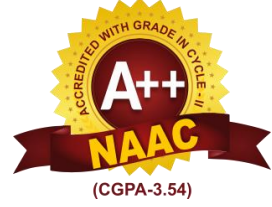




राजस्थान केन्द्रीय विश्वविद्यालय  
Central University of Rajasthan  
NH-8, Bandarsindri, Kishangarh-305817, Ajmer(Raj.)



NIT No. CURAJ/R/F.161/2024/2296

Date: 19.10.2024

**Financial Bid**

**Name of Work:** Comprehensive Annual Operation and Maintenance Services (Day to Day) including Round the clock Security Services; all Civil Repair & Maintenance Works (buildings, roads, hard standings, paths, security wall, sewer lines, plumbing, drainage works, sanitary/pantry fittings/fixture, other related items etc.); All Electrical Repair & Maintenance Works (Internal & External Electrical Wiring, Fitting & Fixtures, Panels, Overhead & Underground Electric Lines, Fans, Motors & Pumps, Road Lights, etc.); Operation and CAMC of Electric Sub-Stations, DG Sets, Specialized E&M equipment, HVAC System, Passenger Lifts; Online UPS including battery bank, Water Coolers, RO Plants, STP Plants, General Pest Control and Anti-Termite Services, Rainwater Harvesting System, Fire Fighting System with Wet Riser, Sprinkler & Fire Alarm, Internal Water Supply System; ICT Services (CCTV cameras, LAN System, Wi-Fi System, EPBAX System, Public Address System, Operation & CAMC of Audio & Video Conferencing System, Networking, Switches, Active & Passive Network components, Computer Peripherals etc.); Mechanized Housekeeping Services and Garbage Collection & Disposal Services; Horticulture Maintenance and O&M of Drip Irrigation System as mentioned in the tender document at Central University of Rajasthan.

**SCHEDULE OF QUANTITIES – I**

**SH- I (A): DAY TO DAY CIVIL MAINTENANCE WORKS AT CURAJ.**

S.No.	Description of items	Qty	Unit	Rate	Amount
1	Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including getting out and disposal of excavated earth upto 50 m and lift upto 1.5 m, as directed by Engineer-in- Charge:				
1.1	All kinds of soil	1000	sqm		
2	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge.				
2.1	All kinds of soil	100	cum		
3	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
3.1	All kinds of soil.	100	cum		

4	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 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 :				
4.1	All kinds of soil				
4.1.1	Pipes, cables etc, not exceeding 80 mm dia.	20	metre		
4.1.2	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia	20	metre		
4.1.3	Pipes, cables etc. exceeding 300 mm dia but not exceeding 600 mm	20	metre		
5	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	20	cum		
6	Excavating, supplying and filling of local earth (including royalty) by mechanical transport upto a lead of 5km also including ramming and watering of the earth in layers not exceeding 20 cm in trenches, plinth, sides of foundation etc. complete.	500	cum		
7	Surface dressing of the ground including removing vegetation and in-equalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up to 1.5 m.				
7.1	All kinds of soil	1000	sqm		
8	Excavating holes more than 0.10 cum & upto 0.5 cum including getting out the excavated soil, then returning the soil as required in layers not exceeding 20cm in depth, including consolidating each deposited layer by ramming, watering etc, disposing of surplus excavated soil, as directed within a lead of 50 m and lift upto 1.5 m.				
8.1	All kinds of soil	20	each		
9	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared.	100	sqm		
10	Clearing grass and removal of the rubbish up to a distance of 50 m outside the periphery of the area cleared.	100	sqm		
11	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
11.1	1:2:4 (1 cement : 2 coarse sand (zone-III) derived from natural sources: 4 graded stone aggregate 20 mm nominal size derived from natural sources).	50	cum		
11.2	1:4:8 (1 Cement : 4 coarse sand (zone-III) derived from natural sources : 8 graded stone aggregate 40 mm nominal size derived from natural sources).	50	cum		
12	Centering and shuttering including strutting, propping etc. and removal of form work for :				
12.1	Foundations, footings, bases for columns	50	sqm		

13	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation, levelling & dressing & finishing the top smooth.	50	sqm		
14	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand derived from natural sources): 4 graded stone aggregate 12.5mm nominal size derived from natural sources)	50	sqm		
15	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement-All work up to plinth level :				
15.1	1:1.5:3 (1 cement: 1.5 coarse sand (zone-III) derived from natural sources: 3 graded stone aggregate 20 mm nominal size derived from natural sources).	10	cum		
16	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement				
16.1	1:1.5:3 (1 cement : 1.5 coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources).	10	cum		
17	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases above plinth level up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement, with 1:1.5:3 (1 cement: 1.5 coarse sand (zone-III) derived from natural sources: 3 graded stone aggregate 20 mm nominal size derived from natural sources).	5	cum		
18	Centering and shuttering including strutting, propping etc. and removal of form for				
18.1	Foundations, footings, bases of columns, etc. for mass concrete	50	sqm		
18.2	Lintels, beams, plinth beams, girders, bressumers and cantilevers	10	sqm		
18.3	Columns, Pillars, Piers, Abutments, Posts and Struts	10	sqm		
19	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.				
19.1	Thermo-Mechanically Treated bars of grade Fe-500D or more.	50	kg		
20	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:				
20.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	20	cum		
20.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	50	cum		

21	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 :				
21.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	5	cum		
21.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	25	cum		
22	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) upto plinth level with :				
22.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	10	cum		
23	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately).				
23.1	Second class teak wood	5	cum		
24	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.				
24.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	20	sqm		
24.2	30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	20	sqm		
25	Providing and fixing wire gauge shutters using galvanized M.S. wire gauge of average width of aperture 1.4 mm in both directions with wire of dia 0.63 mm, for doors, windows and clerestory windows with hinges and necessary screws :				
25.1	35 mm thick shutters				
25.1.1	With ISI marked stainless steel butt hinges of required size				
25.1.1.2	Second class teak wood	20	sqm		
25.2	30 mm thick shutters				
25.2.1	With ISI marked stainless steel butt hinges of required size				
25.2.1.1	Second class teak wood	20	sqm		
26	Providing and fixing wooden moulded beading to door and window frames with iron screws, plugs and priming coat on unexposed surface etc. complete :				
26.1	2nd class teak wood				
26.1.1	50x12 mm	100	metre		
26.1.2	50 x 20 mm	100	metre		
27	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.				
27.1	Fixed to steel windows by welding	20	kg		
27.2	Fixed to openings /wooden frames with rawl plugs screws etc.	20	kg		

28	Providing and fixing fly proof galvanized M.S. wire gauge to windows and clerestory windows using wire gauge with average width of aperture 1.4 mm in both directions with wire of dia 0.63 mm all complete.				
28.1	With 2nd class teak wood beading 62X19 mm	10	sqm		
28.2	With 12 mm mild steel U beading	10	sqm		
29	Providing 40x5 mm flat iron hold fast 40 cm long including fixing to frame with 10 mm diameter bolts, nuts and wooden plugs and embedding in cement concrete block 30x10x15cm 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size).	20	each		
30	Providing and fixing ISI marked oxidised M.S. pressed butt hinges with necessary screws etc. complete.				
30.1	125x65x2.12 mm	30	each		
30.2	100x58x1.90 mm	50	each		
30.3	75x47x1.70 mm	10	each		
30.3	50x37x1.50 mm	10	each		
31	Providing and fixing ISI marked oxidised M.S. sliding door bolts with nuts and screws etc. complete :				
31.1	300x16 mm	50	each		
31.2	250x16 mm	30	each		
32	Providing and fixing ISi marked oxidised M.S. door latches conforming to IS:5930 with screws etc. complete :				
32.1	300x20x6 mm	50	each		
32.2	250x20x6 mm	50	each		
33	Providing and fixing ISI marked 85x42 mm oxidised M.S. pull bolt lock conforming to IS : 7534 with necessary screws bolts, nut and washers etc. complete.	10	each		
34	Providing and fixing ISI marked oxidised M.S. handles conforming to IS:4992 with necessary screws etc. complete :				
34.1	125 mm	20	each		
34.2	100 mm	20	each		
34.3	75 mm	10	each		
35	Providing and fixing oxidised M.S. hasp and staple (safety type) conforming to IS : 363 with necessary screws etc. complete :				
35.1	150 mm	5	each		
35.2	115 mm	10	each		
35.3	90 mm	5	each		
36	Providing and fixing IS : 12817 marked stainless steel butt hinges with stainless steel screws etc. complete :				
36.1	125x64x1.90 mm	100	each		
36.2	100X58X1.90 mm	100	each		
36.3	75x47x1.80 mm	50	each		
36.4	50x37x1.50 mm	20	each		
37	Providing and fixing IS : 12817 marked stainless steel butt hinges (heavy weight) with stainless steel screws etc. complete :				
37.1	125x64x2.50 mm	10	each		
37.2	100x60x2.50 mm	50	each		

37.3	75x50x2.50 mm	10	each		
38	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete :				
38.1	250x10 mm	5	each		
38.2	200x10 mm	5	each		
38.3	150x10 mm	5	each		
38.4	100x10 mm	5	each		
39	Providing and fixing bright finished brass door latch with necessary screws etc. complete :				
39.1	300x16x5 mm	2	each		
39.2	250x16x5 mm	2	each		
40	Providing and fixing bright finished brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles of approved quality with necessary screws etc. complete.	1	each		
41	Providing and fixing special quality bright finished brass cupboard or ward robe locks with four levers of approved quality including necessary screws etc. complete.				
41.1	40 mm	5	each		
41.2	50 mm	5	each		
42	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm), with necessary accessories and screws etc. complete.	10	each		
43	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.	10	each		
44	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 :				
44.1	300x16 mm	10	each		
44.2	250x16 mm	10	each		
45	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 :				
45.1	300x10 mm	10	each		
45.2	250x10 mm	10	each		
45.3	200x10 mm	5	each		
45.4	150x10 mm	5	each		
45.5	100x10 mm	5	each		
46	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 :				
46.1	125 mm	10	each		
46.2	100 mm	10	each		

46.3	75 mm	10	each		
47	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.				
47.1	Single rubber stopper	20	each		
47.2	Twin rubber stopper	100	each		
48	Providing and fixing bright finished brass 100 mm mortice latch and lock, ISI marked, with six levers and a pair of anodised (anodic coating not less than grade AC 10 as per IS : 1868) aluminium lever handles of approved quality with necessary screws etc. complete.	20	each		
49	Providing and fixing powder coated telescopic drawer channels 300 mm long with necessary screws etc. complete as per directions of Engineer-in-charge.	20	one set		
50	Providing and fixing Fiber Glass Reinforced plastic (FRP) Door Frames of cross-section 90 mm x 45 mm having single rebate of 32 mm x 15 mm to receive shutter of 30 mm thickness. The laminate shall be moulded with fire resistant grade unsaturated polyester resin and chopped mat. Door frame laminate shall be 2mm thick and shall be filled with suitable wooden block in all the three legs. The frame shall be covered with fiber glass from all sides. M.S. stay shall be provided at the bottom to steady the frame.	20	metre		
51	Providing and fixing to existing door frames.				
51.1	30 mm thick Glass Fibre Reinforced Plastic (FRP) panelled door shutter of required colour and approved brand and manufacture, made with fire - retardant grade unsaturated polyester resin, moulded to 3 mm thick FRP laminate for forming hollow rails and styles, with wooden frame and suitable blocks of seasoned wood inside at required places for fixing of fittings, cast monolithically with 5 mm thick FRP laminate for panels conforming to IS: 14856, including fixing to frames.	20	sqm		
51.2	30 mm thick Fiberglass Reinforced Plastic (F.R.P.) flush door shutter in different plain and wood finish made with fire retardant grade unsaturated polyester resin, moulded to 3 mm thick FRP laminate all around, with suitable wooden blocks inside at required places for fixing of fittings and polyurethane foam (PUF)/Polystyrene foam to be used as filler material throughout the hollow panel, casted monolithically with testing parameters of F.R.P. laminate conforming to table - 3 of IS: 14856, complete as per direction of Engineer-in-charge.	10	sqm		
53	Providing and fixing stainless steel (SS-304 grade) friction hinges to the side/top hung uPVC windows, of approved quality, with necessary stainless steel screws etc. as per direction of Engineer-in-charge.				
53.1	200 x 19 x 1.9 mm	10	each		
53.2	250 x 19 x 1.9 mm	10	each		

53.3	300 x 19 x 1.9 mm	10	each		
53.4	350 x 19 x 1.9 mm	5	each		
53.5	400 x 19 x 1.9 mm	5	each		
54	Providing and fixing bright /matt finished Stainless Steel handles of approved quality & make with necessary screws etc all complete.				
54.1	125 mm	100	each		
54.2	100mm	100	each		
54.3	75 mm	20	each		
55	Providing and fixing stainless steel soft closing spring hinges at 0 degree hinges (hydraulic type) of approved make/brand to cupboard shutters with full threaded steel screws including making necessary recess in board and finished etc. complete as per direction of Engineer-in-charge.	10	Each		
56	Providing and fixing stainless steel soft closing heavy type telescopic drawer channels of approved make 500 mm long with screws etc. complete as per directions of Engineer- in-charge.	10	one set		
57	Providing and fixing 2mm thick 16 to 19mm wide PVC edge binding tape of approved quality for cupboard/wardrobe shutters including necessary synthetic resin hot pressed to edges on binding machine etc. complete as per directions of Engineer- in-charge.	50	Mtr.		
58	Providing & fixing fly proof wire gauze to windows, clerestory windows & doors with M.S. Flat 15x3 mm and nuts & bolts complete.				
58.1	Galvanised M.S. Wire gauze with 0.63 mm dia wire and 1.4 mm aperture on both sides	20	sqm		
58.2	Stainless steel (grade 304) wire gauze of 0.5 mm dia wire and 1.4 mm aperture on both sides	20	sqm		
59	Chequerred precast cement concrete tiles 22 mm thick in footpath & courtyard, jointed with neat cement slurry mixed with pigment to match the shade of tiles, including rubbing and cleaning etc. complete, on 20 mm thick bed of cement mortar 1:4 (1 cement: 4 coarse sand).				
59.1	Light shade pigment using white cement	20	sqm		
59.2	Dark shade pigment using ordinary cement	500	sqm		
59.3	Ordinary cement without any pigment	20	sqm		
60	Providing and fixing 10 mm thick acid and/or alkali resistant tiles of approved make and colour using acid and/or alkali resisting mortar bedding, and joints filled with acid and/or alkali resisting cement as per IS : 4457, complete as per the direction of Engineer-in- Charge.				
60.1	In flooring on a bed of 10 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand)				
60.2	Acid and alkali resistant tile	20	sqm		
61	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 :				
61.1	Makrana white second quality	10	sqm		



