



केन्द्रीयविद्यालय,सैक्टर-22,रोहिणी
कार्यस्थल,डी16-,सैक्टर3-,रोहिणी,दिल्ली
KENDRIYA VIDYALAYA, SECTOR-22, ROHINI
AT D-16 SECTOR-3, ROHINI, DELHI-110085
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F.5-Tender/KVRS-22/2022-2023

Dated: 03.03.2023

TENDER INVITATION FORM

Duration of tender – 1 Year (01 April 2023 to 31st March 2024)

EMD – Rs. 50,000/- (Fifty Thousand Rupees Only)

Subject: Quotation for the supply of विद्यालय भवन की मरम्मत तथा निर्माण सामग्री

1. Sealed quotation for the supply of the articles shown in the attached statement are invited by the undersigned up to **2:10 P.M 18.03.2023**. Quotations should be sent under strong sealed cover marked as **Quotation for the supply of विद्यालय भवन की मरम्मत तथा निर्माण सामग्री** and not by name. The quotation will be opened in the office of the undersigned at **10:00 A.M. on 20.03.2023**.
2. The quotation shall be submitted accordingly to the terms & conditions specified in paragraphs 3 to 15 Unless specified otherwise in the quotation it shall be construed that the terms & conditions stipulated hereunder have been agreed to.
3. The rate should be F.O.R. and should include excise duty, sales tax, freight charges, any other taxes rates or imposition whatever liable in respect of the supply. The Vidyalaya shall not be liable to pay any tax, freight etc. which has been expressly stipulated in the quotation in the event of acceptance of the quotation.
4. There should not be any overwriting or corrections in the quotation. If a figure is to be amended it should be neatly scored out the revised figure written above and the same attested with full signature and date. In the absence of attested signature the quotation is liable to be rejected.
5. The undersigned does not bind him to accept the lowest quotation and reserves the right to accept the quotation in whole or in part i.e. with respect to all articles mentioned in the attached statement as he may decide.
6. On acceptance of the quotation it will become a contract and shall be bound by the terms and condition of the quotation.
7. The person/persons whose quotation is accepted, hereinafter, called the contractor, shall deposit an earnest money of Rs. 10% alongwith the quotation which shall be refunded in the event of rejection of the quotation. The earnest money will be forfeited in the event of failure to comply with the contract. In the event of the quotation the earnest money will be adjusted towards Security Deposit which shall be payable at the rate mentioned below:

Security Deposit at in Rs. 50000/- (Fifty Thousand Rupees only)

If the contract is not agreeable to pay Security Deposit. The reasons there of should be specified and the undersigned will reserve the right to accept or reject the request.

8. if the contractor fails to supply the articles within the time stipulated in the later or acceptance by the undersigned, the undersigned shall be at liberty to purchase the article from the market to get the rest of the contract completed by the any other person on firm and the difference of price, if any shall be deducted from the earnest money/Security deposit & in case any amount in excess of the security deposit is paid by the undersigned, the contractor shall be liable to pay this amount.

9. The quantity articles indicated in the attached statement may be increased or decreased at the discretion of the undersigned without assigning any reason. In case and order for any articles is placed for quantity 100 or more one sample shall be retained by the school and no cost will be paid for the same.

10. Prior to acceptance of the quotation, the undersigned reserves the right to call for sample or demonstration and the contractor shall be liable to supply the sample or give the demonstration free of cost.

11. In the event of acceptance of the quotation and placing of the order for purchase the articles ordered for would be subjected to an inspection by the undersigned or his representative and are liable to be rejected if the articles supplied are not according to approved samples or do not confirm to the specifications prescribed.

12. The rates quoted by the contractor shall hold up to **31.03.2024** No amendment in the rate excepted increase in the rate of Sales Tax during the period of execution of the contract, will be accepted.

13. The contractor shall be required to fix a tin liable on the furniture supplied by him, giving his name and year of manufacture.

14. The amount of security deposit shall be retained by the Vidyalaya for a period of six months. From the date of completion of supplies as a safeguard against any defect appearing in the articles supplied within this period.

15. Quotation which do not comply with the above conditions are liable to be rejected.

16. These instructions to tenders are to be signed by the contractors and returned with the tender.

17. Above terms and conditions may be changed by this vidyalaya at any time. An agreement between this Vidyalaya and the party is to be made at the time of awarding the Contract.

Delhi Date 03.03.2023

All the above condition are accepted by me/us

Signature of the Tenderer


03.03.2023
प्राचीरा /PRINCIPAL
केन्द्रीय विद्यालय
लैकड़ा-22 लोहिया तिहाड़ी

Witness – I

Witness – II

KENDRIYA VIDYALAYA Sector 22 Rohini Delhi

SR	Items	Unit	Rate Rs.
1	EARTH WORK		
1.1	Earth work in surface excavation and disposal of excavated earth. Levelling & neatly dressing of disposed soil completely.	Cubic mtr.	
1.2	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, including getting out the excavated soil, and then returning the soil as required, in layers including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed.	Meter	
1.3	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means including getting out and disposal of excavated earth.	Cubic mtr.	
1.4	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 outside the periphery of the area cleared.	Sqmtr	
1.5	Felling trees of all girth (measured at a height of 1 m above ground level), including cutting of trunks and branches, removing the roots and stacking of serviceable material and disposal of unserviceable material	Each	
2	MORTAR		
2.1	Cement mortar 1:4 (1 cement : 4 fine sand).	Cubic mtr.	
2.2	Cement mortar 1:4 (1 cement : 4 Coarse sand).	Cubic mtr.	
3	CONCRETE WORK		
3.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shutting - All work : 1:1½:3 (1 Cement: 1½ coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	Cubic mtr.	
3.2	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor, kerbs, steps and the like at or near ground level etc., excluding the cost of centering, shuttering and finishing: 1:1½:3 (1 cement : 1½ coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	Cubic mtr.	

