and three hundred only	6500.00
Rupees seven only	350.00
Rupees one hundred and forty nine only	1788.00
Rupees one hundred and sixty three only	652.00
Rupees six hundred and seventy two only	13440.00
Rupee five hundred ninety one and fifty paise only	11830.00
Rupees five hundred seven and fifty paise only	101500.00
Rupees three hundred and eighty eight only	38800.00
Rupees three hundred and eighty five only	15400.00
Rupees four hundred and sixty only	25760.00
	16560.00
Rupees three hundred forty only	5100.00
Rupees four hundred and thirty only	6450.00

Rupees eight hundred and thirty only	12450.00
Rupees one hundred only	48300.00
Rupees one hundred and thirty two only	17820.00
Rupees two hundred and twenty four only	7392.00
Rupees ninety nine only	3267.00
Rupees one thousand six hundred and eighty only	38640
Rupees two thousand seven hundred and twenty two only	454574.00

Rupees one thousand five hundred and forty eight only	61920.00
Rupees six hundred and seventy eight only	6780.00
Rupees three hundred ninety six only	3960.00
Rupees four thousand six hundred and forty five only	1026545.00
Rupees three thousand six hundred and ninety four only	36940.00
Rupees eight thousand one hundred and eighty eight only	16376.00
Rupees one thousand eight hundred and seventy only	252450.00
Rupees one thousand three hundred and fifty only	33750.00
Rupees three thousand two hundred and twenty only	25760.00
Rupees three hundred and seventy five only	179250.00

Rupees twelve lakhs thirty six thousand and two hundred thirty eight only	1236238.00
Rupees ninety four thousand and five hundred only	94500.00
Rupees one lakh fifteen thousand and two hundred only	230400.00
Rupees thirty one thousand and two hundred only	62400.00
Rupees sixteen thousand only	32000.00
Rupees nine thousand and six hundred only	19200.00
Rupees four hundred and ten only	410.00

Rupees three hundred and four only	4256.00
Rupees fifty seven only	570.00
Rupees sixty six only	138600.00
Rupees one hundred only	12000.00
Rupees seventy three only	1606.00
Rupees one hundred and twelve only	117600.00
Rupees ten and ten paise only	15150.00
Rupees twenty five and eighty paise only	38700.00
Rupees three hundred and forty only	17000.00
Rupes five thousand and two hundred only	15600.00
Rupees two hundred and twenty only	11000.00
Rupees two hundred only	10000.00
Rupees six thousand and five hundred only	19500.00
Rupees forty only	4000.00
Rupees six hundred and fifty only	3900.00

Rupee four thousand and seven hundred only	9400.00
Rupees five thousand five hundred and eighty only	5580.00
Rupees one hundred and five only	52500.00
Rupees seven thousand and five hundred only	7500.00
Rupees nine thousand and five hundred only	9500.00
Rupes two thousand only	2000.00
Rupees three hundred and fifty only	350.00
Rupees twenty nine only	4350.00
Rupees one hundred only	5000.00
Rupees ninety eight only	980.00
Rupees sixty only	7500.00
Rupee sixty nine only	220800.00

Rupees seven lakhs fifty thousand and three hundred only	750300.00
Rupees one lakh sixty seven thousand five hundred and ninety seven only	167597.00
Rupees thirty one thousand nine hundred and eighty eight only	31988.00
Rupees eighteen thousand six hundred and fifty nine only	186590.00
Rupees ten thousand six hundred and sixty three only	10663.00
Rupees two thousand and sixty six only	92970.00
Rupees eleven thousand only	330000.00

Rupees nineteen thousand and one only	152008.00
Rupees twenty two thousand only	308000.00
Rupees one thousand and five hundred only	78000.00
Rupees sixteen thousand five hundred and fifty only	16550.00
Rupees one lakh and twenty five thousand only	500000.00
Rupees thirty four thousand one hundred and nine only	102327.00
Rupees twenty five thousand only	25000.00

Rupees thirty seven only	185000.00
Rupees one hundred and forty seven only	588000.00
Rupees sixty nine only	69000.00
Rupees nineteen only	47500.00
Rupees fifty three thousand five hundred and thirty only	267650.00
Rupees three thousand four hundred and eighty one only	34810.00
	0.00

Rupees one lakh seventy four thousand five hundred and eighty two only	174582.00
Rupees eleven thousand eight hundred and thirty four only	118340.00
Rupees two lakhs thirty four thousand five hundred and seventeen only	234517.00
Rupees three hundred and forty eight only	17400.00
Rupees two thousand and ninteen only	20190.00
Rupees one thousand seven hundred and forty only	17400.00
Rupees five thousand nine hundred and seventeen only	59170.00

Rupees two thousand two hundred and ninety seven only	22970.00
Rupees one hundred and seventy seven only	88500.00
Rupees one hundred and four only	5200.00
Rupees two thousand and nineteen only	20190.00
Rupees one thousand seven hundred and forty only	17400.00
Rupees two lakhs fifteen thousand two hundred and ninety four only	215294.00

Rupees one lakh eighty eight thousand and one hundred only	188100.00
Rupees one lakh one thousand and eighty only	101080.00
Rupees five thousand one hundred and thirty only	82080.00
Rupees five thousand three hundred and twenty five only	85200.00
Rupees five thousand one hundred and thirty only	153900.00
Rupees four thousand five hundred and sixty only	9120.00
Rupees five thousand five hundred and fifty eight only	11116.00
Rupees four thousand six hundred fifty five only	93100.00