61.2	Raj Nagar plain	10	sqm		
61.3	Udaipur green marble	10	sqm		
62	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) :				
62.1	25 mm thick	20	sqm		
63	40 mm thick fine dressed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement : 5 coarse sand) with joints finished flush.				
63.1	Red sand stone	20	sqm		
63.2	White sand stone	20	sqm		
64	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), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joints with white cement and matching pigments etc., complete.				
64.1	Size of Tile 600x600 mm	100	sqm		
65	Grouting the joints of flooring tiles having joints of 3 mm width, using epoxy grout mix of 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg), including filling / grouting and finishing complete as per direction of Engineer-in-charge.				
65.1	Size of Tile 600x600 mm	200	sqm		
66	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.				
66.1	18 mm thick Italian Marble stone slab, Perlato, Rosso verona, Fire Red or Dark Emperadore etc.	50	sqm		
67	Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing , curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge.				
67.1	Polished Granite stone slab jet Black, Cherry Red,	10	sqm		

	Elite Brown, Cat Eye or equivalent.				
68	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	100	sqm		
69	Providing and laying rectified Glazed Ceramic floor tiles of size 300x300 mm or more (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in colours White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement: 4 Coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joints with white cement and matching pigments etc., complete.	100	sqm		
70	Deduct for not grouting the joints with white cement and matching pigment in the items of fixing of vitrified tiles.	50	sqm		
71	Grouting the joints of flooring tiles of toilets having joints upto 3 mm width, using tile grout of desired shade , including, removing loose grout compound/ filling / grouting and finishing complete as per direction of Engineer-in-charge.				
71.1	Size of Tile 300x300 mm	1000	sqm		
72	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 :				
72.1	In 75x75 mm deep chase	100	metre		
73	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.	5	each		
74	Providing and fixing M.S. holder bat clamps of approved design to C.I. or S.C.I. rain water pipes 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) and cost of cutting holes and making good the walls etc. :				
74.1	100 mm diameter	20	each		

75	<p>Providing and fixing pre-coated galvanized iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.</p>	50	sqm		
76	<p>Providing and fixing tiled false ceiling of specified materials of size 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections ( galvanized @ 120 grams/ sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanized butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer-in-charge.</p>				
76.1	<p>GI Metal Ceiling Lay in plain Tegular edge Global white color tiles of size 595x595 mm, and 0.5 mm thick with 8 mm drop; made of G I sheet having galvanizing of 100 gms/sqm (both sides inclusive) and electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending.</p>	50	sqm		

77	Providing and fixing Heat Resistant Terrace Tiles (300 mm x 300 mm x 20 mm) with SRI (solar refractive index) > 78, solar reflection > 0.70 and initial emittance > 0.75 on waterproof and sloped surface of terrace, laid on 20 mm thick cement sand mortar in the ratio of 1:4 (1 cement : 4 coarse sand) and grouting the joints with mix of white cement & marble powder in ratio of 1:1, including rubbing and polishing of the surface upto 3 cuts complete, including providing skirting upto 150 mm height along the parapet walls in the same manner.	20	sqm		
78	12 mm cement plaster of mix :				
78.1	1:4 (1 cement: 4 fine sand)	100	sqm		
78.2	1:6 (1 cement: 6 fine sand)	1000	sqm		
79	15 mm cement plaster on the rough side of single or half brick wall of mix :				
79.1	1:4 (1 cement: 4 fine sand)	100	sqm		
79.2	1:6 (1 cement: 6 fine sand)	1000	sqm		
80	12 mm cement plaster finished with a floating coat of neat cement of mix :				
80.1	1:3 (1 cement: 3 fine sand)	20	sqm		
80.2	1:4 (1 cement: 4 fine sand)	40	sqm		
81	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement : 5 coarse sand) finished with a top layer 6 mm thick cement plaster 1:6 (1 cement : 6 fine sand).	20	sqm		
82	Distempering with 1st quality acrylic distemper, having VOC (Volatile Organic Compound ) content less than 50 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and colour.				
82.1	Two coats	1000	sqm		
83	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade:				
83.1	New work (Two or more coats applied @ 1.43 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm)	200	sqm		
84	Painting (two or more coats) on rain water, soil waste and vent pipes and fittings with synthetic enamel paint of approved brand and manufacture and required colour over a priming coat of approved steel primer on new work.				
84.1	100 mm diameter pipes	1000	metre		
85	Wall painting with acrylic emulsion paint, having VOC (Volatile Organic Compound ) content less than 50 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and colour.				
85.1	Two coats	500	sqm		
86	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
86.1	Two or more coats on new work	2500	sqm		
87	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc.	5000	sqm		

	complete				
88	Distempering with 1st quality acrylic distemper (Ready mix) having VOC content less than 50 grams/ litre of approved brand and manufacture to give an even shade :				
88.1	Old work (one or more coats)	5000	sqm		
89	Painting (one or more coats) on rain water, soil waste and vent pipes and fittings with synthetic enamel paint of approved brand and manufacture and required colour on old work :				
89.1	100 mm diameter pipes	50	metre		
91	Painting with aluminium paint of approved brand and manufacture to give an even shade:				
91.1	One or more coats on old work	500	sqm		
93	Finishing walls with Acrylic Smooth exterior paint of required shade :				
93.1	Old work (Two or more coat applied @ 1.67 ltr/ 10 sqm) on existing cement paint surface	2500	sqm		
94	Polishing in high gloss/matt finish melamine clear polish on wood work in required color/wooden shade texture with following process in the sequence as detailed below:				
94.1	<p>1.The surface to be polished is rubbed with sand paper 80/120 no. and then with sand paper of 160/180nos.</p> <p>2.Applying two coats of sealer with spray gun and allowing sufficient drying time for 1st coat and 2nd coat is allowed to dry for 8 to 12 hrs.</p> <p>3.On drying of sealer coat, wet rubbing with emery cloth of finer grading with ample water to remove excess sealer layer and make the surface further smooth after this wet rubbing, then surface is applied with special grade melamine fillers to fill all the small and big holes/grooves etc. Filler coat to be allowed to dry for 4 to 6 hrs on which again a light wet rubbing is done this surface is further allowed to dry for 12 hrs.</p> <p>4. On this, 1st coat of melamine polish is applied with spray gun using melamine clear polish and melamine thinner in required proportion. This 1st coat is allowed to dry for 24 hrs then this dry surface is again fine wet rubbed smooth, which is further allowed to dry for 12 hrs. The final melamine polish is applied with compressor pressure spray gun using melamine clear polish and melamine thinner mixed in required proportion complete as per direction of Engineer-in-Charge. (Final coat to be done in 1 or 2 layers without gap of time.)</p>	100	Sqm		
95	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq.meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground, all complete as per direction of Engineer-in-Charge.				
95.1	With cement mortar 1:4 (1 cement : 4 fine sand)	2500	sqm		
95.2	With cement mortar 1:4 (1cement: 4 coarse sand)	2500	sqm		

96	Fixing chowkhats in existing opening including embedding chowkhats in floors or walls cutting masonry for holdfasts, embedding hold fasts in cement concrete blocks of size 15 x 10 x 10 cm with cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size), painting two coats of approved wood preservative to sides of chowkhats and making good the damages to walls and floors as required complete, including disposal of rubbish to the dumping ground, all complete as per direction of Engineer-in-Charge.				
96.1	Door chowkhats	10	each		
96.2	Window chowkhats	10	each		
97	Fixing chowkhat in existing opening in brick/ RCC wall with dash fasteners/Chemical fasteners of appropriate size (3 nos on each vertical member of door chowkhat and 2 nos on each vertical member of window chowkhats), including Cost of dash fasteners/ chemical fastener.	10	each		
98	Making the opening in brick masonry including dismantling in floor or walls by cutting masonry and making good the damages to walls, flooring and jambs complete, to match existing surface i/c disposal of mulba/ rubbish to the nearest municipal dumping ground, all complete as per direction of Engineer-in-Charge.				
98.1	For door/ window/ clerestory window	10	sqm		
99	Renewing glass panes, with putty and nails wherever necessary including racking out the old putty:				
99.1	Float glass panes of nominal thickness 4 mm (weight not less than 10kg/sqm)	50	sqm		
99.2	Float glass panes of nominal thickness 5 mm (weight not less than 12.5kg/sqm)	20	sqm		
100	Renewing glass panes, with wooden fillets wherever necessary:				
100.1	Float glass panes of nominal thickness 4 mm (weight not less than 10kg/sqm)	20	sqm		
101	Float glass panes of nominal thickness 5 mm (weight not less than 12.5kg/sqm)	20	sqm		
102	Renewing glass panes and refixing existing wooden fillets:				
102.1	Float glass panes of nominal thickness 4 mm (weight not less than 10kg/sqm)	20	sqm		
102.2	Float glass panes of nominal thickness 5 mm (weight not less than 12.5kg/sqm)	20	sqm		
103	Supplying and fixing new wooden fillets wherever necessary:				
103.1	2nd class teak wood fillets	20	metre		
104	Renewal of old putty of glass panes (length)	50	metre		
105	Refixing old glass panes with putty and nails	50	sqm		
106	Fixing old glass panes with wooden fillets (excluding cost of fillets)	50	sqm		

107	Providing and fixing 16 mm M.S. Fan clamps of standard shape and size in existing R.C.C. slab, including cutting chase, anchoring clamp to reinforcement bar, including cleaning, refilling, making good the chase with matching concrete, plastering and painting the exposed portion of the clamps complete.	10	each		
108	Taking out wind ties from roof including cutting out rusted bolts, nuts etc. and removing materials to any distance within compound and stacking.	20	kg		
109	Fixing of old wind tie with new fittings including painting two or more coats with anticorrosive bitumastic paint of approved brand & manufacturer over and including priming coat of ready mixed zinc chromate yellow primer of approved brand.	200	metre		
110	Renewing bottom rail and/or top runner of collapsible gate including making good all damages and applying priming coat of zinc chromate yellow primer of approved brand and manufacturer.	50	kg		
111	Pumping out water caused by springs, tidal or river seepage, broken water mains or drains and the like.	100	kilo litre		
112	Providing and fixing M.S. round or square bars with M.S. flats at required spacing in wooden frames of windows and clerestory windows.	20	kg		
113	Providing and fixing double scaffolding system (cup lock type) on the exterior side, up to seven story height made with 40 mm dia M.S. tube 1.5 m centre to centre, horizontal & vertical tubes joining with cup & lock system with M.S. tubes, M.S. tube chollies, M.S. clamps and M.S. staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for the required duration as approved and removing it there after .The scaffolding system shall be stiffened with bracings, runners, connection with the building etc wherever required for inspection of work at required locations with essential safety features for the workmen etc. complete as per directions and approval of Engineer-in-charge .The elevational area of the scaffolding shall be measured for payment purpose .The payment will be made once irrespective of duration of scaffolding.	100	sqm		
114	Repair to plaster of thickness 12mm to 20 mm in patches of area 2.5 sqm and under, including cutting the patch in proper shape, raking out joints and preparing plastering the wall surface with white cement based polymer modified self curing mortar, including disposal of rubbish, all complete as per the direction of Engineer-In-Charge.	1000	sqm		

15	Cleaning of terrace/loft water storage tank (inside surface area) upto 2000 litre capacity at all heights with coconut brushes, duster etc., removal of silt, rubbish from the tank and cleaning the tank with fresh water disinfecting with bleaching powder @ 0.5gm per litre capacity of tank including marking the date of cleaning on the side of tank body with the help of stencil and paint and disposing of malba all complete as per direction of Engineer-in-Charge. (The old date already written on tank should be removed with paint remover or black paint and if date is not written with the stencil or old date is not removed deduction will be made @ Rs. 0.10 per litre) (if during cleaning any GI fittings or ball cock is damaged that is to be repaired by contractor at his own cost and nothing extra will be paid on this account)	953200	litre		
116	Cleaning and desilting of gully trap chamber, including removal of rubbish mixed with earth etc. and disposal of same, all as per the direction of Engineer-in-charge.	50	each		
117	Cleaning of choked sewer line by diesel running vehicle mounting hydraulic operated high pressure suction cum jetting sewer cleaning machine fitted with pump having 4000 litres suction capacity and 6000 litres water jetting tank capacity including skilled operator, supervising engineer etc. for cleaning and partial desilting of manholes and dechocking of sewer lines. Dechocking and flushing of sewer line from one manhole to another by high pressure jetting system of 2200 PSI for sewer line from 150mm dia upto 300mm	100	metre		
118	Cleaning of under ground sump, Over Head R.C.C. Tank ( independent staging) including disposal of slit and rubbish, all as per direction of Engineer-in-Charge. The cleaning shall consist following operations:- (i)Tank shall be emptied of water by pumping & bottom shall be cleaned of silt and other deposits. (ii) Entire surface area of the sump shall then scrubbed thoroughly with wire brush etc. and pressure washed with water. (iii) Chlorination of RCC internal surface by liquid chlorine. (iv) The treated surface shall be dried using air jetting and all loose particles shall be removal from the surface. (v) Finally the surface shall be treated with ultraviolet radiation etc. as per direction of Engineer-in-Charge.	6910	sqm		
119	Disconnecting damaged overhead/terrace PVC water storage tank of any size from water supply line and removing from the terrace including shifting at ground level as per direction of Engineer-in-charge.	10	each		
120	Providing & fixing White vitreous china water closet squatting pan (Indian type) along with "S" or "P" trap including dismantling of old WC seat and "S" or "P" trap at site complete with all operations including all necessary materials, labour and disposal of dismantled material i/c malba, all complete as per the direction of Engineer-in charge.				