3.3	Centering and shuttering including strutting, propping etc. and removal of form work.	Sqmtr	
3.4	Providing and laying cement concrete in kerbs, steps and the like at or near ground level excluding the cost of centering, shuttering and finishing. 1:1½:3 (1 Cement: 1½ coarse sand(zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	Cubic mtr.	
3.3	DAMP-PROOF COURSE Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement: 2 coarse sand (zone-III) derived from natural sources: 4 graded stone aggregate 12.5mm nominal size derived from natural sources) including providing and mixing water proofing material in cement concrete work in doses by weight of cement as per manufacturer's specification in per 50kg cement.	Sqmtr	
4	REINFORCED CEMENT CONCRETE		
4.1	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work 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)	Cubic mtr.	
4.2	All kind of 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. kerbs, steps, beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, bands, plain window sills, staircases and spiral stair, arches, archribs, domes, vaults, shells, folded plate and roofs having slope more than 15° up to floor five level, vertical and horizontal fins individually or forming box louvers, facias and eaves boards excluding cost of centering, shuttering, finishing and reinforcement : 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)	Cubic mtr.	
4.3	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, bands, plain window sills, staircases and spiral staircases 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 including manufactured sand derived from Recycled Concrete Aggregate (RCA) upto 20%: 3 graded stone aggregate 20 mm nominal size Recycled Concrete Aggregate (RCA) upto 20%)	Cubic mtr.	
4.4	FORM WORK Centering and shuttering including strutting, propping etc. and removal of form	Sqmtr	
4.5	Providing precast cement concrete Jali 1:2:4 (1 cement : 2 coarse sand(zone-III) : 4 graded stone aggregate 6mm nominal size), reinforced with 1.6 mm dia mild steel wire, including centering and shuttering, roughening cleaning, fixing and finishing in cement mortar 1:3 (1 cement: 3 fine sand) etc. complete, 40 mm thick Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.	Sqmtr	
4.5	Mild steel and Medium Tensile steel bars /Cold twisted bars	Per kg	

4.6	Encasing rolled steel sections, in beams and columns, with cement concrete 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) including centering and shuttering complete but , excluding cost of reinforcement	Cub mtr	
4.7	Smooth finishing of the exposed surface of R.C.C. work with 6 mm thick cement mortar 1:3 (1 Cement : 3 fine sand).	Sqmtr	
4.8	ENCASING ROLLED STEEL SECTION Encasing rolled steel sections, in beams and columns, with cement concrete 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) including centering and shuttering complete but , excluding cost of reinforcement.	cum	
4.9	Extra for rendering smooth the top of suspended floors, landings and staircases (treads and risers) with cement mortar 1:2 (1 cement : 2 coarse sand), including a floating coat of neat cement and protecting the surface with a layer of 7.5 cm of earth laid over 15 mm of fine sand in case of suspended floor and bricks laid in mud mortar in case of landings and steps, including subsequent removal and cleaning of the same.	Sqmtr	
5	MASONRY/ BRICK/ STONE WORK		
5.1	All kind of Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in: Cement mortar 1:4 (1 cement : 4 coarse sand)	Cubic mtr.	
5.2	HALF BRICK MASONRY Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundations and plinth in : Cement mortar 1:3 (1 cement : 3 coarse sand)	Cubic mtr.	
5.3	EXPOSED BRICK WALL Brick work with common burnt clay selected F.P.S. (non modular) bricks of class designation 7.5 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12 mm deep complete in cement mortar 1:6 (1 cement : 6 coarse sand)	Cubic mtr.	
5.4	Providing and fixing sloping chajja of stone 40 mm thick and upto 80 cm wide beyond the wall as measured along the slope in cement mortar 1:4 (1 cement : 4 coarse sand) with 12 mm diameter anchoring steel bar, 45 cm long, fixed in each stone and supported on and including with bricks cove in cement mortar 1:4 (1 cement : 4 coarse sand), including pointing in cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade : Red sand stone With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	Sqmtr	
6	CLADDING WORK		
6.1	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 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.	Sqmtr	

6.2	Stone work (machine cut edges Veneer work) for wall lining upto 10 m height, backing filled with a grout of 12 mm thick cement mortar 1:3 (1 Cement : 3 coarse sand) and jointed with Cement mortar 1:2 (1 cement : 2 stone dust), including rubbing and polishing complete. Kota stone slabs exposed face dressed and rubbed. 25 mm thick	Sqmtr
7 WOOD AND P. V. C. WORK		
7.1	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). BEST QUALITY WOOD	Cub mtr
7.2	Providing and fixing ISI marked flush door / window shutters conforming to IS : 2202 (Part I) Non 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. 30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	Sqmtr
7.3	Providing and fixing wire gauge laminated veneer lumber shutter conforming to IS : 14616, and as per TADS 15 :2001 (Part B) using galvanised wire gauge with average width of aperture 1.4 mm in both directions with wire of dia 0.63 mm as per IS :1568, for doors, windows and clerestory windows, fixing with butt hinges of required size with necessary screws. 30 mm thick shutters.	Sqmtr
7.4	Providing and fixing nickel plated M.S. pipe curtain rods with nickel plated brackets :20 mm dia (heavy type)	mtr
7.5	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.	Kg
7.6	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.	Sqmtr
7.7	Providing and fixing IS : 12817 marked stainless steel butt hinges with stainless steel screws etc. complete : 125x64x1.90 mm	Each
7.8	Providing and fixing ISI marked oxidised M.S. sliding door bolts with nuts and screws etc. complete : 300x16 mm	Each
7.9	Providing and fixing ISI marked oxidised M.S. tower bolt black finish, (Barrel type) with necessary screws etc. complete : 250x10 mm	Each
7.10	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.	Each
7.11	Providing and fixing ISI marked oxidised M.S. door latches conforming to IS:5930 with screws etc. complete : 300x20x6 mm	Each
7.12	Providing and fixing ISI marked oxidised M.S. handles conforming to IS:4992 with necessary screws etc. complete : 125 mm	Each

