Buildings (C & M) Circle, P.W.D

SCHEDULE - A

Name of Work: Construction of Prefabricated Structure workshop in Government ITI at K.Pudur in Madurai District

| Sl. No | Quantity | Description | TNBP No. | Rat | e | Unit | Amount |
|-----------|----------|--|-------------|-----|---|------------------------------------|--------|
| 1 | 2 | 3 | 4 | | 5 | 6 | 7 |
| 1 | • • | Earth work excavation for foundation in all soils and subsoils and to full depth as may be directed except in hard rock requiring blasting inclusive of shoring shuttering, bailing out water wherever necessary refilling the sides of foundation with excavated soil other than sand in layers of 15cm thick well rammed and completed, and depositing the surplus earth within the compound in places shown by the departmental officers with an initial lead of 10 mts and initial lift of 2 mts. and clearing and levelling the site, etc., | | | | 1 M ³ (One cubic metre) | |
| 2 | ` , | complete complying with standard specification. Earth work open excavation in all soils and sub-soils and to full depth as may be directed except in rock requiring blasting inclusive of shoring shuttering, bailing out water wherever necessary and depositing the excavated earth with a lead of 10 mts. within the compound in places shown by the departmental officers and clearing and levelling the site, etc., complete complying with standard specification. | | | | 1 M ³ (One cubic metre) | |

No.of corrections: No.of over writtings: Madurai

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|--|--|---|---|------------------------------------|---|
| 3 | 489.10 cu.m (Four hundred and eighty nine point one zero cubic metres only) | Supplying and filling of Quarry Rubbish in basement filling including conveyance loading and unloading charges and all other incidential charges filling laying watering and consolidation etc., complete as directed by the Dept., Officers with standard specification. | | | 1 M ³ (One cubic metre) | |
| 4 | ` | Supplying and filling in foundation and basement with filling Stone dust in layers of 150mm thickness well watered rammed and consolidated complying with relevant std specification including cost of supplying filling Stone dust. | | | 1 M ³ (One cubic metre) | |
| 5 | ` | Cement Concrete 1:5:10 (One Cement, Five sand and Ten hard broken stone jelly) using 40 mm gauge hard broken granite stone jelly for foundation and flooring including dewatering wherever necessary and laid in layers of not more than 15 cm thick, well rammed, consolidated and curing etc. complete complying with standard specification and as directed by the departmental officers. | | | 1 M ³ (One cubic metre) | |

5 7 4 6

510.70 sq.m metres only)

Supplying and erecting steel centering including necessary (Five hundred and ten supports for plane surfaces for Reinforced Cement point seven zero square Concrete works such as column footings, column pedestals, plinth beams, grade beams, staircase steps, etc. which require only nominal strutting using mild steel sheets of size 90cm x 60cm and 10 BG stiffened with welded mild steel angles of size 25mm x 25mm x 3 mm for boarding, laid over silver oak joists of size 10cm x 6.5cm spaced at about 75cm centre to centre or at suitable intervals etc. complete in all floors complying with standard specification. (Payment for centering shall be given after the concrete is laid)

 1m^2 (One square metre)

7

Supplying and erecting centering for sides and soffits including necessary supports and strutting upto 3.29 M height for plane surfaces as detailed below in all floors with all cross bracings using Mild Steel sheets of size 90 x 60 cm and 10 BG stiffened with welded Mild Steel angle of size 25mm x 25mm x 3 mm for boarding laid over silver oak joists of size 10cm x 6.50 cm spaced at about 90 cm centre to centre and supported by casurina props of 10cm to 13 cm dia spaced at not more than 75 cm centre to centre etc. complete complying with the standard specificaiton. (Payment for centering shall be given after the concrete is laid)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|--|--|---|---|------------------------------------|---|
| a | | For plane surfaces such as RCC floor slab, roof slab, beams, lintels, $$ | | | 1m^2 | _ |
| | (Three hundred and two point seven five square metres only) | bed blocks, landing slab, waist slab, portico slabs and beams, etc. | | | (One square metre) | |
| b | 466.50 sq.m (Four hundred and sixty six point five zero square metres only) | For plane surfaces such as rectangular or square RCC columns, sunshades, top and bottom slab of RCC boxing, etc. | | | 1m ² (One square metre) | |