120.1	Long pattern W.C Pan of size 580x440 mm	5	each		
120.2	Orissa pattern W.C Pan of size 580x440 mm	5	each		
121	Cutting holes of required size in brick masonry wall for fixing of exhaust fan including providing and fixing 300 mm dia PVC pipe conforming BIS-12818 and making good the same etc. complete as per direction of Engineer-in-charge.	5	each		
122	Dismantling W.C. Pan of all sizes including disposal of dismantled materials i/c malba all complete as per directions of Engineer-in-Charge.	5	each		
123	Hacking of CC flooring including cleaning for surface etc. complete as per direction of the Engineer-in-Charge.	10	sqm		
124	Dismantling 15 to 50 mm dia G.I. pipe including stacking of dismantled pipes (within 50 metres lead) as per direction of Engineer-in-Charge.	100	metre		
125	Taking out existing wooden door shutter, repair by cutting, painting etc. and refixing of repaired door shutters to existing door frames, including replacement of hinges with screws, etc. as required, all complete as per the direction of the Engineer-in-charge.	10	each		
126	Providing and laying in situ seven course water proofing treatment with APP (Atactic polypropylene) modified Polymeric memberane over roof consisting of first coat of bitumen primer @ 0.40 litre per sqm, 2nd, 4th & 6th courses of bonding material @ 1.20 Kg/sqm, which shall consist of blown type bitumen of grade 85/25 conforming to IS : 702, 3rd and 5th layers of roofing membrane APP modified Polymeric membrane 1.5 mm thick of 2.25 Kg/sqm weight consisting of five layers prefabricated with centre core as 20 micron HMHDPE film sandwiched on both sides with polymeric mix and the polymeric mix is protected on both side with 20 micron HMHDPE film. 7th, the top most layer shall be finished with brick tiles of class designation 10 grouted with cement mortar 1:3 (1cement : 3 fine sand) mixed with 2% integral water proofing compound by weight of cement over a 12 mm layer of cement mortar 1:3 (1 cement : 3 fine sand) and finished neat (item of laying brick tiles shall be paid for separately).	50	sqm		
127	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.				
127.1	Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	5	cum		
127.2	Nominal concrete 1:4:8 or leaner mix (i/c equivalent design mix)	5	cum		
128	Demolishing brick/CLC block work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.				
128.1	In cement mortar	20	cum		

129	Removing mortar from bricks and cleaning bricks including stacking within a lead of 50 m (stacks of cleaned bricks shall be measured):				
129.1	From brick work in cement mortar	1000	1000 Nos		
130	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead :				
130.1	Of area 3 sq. metres and below	3	each		
130.2	Of area beyond 3 sq. metres	2	each		
131	Taking out doors, windows and clerestory window shutters (steel or wood) including stacking within 50 metres lead :				
131.1	Of area 3 sq. metres and below	3	each		
131.2	Of area beyond 3 sq. metres	2	each		
132	Dismantling G.I. pipes (external work) including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means including stacking of pipes within 50 metres lead as per direction of Engineer-in-charge :				
132.1	15 mm to 40 mm nominal bore	50	metre		
132.2	Above 40 mm nominal bore	50	metre		
133	Taking out C.I. cover with frame from R.C.C. top slab of manholes of various sizes including demolishing of R.C.C. work manually/ by mechanical means and stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead as per direction of Engineer-in-charge.	20	each		
134	Taking out C.I. cover with frame from R.C.C. top slab of inspection chambers of various sizes including demolishing of R.C.C. work manually/ by mechanical means and stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead as per direction of Engineer-in-charge.	10	each		
135	Dismantling of flushing cistern of all types (C.I./PVC/Vitrious China) including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead.	50	each		
136	Dismantling of C.I. sluice valve including stacking of useful materials within a lead of 50 metres				
136.1	Up to 150 mm diameter	1	each		
136.2	Above 150 mm diameter	1	each		
137	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	100	sqm		
138	Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable material and stacking of serviceable material with in 50 meters lead as directed by Engineer-in-charge.	50	sqm		

139	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	50	cum		
140	Brick edging in full brick width and half brick depth including excavation, refilling and disposal of surplus earth lead upto 50 metres.				
140.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	100	metre		
141	Painting runway/taxi track/apron marking with adequate nos of coats to give uniform finish with road marking paint of superior make as approved by the Engineer-in-charge, i/c cleaning the surface of ail dirt, scales, oil, grease and other foreign material etc. and lining out complete.				
141.1	New work (Two or more coats)	50	sqm		
141.2	Old work (One or more coats)	50	sqm		
142	Painting road surface marking with adequate nos of coats to give uniform finish with ready mixed road marking paint conforming to IS : 164, on bituminous surface in white/yellow shade, including cleaning the surface of all dirt, scales, oil, grease and foreign material etc. complete.				
142.1	New work (Two or more coats)	1000	sqm		
142.2	Old work (One or more coats)	500	sqm		
145	Providing and fixing Glow studs of size 100x20 mm made of heavy duty body shall be moulded ASA (Acrylic styrene Acryloretrite ) or HIP (High impact polystyrene) or ABS having electronically welded micro- prismatic lens with abrasion resistant coating as approved by Engineer in charge. The glow stud shall support a load of 13635 kg tested in accordance with ASTM D4280. The slope of retro- reflective surface shall be 35 (+/-5) degress to base .The reflective panels on both sides with at least 12 cm of reflective area up each side. The luminance intensity should be as per the specification and shall be tested as described in ASTM I: 809 as recommended in BS: 873 part 4 : 1973. The studs shall be fixed to the Road surface using the adhesive conforming to IS, as per procedure recommended by the manufacturer complete and as per direction of Engineer-in-charge.	50	each		

146	Manufacturing, supplying and fixing retro reflective overhead signage boards made up of 2 mm thick aluminium sheet, face to be fully covered with high intensity and encapsulated lens type heat activated retro reflective sheeting conforming to type - III of ASTM-D-4956-01 as approved by Engineer-in-charge, letters, borders etc. as per IRC : 67-2001 in silver white with blue colour back ground and with high intensity grade, pasted on substrate by pressure sensitive adhesive backing which shall be activated by applying pressure conforming to class II of ASTM-D-4956-01 and fixing the same to the plate of structural frame work by means of suitable sized aluminium alloys, rivets or bolts & nuts @ 300 mm centre to centre all along the periphery as well as in two vertical rows along with theft resistant measures, including the cost of painting with two or more coats of epoxy paint in grey colour on the back side of aluminium sheet including appropriate priming coat. The rate includes the cost of rounding off the corners, lowering down the structural frame work from the gantry, fixing and erecting the same in position all complete as per drawings, specification and direction of the engineer-in-charge.(Structural frame work including M.S. plate to be provided separately. Rectangular area of the sheet only shall be measured for payment).				
146.1	Overhead informatory road signage	20	sqm		
147	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	10	cum		
148	Taking out existing kerb stones of all types from footpath/ central verge, including removal of mortar etc., disposal of unserviceable material to the dumping ground, for which payment shall be made separately and stacking of serviceable material within 50 metre lead as per direction of Engineer-in-Charge.	50	metre		
149	Taking out existing CC interlocking paver blocks from footpath/ central verge, including removal of rubbish etc., disposal of unserviceable material to the dumping ground, for which payment shall be made separately and stacking of serviceable material within 50 metre lead as per direction of Engineer-in-Charge.	100	sqm		
150	Laying old cement concrete interlocking paver blocks of any design/ shape laid in required line, level, curvature, colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all	100	sqm		

	complete as per the direction of Engineer-in-charge. (Old CC paver blocks shall be supplied by the department free of cost).				
151	Laying at or near ground level old kerb stones of all types in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement : 3 coarse sand), including making joints with or without grooves (thickness of joints, except at sharp curve, shall not be more than 5 mm), including making drainage opening wherever required etc. complete as per direction of Engineer-in-charge. (Length of finished kerb edging shall be measured for payment). (Old kerb stones shall be supplied by the department free of cost)	50	metre		
152	Providing and laying tactile tile (for vision impaired persons as per standards) of size 300x300x9.8mm having with water absorption less than 0.5% and conforming to IS:15622 of approved make in all colours and shades in for outdoor floors such as footpath, court yard, multi modals location etc., laid on 20mm thick base of cement mortar 1:4 (1 cement : 4 coarse sand) in all shapes & patterns including grouting the joints with white cement mixed with matching pigments etc. complete as per direction of Engineer-in-Charge.	50	sqm		
153	Providing and laying factory made chamfered edge Cement Concrete paver blocks in footpath, parks, lawns, drive ways or light traffic parking etc, of required strength, thickness & size/ shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand. complete all as per direction of Engineer-in-Charge.				
153.1	80 mm thick C.C. paver block of M-30 grade with approved color design and pattern.	100	sqm		
154	Providing and placing in position 100 mm thick factory made machine batched & machine mixed Precast RCC Rectangular Covers on drains of footpath of various sizes, of M-25 grade cement concrete for RCC work, including cost of centering, shuttering, reinforcement of 8 mm dia TMT bars of Fe 500 grade @ maximum 100mm c/c on both ways , neat cement punning on finished surface, properly encased on all edges with 1.6 mm thick , 100 mm wide MS sheet duly painted over priming coat , reinforcement to be welded at edges with MS sheet and providing 2 Nos. 12 mm dia bar for hooks etc i/c cost of cartage, all leads & lift, handling at site etc. all complete as per direction of Engineer-in-Charge.	50	sqm		
155	Providing and fixing white vitreous china water closet squatting pan (Indian type) :				
155.1	Orissa pattern W.C. pan of size 580x440 mm	5	each		
156	Providing and fixing 8 mm dia C.P. / S.S. Jet with	100	each		

	flexible tube upto 1 metre long with S.S. triangular plate to European type W.C. of quality and make as approved by Engineer - in - charge.				
157	Providing and fixing P.V.C. low level flushing cistern with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete.				
157.1	10 litre capacity - White	50	each		
158	Providing and fixing CP Brass 32mm size Bottle Trap of approved quality & make and as per the direction of Engineer-in-charge.(Make: Jaugar, Modle No: ALD-CHR-769)	20	each		
159	Providing and fixing white vitreous china laboratory sink including making all connections excluding cost of fittings :				
159.1	Size 600x450x200 mm	2	each		
160	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.				
160.1	Flexible pipe				
160.1.1	32 mm dia	100	each		
160.1.2	40 mm dia	10	each		
161	Providing and fixing 100 mm sand cast Iron grating for gully trap.	20	each		
162	Providing and fixing in position 25 mm diameter mosquito proof coupling of approved municipal design.	20	each		
163	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	50	each		
164	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing :				
164.1	Rectangular shape 1500x450 mm	20	each		
165	Providing and fixing toilet paper holder :				
165.1	C.P. brass	10	each		
166	Providing and fixing soil, waste and vent pipes :				
166.1	100 mm dia				
166.1.1	Centrifugally cast (spun) iron socket & spigot (S&S) pipe as per IS: 3989	20	metre		
166.1.2	Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905	10	metre		
167	Providing and filling the joints with spun yarn, cement slurry and cement mortar 1:2 ( 1 cement : 2 fine sand) in S.C.I./ C.I. Pipes :				
167.1	100 mm dia pipe	5	each		
168	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. :				
168.1	For 100 mm dia pipe	50	each		
169	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick,				

	bolts and nuts complete.				
169.1	100 mm dia				
169.1.1	Sand cast iron S&S as per IS - 3989	5	each		
169.1.2	Hubless centrifugally cast (spun) iron epoxy coated inside & outside as per IS:15905	5	each		
170	Providing and fixing plain bend of required degree.				
170.1	100 mm dia				
170.1.1	Sand cast iron S&S as per IS : 3989	3	each		
170.1.2	Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905	3	each		
171	Providing and fixing door piece, insertion rubber washer 3mm thick, bolts & nuts complete :				
171.1	100 mm				
171.1.1	Sand cast iron S&S as per IS - 1729	5	each		
171.1.2	Sand cast iron S&S as per IS - 3989	5	each		
172	Providing and fixing M.S. stays and clamps for sand cast iron/ centrifugally cast (spun) iron pipes of diameter :				
172.1	100 mm	20	each		
173	Cutting chases in brick masonry walls for following diameter sand cast iron/centrifugally cast (spun) iron pipes and making good the same with cement concrete 1:3:6 ( 1 cement : 3 coarse sand :6 graded stone aggregate 12.5 mm nominal size), including necessary plaster and pointing in cement mortar 1:4 (1 cement : 4 coarse sand) :				
173.1	100 mm dia	20	metre		
174	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				
174.1	15 mm nominal outer dia Pipes	20	metre		
174.2	20 mm nominal outer dia Pipes	20	metre		
174.3	25 mm nominal outer dia Pipes	100	metre		
174.4	32 mm nominal outer dia Pipes	50	metre		
174.5	40 mm nominal outer dia Pipes	20	metre		
174.6	50 mm nominal outer dia Pipes	20	metre		
175	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 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.				
175.1	15 mm nominal outer dia Pipes	20	metre		
175.2	20 mm nominal outer dia Pipes	20	metre		
175.3	25 mm nominal outer dia Pipes	50	metre		
175.4	32 mm nominal outer dia Pipes	20	metre		

176	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge. External work				
176.1	15 mm nominal outer dia Pipes	20	metre		
176.2	20 mm nominal outer dia Pipes	20	metre		
176.3	25 mm nominal outer dia Pipes	20	metre		
176.4	32 mm nominal outer dia Pipes	20	metre		
176.5	40 mm nominal outer dia Pipes	20	metre		
176.5	50 mm nominal outer dia Pipes	20	metre		
176.6	62.50 mm nominal inner dia Pipes	20	metre		
176.7	75 mm nominal inner dia Pipes	20	metre		
176.8	100 mm nominal inner dia Pipes	20	metre		
177	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, i/c cutting and making good the walls etc. Internal work - Exposed on wall				
177.1	15 mm dia nominal bore	50	metre		
177.2	20 mm dia nominal bore	20	metre		
177.3	25 mm dia nominal bore	50	metre		
177.4	32 mm dia nominal bore	20	metre		
177.5	40 mm dia nominal bore	20	metre		
177.6	50 mm dia nominal bore	5	metre		
178	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. External work				
178.1	15 mm dia nominal bore	20	metre		
178.2	20 mm dia nominal bore	20	metre		
178.3	25 mm dia nominal bore	50	metre		
178.4	32 mm dia nominal bore	20	metre		
178.5	40 mm dia nominal bore	10	metre		
178.6	50 mm dia nominal bore	5	metre		
178.7	65 mm dia nominal bore	5	metre		
178.8	80 mm dia nominal bore	20	metre		
179	Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete :				
179.1	25 to 40 mm nominal bore	20	each		
179.2	50 to 80 mm nominal bore	20	each		
180	Providing and Fixing of stop cock in G.I. pipe line including cutting and threading the pipe and making connection etc. complete.	10	each		
181	Providing and Fixing of Socket/reducer socket of size 15mm to 40mm in G.I. pipe line including cutting and threading the pipe and making connection etc. complete.	100	each		
182	Providing and Fixing of Socket/reducer socket of size 50 mm to 80mm in G.I. pipe line including cutting and threading the pipe and making connection etc. complete .	50	each		
183	Providing and Fixing of elbow/Tee of size 15mm to 40mm in G.I. pipe line including cutting and threading the pipe and making connection etc. complete .	100	each		