7.13	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. Single rubber stopper		Each	
7.14	Providing and fixing factory made uPVC door frame made of uPVC extruded sections having an overall dimension as below (tolerance ± 1 mm), with wall thickness 2.0 mm (± 0.2 mm), corners of the door frame to be jointed with galvanized brackets and stainless steel screws, joints mitred and Plastic welded. The hinge side vertical of the frames reinforced by galvanized M.S. tube of size 19 X 19 mm and 1mm (± 0.1 mm) wall thickness and 3 nos. stainless steel hinges fixed to the frame complete as per manufacturer's specification. Extruded section profile size 42x50 mm.	mtr		
7.15	Providing and fixing to existing door frames. 24 mm thick factory made PVC door shutters made of styles and rails of a uPVC hollow section of size 59x24 mm and wall thickness 2 mm (± 0.2 mm) with inbuilt edging on both sides. The styles and rails mitred and joint at the corners by means of M.S. galvanised/ plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 20x20 mm and 1 mm (± 0.1 mm) wall thickness. The lock rail made up of 'H' section, a uPVC hollow section of size 100x24 mm and 2 mm (± 0.2 mm) wall thickness, fixed to the shutter styles by means of plastic/galvanised M.S. 'U' cleats. The shutter frame filled with a uPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm (± 0.1 mm) wall thickness. The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge. (For W.C. and bathroom door shutter). Complete in all respect and All fittings like Slide bolt, tower bolt, handle etc.	Sqmtr		
7.16	Providing and fixing to existing door frames. 30 mm thick factory made Polyvinyl Chloride (PVC) door shutter made of styles and rails of a uPVC hollow section of size 60x30 mm and wall thickness 2 mm (± 0.2 mm), with inbuilt decorative moulding edging on one side. The styles and rails mitred and joint at the corners by means of M.S. galvanised/ plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 25x20 mm and 1 mm (± 0.1 mm) wall thickness. The lock rail made up of 'H' section, a uPVC hollow section of size 100x30 mm and 2 mm (± 0.2 mm) wall thickness fixed to the shutter styles by means of plastic/ galvanised M.S. 'U' cleats. The shutter frame filled with a uPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm (± 0.1 mm) wall thickness . The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification. Complete in all respect and All fittings like Slide bolt, tower bolt, handle etc.	Sqmtr		
7.17	Providing and fixing factory made P.V.C. door frame of size 50x47 mm with a wall thickness of 5 mm, made out of extruded 5mm rigid PVC foam sheet, mitred at corners and joined with 2 Nos of 150 mm long brackets of 15x15 mm M.S. square tube, the vertical door frame profiles to be reinforced with 19x19 mm M.S. square tube of 19 gauge, EPDM rubber gasket weather seal to be provided throughout the frame. The door frame to be fixed to the wall using M.S. screws of 65/100 mm size, complete as per manufacturer's specification.	mtr		
7.18	Providing and fixing factory made panel PVC door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19 mm x 19 mm for styles and 15x15 mm for top & bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacture. M.S. frame covered with 5 mm thick heat moulded PVC 'C' channel of	Sqmtr		

	size 30 mm thickness, 70 mm width out of which 50 mm shall be flat and 20 mm shall be tapered in 45 degree angle on both side forming styles and 5 mm thick, 95 mm wide PVC sheet out of which 75mm shall be flat and 20 mm shall be tapered in 45 degree on the inner side to form top and bottom rail and 115 mm wide PVC sheet out of which 75 mm shall be flat and 20 mm shall be tapered on both sides to form lock rail. Top, bottom and lock rails shall be provided both side of the panel. 10 mm (5 mm x 2) thick, 20 mm wide cross PVC sheet be provided as gap insert for top rail & bottom rail. paneling of 5 mm thick both side PVC sheet to be fitted in the M.S. frame welded/ sealed to the styles & rails with 7 mm (5 mm+2 mm) thick x 15 mm wide PVC sheet beading n inner side, and joined together with solvent cement adhesive. An additional 5 mm thick PVC strip of 20 mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent adhesive etc. complete as per direction of Engineer-in-charge, manufacturer's specification & drawing. 30 mm thick plain PVC door shutters.	Sqmtr	
7.19	Providing and fixing to existing door frames. 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.	Sqmtr	
7.20	Providing and fixing factory made Fiberglass Reinforced plastics (F.R.P.) chajja 4 mm thick of required colour, size and design made by Resin Transfer Moulding (RTM) Machine Technology, resulting in void free compact laminate in single piece, having smooth gradual slope curvature for easy drainage of water and duly reinforced by 2 nos vertically and 1 nos horizontally 50x2 mm thick M.S. flat with 12 mm in built hole for grouting on the existing wall along with the 50 mm flanges duly inserted and sealed in the wall complete in one single piece casted monolithically, including all necessary fittings . The FRP Chajja should be manufactured using unsaturated Polyester resin as per IS: 6746, duly reinforced with fibre glass chopped strand mat (CSM) as per IS: 11551 complete with protective Gel coat UV coating on Top for complete resistance from the extreme of temperature, weather & sunlight (Only plan area of chajjas shall be measured for making payment).	Sqmtr	
8 STEEL WORK			
8.1	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (whichever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in- charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	Kg	
8.2	Providing and fixing angle iron frames for doors, windows and ventilators of mild steel Angle sections of size 35x35x5 mm, joints mitred and welded by angle iron 35x35x5 mm or 35x 5 mm flat T-iron frame or to the wall with dash fastener, including a priming coat to the the fixing of approved primer, all complete as per the direction of Engineer-In-charge.	Kg	