8

Providing and laying in position, Standardised Concrete Mix M-20 Grade in accordance using 20mm with IS:456-2000, and down graded hard broken granite stone jelly for all RCC items of works with minimum cement content of 325 Kg/M3 and maximum water cement ratio of 0.55, including admixture (plasticiser / super plasticiser) in recommended proportions as per IS:9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability with about (5 cu.m.) 7730 kg. of 20mm machine crushed stone jelly and with about (3.3 cu.m.) 5156 kg. of 10-12mm machine crushed stone jelly and with about (4.79 cum) 7670 kg. of sand, but excluding cost of reinforcement grill and fabricating charges, centering and shuttering and also including laying, vibrating with mechanical vibrators, finishing, curing, etc. and providing fixtures like fan clamps in the RCC floor/roof slabs wherever necessary without claiming extra, etc., complete complying with standard specification and as directed by the departmental officers. The coarse and fine aggregates to be used should comply with the requirements of IS standards. (No separate payment will be made by the Department for the excess usage of materials).

> No.of corrections: No.of over writtings:

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|------------------------------------|---|
| a | 353.76 cu.m (Three hundred and fifity three point seven six cubic metres only) | foundation and basement | | | 1 M ³ (One cubic metre) | |
| b | 60.60 cu.m (Sixty point six zero cubic metres only) | Ground floor | | | 1 M ³ (One cubic metre) | |
| 9 | 486.00 Qtl. (Four hundred and eighty six quintals only) | Supplying, fabricating and placing in position Mild Steel / Ribbed Tor Steel rod for all RCC works as per execution given including cost of steel and G.I. binding wire in all floors etc. complete complying with standard specification. (Contractor has to make his own arrangements for the supply of steel and binding wire) | | | 1 Qtl. (One quintal) | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|--|--|---|---|------------------------------------|---|
| 10 | | Brick work in following Cement Mortar 1:5 using best quality of country bricks of size 8-3/4" x 4-1/4" x 2-3/4" for foundation and basement including curing, etc., complete complying with standard specification | | | | |
| a | 135.55 cu.m (Oen hundred and thirty five point five five cubic metres only) | foundation and basement | | | 1 M ³ (One cubic metre) | |
| b | 103.50 cu.m (One hundred and three point five zero cubic metres only) | Ground floor | | | 1 M ³ (One cubic metre) | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|------------------------|--|---|---|----------------|---|
| 11 | 200.00 sq.m | Special ceiling plastering and finishing the exposed surface | | | $1m^2$ | |
| | (Two hundred square | of all RCC items of work such as slabs, beams, sunshades, | | | (One square | |
| | metres only) | facia, canopy slab, staircase waist slab, landing slab etc., | | | metre) | |
| | | with Cement Mortar 1:3 (One Cement and Three Sand) | | | , | |
| | | 10mm thick including hacking the surfaces, providing | | | | |
| | | cement mortar nosing, beading for sunshades, staircases, | | | | |
| | | steps, landing slabs and curing, etc., in all floors complying | | | | |
| | | with standard specification and as directed by the | | | | |
| | | departmental officers | | | | |
| | | | | | | |
| 12 | 1366.00 sq.m | Plastering with Cement Mortar 1:5 (One cement and Five | | | 1m^2 | |