Rupees four thousand six hundred fifty five only	27930.00
Rupees three thousand and eight hundred only	19000.00
Rupees thirty seven only	81400.00
Rupees sixty four only	6400.00
Rupees ninety seven only	19400.00
Rupees one hundred forty seven only	367500.00
Rupees three lakhs eighty seven thousand six hundred and fifty nine only	387659.00
Rupees on lakh thirty seven thousand one hundred and thirty two only	137132.00

Rupees one lakh nine thousand two hundred and eighty eight	109288.00
Rupees seventeen thousand four hundred and three only	17403.00
Rupees three thousand four hundred and eleven only	17055.00
Rupees one thousand seven hundred and forty only	121800.00
Rupees two thousand two hundred and ninety seven only	9188.00
Rupees twenty five and eighty paise only	15480.00
Rupees one hundred and forty seven only	88200.00

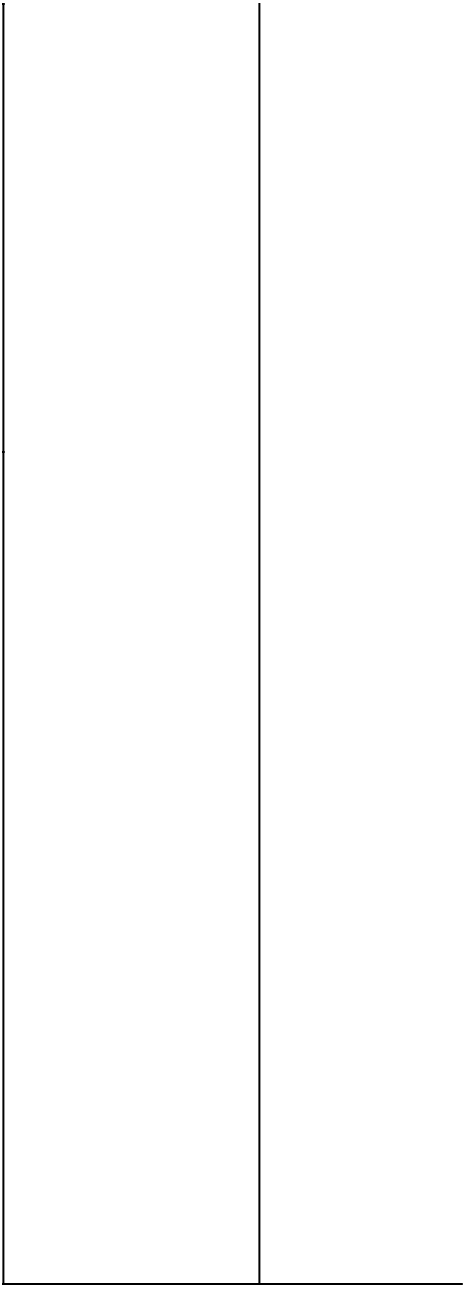
Rupees twenty two lakhs fifty nine thousand seven hundred and fifty only	2259750.00
Rupees sixteen lakhs seventy one thousand and twenty four only	1671024

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Rupees sixty thousand one hundred and fifty seven only	120314.00
Rupees ten lakhs seventy three thousand eight hundred and sixty five only	2147730.00

Rupees ten lakhs thirty four thousand eight hundred and ninteen only	3104457.00
Rupees thirty five thousand only	105000.00