184	Providing and Fixing of Elbow/Tee of size 50 mm to 80mm in G.I. pipe line including cutting and threading the pipe and making connection etc. complete.	50	each		
185	Providing and Fixing of stop cock in CPVC pipe line including cutting and fixing the pipe and making connection etc. complete .	50	each		
186	Providing and Fixing of Socket/reducer socket of size 15mm to 40mm in CPVC pipe line including cutting and fixing the pipe and making connection etc. complete.	100	each		
187	Providing and Fixing of Socket/reducer socket of size 50 mm to100 mm in CPVC pipe line including cutting and fixing the pipe and making connection etc. complete.	50	each		
188	Providing and Fixing of elbow/Tee of size 15mm to 40mm in CPVC pipe line including cutting and threading the pipe and making connection etc. complete.	100	each		
189	Providing and Fixing of Elbow/Tee of size 50 mm to 80mm in CPVC pipe line including cutting and fixing the pipe and making connection etc. complete.	50	each		
190	Providing and fixing brass bib cock of approved quality:				
190.1	15 mm nominal bore	10	each		
191	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :				
191.1	25 mm nominal bore	10	each		
191.2	20 mm nominal bore	10	each		
191.3	32 mm nominal bore.	10	each		
191.4	40 mm nominal bore	5	each		
191.5	50 mm nominal bore	10	each		
191.6	65 mm nominal bore	2	each		
191.7	80 mm nominal bore	5	each		
192	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete:				
192.1	15 mm nominal bore	10	each		
192.2	20 mm nominal bore	10	each		
192.3	25 mm nominal bore	10	each		
193	Providing and fixing gun metal non- return valve of approved quality (screwed end) :				
193.1	25 mm nominal bore				
193.1.1	Horizontal	5	each		
193.1.2	Vertical	5	each		
193.2	32 mm nominal bore				
193.2.1	Horizontal	2	each		
193.2.2	Vertical	2	each		
193.3	40 mm nominal bore				
193.3.1	Horizontal	2	each		
193.3.2	Vertical	2	each		
193.4	50 mm nominal bore				
193.4.1	Horizontal	2	each		
193.4.2	Vertical	2	each		
194	Providing and fixing uplasticised PVC connection pipe with brass unions :				
194.1	45 cm length				
194.1.1	15 mm nominal bore	200	each		

195	Providing and fixing C.I. sluice valves (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pieces if required will be paid separately) :				
195.1	100 mm diameter				
195.1.1	Class I	2	each		
195.2	150 mm diameter				
195.2.1	Class I	2	each		
196	Providing and filling sand of grading zone V or coarser grade, allround the G.I. pipes in external work :				
196.1	15 mm diameter pipe	20	metre		
196.2	20 mm diameter pipe	20	metre		
196.3	25 mm diameter pipe	100	metre		
196.4	32 mm diameter pipe	20	metre		
196.5	40 mm diameter pipe	20	metre		
196.6	50 mm diameter pipe	100	metre		
196.7	65 mm diameter pipe	5	metre		
196.8	80 mm diameter pipe	10	metre		
197	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work) :				
197.1	15 mm nominal bore	5	each		
197.2	20 mm nominal bore	5	each		
197.3	25 mm nominal bore	5	each		
197.4	32 mm nominal bore	5	each		
197.5	40 mm nominal bore	5	each		
197.6	50 mm nominal bore	5	each		
197.7	65 mm nominal bore	5	each		
197.8	80 mm nominal bore	5	each		
198	Providing and fixing G.I. Union in existing G.I. pipe line, cutting and threading the pipe and making long screws, including excavation, refilling the earth or cutting of wall and making good the same complete wherever required :				
198.1	15 mm nominal bore	20	each		
198.2	20 mm nominal bore	20	each		
198.3	25 mm nominal bore	20	each		
198.4	32 mm nominal bore	20	each		
198.5	40 mm nominal bore	10	each		
198.6	50 mm nominal bore	20	each		
198.7	65 mm nominal bore	5	each		
198.8	80 mm nominal bore	5	each		
199	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	20000	per litre		
200	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931 :				
200.1	15 mm nominal bore	5	each		
201	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms.				
201.1	15 mm nominal bore	5	each		
202	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.				
202.1	15 mm nominal bore	5	each		

203	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931				
203.1	15mm nominal bore	40	each		
204	Providing and fixing C.P. Brass extension nipple (size 15mmx50mm) of approved make and quality as per direction of Engineer-in-charge.	50	each		
205	Providing and fixing PTMT, push cock of approved quality and colour.				
205.1	15 mm nominal bore, 98 mm long, weighing not less than 75 gms	50	each		
206	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329:				
206.1	100 mm dia Ductile Iron Class K-7 pipes	20	metre		
207	Cutting holes up to 30x30 cm in walls including making good the same:				
207.1	With common burnt clay F.P.S. (non modular) bricks	10	Each		
208	Labour for cutting C.I. pipe with steel saw.				
208.1	100 mm diameter C.I. pipe	10	each cut		
209	Supplying and fixing C.I. cover without frame for manholes:				
209.1	455x610 mm rectangular C.I. cover (light duty) the weight of the cover to be not less than 23 kg	20	each		
209.2	500 mm diameter C.I. cover (medium duty) the weight of the cover to be not less than 58 kg	20	each		
209.3	560 mm diameter C.I. cover (heavy duty) the weight of the cover to be not less than 108 kg	20	each		
210	Providing and fixing in position pre-cast R.C.C. manhole cover and frame of required shape and approved quality				
210.1	L D- 2.5				
210.1.1	Rectangular shape 600x450 mm internal dimensions	20	each		
210.1.2	Square shape 450 mm internal dimensions	20	each		
210.2	Circular shape 450 mm internal diameter	5	each		
210.2.1	M D - 10				
210.2.2	Square shape 450 mm internal dimension	10	each		
210.2.3	Circular shape 500 mm internal diameter	5	each		
210.3	H D - 20				
210.3.1	Circular shape 560 mm internal diameter	5	each		
211	Supplying and fixing C.I. cover 300x300 mm without frame for gully trap (standard pattern) the weight of cover to be not less than 4.5 kg	5	each		
212	Providing and fixing 12 mm thick pre-laminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge.				
212.1	Pre-laminated particle board with decorative lamination on both sides	100	sqm		

213	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):				
213.1	With float glass panes of 5 mm thickness (weight not less than 12.50 kg/sqm)	300	sqm		
213.2	With float glass panes of 8 mm thickness (weight not less than 20 kg/sqm)	50	sqm		
214	Replacement of double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge.(DSR-2023) Note: Old material will be the property of the Contractor.				
214.1	With stainless steel cover plate minimum 1.25 mm thickness	50	Each		
215	Replacement of aluminium round shape handle of outer dia 100 mm with SS screws etc. complete as per direction of Engineer-in-charge. Note: Old material will be the property of the Contractor.				
215.1	Powder coated minimum thickness 50 micron aluminium	30	Each		
216	Repair maintenance of Aluminium Doors by open of door frame and proving and fixing 8mm thick rod (in single leaf) and screws, clit, etc. complete and as per direction of Engineer-in-charge. Note: Old material will be the property of the Contractor.	100	Each		
217	Replacement and fixing of Mortice Lock handle with cover and required nut, screws etc. complete and as per direction of Engineer-in-charge.(Excluding lock) Note: Old material will be the property of the Contractor.	100	Each		
218	Providing and fixing powder coated aluminium snap beading for doors, windows, ventilators and partitions with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically, stainless steel screws, all complete as per the directions of Engineer-in-charge. (minimum thickness of powder coating 50 micron). Note: Old material will be the property of the Contractor.	100	kg		

219	Replacement and fixing Brass 100mm mortice latch and lock with 6 levers without pair of handles (best make of approved quality) for aluminium doors complete. Note: Old material will be the property of the Contractor.	50	Each		
220	Replacement of aluminium door pivot set of door weight upto 125 kg, including cost of removing old pivot, embedding in door frame as required and making good the same etc. and as per direction of Engineer-in-charge. Note: Old material will be the property of the Contractor.	100	Each		
221	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge.				
221.1	With stainless steel cover plate minimum 1.25 mm thickness	10	each		
222	Providing and fixing double glazed hermetically sealed glazing in aluminium windows, ventilators and partition etc. with 6 mm thick clear float glass both side, having 12 mm air gap, including providing EPDM gasket, perforated aluminium spacers, desiccants, sealant (Both primary and secondary sealant) etc. as per specifications, drawings and direction of Engineer-in-charge complete.	50	sqm		
223	Providing and fixing stainless steel (SS 304 grade) adjustable friction windows stays of approved quality with necessary stainless steel screws etc. to the side hung windows as per direction of Engineer-in-charge complete.				
223.1	205 X 19 mm	5	each		
223.2	255 X 19 mm	5	each		
223.3	355 X 19 mm	5	each		
224	Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying : (a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/ sqm. This layer will be allowed to air cure for 4 hours. (b) Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.	50	sqm		

225	Providing and fixing factory made precast RCC perforated drain covers, having concrete of strength not less than M-25, of size 1000 x 450x50 mm, reinforced with 8 mm dia four nos longitudinal & 9 nos cross sectional T.M.T. hoop bars, including providing 50 mm dia perforations @ 100 to 125 mm c/c, including providing edge binding with M.S. flats of size 50 mm x 1.6 mm complete, all as per direction of Engineer-in-charge.	50	each		
226	Providing and fixing mineral fibre false ceiling tiles at all heights of size 595X595mm of approved texture, design and pattern. The tiles should have Humidity Resistance (RH) of 99%, Light Reflectance $\geq$ 85%, Thermal Conductivity k = 0.052 - 0.057 w/m K, Fire Performance as per (BS 476 pt - 6 &7) in true horizontal level suspended on interlocking T-Grid of hot dipped all round galvanized iron section of 0.33 mm thick (galvanized @120 gsm) comprising of main T runners of 15x32 mm of length 3000 mm, cross T of size 15x32mm of length 1200 mm and secondary intermediate cross T of size 15x32 mm of length 600 mm to form grid module of size 600x600 mm suspended from ceiling using galvanized mild steel item (galvanised@80gsm) 50 mm long 8mm outer diameter M-6 dash fasteners, 6 mm diameter fully threaded hanger rod up to 1000 mm length and L-shape level adjuster of size 85x25x2 mm, spaced at 1200 mm centre to centre along main 'T'. The system should rest on periphery walls /partitions with the help of GI perimeter wall angle of size 24x24X3000 mm made of 0.40 mm thick sheet, to be fixed to the wall with help of plastic rawl plug at 450 mm centre to centre & 40 mm long dry wall S.S. screws. The exposed bottom portion of all T-sections used in false ceiling support system shall be pre-painted with polyester baked paint, for all heights. The work shall be carried out as per specifications, drawings and as per directions of the engineer-in-charge.				
226.1	With 20 mm thick beveled tegular mineral fibre false ceiling tile (NRC 0.7)	100	sqm		
227	Providing, mixing and applying bonding coat of approved adhesive on chipped portion of RCC as per specifications and direction of Engineer-In-charge complete in all respect.				
227.1	SBR Polymer (@10% of cement weight) modified cementitious bond coat @ 2.2 kg cement per sqm of surface area mixed with specified proportion of approved polymer	20	sqm		
228	Providing and fixing G.I. Nipple 15 mm nominal bore on existing GI pipe line by cutting, threadning, fixing complete in all respect.				
228.1	50mm long	20	Each		
228.2	75mm long	20	Each		
228.3	100mm long	20	Each		

228.4	150mm long				
229	Providing and fixing G.I. Nipple 25 mm nominal bore on existing Gi pipe line by cutting, threading, fixing complete in all respect.				
229.1	50mm long	20	Each		
229.2	75mm long	20	Each		
229.3	100mm long	20	Each		
230	Providing and fixing G.I. Nipple 32 mm nominal bore on existing Gi pipe line by cutting, threading, fixing complete in all respect.				
230.1	50 mm (Length)	20	Each		
230.2	80 mm (Length)	20	Each		
230.3	100 mm (Length)	20	Each		
230.4	125 mm (Length)	20	Each		
230.5	150 mm (Length)	20	Each		
231	Providing and fixing G.I. Nipple 40 mm nominal bore on existing Gi pipe line by cutting, threading, fixing complete in all respect.				
231.1	50 mm (Length)	20	Each		
231.2	80 mm (Length)	20	Each		
231.3	100 mm (Length)	20	Each		
231.4	125 mm (Length)	20	Each		
231.5	150 mm (Length)	20	Each		
232	Providing and fixing G.I. Nipple 50 mm nominal bore on existing Gi pipe line by cutting, threading, fixing complete in all respect.				
232.1	50 mm (Length)	20	Each		
232.2	80 mm (Length)	20	Each		
232.3	100 mm (Length)	20	Each		
232.4	125 mm (Length)	20	Each		
232.5	150 mm (Length)	20	Each		
			<b>Sub Total Amount</b>		