8.3	Providing and fixing in position collapsible steel shutters with vertical channels 20x10x2 mm and braced with flat iron diagonals 20x5 mm size, with top and bottom rail of T-iron 40x40x6 mm, with 40 mm dia steel pulleys, complete with bolts, nuts, locking arrangement, stoppers, handles, including applying a priming coat of approved steel primer.	Sqmtr	
8.4	Providing and fixing 1mm thick M.S. sheet door with frame of 40x40x6 mm angle iron and 3 mm M.S. gusset plates at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer. Using M.S. angels 40x40x6 mm for diagonal braces	Sqmtr	
8.5	Fixing standard steel glazed doors, windows and ventilators in walls, including fixing of float glass panes with glazing clips and special metalsash putty of approved make, or metal beading with screws, (only steel windows, glass panes cut to size and glazing clips or metal beading with screws. Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	Kg	
8.6	Providing and fixing M.S. fan clamp type I or II of 16 mm dia M.S. bar, bent to shape with hooked ends in R.C.C. slabs or beams during laying, including painting the exposed portion of loop, all as per standard design complete.	Each	
8.7	Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows, all complete with : 4.0 mm thick glass panes	Sqmtr	
8.8	Providing and fixing in position collapsible steel shutters with vertical channels 20x10x2 mm and braced with flat iron diagonals 20x5 mm size, with top and bottom rail of T-iron 40x40x6 mm, with 40 mm dia steel pulleys, complete with bolts, nuts, locking arrangement, stoppers, handles, including applying a priming coat of approved steel primer.	Sqmtr	
8.9	Providing and fixing 1 mm thick M.S. sheet sliding-shutters, with frame and diagonal braces of 40x40x6 mm angle iron, 3 mm M.S. gusset plates at the junctions and corners, 25 mm dia pulley, 40x40x6 mm angle and T- iron guide at the top and bottom respectively, including applying a priming coat of approved steel primer	Sqmtr	
8.10	Fixing standard steel glazed doors, windows and ventilators in walls, including fixing of float glass panes with glazing clips and special metal- sash putty of approved make, or metal beading with screws, shall be supplied by department free of cost. Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	Kq	
8.11	Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 3 m height of wall with existing angle iron 'Y' shaped placed 2.4 m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, with reinforced barbed tape(R.B.T) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre	mtr	

8.12	Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 3 m height of wall without angle iron 'Y' shaped placed 2.4 m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre	mtr
8.13	Steel frame of pipe for supporting / fixing the fiberglass reinforced plastic sheet or GI sheet including welding and nut / bolt. All complete.	Kg
8.14	Supply and Making of Metal Flower Pot Stand 3 Tier Step Stand, Height: 733 Mm with primer and enamel paint	Kq
8.15	Supply and installation of GI sheet with nut and bolt. Complete work.Best quality.	Kg
8.16	Supply and installation of Iron Main gate with GI sheet, iron pipe, iron patti, iron rod, iron slide bolt with nut and bolt. All complete work. Best quality material.	Kg
8.17	Supply and installation iron frame for any purpose like base of flex/ fibre sheet/ GI sheet etc. Complete in all respect.	Kg
9	FLOORING	
9.1	52 mm under layer sand : 4 mm thick cement aggregate hardener consisting mix : 2 graded stone aggregate 6 mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 kg of cement or as per manufacturer's specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete.	Sqmtr
9.2	Cement graded stone making complete. paving aggregate chequers of 20 mm approved steps, landing, pavements etc.	Cub mtr
9.3	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) : 25 mm thick	Sq m
9.4	40 mm thick rubbed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement : 5 coarse sand) with joints 3 mm thick, side buttered with cement mortar 1:2 (1 cement : 2 stone dust) admixed with pigment to match the shade of stone and pointing with same mortar. Red sand stone	Sq m

9.5	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand), Jointing with grey cement slurry @ 3.3 kg/sqm including pointing the joints with white cement and matching pigment etc., complete.	Sq m	
9.6	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. Size of Tile 500x500 mm	Sq m	
9.7	Brick on edge flooring with bricks of class designation 7.5 on a bed of 12 mm cement mortar, including filling the joints with same mortar, with common burnt clay non modular bricks: 1:4 (1 cement : 4 coarse sand)	Sqmtr	
9.8	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete. 40 mm thick with 20 mm nominal size stone aggregate	Sqmtr	
10	ROOFING		
10.1	SHEET ROOFING Providing corrugated G.S. sheet roofing including vertical / curved surface fixed with polymer coated J or L hooks, bolts and nuts 8 mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead, including a coat of approved steel primer and two coats of approved paint on overlapping of sheets complete (up to 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. 1.00 mm thick with zinc coating not less than 275 gm/m ² . Complete in all respect.	Sqmtr	
10.2	Providing reinforced by organic fibres and/or inorganic synthetic fibres cement Non – asbestos 6 mm thick corrugated sheets (as per IS: 14871) roofing up to any pitch and fixing with polymer coated J, or L hooks, bolts and nuts 8 mm dia. G.I. plain and bitumen washers or with self drilling fastener and EPDM washers etc. complete (excluding the cost of purlins, rafters and trusses), including cutting sheets to size and shape wherever required. Including providing and fixing wind ties of 40x6 mm flat iron section.	Sqmtr	
10.3	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of raw plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and	Sqmtr	