| | (One thousand three | sand), 12mm thick in all floors including curing etc. | | | (One square | |
| | hundred and sixty six | complete complying with standard specification and as | | | metre) | |
| | square metres only) | directed by the departmental officers. | | | , | |
| | | | | | | |
| | | | | | | |
| 13 | 143.80 sq.m | Plastering with Cement Mortar 1:3 (One Cement and Three | | | 1m^2 | |
| | (One hundred and forty | Sand) 12mm thick mixed with water proofing compound | | | (One square | |
| | three point eight zero | conforming to BIS at 2% by weight of cement used | | | metre) | |
| | square metres only) | including finsihing, curing, etc., complete in all floors | | | metre) | |
| | | complying with standard specification and as directed by | | | | |
| | | the departmental officers. | | | | |
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| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|---|--|---|---|------------------------------------|---|
| 14 | 64.80 sq.m (Sixty four point eight zero square metres only) | Plastering the surface of walls with Cement Mortar 1:3 (One cement and Three sand), 20mm thick in all floors including curing etc., complete complying with standard specification and as directed by the departmental officers. | | | 1m ² (One square metre) | |
| 15 | • | Painting two coats of newly plastered wall surface with ready mixed plastic Interior emulsion paint of first class quality and of approved colour over a priming coat including thorough scrapping, clean removal of dirt, and including necessary plaster of paris putty, wherever required etc., complete complying with standard specification. | | | 1m ² (One square metre) | |
| 16 | 816.50 sq.m (Eight hundred and sixteen point five zero square metres only) | Painting two coats of newly plastered wall surface with ready mixed exterior plastic emulsion paint of first class quality and of approved colour over a priming coat including thorough scrapping, clean removal of dirt, and including necessary plaster of paris putty, wherever required etc., complete complying with standard specification. | | | 1m ² (One square metre) | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|---|--|---|---|------------------------------------|---|
| 17 | 1640.00 kg (One thousand six hundred and forty kilo grams only) | Supplying and fixing of M.S.grill of approved design for open courtyard, grill, grill work to doors and window openings etc., using necessary mild steel flats for inner and outer members which should be fixed on edges including cutting the members, welding, grinding, one coat of priming coat using best approved quality red oxide primer, dismantling of walls / concrete if necessary, fixing and finishing the dismantled portion to original condition etc., complete complying with standard specification. | | | 1 Kg (One Kilo gram) | |
| 18 | 60.50 sq.m (Sixty point five zero square metres only) | Painting new iron works such as steel doors, windows, ventilators, window bars, balustrades etc., with two coats of best approved first quality and colour of synthetic enamel paint over the existing red oxide priming coat in all floors excluding cost of priming coat etc., complete complying with standard specification. (The make, quality and colour of paint should be got approved by the Executive Engineer before use on works.) | | | 1m ² (One square metre) | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| | | | | | | |