**SH- I (B): DAY TO DAY CIVIL MAINTENANCE WORKS of Non DSR Items AT CURAJ.**

S.No.	Items	Qty	Unit	Rate	Amount
1	Providing and fixing Polyethylene water storage tank cover and suitable locking arrangement of 500 liter capacity	10	Each		
2	Providing and fixing Polyethylene water storage tank cover and suitable locking arrangement of 1000 liter capacity	100	Each		
3	Providing and fixing Polyethylene water storage tank cover and suitable locking arrangement of 1100 liter capacity	10	Each		
4	Providing and fixing Polyethylene water storage tank cover and suitable locking arrangement of 2000 liter capacity	20	Each		
5	Providing and fixing Polyethylene water storage tank cover and suitable locking arrangement of 5000 liter capacity	5	Each		
6	Providing and fixing Health Faucet of (Make: Jaugar, Modle No: ALD-CHR-573)	50	Each		
7	Providing and fixing W/C rubber Washer Black 110mm of Jaguar make	100	Each		
8	Providing and fixing of cistern PVC handle	100	Each		
9	Providing and fixing of Cistern and W/c Syphon washer 32mm	400	Each		
10	Providing and fixing Jaqure make spindle of thick nose for bib cock/piller cock/angular cock	20	Each		
11	Providing and fixing Jaqure make spindle of thin nose for bib cock/piller cock/angular cock,	20	Each		
12	Providing and fixing 100 mm sand cast Iron grating for gully trap.	50	Each		
13	Providing and fixing CPVC MAPT 15mm ,Make: Ashirwad, Astral, Finolex	10	Each		
14	Providing and fixing CPVC MABT 15mm ,Make: Ashirwad, Astral, Finolex	10	Each		
15	Providing and fixing CPVC MAPT 20mm,Make: Ashirwad, Astral, Finolex	10	Each		
16	Providing and fixing CPVC MABT 20mm ,Make: Ashirwad, Astral, Finolex	10	Each		
17	Providing and fixing CPVC MAPT 25mm , Make: Ashirwad, Astral, Finolex	10	Each		
18	Providing and fixing CPVC MABT 25mm ,Make: Ashirwad, Astral, Finolex	10	Each		
19	Providing and fixing CPVC MAPT 32mm,Make: Ashirwad, Astral, Finolex	10	Each		
20	Providing and fixing CPVC MABT 32mm,Make: Ashirwad, Astral, Finolex	10	Each		
21	Providing and fixing CPVC MAPT 40mm,Make: Ashirwad, Astral, Finolex	10	Each		
22	Providing and fixing CPVC MABT 40mm , Make: Ashirwad, Astral, Finolex	10	Each		
23	Providing and fixing CPVC MAPT 50mm , Make: Ashirwad, Astral, Finolex	10	Each		



24	Providing and fixing CPVC MABT 50mm , Make: Ashirwad, Astral, Finolex	10	Each		
25	Providing and fixing CPVC FAPT 15mm , Make: Ashirwad, Astral, Finolex	10	Each		
26	Providing and fixing CPVC FABT 15mm, Make: Ashirwad, Astral, Finolex	10	Each		
27	Providing and fixing CPVC FAPT 20mm , Make: Ashirwad, Astral, Finolex	10	Each		
28	Providing and fixing CPVC FABT 20mm, Make: Ashirwad, Astral, Finolex	10	Each		
29	Providing and fixing CPVC FAPT 25mm, Make: Ashirwad, Astral, Finolex	10	Each		
30	Providing and fixing CPVC FABT 25mm, Make: Ashirwad, Astral, Finolex	10	Each		
31	Providing and fixing CPVC FAPT 32mm , Make: Ashirwad, Astral, Finolex	10	Each		
32	Providing and fixing CPVC FABT 32mm ,Make: Ashirwad, Astral, Finolex	10	Each		
33	Providing and fixing CPVC FAPT 40mm,Make: Ashirwad, Astral, Finolex	10	Each		
34	Providing and fixing CPVC FABT 40mm ,Make: Ashirwad, Astral, Finolex	10	Each		
35	Providing and fixing CPVC FAPT 50mm ,Make: Ashirwad, Astral, Finolex	10	Each		
36	Providing and fixing CPVC FABT 50mm,Make: Ashirwad, Astral, Finolex	10	Each		
37	Providing and fixing CPVC Valve 15mm Make: Ashirwad, Astral, Finolex	50	Each		
38	Providing and fixing CPVC Value 20mm Make: Ashirwad, Astral, Finolex	50	Each		
39	Providing and fixing CPVC Valve 25mm Make: Ashirwad, Astral, Finolex	50	Each		
40	Providing and fixing CPVC Valve 32mm Make: Ashirwad, Astral, Finolex	50	Each		
41	Providing and fixing CPVC Valve 40mm Make: Ashirwad, Astral, Finolex	30	Each		
42	Providing and fixing CPVC Valve 50mm Make: Ashirwad, Astral, Finolex	30	Each		
43	Providing and fixing CPVC End Cap 15mm Make: Ashirwad, Astral, Finolex	50	Each		
44	Providing and fixing CPVC End Cap 20mm Make: Ashirwad, Astral, Finolex	50	Each		
45	Providing and fixing CPVC End Cap 25mm Make: Ashirwad, Astral, Finolex	50	Each		
46	Providing and fixing CPVC End Cap 32mm Make: Ashirwad, Astral, Finolex	50	Each		
47	Providing and fixing CPVC End Cap 40mm Make: Ashirwad, Astral, Finolex	30	Each		
48	Providing and fixing CPVC End Cap 50mm Make: Ashirwad, Astral, Finolex	10	Each		

49	Providing and fixing CPVC End Cap 110mm Make: Ashirwad, Astral, Finolex	10	Each		
50	Providing and fixing CPVC Elbow 15mm Make: Ashirwad, Astral, Finolex	50	Each		
51	Providing and fixing CPVC Elbow 20mm Make: Ashirwad, Astral, Finolex	50	Each		
52	Providing and fixing CPVC Elbow 25mm Make: Ashirwad, Astral, Finolex	50	Each		
53	Providing and fixing CPVC Elbow 32mm Make: Ashirwad, Astral, Finolex	50	Each		
54	Providing and fixing CPVC Elbow 40mm Make: Ashirwad, Astral, Finolex	30	Each		
55	Providing and fixing CPVC Elbow 50mm Make: Ashirwad, Astral, Finolex	10	Each		
56	Providing and fixing CPVC Elbow 110mm Make: Ashirwad, Astral, Finolex	10	Each		
57	Providing and fixing CPVC Tee 15mm Make: Ashirwad, Astral, Finolex	50	Each		
58	Providing and fixing CPVC Tee 20mm Make: Ashirwad, Astral, Finolex	50	Each		
59	Providing and fixing CPVC Tee 25mm Make: Ashirwad, Astral, Finolex	50	Each		
60	Providing and fixing CPVC Tee 32mm Make: Ashirwad, Astral, Finolex	50	Each		
61	Providing and fixing CPVC Tee 40mm Make: Ashirwad, Astral, Finolex	30	Each		
62	Providing and fixing CPVC Tee 50mm Make: Ashirwad, Astral, Finolex	10	Each		
63	Providing and fixing CPVC Tee 110mm Make: Ashirwad, Astral, Finolex	10	Each		
64	Providing and fixing CPVC Tee 20x15mm Make: Ashirwad, Astral, Finolex	50	Each		
65	Providing and fixing CPVC Tee 25x20mm Make: Ashirwad, Astral, Finolex	50	Each		
66	Providing and fixing CPVC Tee 32x25mm Make: Ashirwad, Astral, Finolex	50	Each		
67	Providing and fixing CPVC Tee 40x32mm Make: Ashirwad, Astral, Finolex	10	Each		
68	Providing and fixing CPVC Tee 50x40mm Make: Ashirwad, Astral, Finolex	10	Each		
69	Providing and fixing CPVC Socket 15mm Make: Ashirwad, Astral, Finolex	50	Each		
70	Providing and fixing CPVC Socket 20mm Make: Ashirwad, Astral, Finolex	50	Each		
71	Providing and fixing CPVC Socket 25mm Make: Ashirwad, Astral, Finolex	50	Each		
72	Providing and fixing CPVC Socket 32mm Make: Ashirwad, Astral, Finolex	50	Each		
73	Providing and fixing CPVC Socket 40mm Make: Ashirwad, Astral, Finolex	30	Each		

74	Providing and fixing CPVC Socket 50mm Make: Ashirwad, Astral, Finolex	10	Each		
75	Providing and fixing CPVC Socket 110mm Make: Ashirwad, Astral, Finolex	10	Each		
76	Providing and fixing CPVC Elbow 15X15mm Brass Make: Ashirwad, Astral, Finolex	50	Each		
77	Providing and fixing CPVC Elbow 15X20mm Brass Make: Ashirwad, Astral, Finolex	50	Each		
78	Providing and fixing CPVC Elbow 20mm Brass Make: Ashirwad, Astral, Finolex	50	Each		
79	Providing and fixing CPVC Elbow 25mm Brass Make: Ashirwad, Astral, Finolex	50	Each		
80	Providing and fixing CPVC Tee 15x15mm Brass Make: Ashirwad, Astral, Finolex	50	Each		
81	Providing and fixing CPVC Tee 15x20mm Brass Make: Ashirwad, Astral, Finolex	50	Each		
82	Providing and fixing CPVC Tee 20mm Brass Make: Ashirwad, Astral, Finolex	50	Each		
83	Providing and fixing CPVC Tee 25mm Brass Make: Ashirwad, Astral, Finolex	50	Each		
84	Providing and fixing CPVC Union 15mm Make: Ashirwad, Astral, Finolex	50	Each		
85	Providing and fixing CPVC Union 20mm Make: Ashirwad, Astral, Finolex	50	Each		
86	Providing and fixing CPVC Union 25mm Make: Ashirwad, Astral, Finolex	50	Each		
87	Providing and fixing CPVC Union 32mm Make: Ashirwad, Astral, Finolex	50	Each		
88	Providing and fixing CPVC Union 40mm Make: Ashirwad, Astral, Finolex	30	Each		
89	Providing and fixing CPVC Union 50mm Make: Ashirwad, Astral, Finolex	10	Each		
90	Providing and fixing CPVC Reducer 15x20mm Make: Ashirwad, Astral, Finolex	50	Each		
91	Providing and fixing CPVC Reducer 20x25mm Make: Ashirwad, Astral, Finolex	50	Each		
92	Providing and fixing CPVC Reducer 25x32mm Make: Ashirwad, Astral, Finolex	50	Each		
93	Providing and fixing CPVC Reducer 32x40mm Make: Ashirwad, Astral, Finolex	50	Each		
94	Providing and fixing CPVC Reducer 40x50mm Make: Ashirwad, Astral, Finolex	30	Each		
95	Providing and fixing CPVC Reducer 50x110mm Make: Ashirwad, Astral, Finolex	10	Each		
96	Providing and fixing CPVC Elbow 15x20mm Make: Ashirwad, Astral, Finolex	50	Each		
97	Providing and fixing CPVC Elbow 20mx25m Make: Ashirwad, Astral, Finolex	50	Each		
98	Providing and fixing CPVC Elbow 25x32mm Make: Ashirwad, Astral, Finolex	50	Each		

99	Providing and fixing CPVC Elbow 32x40mm Make: Ashirwad, Astral, Finolex	50	Each		
100	Providing and fixing CPVC Elbow 40x50mm Make: Ashirwad, Astral, Finolex	30	Each		
101	Providing and fixing CPVC Elbow 50x110mm Make: Ashirwad, Astral, Finolex	30	Each		
102	Providing and fixing CPVC Elbow 45 degree 20mm Make: Ashirwad, Astral, Finolex	10	Each		
103	Providing and fixing CPVC Elbow 45 degree 25mm Make: Ashirwad, Astral, Finolex	10	Each		
104	Providing and fixing CPVC Elbow 45 degree 32mm Make: Ashirwad, Astral, Finolex	10	Each		
105	Providing and fixing CPVC Elbow 45 degree 40mm Make: Ashirwad, Astral, Finolex	10	Each		
106	Providing and fixing CPVC Elbow 45 degree 50mm Make: Ashirwad, Astral, Finolex	10	Each		
107	Providing and fixing CPVC Elbow 45 degree 110mm Make: Ashirwad, Astral, Finolex	10	Each		
108	Providing and fixing CPVC Tank Connection 15mm Make: Ashirwad, Astral, Finolex	50	Each		
109	Providing and fixing CPVC Connection 20mm Make: Ashirwad, Astral, Finolex	50	Each		
110	Providing and fixing CPVC Connection 25mm Make: Ashirwad, Astral, Finolex	50	Each		
111	Providing and fixing CPVC Connection 32mm Make: Ashirwad, Astral, Finolex	50	Each		
112	Providing and fixing CPVC Connection 40mm Make: Ashirwad, Astral, Finolex	30	Each		
113	Providing and fixing CPVC Connection 50mm Make: Ashirwad, Astral, Finolex	10	Each		
114	Providing and fixing CPVC U-Clip 15mm Make: Ashirwad, Astral, Finolex	100	Each		
115	Providing and fixing CPVC U-Clip 20mm Make: Ashirwad, Astral, Finolex	100	Each		
116	Providing and fixing CPVC U-Clip 25mm Make: Ashirwad, Astral, Finolex	100	Each		
117	Providing and fixing CPVC U-Clip 32mm Make: Ashirwad, Astral, Finolex	100	Each		
118	Providing and fixing CPVC U-Clip 40mm Make: Ashirwad, Astral, Finolex	100	Each		
119	Providing and fixing CPVC U-Clip 50mm Make: Ashirwad, Astral, Finolex	30	Each		
120	Providing and fixing CPVC U-Clip 110mm Make: Ashirwad, Astral, Finolex	50	Each		
121	Providing and fixing PVC Elbow 15mm Make: Kisan or equivalent	20	Each		
122	Providing and fixing PVC Elbow 20mm Make: Kisan or equivalent	20	Each		
123	Providing and fixing PVC Elbow 25mm Make: Kisan or equivalent	20	Each		