Rupees twenty lakhs
fifty thousand six
hundred and eighty
three only

2050683

Vertical line 1

Vertical line 2

Vertical line 3

Vertical line 1

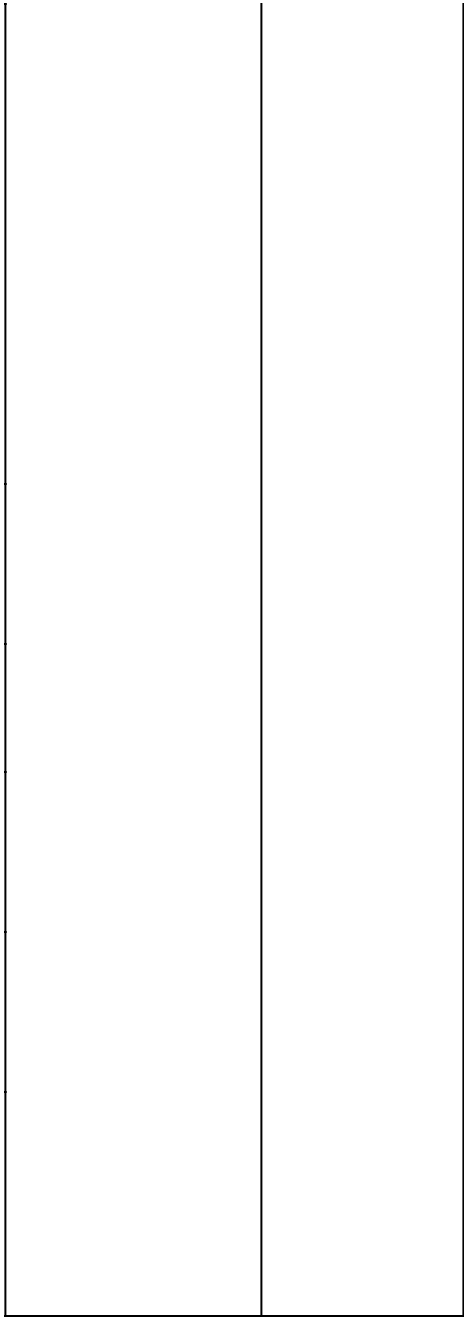
Vertical line 2

Vertical line 3

Vertical line 1

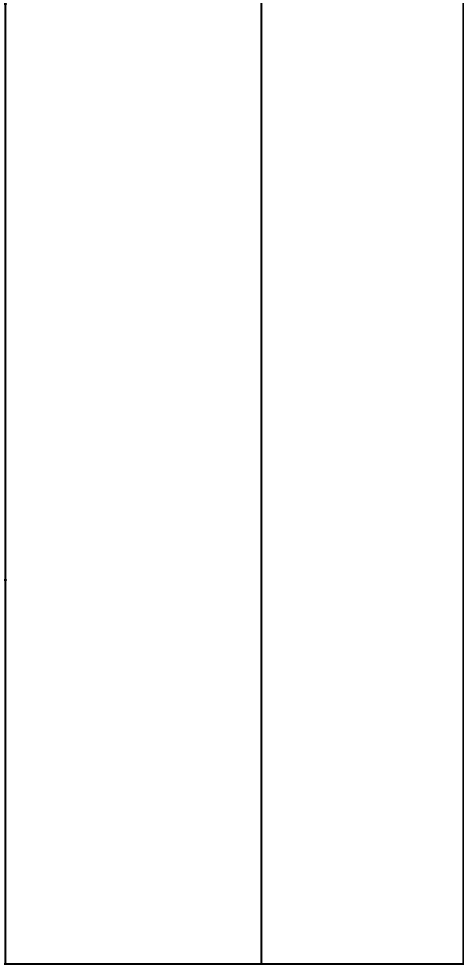
Vertical line 2

Vertical line 3



Rupees six lakhs thirty thousand and seventy eight only	630078

Rupees two lakhs fifty thousand one hundred and seventy four only	500348



Rupees one lakh two
thousand three
hundred and twenty
six only

102326

Rupees one lakh eight thousand two hundred and seventy only	108270
Rupees eighty two thousand two hundred and sixty seven only	82267
Rupees two lakhs twenty four thousand nine hundred and	224913

nundrea and thirteen only	
Rupees two lakhs seventy eight thousand four hundred and six only	278406

Rupees thirty thousand four hundred and seventy three only	182838.00
Rupees sixty two thousand two hundred and seven only	62207

Rupees sixty two thousand two hundred and seven only	62207

Rupees thirty eight thousand four hundred and thirty three only	1537320.00
Rupees three thousand six hundred and seventy two only	135864.00
Rupees four thousand three hundred and twenty seven only	77886.00
Rupees eight thousand two hundred and eighty nine only	82890.00
Rupees twenty eight only	756000.00
Rupees eight hundred and seventy two only	1308000.00
Rupees three hundred and fifty one only	2597400.00

Rupees one hundred and thirty four only	13400.00
Rupees six hundred and ninety eight only	34900.00
Rupees one hundred and twenty nine only	6450.00
Rupees thirty seven only	3700.00
Rupees two hundred and six only	3832630.00
Rupees two hundred and fourteen only	823044.00
Rupees two hundred and twenty three only	538545.00
Rupees two hundred and forty eight only	548080.00
Rupees one hundred and forty one only	644079.19
Rupees one hundred and forty nine only	213909.99

Rupees one hundred fifty eight only	82483.90
Rupees eighteen only	6300.00
Rupees twenty eight only	3080.00
Rupees thirty seven only	1480.00
Rupees fourteen only	980.00
Rupees twenty two only	440.00
Rupees twenty one only	2100.00
Rupees two hundred and sixty nine only	5380.00
Rupees sixty five only	19500.00
Rupees ninety two only	1840.00
Rupees one hundred and eight only	1960740.00
Rupees one hundred and thirty only	45500.00
Rupees one hundred and sixty two only	372600.00

Rupees two hundred and seven only	55588.00
Rupees two hundred and forty seven only	938600.00
Rupees three hundred and twenty six only	6520.00
Rupees five hundred and thirty seven only	698100.00
Rupees seven hundred and sixty two only	167640.00
Rupees eight hundred and six only	128960.00
Rupees one thousand and twenty three only	235290.00
Rupees one thousand four hundred and forty nine only	507150.00
Rupees one thousand four hundred and seventy five only	1327500.00
Rupees three hundred and twenty seven only	3924.00
Rupees four hundred and ninety one only	7856.00
Rupees five hundred and seventy eight only	1156.00
Rupees ninety four only	111108.00

Rupees one hundred and thirty eight only	4140.00
Rupees two hundred and sixty four only	3168.00
Rupees sixty only	70680.00
Rupees fourteen only	196.00
Rupees seventeen only	272.00
Rupees twenty only	40.00
Rupees thirty five only	420.00
Rupees forty only	160.00
Rupees forty six only	552.00
Rupees seventy one only	1136.00
Rupees ninety two only	368.00
Rupees ten thousand seven hundred and sixty nine only	64614.00

Rupees eleven thousand six hundred and twenty six only	23252.00
Rupees nine thousand three hundred and seventy only	3691780.00
Rupees thirteen thousand only	663000.00
Rupees twenty one thousand and five hundred only	215000.00
Rupees fifteen thousand three hundred and twenty nine only	2146060.00