	finishing to a flush finish of tapered and square edges of the board with recommended jointing compound , jointing tapes , finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification including the cost of painting with : 12.5 mm thick tapered edge gypsum plain board conforming to IS: 2095-(Part I) :2011 (Board with BIS certification marks)	Sqmtr	
19.4	Providing & fixing UV stabilised fiberglass reinforced plastic sheet roofing up to any pitch, including fixing with polymer coated 'J' or 'L' hooks, bolts & nuts 8mm dia. G.I plain/bitumen washers complete but including the cost of purlins, rafters, trusses etc. The sheets shall be manufactured out of 2400 TEX panel rovings incorporating minimum 0.3% ultra-violet stabiliser in resin system under approximately 2400 psi and hot cured. They shall be of uniform pigmentation and thickness without air pockets and shall conform to IS 10192 and IS 12866. The sheets shall be opaque or translucent, clear or pigmented, textured or smooth as specified. 2 mm thick flat or corrugated (2.5" or 4.2" or 6") or step-down (2" or 3" or 6") as specified	Sqmtr	
10.5	Providing and fixing precoated galvanised 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.	Sqmtr	
10.6	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 galvanised 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. GI Metal Ceiling Lay in plain Tegular edge Global white color tiles of size 595x595 mm, and 0.5 mm thick with 8mm 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.	Sqmtr	
10.7	Providing and fixing best quality branded coal tar sheet for waterproofing on corrugated G.S. sheet or Cement roofing	Sqmtr	19

10.8	Supply and installation of UV stabilised fiberglass reinforced plastic sheet with nut and bolt. Best quality.	Sqmtr	
11	FINISHING		
11.1	12 mm cement plaster of mix : 1:4 (1 cement: 4 fine sand)	Sq m	
11.2	12 mm cement plaster of mix : 1:4 (1 cement: 4 coarse sand)	Sq m	
11.3	12 mm cement plaster finished with a floating coat of neat cement of mix : 1:3 (1 cement: 3 fine sand)	Sq m	
11.4	INTERIOR FINISHING White washing with lime to give an even shade : New work (three or more coats)	Sq m	
11.5	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade : New work (two or more coats) over and including water thinnable priming coat with cement primer	Sq m	
11.6	EXTERIOR FINISHING Finishing walls with water proofing cement paint of required shade : New work (Two or more coats applied @ 3.84 kg/10 sqm)	Sq m	
11.7	Painting (two or more coats) on rain water, soil waste and vent pipes and fittings with black anticorrosive bitumastic paint of approved brand and manufacture, over and including a priming of ready mixed zinc chromate yellow primer.	mtr	
11.8	White washing with lime to give an even shade : Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete Old work (two or more coats)	Sqmtr	
11.9	Applying priming coat: With ready mixed pink or Grey primer of approved brand and manufacture on wood work (hard and soft wood)	Sqmtr	
11.10	Painting on G S. sheet with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade : work (two or more coats) including a coat of approved steel primer but excluding a coat of mordant solution.	Sqmtr	
11.11	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade : Two coats.	Sqmtr	
11.12	Wall Painting / Painting on the sign board or display board by Art painter/ drawing artist with material. Scratching/ rubbing old work also. Complete work	Sq feet	
11.12	Supply and fixing of Flex for Display / hoarding	Sq feet	
12	REPAIRS TO BUILDING		
12.1	Repairs to plaster of thickness 12 mm to 20 mm in patches of wall 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	Sq m	

12.2	dumping ground, all complete as per direction of Engineer-in-Charge. With cement mortar 1:4 (1 cement : 4 fine sand)	Each	
12.2	Fixing chowkhats (Door/ Window) in existing opening including embedding chowkhats in floors or walls cutting masonry for holdfasts, embedding hold fasts in cement concrete blocks of size $15 \times 10 \times 10$ 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.	Each	
12.3	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. For door/ window/ clerestory window Renewing glass panes, with putty and nails wherever necessary including racking out the old putty. Float glass panes of nominal thickness 4 mm (weight not less than 10kg/sqm)	Sq m	
12.4	Cleaning of under ground Septic tank including disposal of slit and rubbish all as per direction of Engineer-in-Charge. The cleaning shall consist following operations:- Tank shall be emptied of water by pumping & bottom shall be cleaned of silt and other deposits.	Sq m	
12.5	Dismantling W.C. Pan of all sizes including disposal of dismantled materials i/c malba all complete.	Each	
12.6	Hacking of CC flooring including cleaning for surface etc. complete.	Sq m	
12.7	Dismantling 15 to 40 mm dia G.I. pipe including stacking of dismantled pipes. Internal Work- Exposed on wall	mtr	
12.8	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.	Kg	
12.9	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 chailies, 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. The elevational area of the scaffolding shall be measured for payment purpose .The payment will be made once irrespective of duration of scaffolding.	Sqmtr	
12.10	Cleaning and desilting of gully trap chamber, including removal of rubbish mixed with earth etc. and disposal of same.	each	
12.11	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 dechoking 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	mtr	