124	Providing and fixing PVC Elbow 40mm Make: Kisan or equivalent	20	Each		
125	Providing and fixing PVC Elbow 50mm Make: Kisan or equivalent	20	Each		
126	Providing and fixing PVC Elbow 90mm Make: Kisan or equivalent	20	Each		
127	Providing and fixing PVC Tee 15mm Make: Kisan or equivalent	20	Each		
128	Providing and fixing PVC Tee 20mm Make: Kisan or equivalent	20	Each		
129	Providing and fixing PVC Tee 25mm Make: Kisan or equivalent	20	Each		
130	Providing and fixing PVC Tee 40mm Make: Kisan or equivalent	20	Each		
131	Providing and fixing PVC Tee 50mm Make: Kisan or equivalent	20	Each		
132	Providing and fixing PVC Tee 90mm Make: Kisan or equivalent	20	Each		
133	Providing and fixing PVC Socket 15mm Make: Kisan or equivalent	20	Each		
134	Providing and fixing PVC Socket 20mm Make: Kisan or equivalent	20	Each		
135	Providing and fixing PVC Socket 25mm Make: Kisan or equivalent	20	Each		
136	Providing and fixing PVC Socket 40mm Make: Kisan or equivalent	20	Each		
137	Providing and fixing PVC Socket 50mm Make: Kisan or equivalent	20	Each		
138	Providing and fixing PVC Socket 110mm Make: Kisan or equivalent	20	Each		
139	Providing and fixing GI Eblow 15mm Make: UCO, Unik	10	Each		
140	Providing and fixing GI Eblow 20mm Make: UCO, Unik	10	Each		
141	Providing and fixing GI Eblow 25mm Make: UCO, Unik	10	Each		
142	Providing and fixing GI Eblow 32mm Make: UCO, Unik	10	Each		
143	Providing and fixing GI Eblow 40mm Make: UCO, Unik	10	Each		
144	Providing and fixing GI Eblow 50mm Make: UCO, Unik	10	Each		
145	Providing and fixing GI Eblow 80mm Make: UCO, Unik	10	Each		
146	Providing and fixing GI Tee 15mm Make: UCO, Unik	10	Each		
147	Providing and fixing GI Tee 20mm Make: UCO, Unik	10	Each		
148	Providing and fixing GI Tee 25mm Make: UCO, Unik	10	Each		
149	Providing and fixing GI Tee 32mm Make: UCO, Unik	10	Each		

150	Providing and fixing GI Tee 40mm Make: UCO, Unik	10	Each		
151	Providing and fixing GI Tee 50mm Make: UCO, Unik	10	Each		
152	Providing and fixing GI Tee 80mm Make: UCO, Unik	10	Each		
153	Providing and fixing GI Socket 15mm Make: UCO, Unik	10	Each		
154	Providing and fixing GI Socket 20mm Make: UCO, Unik	10	Each		
155	Providing and fixing GI Socket 25mm Make: UCO, Unik	10	Each		
156	Providing and fixing GI Socket 32mm Make: UCO, Unik	10	Each		
157	Providing and fixing GI Socket 40mm Make: UCO, Unik	10	Each		
158	Providing and fixing GI Socket 50mm Make: UCO, Unik	10	Each		
159	Providing and fixing GI Socket 80mm Make: UCO, Unik	10	Each		
160	Providing and fixing GI Union 15mm Make: UCO, Unik	10	Each		
161	Providing and fixing GI Union 20mm Make: UCO, Unik	10	Each		
162	Providing and fixing GI Union 25mm Make: UCO, Unik	10	Each		
163	Providing and fixing GI Union 32mm Make: UCO, Unik	10	Each		
164	Providing and fixing GI Union 40mm Make: UCO, Unik	10	Each		
165	Providing and fixing GI Union 50mm Make: UCO, Unik	10	Each		
166	Providing and fixing GI Union 80mm Make: UCO, Unik	10	Each		
167	Providing and fixing GI Nipple 15mm 2"	10	Each		
168	Providing and fixing GI Nipple 15mm 3"	10	Each		
169	Providing and fixing GI Nipple 15mm 4"	10	Each		
170	Providing and fixing GI Nipple 15mm 6"	10	Each		
171	Providing and fixing GI Nipple 15mm 8"	10	Each		
172	Providing and fixing GI Nipple 15mm 9"	10	Each		
173	Providing and fixing GI Nipple 15mm 12"	10	Each		
174	Providing and fixing GI Nipple 15mm 18"	10	Each		
175	Providing and fixing GI Nipple 20mm 2"	10	Each		
176	Providing and fixing GI Nipple 20mm 3"	10	Each		
177	Providing and fixing GI Nipple 20mm 4"	10	Each		
178	Providing and fixing GI Nipple 20mm 6"	10	Each		
179	Providing and fixing GI Nipple 20mm 8"	10	Each		
180	Providing and fixing GI Nipple 20mm 9"	10	Each		
181	Providing and fixing GI Nipple 20mm 12"	10	Each		
182	Providing and fixing GI Nipple 20mm 18"	10	Each		
183	Providing and fixing GI Nipple 25mm 2"	10	Each		
184	Providing and fixing GI Nipple 25mm 3"	10	Each		

185	Providing and fixing GI Nipple 25mm 4"	10	Each		
186	Providing and fixing GI Nipple 25mm 6"	10	Each		
187	Providing and fixing GI Nipple 25mm 8"	10	Each		
188	Providing and fixing GI Nipple 25mm 9"	10	Each		
189	Providing and fixing GI Nipple 25mm 12"	10	Each		
190	Providing and fixing GI Nipple 25mm 18"	10	Each		
191	Providing and fixing GI Nipple 32mm 2"	10	Each		
192	Providing and fixing GI Nipple 32mm 3"	10	Each		
193	Providing and fixing GI Nipple 32mm 4"	10	Each		
194	Providing and fixing GI Nipple 32mm 6"	10	Each		
195	Providing and fixing GI Nipple 32mm 8"	10	Each		
196	Providing and fixing GI Nipple 32mm 9"	10	Each		
197	Providing and fixing GI Nipple 32mm 12"	10	Each		
198	Providing and fixing GI Nipple 32mm 18"	10	Each		
199	Providing and fixing GI Nipple 40mm 2"	10	Each		
200	Providing and fixing GI Nipple 40mm 3"	10	Each		
201	Providing and fixing GI Nipple 40mm 4"	10	Each		
202	Providing and fixing GI Nipple 40mm 6"	10	Each		
203	Providing and fixing GI Nipple 40mm 8"	10	Each		
204	Providing and fixing GI Nipple 40mm 9"	10	Each		
205	Providing and fixing GI Nipple 40mm 12"	10	Each		
206	Providing and fixing GI Nipple 40mm 18"	10	Each		
207	Providing and fixing GI Nipple 50mm 2"	10	Each		
208	Providing and fixing GI Nipple 50mm 3"	10	Each		
209	Providing and fixing GI Nipple 50mm 4"	10	Each		
210	Providing and fixing GI Nipple 50mm 6"	10	Each		
211	Providing and fixing GI Nipple 50mm 8"	10	Each		
212	Providing and fixing GI Nipple 50mm 9"	10	Each		
213	Providing and fixing GI Nipple 50mm 12"	10	Each		
214	Providing and fixing GI Nipple 50mm 18"	10	Each		
215	Providing and fixing GI Nipple 80mm 2"	10	Each		
216	Providing and fixing GI Nipple 80mm 3"	10	Each		
217	Providing and fixing GI Nipple 80mm 4"	10	Each		
218	Providing and fixing GI Nipple 80mm 6"	5	Each		
219	Providing and fixing GI Nipple 80mm 8"	5	Each		
220	Providing and fixing GI Nipple 80mm 9"	5	Each		
221	Providing and fixing GI Nipple 80mm 12"	5	Each		
222	Providing and fixing GI Nipple 80mm 18"	5	Each		
223	Providing and fixing GI U-Clip 15mm	50	Each		
224	Providing and fixing GI U-Clip 20mm	50	Each		
225	Providing and fixing GI U-Clip 25mm	50	Each		
226	Providing and fixing GI U-Clip 32mm	50	Each		
227	Providing and fixing GI U-Clip 40mm	50	Each		
228	Providing and fixing GI U-Clip 50mm	50	Each		
229	Providing and fixing GI U-Clip 80mm	50	Each		
230	Providing and fixing Fastner 16mm 6"	300	Each		
231	Providing and fixing SS 100x8mm Screw(Each 500No)	5	Packet		
232	Providing and fixing SS 25x6mm Screw(Each	5	Packet		

	5000No)				
233	Providing and fixing SS 25x8mm Screw(Each 5000No)	5	Packet		
234	Providing and fixing SS 19x6mm Screw(Each 5000no)	5	Packet		
235	Providing and fixing SS 19x8mm Screw(Each 2500No)	5	Packet		
236	Providing and fixing SS 75x6mm Screw(Each2500No)	5	Packet		
237	Providing and fixing SS 75x8mm Screw(Each2500No)	5	Packet		
238	Providing and fixing SS 60x6mm Screw(Each 1250No)	5	Packet		
239	Providing and fixing SS 60x8mm Screw(Each 1250No)	5	Packet		
240	Providing and fixing SS 32x6mm Screw(Each 1250No)	5	Packet		
241	Providing and fixing SS 32x8mm Screw(Each 1250No)	5	Packet		
242	Providing and fixing Plastic Gitti-30mm	20	Packet		
243	Providing and fixing Plastic Gitti-35mm	20	Packet		
244	Providing and fixing Plastic Gitti-38mm	20	Packet		
245	Providing and fixing Plug Bolt 3"	300	Each		
246	Providing and fixing Hinge Bolt 2"	10	Each		
247	Providing and fixing L- Clip 1x1	10	Packet		
248	Providing and fixing L- Clip 2x2	10	Packet		
249	Providing and fixing L- Clip 3x3	10	Packet		
250	Providing and fixing Nail-12x1	5	Kg		
251	Providing and fixing Nail-12x1.5	5	Kg		
252	Providing and fixing Nail-12x2	5	Kg		
253	Providing and fixing Nail-12x3	5	Kg		
254	Providing and fixing Nail-12x4	5	Kg		
255	Providing and fixing Nail-14x1	5	Kg		
256	Providing and fixing Nail-14x1.5	5	Kg		
257	Providing and fixing Nail-14x2	5	Kg		
258	Providing and fixing Shower (Make: Jaugar, Modle No: OHS-CHR-1759)	5	each		
259	Providing and fixing Bottel Trap (Make: Jaugar, Modle No: ALD-CHR-769)	10	each		
260	Providing and fixing Wall Hung With Jet (Make: Jaugar, Modle No: SLS-WHT-6951J)	2	each		
261	Providing and fixing Wall Hung (Make: Jaugar, Modle No: SLS-WHM-6953)	2	each		
262	Providing and fixing Two Way Bib Cock (Make: Jaugar, Modle No: VGP-CHR-81041)	5	each		
263	Providing and fixing Health Faucest (Make: Jaugar, Modle No: ALD-CHR-573)	10	each		
264	Providing and fixing Two Way Angle Value (Make: Jaugar, Modle No: 526A)	10	each		
265	Providing and fixing Angle Value (Make: Jaugar, Modle No: ARI-CHR-39053)	10	each		
266	Providing and fixing Sink Mixer (Make: Jaugar,	5	each		



	<b>Modle No: VGP-CHR-81165)</b>				
267	Providing and fixing Towel Ring ( <b>Make: Jaugar, Modle No: KUP-CHR-35721</b> )	5	each		
Sub Total Amount (Rs.)					

**SH- I (C): Operation And Maintenance Of 750 Kld Sewerage Treatment Plant at CURAJ.**

S.No.	Description of Item of work	Unit	Qty.	Rate	Amount
	<b>SH- I (C): Comprehensive day to day Civil Maintenance works at CURAJ.</b>	job per month	12		
1	Operation and Maintenance of 750 KLD Sewerage Treatment Plant (Bio remediation based technology) by 24x7 hrs. Inclusive of 07 Nos. STP Pumps and consumables required (NSDL liquid) etc. and nothing extra will be provided against this.				
	<b>Sub Total Amount (in Rs.)</b>				

**SCHEDULE OF QUANTITIES – II**

**SH- II (A): Electrical And Mechanical Preventive And Day To Day Maintenance Works, Annual Operation, Repair, Maintenance And Periodic Servicing Works Of Pump Houses And Supply Of Electrical Consumable Material AT CURAJ.**

S.N.	Description of Item	Unit	Qty.	Rate	Amount
a)	<p>Annual preventive and day to day maintenance, to upkeep all the electrical internal &amp; external installations, fittings, fixtures, wiring, Lights, Fans, Geysers etc. functional in the CURAJ campus, for all days in a month, including Sundays and Holidays, including manpower, labour, machinery, general maintenance items, tools &amp; plants etc. complete in all respects, as per standard practice.</p> <p>Indicative items are as under:</p> <ul style="list-style-type: none"> <li>• Wiring/Cabling.</li> <li>• Metal/PVC boxes.</li> <li>• Switches, sockets and accessories of different ratings.</li> <li>• 01phase/03 phase power points &amp; circuits.</li> <li>• 01/03 phase Energy Meters.</li> <li>• Light points/ Fan pts/ Exhaust Fan pts/Call bell pts. etc.</li> <li>• All type of indoor and outdoor lights (conventional/LED/HPSV/MVSV etc.) fittings.</li> <li>• All type of fans (Ceiling/Exhaust/pedestal/wall).</li> <li>• HVLS fans.</li> <li>• Water heaters.</li> <li>• Auditorium stage lights.</li> <li>• Air curtains and electric fly catchers.</li> <li>• Rising mains bus trunking and overhead bus bar of different ratings.</li> <li>• Sandwich rising mains with aluminium bus bar of different ratings.</li> <li>• Switch, disconnecter, SFU and MCCB of different ratings.</li> <li>• MCBs, Isolators, RCCBs and MCB DBs of different ratings.</li> <li>• Cable and Boxes of different sizes.</li> <li>• Brass compression glands of different sizes.</li> <li>• Aluminium lugs of different sizes.</li> <li>• HT/LT Cable fault detections and jointing kits.</li> <li>• Overhead electric line.</li> <li>• Road lights.</li> <li>• Lightning arrester and earthing system.</li> <li>• All Electrical indoor and outdoor panels and panel rooms of all buildings.</li> <li>• Maintenance of records etc. and as per tender</li> </ul>	Jobs/ year	12		