Rupees eight thousand three hundred and seventy one only	3515820.00
Rupees one thousand six hundred and four only	818040.00
Rupees four thousand nine hundred and fifty only	2331450.00
Rupees one lakh three thousand three hundred and fifty four only	310062.00
Rupees thirty five thousand seven hundred and ninety four only	107382.00
Rupees twenty six lakhs six thousand one hundred and seventy five only	2606175

	91500
	550000
	65857223.08

	13870.59
Rupee one hundred and fourteen only	23942.28
Rupees one hundred and sixty six only	20675.30
Rupees six hundred and fifty seven only	79273.62

Rupees four thousand nine hundred and fifty four only	68860.60
Rupees two hundred and seventy four only	1726.20
Rupees one hundred and ninety seven only	31592.89
Rupees two hundred and forty six only	32614.68

Rupees ninety two only	14754.04
Rupees four hundred fifty and thirty five paise only	19148.88
Rupees five thousand five hundred eighty two and eighty five paise only	98928.10
Rupees one thousand eight hundred and forty five only	14760.00
Rupees three hundred eighty eight and forty paise only	388.40
Rupees one hundred eighty nine and twenty paise only	189.20
Rupees eighty eight and ten paise only	176.20
Rupees sixty four and thirty paise only	514.40
Rupees fifty one and ten paise only	408.80

Rupees thirty eight only	38.00
Rupees two thousand three hundred sixteen and ten paise only	13132.29
Rupees three hundred thirteen and sixty paise only	1778.11
Rupees five hundred fifty five and twenty five paise only	34286.69
Rupees one thousand one hundred fifty eight and ten paise only	9033.18
Rupees one thousand two hundred thirty eight and twenty paise only	4556.58
Rupees eighty four and eighty five paise only	2081.37
Rupees eighteen and ninety five paise only	218.68

Rupees six hundred eighty eight and thirty five paise only	38809.17
Rupees one hundred and fifty three only	4326.84
Rupees one hundred eighty seven and sixty paise only	375.20
Rupees sixty six and forty five paise only	132.90
Rupees one hundred forty three and eighty paise only	16997.16
Rupees three hundred twenty seven and ninety paise only	9837.00

Rupees three hundred eighty four and fifty paise only	36143.00
Rupees four hundred forty four and ninety paise only	20910.30
Rupees eight hundred sixty six and sixty paise only	1655.21
Rupees one thousand three and ninety five paise only	7780.61
Rupees sixty two and forty five paise only	2152.03
Rupees three hundred and fifty nine only	359.00
Rupees fifty five and fifty paise only	222.00
Rupees sixty eight and thirty paise only	136.60

Rupees one thousand thirty four and sixty five only	47283.51
Rupees two thousand only	6000.00
	680069.60
Rupees six hundred and ninety nine only	49167.66

Rupees three thousand eight hundred and sixteen only	242659.44
Rupees six hundred and fifty seven only	13468.50
Rupees one hundred and ninety seven only	113180.44
Rupees two hundred and forty six only	67657.38

Rupees one hundred and thirty one only	75262.12
Rupees eighty nine only	11957.15
Rupees one hundred and thirty six only	9483.28
Rupees four hundred fifty and thirty five paise only	23895.57
Rupees thirty nine and twenty paise only	2158.35
Rupees three hundred eighty eight and forty paise only	1553.60
Rupees two hundred twelve and forty five paise only	637.35
Rupees eighty eight and ten paise only	792.90
Rupees sixty four and thirty paise only	1800.40

Rupees fifty one and ten paise only	1430.80
Rupees thirty eight only	152.00
Rupees two thousand three hundred sixteen and ten paise only	75041.64
Rupees three hundred sixty two and sixty paise only	13724.41
Rupees nine hundred nine and seventy paise only	16088.45
Rupees one thousand five hundred eighty nine and forty paise only	281092.54
Rupees one thousand one hundred nineteen and forty paise only	19925.32

Rupees one thousand one hundred thirty five and twenty paise only	2315.81
Rupees three hundred eighty four and fifty paise only	119195.00
Rupees four hundred forty four and ninety paise only	70739.10
Rupees eight hundred sixty six and sixty paise only	5901.55
	1219280.76
Rupees one hundred and fifteen only	13251.45

Rupees five thousand and eighty four only	43468.20
Rupees five thousand one hundred and thirty six only	43912.80

Rupees three thousand eight hundred and sixteen only	18889.20
Rupees three thousand eight hundred and forty seven only	19043.00
Rupees six hundred and fifty seven only	40254.39

Rupees six hundred and sixty four only	53717.60
Rupees six hundred and seventy one only	37441.80
Rupees four thousand nine hundred and fifty four only	164968.20
Rupees one hundred and ninety seven only	537059.43

Rupees two hundred and forty six only	318119.82
Rupees one hundred and thirty one only	179452.97
Rupees nine hundred and sixty nine only	130640.58
Rupees four hundred fifty and thirty five paise only	26813.84
Rupees four hundred twenty two and thirty paise only	32445.31

Rupees five thousand five hundred eighty two and eighty five paise only	37237.61
Rupees thirty nine and twenty paise only	2490.77
Rupees three thousand three hundred fifty one and ninety five paise only	28525.09
Rupees two hundred forty five and seventy paise only	16012.27
Rupees two hundred sixty six and twenty five paise only	8653.13
Rupees four hundred twenty seven and ninety five paise only	6419.25
Rupees six thousand six hundred forty seven and thirty five paise only	86016.71