12.13	Cleaning of under ground sump, Over Head R.C.C. Tank (independent staging) including disposal of silt and rubbish, all as per direction of Engineer-in-Charge. The cleaning shall consist following operations:-	Sqmtr
	(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.	
12.14	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. Long pattern W.C. Pan of size 580x440 mm	Each
12.15	Dismantling W.C. Pan of all sizes including disposal of dismantled materials i/c malba all complete	Each
12.16	Hacking of CC flooring including cleaning for surface etc.	Sqmtr
12.17	Dismantling 15 to 40 mm dia G.I. pipe including stacking of dismantled pipes (within 50 metres lead). Internal Work- Exposed on wall	mtr
12.18	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.	Each
13	DISMANTLING AND DEMOLISHING	
13.1	Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material: Asbestos Cement sheet	Sq m
13.2	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. 15 mm to 40 mm nominal bore	m
13.3	Dismantling C.I. pipes including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes & lead at site within 50 metre. Up to 150 mm diameter	m
13.4	Demolishing R.C.C. work by mechanical means and stockpiling at designated locations and disposal of dismantled materials up to a lead of 1 kilometre, stacking serviceable and unserviceable material separately including cutting reinforcement bars.	Sqmtr

13.5	Demolishing cement concrete manually/ by mechanical means including disposal of material	Cub mtr
13.6	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material including cutting reinforcement bars manually/ by mechanical means in R.C.C. or R.B. work (Payment shall be made on the cross sectional area of R.C.C. or R.B. work)	Cub mtr
13.7	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material	Cub mtr
13.8	Removing mortar from bricks and cleaning bricks including stacking (stacks of cleaned bricks shall be measured):	1000 Nos
13.9	Dismantling cement asbestos or other hard board ceiling or partition walls including stacking of serviceable materials and disposal of unserviceable materials	Sqmtr
13.10	Dismantling G.I. pipes (external work) including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means including stacking of pipes	mtr
13.11	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground	Sqmtr
14	SANITARY INSTALLATIONS	
14.1	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required: White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests	Each
14.2	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required :W.C. pan with ISI marked white solid plastic seat and lid.	each
14.3	Providing and fixing wash basin with C.I. brackets, 32 mm PTMT waste coupling and standard pattern, including walls size painting of fittings and brackets, cutting and making good the basin wherever required. White Vitreous China Flat 550x400 mm with single 15 mm PTMT pillar cock.	mm PTMT Each
14.4	Providing and fixing white vitreous china water closet squatting pan (Indian type) : Long pattern W.C. pan of size 580 mm	Each
14.5	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. 10 litre capacity - White	
14.6	Providing and fixing G.I. inlet connection for flush pipe connecting with W.C. pan.	Each

14.7	Providing and fixing white vitreous china flat back or wall corner type urinal basin of 430x260x350 mm or 340x410x265 mm	Each
14.8	Providing and fixing white vitreous china wash basin including making all connections but including the cost of fittings : Flat back wash basin of size 630x450 mm	Each
14.9	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete. Flexible pipe . 32 mm dia	Each
14.10	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm and 340x410x265 mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required : One urinal basin with 5 litre white P.V.C. automatic flushing cistern	Each
14.11	Providing and fixing white vitreous china water closet squatting pan (Indian type) Long pattern W.C. pan of size 580 mm	Each
14.12	Providing and fixing white vitreous china pedestal type (European type/ wash down type) water closet pan.	Each
14.13	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. 10 litre capacity - White	Each
14.14	Providing and fixing 8 mm dia C.P. / S.S. Jet with flexible tube upto 1 metre long with S.S. triangular plate to European type W.C. of quality.	Each
14.15	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame or approved make and shade with 6 mm thick hard board backing : Rectangular shape 453x357 mm	Each
14.16	Providing and fixing toilet paper holder : C.P. brass	Each
14.17	Providing and fixing soil, waste and vent pipes : 100 mm dia Sand cast iron S&S pipe as per IS: 1729	Per mtr
14.18	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete. 100 mm dia Sand cast iron S&S as per IS - 1729	Each
14.19	Providing and fixing PTMT Bottle Trap for Wash basin and sink. Bottle trap 31mm single piece moulded with height of 270 mm, effective length of tail pipe 260 mm from the centre of the waste coupling, 77 mm breadth with 25 mm minimum water seal, weighing not less than 260 gms	Each
15	WATER SUPPLY	
15.1	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	Per mtr

	<ul style="list-style-type: none"> 1. 15 mm nominal dia Pipes 2. 20 mm nominal dia Pipes 3. 25 mm nominal dia Pipes 4. 32 mm nominal dia Pipes 		
15.2	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. External work	Per mtr	
	<ul style="list-style-type: none"> 1. 15 mm dia nominal bore 2. 20 mm dia nominal bore 3. 25 mm dia nominal bore 		
15.3	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 :	Each	
	<ul style="list-style-type: none"> 1. 25 to 40 mm nominal bore 2. 50 to 80 mm nominal bore 		
15.4	Fixing water meter and stop cock in G.I. pipe line including cutting and threading the pipe and making long screws etc. complete (cost of water meter and stop cock including).	Each	
15.5	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work) :	Each	
	<ul style="list-style-type: none"> 15 mm nominal bore 20 mm nominal bore 25 mm nominal bore 32 mm nominal bore 		
15.6	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 :		
	<ul style="list-style-type: none"> 1. 15 mm nominal bore 2. 20 mm nominal bore 3. 25 mm nominal bore 		