	document.				
b)	Comprehensive Annual Operation, Repair, Maintenance and Periodic Servicing Works of pump houses and other water & booster pumps/motors/starters along with associated panels and accessories for all days in a month including Sundays and Holidays, including manpower, machinery, spare parts, consumables, tools & plants etc. complete in all respects.	<b>Jobs/ year</b>	<b>12</b>		
c)	<b>All Electrical consumable items cost (including all) will be reimbursed to the agency/contractor as per following:</b>				
1	CPWD DSR (E&M) 2022/Appendix-II: BASIC RATE OF MATERIAL The bidder has to quote the rates above / below / at par on DSR (E&M) 2022 rates including all considering estimated cost of Rs. 3,00,000/-	<b>L.S.</b>			
2	2.5 sq mm, three core, FRLS PVC sheathed, workshop flexible copper cable	metre	200		
3	10.0 sq mm, four core, FRLS PVC sheathed, aluminum conductor armored cable	metre	50		
4	16.0 sq mm, four core, FRLS PVC sheathed, aluminum conductor armored cable	metre	100		
5	4.0 sq mm, three core, FRLS PVC sheathed, flexible flat submersible copper cable	metre	50		
6	6.0 sq mm, three core, FRLS PVC sheathed, flexible flat submersible copper cable	metre	50		
7	20 mm dia. ISI marked, flexible PVC conduit	metre	50		
8	25 mm dia. ISI marked, flexible PVC conduit	metre	50		
9	D.P. 25/32 amps, one way modular switch with indicator, ISI marked; Make & Model: Legrand, arteor.	each	25		
10	63 amps. ratings , TPN MCB, "C" curve, 10 KA breaking capacity	each	20		
11	16 A, three pin plug top as per IS.	each	100		
12	06 A, three pin plug top as per IS.	each	20		
13	03 way bakelite connector	each	20		
14	04 way bakelite connector	each	20		
15	2.5 mfd, 230V, 50 Hz, capacitor as per IS.	each	2000		
16	4.0 mfd, 230V, 50 Hz, capacitor as per IS.	each	10		
17	35 mfd, 230V, 50 Hz, capacitor as per IS.	each	5		
18	50 mfd, 230V, 50 Hz, capacitor as per IS.	each	5		
19	4" pvc electric round sheet	each	500		
20	10-12 W, 02 pin, 230 V, 50 Hz LED PL.	each	100		
21	02 wire, 5-30 Amp rated static energy meter with 1.0 accuracy class as per IS, suitable for 01 phase, 230 V, 50 Hz AC supply.	each	5		
22	4 wire, 10-60 Amp rated static energy meter with 1.0 accuracy class as per IS, suitable for 03 phase, 415 V, 50 Hz AC supply.	each	5		
23	<u>Rollar</u> of Stepped type Modular Fan regulator (2 module); Make & Model: Legrand, mylinc (100 pcs) and Legrand, arteor (400 pcs).	each	500		

24	01 phase, 230 V, 50 Hz AC, 20W rated, 4' long LED tubelight/batten as per IS.	each	1000		
25	01 phase, 230 V, 50 Hz AC, 10W rated, 2' long LED tubelight/batten as per IS.	each	500		
26	90-100 W, 230V, 50 Hz LED street light as per IS.	each	30		
27	40-50 W, 230V, 50 Hz LED street light as per IS.	each	30		
28	100 W, 230V, 50 Hz LED flood light as per IS.	each	5		
29	18W-28W, 230V, 50 Hz, 1'*1' size Panel LED light as per IS.	each	10		
30	30W-48W, 230V, 50 Hz, 2'*2' size Panel LED light as per IS.	each	50		
31	40-50W , 230V, 50 Hz garden light as per IS.	each	5		
32	12-15W, 230 V, 50 Hz, LED Surface light as per IS.	each	20		
33	06W or equivalent, 03" dia. or equivalent LED Ceiling light (square shaped) as per IS.	each	20		
34	11W or equivalent, 04" dia. or equivalent LED Ceiling light (round shaped) as per IS.	each	20		
35	14W or equivalent, 06" dia. or equivalent LED Ceiling light (round shaped) as per IS.	each	20		
36	10 W, 230V, 50 Hz wall mount oval outdoor led light as per IS.	each	10		
37	Digital time switch suitable for 1 output per phase and suitable for 01 phase, 230 V, 50 Hz AC supply, as per IS. (make: GIC/L&T/Siemens/C&S/ABB/Schneider).	each	10		
38	Fully Automatic Star-Delta Starter (FASD) as per IS with inbuilt ammeter, voltmeter & single phase preventor etc. suitable for 03 phase, 415 V, 50 Hz, AC, 15 hp rated Open well Submersible Pump (make: L&T/Siemens/C&S/ABB/Schneider).	each	2		
39	Direct-On-Line Starter as per IS with inbuilt ammeter, voltmeter & single phase preventor etc. suitable for 03 phase, 415 V, 50 Hz, AC, 7.5 hp rated Open well Submersible Pump (make: L&T/Siemens/C&S/ABB/Schneider).	each	2		
40	1000 W haligen lamp/rod suitable for 1 ph, 230V AC auditorium lights.	each	10		
41	Supply of LED Light Drivers of following specifications as per IS:				
41.1	Input Voltage=100-277 V AC, Input Current=2.0 A, Input Frequency=50 Hz, Power Factor=0.9 minimum, Output Voltage=42-64 V DC, Output Current=1.4 A and suitable for 220-240 V, 50-60 Hz, AC, 0.35 Amp, 85 W max rated LED Street light.	each	20		
41.2	Input Voltage=100-277 V AC, Input Current=0.8 A, Input Frequency=50 Hz, Power Factor=0.9 minimum, Output Voltage=44-72 V DC, Output Current=0.7 A and Suitable for 220-240 V, 50-60 Hz, AC, 0.21 Amp, 43 W max rated LED Street light.	each	10		
41.3	Input Voltage=150-264 V AC, Input Current=0.7 A, Input Frequency=50 Hz, Power Factor=0.9 minimum, Output Voltage=49-60 V DC, Output Current=1.4 A and Suitable for 220-240 V, 50-60 Hz, AC, 0.21 Amp, 43 W max rated LED Street light.	each	10		
41.4	Input Voltage=150-270 V AC, Input Frequency=50 Hz, Power Factor=0.9 minimum, Output Voltage=65 V DC,	each	25		

	Output Current=0.5 A, Power=36 W and Suitable for 240 V, 50 Hz, AC, 45 W max rated LED ceiling light of 2'*2' size.				
41.5	Input Voltage=150-270 V AC, Input Frequency=50 Hz, Power Factor=0.9 minimum, Output Voltage=26.4 V DC, Output Current=1.12 A and Suitable for 240 V, 50 Hz, AC, 31 W max rated LED ceiling light of 2'*2' size.	each	20		
41.6	Input Voltage=150-270 V AC, Input Current=0.07 A, Input Frequency=50 Hz, Power Factor=0.9 minimum, Output Voltage=40 V DC, Output Current=0.350 A, Power=14 W and Suitable for 240 V, 50 Hz, AC False Ceiling Light.	each	25		
41.7	Input Voltage=240 V AC, Input Current=0.065 A, Input Frequency=50 Hz, Power Factor=0.9 minimum, Output Voltage=36 V DC, Output Current=0.33 A and Suitable for 240 V, 50 Hz, AC, 08 W Surface Light.	each	25		
41.8	Input Voltage=120-277 V AC, Input Current=0.35 A, Input Frequency=50 Hz, Power Factor=0.9 minimum, Output Voltage=54-107 V DC, Output Current=0.7 A and Suitable for 240 V, 50 Hz, AC Garden Light.	each	25		
41.9	Input Voltage=150-270 V AC, Input Frequency=50 Hz, Power Factor=0.9 minimum, Output Voltage=19 V DC, Output Current=0.17 A and Suitable for 240 V, 50 Hz, AC, 08 W Surface Light.	each	25		
41.10	Input Voltage=240 V AC, Input Current=0.06 A, Input Frequency=50 Hz, Power Factor=0.9 minimum, Output Voltage=10-14 V DC, Output Current=0.7 A, Power=13.5 W and Suitable for 240 V, 50 Hz, AC False Ceiling Light.	each	25		
	<b>Sub Total Amount (in Rs.)</b>				

**SH- II (B): Annual Electrical Works At CURAJ**

S.N.	Description of Item	Unit	Qty.	Rate	Amount
1	CPWD DSR (E&M) 2022/Chapter-01: Wiring. The bidder has to quote the rates above / below / at par on DSR (E&M) 2022 rates (including all) considering estimated cost of work Rs. 5,00,000/-	L.S.			
2	CPWD DSR (E&M) 2022/Chapter-02: MCCB, MCB, DBs. The bidder has to quote the rates above / below / at par on DSR (E&M) 2022 rates (including all) considering estimated cost of work Rs. 1,00,000/-	L.S.			
3	CPWD DSR (E&M) 2022/Chapter-05: Earthing The bidder has to quote the rates above / below / at par on DSR (E&M) 2022 rates (including all) considering estimated cost of work Rs. 1,00,000/-	L.S.			
4	Detection of fault in underground electric <b>Low Tension (LT)/High Tension (HT)</b> cable incl. fault detection machine charges, digging & labour charges etc. complete in all respects as per standard practice.	job	40		
5	Supplying and making straight through joint with heat shrinkable kit including ferrules and other jointing materials for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor <b>LT cable</b> of 1.1 KV grade as required.				
5.1	3½ X 25 sq. mm	each	2		
5.2	3½ X 35 sq. mm	each	2		
5.3	3½ X 50 sq. mm	each	2		
5.4	3½ X 70 sq. mm	each	2		
5.5	3½ X 95 sq. mm	each	2		
5.6	3½ X 120 sq. mm	each	2		
5.7	3½ X 150 sq. mm	each	2		
5.8	3½ X 185 sq. mm	each	2		
5.9	3½ X 240 sq. mm	each	2		
5.10	3½ X 300 sq. mm	each	2		
5.11	3½ X 400 sq. mm	each	2		
5.12	4 X 16 sq. mm	each	20		
6	Supplying and making straight through cable jointing with heat shrinkable jointing kit complete with all accessories including ferrules suitable for following size of 3 core, XLPE aluminium conductor <b>HT cable</b> of 11 KV grade as required :				
6.1	70 sq. mm	each	1		
6.2	120 sq. mm	each	1		
6.3	185 sq. mm	each	1		
6.4	240 sq. mm	each	1		
6.5	300 sq. mm	each	1		
6.6	400 sq. mm	each	1		

7	General inspection & patrolling of about 10 km long overhead HT/LT lines/feeder wise for identification of maintenance work to be carried out i/c strengthening of cross arms with clamps including tightening of nut bolts, removal of bird's nest and foreign material from line along with tree/bush trimming under the lines. (to be carried out before starting of summer season and as per requirement).	Job/ year	01		
8	Annual Servicing of Fans (Ceiling/Exhaust/Wall/Pedestal etc.) installed in various buildings of the University i/c checking the unit with accessories for functionality tests, replacement of nut-bolts & locking pins/clips wherever reqd, oiling/greasing, cleaning, pasting of service/repair slips on fan and any other minor repair works required on site i/c labour, tools & takels charges as per standard practice and directions of EIC. <u>Note:</u> 1) This work also includes replacement of spare parts of fans like condensers, regulators, fan hooks required during servicing and the cost of these spare parts will be reimbursed. 2) This work excludes all major repair works like rewinding, replacement of bush/bearing etc.	Each	5000		
9	Copper rewinding of existing burnt fans ( <i>Ceiling/Exhaust/Wall/Pedestal Fans</i> ) under buyback of old copper incl. handling charges etc. as per standard practice.	Each	500		
10	Replacement of parts like bush/bearing etc. with new one of same size/rating under buyback of faulty one as per standard practice incl. handling charges.	Each	500		
11	Repairing of rotor/stator/shaft etc. of fans as required as per standard practice incl. handling charges.	Each	200		
	<b>Sub Total Amount (in Rs.)</b>				



**SH- II (C): Comprehensive AMC Work of Online UPS(s) of different ratings installed in various buildings of CURaj**

S.NO.	Description of Item	Unit	Qty.	Rate	Amount
1	Comprehensive AMC Work of Online UPS(s) of different ratings installed in various buildings of CURaj, including labour, machinery, spare parts, batteries, consumables, tools & plants etc. complete in all respects. Note: This work includes general R&M on monthly basis, preventive R&M and servicing on quarterly basis and unlimited breakdown calls through qualified & experienced persons.				
1.1	14 Nos. 1 kVA Online UPS	Jobs/ year	12		
1.2	08 Nos. 2 kVA to 3 kVA Online UPS	Jobs/ year	12		
1.3	08 Nos. 5 kVA to 6 kVA Online UPS	Jobs/ year	12		
1.4	02 Nos. 10 kVA Online UPS	Jobs/ year	12		
1.5	06 Nos. 15 kVA to 20 kVA Online UPS	Jobs/ year	12		
1.6	02 Nos. 40 kVA Online UPS	Jobs/ year	12		
2	Replacement of following capacity faulty/dead SMF rechargeable batteries along with connections, testing and commissioning etc. as required on site as per standard practice, under buyback offer. Make: Exide/Amaron/Luminous/HBL Warranty: minimum 02 years onsite or as per OEM, whichever is higher.				
2.1	18 AH, 12 V	Each	16		
2.2	26/28 AH, 12 V	Each	06		
2.3	42/45 AH, 12 V	Each	50		
2.4	65 AH, 12 V	Each	50		
2.5	75 AH, 12 V	Each	28		
2.6	120 AH, 12 V	Each	20		
2.7	150 AH, 12 V	Each	32		
	<b>Sub Total Amount (in Rs.)</b>				

**SH- II (D): Comprehensive AMC Work of 86 Nos. Water Coolers of 150 LPH capacity each, installed in various buildings of CURaj**

<b>S.NO.</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Qty.</b>	<b>Rate</b>	<b>Amount</b>
1	<p>Comprehensive AMC Work of 86 Nos. Water Coolers of 150 LPH capacity each, installed in various buildings of CURaj, including labour, machinery, spare parts, consumables, tools &amp; plants etc. complete in all respects.</p> <p>Note: This work includes general R&amp;M on monthly basis, preventive R&amp;M on quarterly basis, annual servicing and unlimited breakdown calls through qualified &amp; experienced persons.</p>	<b>Jobs/ year</b>	<b>12</b>		
2	<p>Repairing of 50 Nos. faulty Water Coolers of 150 LPH capacity each, installed in various buildings of CURaj including labour, machinery, spare parts, consumables, tools &amp; plants etc. complete in all respects, as per standard practice before starting the CAMC Work.</p>	<b>Job (on L.S. basis)</b>	<b>01</b>		
	<b>Sub Total Amount (in Rs.)</b>				