Rupees two thousand nine hundred thirty seven and seventy paise only	124705.37
Rupees three hundred eighty eight and forty paise only	6991.20
Rupees eighty eight and ten paise only	6607.50
Rupees sixty four and thirty paise only	5144.00
Rupees fifty one and ten paise only	4088.00
Rupees thirty eight only	684.00
Rupees five hundred fifty five and twenty five paise only	28067.89
Rupees three hundred fifty and five paise only	4701.17

Rupees six hundred eighty eight and thirty five paise only	24704.88
Rupees one thousand one hundred nineteen and forty paise only	518685.18
Rupees one thousand one hundred thirty five and twenty paise only	59575.30
Rupees five thousand six and ten paise only	437282.84
Rupees one hundred and fifty three only	20763.63
Rupees one hundred eighty seven and sixty paise only	1876.00
Rupees sixty six and forty five paise only	664.5

Rupees one thousand five hundred twenty seven and twenty five paise only	632816.04
Rupees three hundred eighty four and fifty paise only	552911.00
Rupees four hundred forty four and ninety paise only	266050.20

Rupees eight hundred sixty six and sixty paise only	15330.15
Rupees one thousand three and ninety five paise only	61411.62
Rupees one thousand one hundred fifty three and ninety paise only	73272.65
Rupees sixty two and forty five paise only	24964.39
Rupees three hundred and fifty nine only	10052.00
Rupees fifty five and fifty paise only	2664.00
Rupees sixty eight and thirty paise only	3756.50

Rupees one thousand thirty four and sixty five only	409514
Rupees four hundred and thirty only	41108.00
Rupees three hundred and fifteen only	3150.00

Rupees six thousand and eight hundred only	1101600.00
Rupees eighteen thousand only	135000.00
Rupees twenty six thousand four hundred and fifty only	766521.00

Rupees thirty two thousand three hundred and eighty one only	259048
Rupees thirty two thousand three hundred and eighty one only	
	7448545
Rupees seven hundred and fourteen only	57477.00

Rupees seven hundred and sixty only	61187.60
Rupees eight hundred and six only	64883.00
Rupees eight hundred and fifty three only	68666.50

Rupees nine hundred and sixty two only	77441.00
Rupees one hundred and fourteen only	21063.78
Rupees one hundred and twenty three only	20932.14
Rupees one hundred and thirty three only	24691.45
Rupees one hundred and forty three only	26540.80

Rupees one hundred and fifty three only	28398.33
Rupees one hundred and sixty six only	21833.98
Rupees one hundred and eighty only	23648.40
Rupees one hundred and ninety three only	28039.04
Rupees two hundred and seven only	30072.96

Rupees two hundred and twenty one only	32106.88
Rupees five thousand and eighty four only	53076.96
Rupees five thousand one hundred and thirty six only	53619.84

Rupees five thousand one hundred and eighty seven only	54152.28
Rupees five thousand two hundred and thirty nine only	54695.16

Rupees five thousand two hundred and ninety only	55227.60
Rupees three thousand eight hundred and sixteen only	14424.48

Rupees three thousand eight hundred and forty seven only	14541.66
Rupees three thousand eight hundred and seventy seven only	14655.06

Rupees three thousand nine hundred and seven only	14768.46
Rupees three thousand nine hundred and thirty seven only	14881.86
Rupees three thousand eight and sixteen only	55370.16

Rupees three thousand eight hundred and forty seven only	55781.50
Rupees three thousand eight hundred and seventy seven only	56216.50
Rupees three thousand nine hundred and seven only	56651.50
Rupees six hundred and fifty seven only	14680.01

Rupees six hundred and sixty four only	14836.42
Rupees six hundred and seventy one only	14992.82
Rupees six hundred and seventy eight only	15149.23
Rupees six hundred and eighty five only	15305.64

Rupees four thousand nine hundred and fifty four only	598591.82
Rupees two hundred and seventy four only	13700.00
Rupees one hundred and ninety seven only	202890.02
Rupees two hundred and forty six only	94857.60

Rupees one hundred and thirty one only	150879.25
Rupees eighty nine only	12102.22
Rupees nine hundred and sixty nine only	118072.65
Rupees seven hundred and sixteen only	143200.00

Rupees nine hundred seventeen and seventy five paise only	6831.00
Rupees four hundred fifty and thirty five paise only	15194.81
Rupees three hundred seventy eight and sixty paise only	230805.92
Rupees four hundred twenty two and thirty paise only	3779.59
Rupees seven thousand five hundred seventeen and twenty paise only	3157.22
Rupees thirty nine and twenty paise only	1323.00

Extra item

Rupees three thousand three hundred fifty one and ninety five paise only	28491.58
Rupees two hundred forty five and seventy paise only	7371.00
Rupees two hundred sixty six and twenty five paise only	6922.50
Rupees four hundred twenty seven and ninety five paise only	4279.50
Rupees three hundred eighty eight and forty paise only	8156.40
Rupees eighty eight and ten paise only	4581.20
Rupees thirty eight only	798.00
Rupees sixty seven and sixty paise only	557023.00
Rupees sixty eight only	0.00
	505349.46

Rupees three hundred six and twenty five paise only	9187.50
Rupees three hundred fifty seven and ninety five paise only	8053.88
Rupees six hundred eighty eight and thirty five paise only	14283.26
Rupees one thousand one hundred nineteen and forty paise only	315122.29
Rupees one thousand one hundred thirty five and twenty paise only	31955.88
Rupees five thousand two hundred thirty three and seventy five paise only	396770.59