266.50 sq.m six point five zero square metres only)

19

Fabricating Supplying and fixing in position of Aluminium (Two hundred and sixty anodised natural colour matt finish 1/3rd fixed glazing 2/3rd prelaminated board of Aluminium partition. The outer frames Outer frame: 63.50x38x3mm@ kg/m,Centre mullions: 63.50x38x3mm@ 1.55 kg/m,Alu. Clips: 17.27x17.15x1.50mm @ 0.175kg/mg/m for intermediate vertical mullion 90cm c/c. Horizontal mullion at 1.00m 2.10m covered with 5.5mm thick plain glass with neccessary aluminium clips of size 17.27x17.15 x1.50mm @ 0.176kg/m and with required rubber beading etc., including necessary dismantling holes in RCC column,masonry wherever in necessary with power drills to the extent required and made good the damaged portion in good condition after fixing as directed by the departmental officers. All the aluminium sections should be anodised not less than 15 microns as ISI specification 1868/1962 / and should be gotapproved by Executive Engineer before use.

 $1m^2$ (One square metre)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|---|---|---|---|------------------------------------|---|
| 20 | • | Providing and fixing 8 mm thick fully designed perforated calcium silicate board 2'x2' panel tiled false ceiling (Hilux) including supplying and fixing true horizontal level false ceiling with 24mm prelude grid system Using hot dipped galvanised steel section exposed surface chemically cleaned caping prefinished in backed polyester paint wall angle of size 3000x19x19mm used in the periphery of the ceiling fixed to the wall, parttion with the help of screws at 600mm c/c. Mainrunner of size 3000x24mm suspended at a 1200mm c/c by using securely fixed to the structural soffit of RCC slab by using 6mm Nylon Rwl plug at every 1200mm(max) and 1200mm long cross tee of size 1200x24mm to interlocked between mainrunner at 600mm c/c(max) to form a grid of size 1200x600mm. 600mm long cross tee of size 600x600mm and finally laying classic lite regular edge tiles of size 600x600x15mm | | | 1m ² (One square metre) | |
| 21 | 247.50 sq.m (Two hundred and forty seven point five zero square metres only) | Paving the floor with best quality Double Charged Vitrified Tiles of size 800 x 800 x 8mm of approved colour, shade and quality laid in cement mortar 1:3 (one cement and three sand) 20mm thick in all floors and the top pointed with the white cement mixed same colour pigments etc., complete complying with standard specification. (The make and brand of the tiles should be got approved by Executive Engineer before use on works) | | | 1m ² (One square metre) | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|--|---|---|---|------------------------------------|---|
| 22 | 41.50 sq.m (Forty one point five zero square metres only) | Flooring with following ceramic tiles of size 305 x 305 x 6 mm laid over 20 mm thick cement mortar 1:3 (One Cement and Three Sand) base mortar over the existing slab / floor including cutting the tiles to the required size with special cutter wherever necessary, laying in position and pointing with white cement mixed with colouring pigment at the rate of 0.3 Kg. / sq.m. etc., complete complying with standard specification. (The make and brand of the tiles should be got approved by Executive Engineer before use on works) | | | 1m ² (One square metre) | |
| 23 | | Dadooing walls with following best approved quality, white / colour glazed tiles of following sizes set in Cement Mortar 1:2 (One Cement and Two sand) 10mm thick and pointing the joints with white cement mixed with colouring pigments at the rate of 0.40 Kg. / sq.m. neatly in all floors, curing, etc., complying with standard specification and as directed by the departmental officers. | | | | |
| a | 144.50 sq.m (One hundred and forty four point five zero square metres only) | Dadooing Ceramic Tiles of size 300mm x 450mm x 8mm | | | 1m ² (One square metre) | |

1 2 3 4 5 6 7

24 51.50 sq.m (Fifty one point five zero square metres only) UPVC Window Specification:

Supplying and fixing UPVC (Un-Plasticized Polyvinyl Chloride) Windows of casement type (open) from the profile the size of outer frame 60mm x 58mm and shutter profile are reinforcement with GI/1mm 125GSM and 100% corrosion free, the profiles are multi chambered sections with wall thick of 2mm. The EPDM rubber (black colour) covered with over all the edges of frame and shutter the shutter will be provided with Espag multi power point locks and also it operates as handle. The corners and joints should be welded and cleaned. Radiations free pin headed plain or brown colour glass 4mm thick should be provided to the shutter and it should not allow leakage of water even at most ranging storms and should have key lockable action, security protective hinges, strong locking systems and as per size for arresting noise and energy loss. The connecting mechanism between sash and outer frame that enables opening of the window. The window should be fixed to the wall with 100% packing with screws and silicon packing all round the frames. The window should be got approved from the Executive Engineer before use on work