**SH- II (E): Comprehensive AMC Work of HVAC System (Ductable / VRV-VRF / Cassate / Split / Tower / Window Type Air Conditioners and ETAC System) installed in various buildings of CURaj**

S.NO.	Description of Item	Unit	Qty.	Rate	Amount
1	Comprehensive AMC Work of HVAC System (Ductable / VRV-VRF / Cassate / Split / Tower / Window Type Air Conditioners and ETAC System) installed in various buildings of CURaj, including labour, machinery, spare parts, consumables, tools & plants etc. complete in all respects, as per standard practice and directions of Engineer-in-Charge. Note: This work includes general R&M on monthly basis, preventive R&M and servicing on quarterly basis and unlimited breakdown calls through qualified & experienced persons.				
1.1	100 hp rated inverter technology based VRV/VRF type Air Conditioning System installed in CIL Building. Make: Hitachi	Jobs/ year	12		
1.2	40 hp rated inverter technology based VRV/VRF type Air Conditioning System installed in VCS, Admin Building. Make: Hitachi	Jobs/ year	12		
1.3	04 Nos. 11.0 TR capacity Ductable Air conditioning units with Scroll Compressor with R 410 A Refrigerant, vibration isolators etc. complete. Make: Hitachi	Jobs/ year	12		
1.4	03 Nos. 5.5 TR capacity Ductable Air conditioning units with Scroll Compressor, R 410 A Refrigerant, vibration isolators etc. complete. Make: Carrier	Jobs/ year	12		
1.5	03 Nos. Ceiling-mounted 3.0 TR Cassette Air Conditioning units complete. Make: Bluestar	Jobs/ year	12		
1.6	400 Nos. Window/Split/Tower type air conditioners.	Jobs/ year	12		
1.7	02 Nos. 30000 CFM, Air ducting system (ETAC)	Jobs/ year	12		
1.8	04 Nos. 28000 CFM, Air ducting system (ETAC)	Jobs/ year	12		
1.9	02 Nos. 10000 CFM, Air ducting system (ETAC)	Jobs/ year	12		
1.10	02 Nos. 4000 CFM, Air ducting system (ETAC)	Jobs/ year	12		
2	Repairing of faulty 100 Nos. Split ACs, 10 Nos. Tower Air-conditioners and 01 No. 5.5 TR Ductable AC, installed in various buildings of CURaj including labour, machinery, spare parts, consumables, tools & plants etc. complete in all respects, as per standard practice before starting the CAMC Work.	Job (on L.S. basis)	01		
	<b>Sub Total Amount (in Rs.)</b>				

**SH- II (F): Comprehensive Annual Operation, Repair and Maintenance of 04 Nos. 11/0.433 kV electric sub-stations and 05 numbers DG Sets at CURaj**

S.NO.	Description of Item	Unit	Qty.	Rate	Amount
1	<p>Comprehensive Annual Operation, Repair and Maintenance of 04 Nos. 11/0.433 kV electric sub-stations and 05 numbers DG Sets along with associated panels etc. through OEM/Authorized Service Agents of OEM only, including manpower for operational purpose, labour, machinery, spare parts, Control Panel/DG Set Batteries, consumables, tools &amp; plants etc. complete in all respects, as per standard practice and directions of Engineer-in-Charge.</p> <p>Note: 1) This work includes operators in all three shifts on 24*7*365 basis at each ESS. 2) This work includes general R&amp;M on monthly basis, preventive R&amp;M on quarterly basis, annual servicing i/c all B/C/D checks and unlimited breakdown calls through qualified &amp; experienced persons, as per OEM guidelines &amp; service manuals.</p>	Jobs/ year	12		

**SH- II (G): Comprehensive Annual Operation (in general shift), Repair and Maintenance of 14 nos. Johnson make, machine room less passenger lifts at CURaj**

S.NO.	Description of Item	Unit	Qty.	Rate	Amount
1	<p>Comprehensive Annual Operation (in general shift), Repair and Maintenance of 14 nos. Johnson make, machine room less passenger lifts along with associated panels etc. through OEM/Authorized Service Agents of OEM only, including manpower, labour, machinery, spare parts, consumables, tools &amp; plants etc. complete in all respects, as per standard practice.</p> <p>Note: 1) This work includes one lift operator in general shift on 24*7*365 basis in Admin Building.</p> <p>2) This work includes general R&amp;M on monthly basis, preventive R&amp;M on quarterly basis, annual servicing and unlimited breakdown calls through qualified &amp; experienced persons, as per OEM guidelines &amp; service manuals.</p>	<b>Jobs/ year</b>	<b>12</b>		
	<b>Sub Total Amount (in Rs.)</b>				

**SCHEDULE OF QUANTITIES – III**

**Comprehensive Annual Repair & Maintenance Work of all Fire Hydrant System and Fire Alarm System at CURaj**

<b>S.NO.</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Qty.</b>	<b>Rate</b>	<b>Amount</b>
1	Comprehensive Annual Repair & Maintenance Work of all Fire Hydrant System installed in various building of the University as specified in Schedule of Work, including manpower, labour, machinery, spare parts, consumables, tools & plants etc. complete in all respects, as per standard practice. Note: This work includes general R&M on monthly basis, preventive R&M and servicing on quarterly basis and unlimited breakdown calls through qualified & experienced persons.	<b>Jobs/ year</b>	<b>12</b>		
2	Comprehensive Annual Repair & Maintenance Work of all Fire Alarm System and associated equipment installed in various building of the University as specified in Schedule of Work, including manpower, labour, machinery, spare parts, consumables, tools & plants etc. complete in all respects, as per standard practice. Note: This work includes general R&M on monthly basis, preventive R&M and servicing on quarterly basis and unlimited breakdown calls through qualified & experienced persons.	<b>Jobs/ year</b>	<b>12</b>		
3	Repairing of existing non-functional Fire Alarm System including associated equipment, installed in various buildings of CURaj including labour, machinery, spare parts, consumables, tools & plants etc. complete in all respects, as per standard practice before starting the CAMC Work.	<b>Job (on L.S. basis)</b>	<b>01</b>		
	<b>Sub Total Amount (in Rs.)</b>				

**SCHEDULE OF QUANTITIES – IV**

**Comprehensive Annual Maintenance Contract for RO Plants/Purifiers.**

<b>S.N.</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Qty.</b>	<b>Rate</b>	<b>Amount</b>
<b>Sub Head - (IV)</b>					
1	The scope of work includes comprehensive annual maintenance and servicing of RO Plants/Purifiers and submitting a report after every visit. The scope of work includes checkup of each Unit/system and general cleaning, chemical cleaning of cartridge, if required, replacement of all type of membrane, all type of filters, all pipes, S.V., TDS Controller, all type of sensors, pump etc. as per requirements of the University during the CAMC Period.	<b>Job per month</b>	12		
2	Supply and Installation (under buy back) of Reverse Osmosis Plant of 50 LPH Capacity Make                   Eureka                   Forbes  Note: Old Reverse Osmosis Plant of 50 LPH Capacity - Make Eureka Forbes will be the property of the Contractor. Hence contractor may be advised to quote their rates accordingly.	<b>Each</b>	10		
	<b>Sub Total Amount (in Rs.)</b>				

**SCHEDULE OF QUANTITIES – V**

**Comprehensive Operation and Maintenance of IT Works**

S.N.	Description of Item	Unit	Qty.	Rate	Amount
<b>Sub Head - V</b>					
A	Comprehensive Operation and Maintenance of installations IT Works (Operation & CAMC of Audio & Video Conferencing System, Networking items for LAN and Wi-Fi systems like Switches, Active & Passive network components, Smart class rooms Equipments including PA systems, Hardware and software maintenance of Computers, Laptops, Printers, Projectors, Servers), CCTV Systems. as per the details given below:				
<b>Hardware Items</b>					
1	Laptops : 159 Nos.				
2	Desktop System: 840 Nos.				
3	Server: 11Nos.				
4	Printers:182 Nos.				
5	LCD Projector: 66 Nos.				
<b>CCTV System</b>					
1	IP Camera 140	Nos.	140		
2	DVR Camera	Nos.	26		
3	Switch (24 port)	Nos.	3		
4	Switch (8 port)	Nos.	24		
5	Switch (4 port)	Nos.	1		
6	42" Screen	Nos.	2		
7	32 Channel NVR	Nos.	8		
8	8 Channel NVR	Nos.	4		
9	4 Channel NVR	Nos.	1		
10	Surveillance Hard Disk 10 TB	Nos.	15		
11	Surveillance Hard Disk 4 TB	Nos.	3		
12	Surveillance Hard Disk 2 TB	Nos.	2		
<b>Biometric Access Control Systems</b>					
1	Face Biometric Machine	Nos.	59		
<b>Voice System</b>					
1	IP-PBX Machine	Nos.	02		
2	IP Phone	Nos.	152		
3	IP Phone DSS KEY	Nos.	05		
<b>Data Networking System</b>					
1	Switch (48 Port)	Nos.	14		
2	Switch (24 Port)	Nos.	101		
3	Core Switch	Nos.	4		
4	LAN points	Nos.	3096		
<b>Audio Video Conferencing System</b>					
1	Group Video Conferencing device including camera, speakerphone with USB plug-and-play	Nos.	02		



	connectivity				
2	PTZ Video Conferencing Camera	Nos.	02		
	<b>Smart Classrooms System including PA System</b>				
1	Smart Classroom equipped with, interactive screen 75/86 inch, audio systems, digital podium with mini PC, PTZ cameras and other related items	Nos	12		
B	Deployment of Manpower – the tenderer shall depute the IT Engineer, CCTV Engineer and Network Engineer as per scope of work.				
	<b>Sub Total Amount (in Rs.)</b>				

**SCHEDULE OF QUANTITIES – VI**

**Comprehensive Maintenance of Horticulture and operation & maintenance of Drip Irrigation System.**

<b>S.N.</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Qty.</b>	<b>Rate</b>	<b>Amount</b>
<b>Sub Head VI</b>					
1	<p>Horticulture Manpower in General Shift in all days except Sundays and holidays (Unskilled). All tools tackles shall be arranged by contractor within its quoted rates.</p> <ul style="list-style-type: none"> <li>• Complete maintenance of Trees, Plants and peripherals, shrubs, hedge, lawns, (Including cricket ground, hockey ground and football ground etc.) cemented potted plants, flower beds, creepers etc. within the campus of the Central University of Rajasthan.</li> <li>• Maintenance includes weeding, pruning, gap filling, watering, mowing of lawn, hoeing, hedge-clipping, application of insecticide &amp; pesticide, top dressing of lawn with good earth and manure including other maintenance work as directed by the University from time to time.</li> <li>• Fertilizers, Manures, plant protection materials etc. will be provided by the contractor nothing extra shall be paid in this regard.</li> </ul>	Job per month	12		
2	<p>Maintenance of Drip Irrigation System, (water sprinkler system installed at cricket, football and hockey grounds and another places of the University etc.) periodical checking of the system cleaning, oiling, greasing, routine maintenance, realignment, necessary safety arrangements &amp; repair/ replacement of consumables such as Super flow screen filters, Gravel filters, Pressure relief valve, Non return valve, stainless steel pressure gauges, by pass valve PP, PVC control/ball valves, sub main flush valve, Reinforced nylon air release valve CPVC gate valves, super flow disc clean filters, PVC pipes and fittings etc. as per direction of Engineer-in-charge. This shall include all cost involved in maintenance except for electricity for operation, which shall be provided by the University free of cost.</p>				
<b>Sub Total Amount (in Rs.)</b>					

**SCHEDULE OF QUANTITIES – VII**

**(SH : VII – A&B) Maintenance of Mechanized Housekeeping and Garbage Collection and Disposal Services, Pest Control Services**

S.N.	Description of Item	Unit	Qty.	Rate	Amount
<b>Sub Head VII-A and VII-B</b>					
1	Providing Mechanized House Keeping Service include machine enabled cleaning, sweeping, wiping, dusting, moping, freshening, garbage collection, segregation & disposal, vacuum cleaning, scrubbing and any other similar tasks as assigned by CURAJ authorities from time to time.	<b>Job per month</b>	<b>12</b>		
2	Consumable, like duster, Soap, chemicals, wipers, Phenyl and other cleaning materials for toilets and floor required as indicated in list under the scope of work etc. All façade glass should be cleaned once in a month including glass doors and windows.				
3	Providing pest Control Services, Rodent Control Services, Fogging & Fumigation against mosquito & larva, Fly management services, termite treatment etc. as per tender terms and conditions and directions of the University.				
4	<b>Termite Treatment:</b> Termite treatment in the University based on IS:6313(Part-3)-1981 specification which consists of creating uninterrupted chemical barriers inside and all around the building. The treatment should be drill holes of 6mm as close as possible to the plinth, walls, junctions of the walls at an interval of 6 inches enough to reach the soil below 6 inches deep. Then chemical emulsion should be injected into these holes, which should be subsequently sealed using white cement match with floor colour all complete , The wall should be spray the chemical emulsion up to roof height wherever required complete.	<b>Sqft</b>	<b>10000</b>		
<b>Sub Total Amount (in Rs.)</b>					

**SCHEDULE OF QUANTITIES – VIII**

**24x7 security services**

<b>S.N.</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Qty.</b>	<b>Rate</b>	<b>Amount</b>
<b>Sub Bead-VIII</b>					
	Round the clock surveillance, watch and ward at Central University of Rajasthan of common areas and properties including providing security equipment's on 24 x 7 hour basis including Saturday, Sundays and holidays as per specifications and scope of work described in the tender documents. <b>Note:</b> The University will require Security services at 23 numbers of posts tentatively.	Job per month			
	<b>Sub Total Amount (in Rs.)</b>				

**SCHEDULE OF QUANTITIES – IX**  
**Hiring Manpower with fixed remuneration through outsourced agency**

Sl. No.	Item Description	(In Rs.)
1	<b>Service charges per month per person (To be quoted for deciding the lowest responsive bid to award the work)</b>	
	Sub Total Amount (in Rs.)	
	<b>Grand Total All Sub Heads (in Rs.)</b>	