Rupees one hundred forty eight and seventy five paise only	4165.00
Rupees sixty six and ten paise only	264.40
Rupees one hundred eighty two and fifty five paise only	4381.20
Rupees one hundred eighty one and forty paise only	6530.40
Rupees sixty six and forty five paise only	398.70
hundred twenty seven	250224.64

Rupees forty and sixty five paise only	8023.09
Rupees three hundred eighty four and fifty paise only	259537.50
Rupees four hundred forty four and ninety paise only	299417.70
Rupees eight hundred sixty six and sixty paise only	42472.07
Rupees one thousand three and ninety five paise only	2409.48
Rupees one thousand one hundred fifty three and ninety paise only	9554.29
Rupees sixty two and forty five paise only	11971.67

Rupees five hundred nine and thirty paise only	2037.20
Rupees three hundred and fifty nine only	5744.00
Rupees sixty eight and thirty paise only	5600.60
Rupees three hundred thirty eight and twenty five paise only	1508595.00
Rupees two thousand four hundred nine and ninety paise only	1019122.61

Vertical line 1

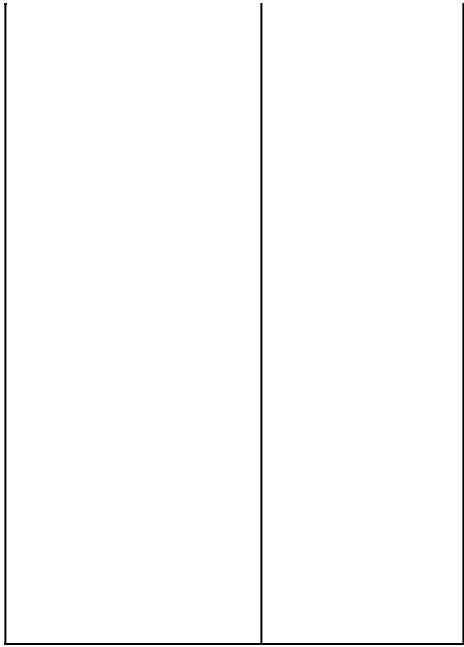
Vertical line 2

Vertical line 3

seven hundred thirty	1,577,676.00

Rupees two thousand nine hundred forty one and sixty paise only	124400.26
Rupees one thousand five hundred forty two and sixty paise only	60161.40
Rupees two thousand seven hundred ninety eight and seventy only	109149.30

Rupees three thousand four hundred five and ninety paise only	766770.27



Rupees six thousand nine hundred twenty eight and fifty five paise only	211736.49
Rupees one thousand and eight hundred only	119160.00

Rupees eighteen thousand only	67500.00
	11200744.40
Rupees Eight fifty one	4748.58
Rupees three thousand four hundred and fifty nine only	19301.22
Rupees eighty nine only	109795.16
Rupees five hundred fifty five and twenty five paise only	44975.25

Rupees seven lakhs and twenty five thousand only	1450000.00
	1628820.21
Rupees ninety four only	18126.02
Rupees ninety four only	191548.44
Rupees two hundred and seventeen only	0.00
Rupees five hundred and thirty seven only	328831.95
Rupees eight hundred and twenty eight only	9861.48

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Rupees three thousand four hundred and fifty nine only	247698.99
Rupees seven thousand seven hundred and sixty eight only	559762.08
Rupees eight thousand one hundred and twenty nine only	299065.91

Rupees nine thousand seven hundred and twenty nine only	182126.88
Rupees fifty thousand nine hundred and seventy three only	975623.22
Rupees one hundred and fourteen only	7113.60
Rupees one hundred and fourteen only	7113.60

Rupees eighty nine only	147416.93
Rupees four thousand seven hundred fifty one and sixty five paise only	39866.34
Rupees three hundred eighty eight and forty paise only	6214.40
Rupees eighty eight and ten paise only	2819.20
Rupees thirty eight only	608.00
Rupees sixty seven and sixty paise only	0.00
Rupees ninety and twenty five paise only	1442556.00
Rupees sixty eight only	54663.84
Rupees sixty five and eighty paise only	508649.79
Rupees eighty five and ninety five paise only	1127217.06

Extra item

#REF!	
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13986 1,998.00

Rupees three hundred sixty two and sixty paise only	28783.19
Rupees three hundred eighty four and fifty paise only	46140.00
Rupees four hundred forty four and ninety paise only	66735.00
Rupees one thousand one hundred fifty three and ninety paise only	83080.80
Rupees sixty two and forty five paise only	13364.30
Rupees three hundred and fifty nine only	2872.00
Rupees sixty eight and thirty paise only	1092.80

Rupees two thousand only	576000.00	Extra item				
Rupees one hundred and ninety seven only	113472.00	Extra item				
Rupees one hundred and thirty six only	78336.00	Extra item				

Rupees seven hundred and sixteen only	131973.12	Extra item				
	7298732.94					
Rupees nine thousand six hundred and eighty nine only	416627.00					
Rupees four thousand three hundred and sixty only	187480.00					
Rupees one thousand three hundred and fifty only	58050.00					
Rupee nine hundred and forty four only	40592.00					
Rupees one thousand two hundred sixty nine only	38070.00					
Rupees two hundred and forty three only	7290.00					
Rupees two thousand four hundred and eighty one only	109164.00					