1m²
(One square metre)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|--|--|---|---|------------------------------------|---|
| 25 | 32.00 sq.m (Thirty two square metres only) | Fabrication, supply and fixing in position of 'N' type ventilators using M.S. angle of size 25 x 25 x5 mm for frame and M.S. Flat of size 20 x 3 mm for fixing the weld mesh and using 25 x 22 x3 mm 'T' section for frame glass. Special type of Hold fast welded to the frame of 45 degree inclined towards centre for wall and fxing the weldmesh 25mm square including cost of 3mm thick pinheaded glass panes for all panels and fixing the glass panels with necessary clips & putties with required bolts, nuts and washers and one coat of red oxide primer etc. including necessary dismantling, making holes in RCC columns, beams, masonry wherever necessary with power drill to the extend required and made good to the original conditions after fising as directed by the departmental officers. | | | 1m ² (One square metre) | |
| 26 | 7.00 sq.m (Seven square metres only) | UPVC Ventilator Specification: Supplying and fixing UPVC (Un-Plasticized Polyvinyl Chloride) Louvered Ventilators of from the profile the size of outer frame 60mm x 58mm and shutter profile size of 60 x 78mm both profiles are reinforced with GI/1mm 125GSM and 100% corrosion free, the profile are multi chambered sections with wall thick of 2mm. The EPDM rubber (black colour) covered with all over the edges of frame and shutter. The corners and joints should be welded and cleaned. Radiations pin headed glass 4mm thick should be provided in the louvers. The window should be fixed to the wall with 100% packing with screws and silicon packing all round the frames. The ventilator should be got approved from the Executive Engineer before use on work | | | 1m ² (One square metre) | |

1 2 3 4 5 6 7

27 14.70 sq.m (Fourteen point seven zero square metres only) Fabricating Supplying and fixing in position of Aluminium anodised Powder Coated of single leaf door with half panelled with 12mm thick both side laminated particle board at bottom and half glazed using 5.50mm thick Plain glass at top. The outer frame shall be with aluminium box section 101.60x44.45x3.18m at 2.319kg/m and Shutter frame made of section Vertical & Top rail: 50x44.45x2.50mm@1.292 kg/m and Bottom rail: 100x44.45x2.50mm@ 1.974 kg/m, Lock rail: 50x44.45x2.5mm @ 1.292 kg/m,Alu. Clips: 17.15x17.27x1.50mm @ 0.176 kg/m,Alu. Handle: 100x30mm @ 0.988 kg/m and necessary accessories such as aluminium clips, rubber beading, PVC felt, handle for a length of shutter (both sides), locking arrangements, furniture fittings such as aluminium tower bolts-250x12mm - 1 Nos., aluminium tower bolt 200x12mm - 1No., aluminium Hydraulic door closer - 1No., lock-1No.,

Door stopper with rubber bushincluding cost of materials labour charges and power consumption charges required for fabrication including chipping, dismantling and making hole to the required extent in RCC column, beams, masonry with power drill wherever necessary and redoing the damaged portion to the original condition after fixing etc., complete. All the Alu. Section are to be anodised with matt finish under electrically controlled conditions in accordance with IS 1868/1962 for an average anatic film thickness of 15 microns etc., complete. Aluminium sections, and furniture fittings shall be got approved by the Executive Engineer incharge.

1m²
(One square metre)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|--|---|---|---|------------------------------------|---|
| 28 | 16.00 sq.m (Sixteen square metres only) | Solid PVC door shutters using 19 Gauge 19mm MS square tubes for styles and outer frames. 15mm MS square tubes for top, lock and bottom rails. The steel tubes shall be covered with 5mm thick solid PVC sheets. Shutter using 5mm thick solid PVC sheets for panelling shall rigidly fixed in position including necessary furniture and fittings. The over all size of styles shall be 50mm x 30mm. The over all size of top rail, Lock rail and bottom rail shall be 75mm x 30mm. The over all size of frames shall be 50mm x 45mm, with suitable rabate for housing the shutter. | | | 1m ² (One square metre) | |
| 29 | 66.50 sq.m (Sixty six point five zero square metres only) | supplying and laying vinyl flooring of 2.00mm thick of appoved quality, brand and colour including labour charges for fixing in position using necessary activities approved quality etc., complete complying with standard specification and as directed by the departmental officers etc. | | | 1m ² (One square metre) | |
| 30 | 8.70 sq.m (Eight point seven zero square metres only) | Supplying and Erecting Pull and Push Type rolling Shutter with ISI make of approved size and section using 18 GI sheet. The shutter shall be painted with one coat of red oxide primer and the rate is inclusive of hood covers, ransportation charges etc., Gear Operated Type | | | 1m ² (One square metre) | |