	4. 32 mm nominal bore		
15.7	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.	Per Ltr	
15.8	Providing and fixing rectangular high density polyethylene water storage loft tank with cover, conforming to ISI : 12701, colour of opaque white or as approved by Engineer-in-charge. The rate includes making necessary holes for inlet, outlet & over flow pipes. The base support i/c fittings & fixtures for tank shall be paid separately.	Each	
15.9	PTMT FITTINGS Providing and fixing PTMT bib cock of approved quality and colour. 15mm nominal bore, 86 mm long, weighing not less than 88 gms	Each	
15.10	Providing and fixing PTMT stop cock of approved quality and colour. 15 mm nominal bore, 86 mm long, weighing not less than 88 gms	Each	
15.11	Providing and fixing PTMT, push cock of approved quality and colour. 15 mm nominal bore, 98 mm long, weighing not less than 75 gms each	Each	
15.12	Providing and fixing PTMT grating of approved quality and colour. 100 mm nominal dia each Circular type	Each	
15.13	Providing and fixing PTMT Ball cock of approved quality, colour and make complete with Epoxy coated aluminium rod with L.P./H.P.H.D. plastic ball.	Each	
	1. 15 mm nominal bore, 105 mm long, weighing not less than 138 gms 2. 20 mm nominal bore, 120 mm long, weighing not less than 198 gms		
15.14	Providing and fixing PTMT soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with concealed fitting arrangements, weighing not less than 106 gms.	Each	
15.15	Providing and fixing PTMT extension nipple for water tank pipe, fittings of approved quality and colour. 15 mm nominal bore, weighing not less than 32 gms 20 mm nominal bore, weighing not less than 40 gms	Each	

15.16	Cutting holes up to 30x30 cm in walls including making good the same: With common burnt clay F.P.S. (non modular) bricks	Each	
15.17	Cutting holes up to 15x15 cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including finishing complete so as to make it leak proof.	Each	
15.18	Disinfecting C.I. water mains by flushing with water containing bleaching powder @ 0.5 gms per litre of water and cleaning the same with fresh water, operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory.	100 mtr	
	<ul style="list-style-type: none"> 1. 80 mm diameter C.I. pipe 2. 100 mm diameter C.I. pipe 3. 125 mm diameter C.I. pipe 		
15.19	Submersible water pipes (Make Astral)		
	<ul style="list-style-type: none"> 1. 4" diameter pipe 2. 6" diameter pipe 		
16	DRAINAGE		
16.1	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement: 1 fine sand) including testing of joints etc. complete :	Per mtr.	
	<ul style="list-style-type: none"> 1. 100 mm diameter 2. 150 mm diameter 3. 200 mm diameter 		
16.2	Dismantling of old S.W. pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps : Size 100 mm diameter to 450 mm diameter	Per mtr	
17	ALUMINIUM WORK		
17.1	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides	Kg	

	with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings. (including Glazing, paneling and dash fasteners) with all accessories like slide bolt, tower bolt, handles etc. :	
	For fixed portion : Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	
	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings also include)	
17.2	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	Sqmtr
17.2	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete. (Cost of aluminium snap beading shall be paid in basic item): With float glass panes of 4.0 mm thickness (weight not less than 10kg/sqm)	Sqmtr
18	WATER PROOFING	
18.1	Providing and laying integral cement based treatment for water proofing on horizontal surface at all depth below ground level for underground structures and consisting of:	Sqmtr
	(i) 1st layer of 22 mm to 25 mm thick approved and specified rough stone slab over a 25 mm thick base of cement mortar 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound conforming to IS:2645 in the recommended proportion over the levelling course (levelling course to be paid separately). Joints sealed and grouted with cement slurry mixed with water proofing compound.	
	(ii) 2nd layer of 25 mm thick cement mortar 1:3 (1 cement: 3 coarse sand) mixed with water proofing compound in recommended proportions.	
	(iii) Finishing top with stone aggregate of 10 mm to 12 mm nominal size spreading @ 8 cub m/ sq m thoroughly embedded in the 2nd layer. Using rough kota stone.	
18.2	Providing and laying integral cement based treatment for water proofing on the vertical surface by fixing specified stone slab 22 mm to 25 mm thick with cement slurry mixed with water proofing compound conforming to IS:2645 in recommended proportions with a gap of 20 mm (minimum) between stone slabs and the receiving surfaces and filling the gaps with neat cement slurry mixed with water proofing compound and finishing the exterior of stone slab with cement mortar 1:3 (1 cement : 3 coarse sand) 20 mm thick with neat cement punning mixed with water proofing compound in recommended proportion complete at all levels. Using rough Kota stone	Sqmtr

18.3	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 :	Sqmtr
	(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.	
19	ELECTRICAL WORK	
19.1	WIRING IN PVC CONDUIT: Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit, with piano type switch, phenolic laminated sheet, suitable size MS box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.	POINT
19.2	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit, 2 way piano type switch, phenolic laminated sheet, suitable size MS box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.	POINT
19.3	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	MTR
19.4	Rewiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable and 1.5 sq.mm FRLS PVC insulated copper conductor single core cable as earth wire in existing surface/ recessed steel/PVC conduit including dismantling as required.	POINT
19.5	Rewiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable and 1.5 sq.mm FRLS PVC insulated copper conductor single core cable as earth wire in existing surface/ recessed steel/PVC conduit including dismantling as required.	POINT
19.6	Supplying and fixing of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required. 20 mm	MTR
19.7	Supplying and fixing metal box of following sizes (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including painting etc. as required.	EACH