Rupees one thousand seven hundred and four only	78384.00
Rupees one thousand eight hundred and six only	79464.00
Rupees five hundred and thirteen only	15390.00
Rupees four thousand nine hundred and fifty nine only	9918.00
Rupees six hundred and thirty seven only	1274.00
Rupess three thousand and one hundred	65100.00
Rupees eight thousand eight hundred and sixty six only	17732.00
Rupees four hundred seventy five and seventy paise only	21882.20
Rupees sixty seven and eighty paise only	3186.60

Rupees two thousand eight hundred thirty one and ninety five paise only	45311.20
Rupees three hundred twenty seven and five paise only	654.10
Rupees three hundred thirty one and ninety five paise only	663.90
Rupees seven thousand three hundred and ninety five only	214455.00
Rupees seven thousand three hundred and ninety five only	214455.00
Rupees one thousand two hundred and seventy five only	2550.00
Rupees five hundred and twenty five only	31500.00
Rupees four thousand and twenty only	4020.00
Rupees four thousand six hundred and seventy five only	4675.00

Rupees seven hundred ninety four and fifty five paise only	19863.75
Rupees nine hundred twenty one and sixty five paise only	373268.25
Rupees thirty one only	775.00
Rupees forty and sixty five paise only	16463.25
Rupees one hundred sixty seven and thirty five paise only	1004.10
Rupees one hundred sixty five and five paise only	7427.25
Rupees three hundred eighty four and ninety paise only	9622.50
Rupees three hundred thirty four and ninety five paise only	8373.75
Rupees six hundred and twenty three only	15575.00
Rupees four hundred seventy two and thirty five paise only	4723.50

Rupees five hundred twelve and sixty five paise only	12816.25
Rupees one hundred eighty seven and forty five paise only	4686.25
Rupees two hundred nineteen and fifteen paise only	3287.25
Rupees sixty two only	1550.00
Rupees fifty six and fifty five paise only	848.25
Rupees one thousand thirty four and forty five paise only	67239.25
Rupees three hundred eight and thirty five paise only	27751.50
Rupees three hundred ninety four and fifteen paise only	15766.00
Rupees four hundred seventy two and forty paise only	9448.00
Rupees ten and eighty five paise only	976.50
Rupees twelve and thirty five paise only	494.00
Rupees fourteen and eighty paise only	296.00

Rupees one thousand six hundred and fifty only	24750.00
Rupees one thousand one hundred and thirty five only	73775.00
Rupees one thousand eight hundred and thirty five only	45875.00
Rupees two hundred thirty six and thirty five paise only	37816.00
Rupees ninety four and fifty five paise only	945.50
Rupees one hundred eighty one and fifty five paise only	1815.50
Rupees one hundred thirteen and ten paise	1131.00
Rupees one hundred eighty one and forty paise only	2721.00
Rupees fourty and ninety paise only	409.00

Rupees eight hundred and fifteen only	73350.00
Rupees one hundred forty two and ninety five paise only	10721.25
Rupees one hundred seventy nine and ninety five paise only	32391.00
Rupees two hundred sixtee and twenty paise only	22701.00
Rupees two hundred eight nine and five paise only	27459.75
Rupees three hundred eighty five and fifty paise only	44332.50

Rupees five hundred forty eight and fifty five paise only	43884.00
Rupees two hundred and seventy only	45900.00
Rupees two hundred ninety six and forty paise only	50388.00
Rupees three hundred fifty one and thirty paise only	15808.50
Rupees four hundred twelve and ninety paise only	10322.50
Rupees two hundred sixty and ten paise only	2601.00
Rupees two hundred eighty and forty paise only	4486.40
Rupees four hundred twenty eight and eighty five paise only	9949.32
Rupees five hundred one and fifty paise only	5015.00
Rupees five hundred eighty five and fifty paise only	2927.50

Rupees seven hundred fifty and seventy five paise only	750.75
Rupees one hundred thirty eight and five paise only	34512.50
Rupees two hundred twenty five and forty five paise only	247995.00
Rupees three hundred and fifty two only	17600.00
Rupees two hundred eighty six and thirty two paise only	143160.75
Rupees one thousand one hundred eight and eighty paise only	55440.00
Rupees six hundred twenty two and ninety five paise only	18688.50

Rupees seven hundred sixty one and eighty five paise only	533295.00
Rupees eight hundred eighty eight and ten paise only	115453.00
Rupees one thousand and twenty seven only	164320.00
Rupees one hundred ninety three and ninety five paise only	1939.50
Rupees one thousand six hundred two and fourty paise only	24036.00
Rupees two hundred sixteen and twenty five paise only	4325.00
Rupees three hundred twenty seven and five paise only	65410.00
Rupees four hundred twenty three and thirty five paise only	55035.50
Rupees three hundred fifty five and seventy paise only	177850.00
Rupees four hundred eighty two and five paise only	77128.00

Rupees five hundred eighty five and fifty paise only	36298.50
Rupees eight thousand six hundred thirty four and ten paise only	86341.00
Rupees one lakhs eight thousand four hundred twenty two and forty paise only	92112.00
Rupees five thousand seven hundred eighteen and sixty paise only	28593.00
Rupees six thousand eight hundred fifty and seventy paise only	34253.50
Rupees eight thousand six hundred eighty three and seventy five paise only	86838