	1. 75 mm X 75 mm X 60 mm deep 2. 100 mm X 100 mm X 60 mm deep		
19.8	Supplying and fixing following piano type switch/ socket on the existing switch box/ cover including connections etc. as required.	EACH (SEPARATE)	
	1. 5/6 amps switch 2. 2 way 5/6 A switch 3. 15/16 A switch 4. 3 pin 5/6 A socket outlet 5. 6 pin 15/16 A socket outlet 6. Bell push		
19.9	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.	EACH (SEPARATE)	
	1. 5/6 amps switch 2. 2 way 5/6 A switch 3. 15/16 A switch 4. 3 pin 5/6 A socket outlet 5. 6 pin 15/16 A socket outlet 6. Bell push		
19.10	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	EACH	
19.11	Supplying and fixing following size/ modules, GI box along with modular base & cover plate for modular switches in recess etc. as required. Up to 6 Module (200mmX75mm)	EACH	
19.12	Supplying and fixing 3 pin, 5 A ceiling rose on the existing junction box/ wooden block including connections etc. as required.	EACH	
19.13	Installation , Testing, Commissioning of wall bracket /ceiling fittings of all sizes and shapes containing upto two LED lamps per fitting, complete with all accessories including connections etc. as required.	EACH	

19.14	Supplying and fixing call bell/ buzzer suitable for single phase, 230 V, complete as required.	EACH	
19.15	Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting of all types, complete with all accessories and tube/lamp etc. directly on ceiling/ wall, including connections with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required.	EACH	
19.16	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, including providing and fixing phenolic laminated sheet cover on the fan box etc. as required.	EACH	
19.17	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required. Upto 450 mm sweep. fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	EACH	
19.18	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 2 nos. 3 pin 5/6 A modular socket outlet and 2 nos. 5/6 A modular switch, connections etc. as required.	EACH	
19.19	Supplying and fixing PVC batten angle holder including connections etc. as required.	EACH	
19.20	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. <ol style="list-style-type: none"> 1. Single pole 2. Single pole and neutral 3. Double pole 4. Three Pole+ One 		
19.21	Supplying and fixing DP sheet steel enclosure on surface/ recess along with 25/32 A 240 V "C" curve DP MCB complete with connections, testing and commissioning etc. as required.	each	
19.22	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.	Each	Per Sq inch
19.23	Modular covering Sheet for Switch Box	Each	
19.24	Rate of <ol style="list-style-type: none"> 1. Orient Fan 48" normal 		

	<p>2. Orient exhaust fan 12" normal</p> <p>3. 20 W LED Baton / tube light complete</p> <p>4. 20W LED Bulb</p> <p>5. Orient 50 W LED flood light</p> <p>6. 12" panel fell ceiling orient light</p> <p>7. 2 x 2 panel fell ceiling light</p> <p>8. Orient Wall fan regular 400mm</p> <p>9. Extension Board 2x2 6A with Switch and socket Anchor</p> <p>10. Extension Board 2x2 15A with Switch and socket Anchor / Cona</p> <p>11. LED Bulb holder Cona</p> <p>12. 5 A ceiling rose Cona</p> <p>13. A set of three Ceiling Fan Blades Branded</p> <p>14. White Ceiling Fan Canopy /cap</p> <p>15. 6" ceiling fan rod</p> <p>16. 9" ceiling fan rod</p> <p>17. 12" ceiling fan rod</p> <p>18. Electric water motor Half Hp – Crompton Make</p> <p>19. Electric water motor One Hp – Crompton Make</p> <p>20. Electric submersible pump One Hp – Prakash make</p>	
19.25	Rate of supply and fixing copper electric wire with insulation (Havells brand)	Per meter
	1. 0.75 mm	
	2. 1.5 mm	

	3. 2.5 mm 4. 4mm 5. 6 mm 6. 10 mm 7. 16 mm 8. Twisted Electrical Wire 9. Submersible Pump 3 Core Flat Cable	Per metre	
19.26	Rate of supply and fixing Aluminium electrical wire with insulation 1. 10 mm 2. 16mm	Per metre	
19.27	Rate of supply and fixing PVC Conduit with hooks (Setia brand) 1. 20 mm 2. 25 mm 3. 32 mm	Per Sq inch	
19.28	MCB Iron box all size	Per Sq inch	
20	Wages of Electrician / plumber/labour/ Mason/welder/ Painter for Art painting on wall (Skilled / Semi-Skilled / Un-skilled) will be paid as per the Latest rates decided by Govt. of Delhi / NCT.	Write Yes or No	
21	Use of all material in the items listed above will be branded and popular.	Write Yes or No	
22	Have you signed on all the paper of this M/R list ?	Write Yes or No	

23	If any item/ work with specification mentioned in CPWD DSR is not covered in above list. Then payment of the work done will be made on the basis of latest CPWD DSR rate.	Write Yes or No
24	For any work done, the vendor will be responsible for best quality of work with branded supply of material	Write Yes or No
25	List of brands of each item will be submitted before the starting of work to the office of school.	Write Yes or No
26	Measurement must be done before the members of M/R committee as well as verification of quality of material / items to be fixed / installed.	Write Yes or No
27	Estimate of any M/R is to be submitted before starting of work in the vidyalaya.	Write Yes or No
28	Brand / Make of above articles:	Write Yes or No
	1. Cement – SriRam/ Ambuja/ UltraTech 2. Iron bar/ angle or any iron work - Rathi/ Kamthenu 3. Electric Articles- Anchor/ Havells/ Cona, 4. Sanitary items – Suncera/ Hindustan 5. Aluminium work- Jindal 6. PVC/ CPVC pipe- Prakash / Astral 7. Paint / Distemper – Asian / Berzer 8. Water overhead tank – Sintex Two layer 9. For rest of the items, Branded item will be supplied with inspection before installation.	Write Yes or No. Same brand will be used.
29	Rate of One Bag of Lime stone / chuna for decoration	One bag rate good quality

Date:

Signature of the Proprietor (With Seal)