Rupees four thousand nine hundred eleven and eighty paise only	24559.00
Rupees sixteen thousand seven hundred twenty and ninety paise only	83604.5
Rupees six thousand five hundred five and fifteen paise only	32525.75

Rupees thirty five thousand eight hundred forty five and five paise only	179225.25
Rupees fifteen thousand three hundred and ninety seven only	76985.00
Rupees four thousand fourty three and ten paise only	60646.50
Rupees four thousand three hundred eighty four and fifty paise only	43845.00
Rupees one hundred eight six and thirty paise only	931.50
Rupees two hundred five and eighty five paise only	1029.25
Rupees two hundred fourty seven and fourty paise only	3711.00

Rupees three hundred one and five paise only	30105.00
Rupees three hundred fourty two and seventy paise only	34270.00
Rupees four hundred fifty one and seventy paise only	11292.50
Rupees five hundred seventy six and thirty paise only	28815.00
Rupess seven and ten paise	35.50
Rupees nine and ten paise only	45.50
Rupees ten and eighty five paise only	162.75
Rupees twelve and thirty five paise only	1235.00
Rupees fourteen and eighty paise only	1480.00
Rupees eighteen and twenty five paise only	456.25
Rupees twenty one and twenty paise only	1060.00
Rupees sixty seven and seventy paise only	338.50
Rupees sixty nine and fifty paise only	347.50
Rupees seventy one and thirty paise only	1069.50

Rupees seventy two and twenty five paise only	7225.00
Rupees seventy four and ninety five paise only	7495.00
Rupees one hundred eighteen and thirty paise only	2957.50
Rupees one hundred twenty one and ninety paise only	6095.00
Rupees three hundred ninety six and fifty five paise only	396.55
Rupees four hundred twenty eight and twenty paise only	428.20
Rupees five hundred and seventy five paise only	1001.50
Rupees five hundred eighty four and seventy paise only	1169.40
Rupees seven hundred forty nine and ninety paise only	749.90
Rupees one hundred forty seven and seventy five paise only	738.75

Rupees one hundred seventy and ninety five paise only	854.75
Rupees two hundred five and eighty paise only	1029.00
Rupees two hundred forty and sixty five paise only	1203.25
Rupees two hundred ninety eight and seventy five paise only	1493.75
Rupees three hundred eighty four and ninety paise only	1924.50
Rupees six hundred seventeen and twenty paise only	1234.40
Rupees six hundred ninety eight and fifty paise only	1397.00
Rupees one thousand one hundred ninety five and thirty five paise only	4781.40

Rupees six thousand eight hundred forty nine and sixty paise only	13699.20
Rupees four thousand and twenty only	8040.00
Rupees five hundred eighteen and ninety five paise only	41516.00
Rupees six hundred ten and sixty five paise only	48852.00
Rupees nine hundred twenty one and ninety paise only	11062.80
Rupees one thousand thirty eight and five paise only	12456.60
Rupees one thousand thirty eight and five paise only	12456.60

Rupees one thousand one hundred seventy five and sixty paise only	28214.40
Rupees two hundred fifty three and ninety five paise only	507.90
Rupees three hundred twenty seven and ninety paise only	49185.00
Rupees one thousand six hundred fifty five and twenty paise only	165520.00
Rupees forty eight thousand only	96000.00
Rupees Seven laksh fifty thousand only	750000

Vertical line 1

Vertical line 2

Vertical line 3

Rupees five thousand only	10000.00
Rupees one lakh and ten thousand only	220000.00

Rupees twenty thousand only	20000.00
Rupees forty thousand only	80000.00
Rupees twenty five thousand only	50000.00
Rupees sixty five thousand only	65000.00

Rupees thirty five thousand only	70000.00
Rupees thirty five thousand only	70000.00
Rupees forty five thousand only	90000.00
Rupees eighty thousand only	80000.00
Rupees thirty five thousand only	35000.00
Rupees seventy thousand only	70000.00

Rupees eighty thousand only	80000.00
Rupees seventy thousand only	70000.00
Rupees one lakh and nintey thousand only	190000.00

Rupees one lakh and forty thousand only	140000
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Rupees fifty thousand two hundred and twenty only	50220.00
Rupees sixty two thousand two hundred and seventy only	62270.00
Rupees sixty two thousand two hundred and seventy only	62270.00
Rupees two lakhs twenty thousand six hundred and twenty only	441240.00

Rupees eighty two thousand and four hundred only	82400.00
Rupees two lakhs twelve thousand and seventy only	212070.00

Rupees thirty five thousand two hundred and ninety only	35290.00
Rupees twenty nine thousand three hundred and eighty only	29380.00
Rupees one lakh forty five thousand and nine hundred only	145900

Rupees six hundred ninety five only	6950.00
Rupees nine hundred and thirty only	9300.00
Rupees one thousand one hundred and thirty only	11300.00

Rupees one thousand three hundred and eighty only	13800.00
Rupees one thousand eight hundred and seventy five only	28125.00
Rupees seven thousand four hundred and fifty only	14900.00
Rupees five thousand and one hundred only	10200.00
Rupees three thousand and sixty seven only	12268.00
Rupees three thousand eight hundred and twelve only	30496.00

Rupees five thousand and eighty eight only	30528.00
Rupees one thousand seven hundred and twenty three only	3446.00
Rupees three thousand and five hundred only	10500.00
Rupees three thousand seven hundred and twenty five only	7450.00
Rupees two hundred and sixty only	65000.00

9575758.42

159687518.49