1 2 3 4 5 6 7

31 27.00 MT (Twenty seven metric tone only)

Supply, Fabrication, Erection, alignment and levels as per approved shop drawing of structural steel work in built up sections comprising of ISMB, ISMC, angle, plates and round bar section etc., Necessary permanent rivets, bolts, washers and nuts, handling, straightening, cutting, drilling holes, welding, sand blasting, shop assembly, transport to erection site, storing, leading to erection site and apply a coat of anti-corrosive yellow primer paint of approved make and two coat of MRF enamel paint prior to erection t complete job in all respect. a) Connection Bolt are E350 GR.8.8 (IS3757) b) Hot Rolled are E250 GR, or Equivalent , Plate Grade E350 and all structural steel confirm to IS2062.c) Specification for Cold formed Light gauge Structural Steel Sections Confirm to IS: 811d) Painting confirm to IS 1477 part 1& 2. The rate is inclusive of design ,shop drawing preparation, submission for approval etc., and also inclusive of any other incidental charges such as lifting using cranes, labour charges for erection, cost of all materials involved and painting two coats over one coat of primer and as directed by the departmental officers.

1Mt (One metric tone)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|--|---|---|---|-----------------------------|---|
| 32 | 0.00 | Supply, Fabrication, Erection, alignment and levels as per approved shop drawing of structural steel work in single section for purlins, tie runners with sag rods, etc., Necessary permanent rivets, bolts, washers and nuts, handling, straightening, cutting, drilling holes, welding, shop assembly, transport to erection site, storing, leading to erection site and apply a coat of anti-corrosive yellow primer paint and MRF enamel paint prior to erection. The rate is inclusive of design ,shop drawing preparation, submission for approval etc., and also inclusive of any other incidental charges such as lifting using cranes, labour charges for erection, cost of all materials involved and painting two coats over one coat of primer and as directed by the departmental officers. | | | | |
| a | 7.20 MT (Seven point two zero metric tone only) | Purlin but with Painted cold rolled steel sections Z Section MET- Z Purlin 150 X 60 x 2.0 | | | 1Mt (One metric tone) | |
| b | 2.50 MT (Two point five zero metric tone only) | Sag rod | | | 1Mt (One metric tone) | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|----------------------|--|---|------|--------------|---|
| 33 | | Supplying and embedding P.V.C rain water pipes of | | | | |
| | | approved quality embedded inside the RC | | | | |
| | | columns/masonry in position or underside of truss/lattice, | | | | |
| | | column sides with all necessary specials like shoes, | | | | |
| | | bends or any other specials required to suit site | | | | |
| | | conditions etc., jointed with suitable adhesive and | | | | |
| | | covering the joints using fibre glass wherever required, the | | | | |
| | | steel collar and PVC Pipes with necessary MS clamps, | | | | |
| | | brackets, bolts and nuts all complete as directed. The rate | | | | |
| | | should including providing M.S pipe sleeve necessary lugs | | | | |
| | | of required dia in concrete in the concrete. The rate is | | | | |
| | | inclusive of any other incidental charges such as labour | | | | |
| | | charges, cost of all materials involved and as directed by the departmental officers. | | | | |
| | | the departmental officers. | | | | |
| | | | | | | |
| a | 100.00 Rm | 200 mm Dia PVC Pipe (6k/cm2) | | | 1 RM. | |
| | (One hundred running | | | | (One running | |
| | metres only) | | | | metre) | |
| | | | | | | |
| | | | | | | |
| 34 | 95.00 Rm | Supply and Fixing of UPVC Rain water Gutter of approved | | | 1 RM. | |
| | (Ninety five running | design and drawing including clamping and all others | | | (One running | |
| | metres only) | works required to complete the job. The rate is inclusive of | | | metre) | |
| | | any other incidental charges such as labour charges, cost of | | | | |
| | | all materials involved and as directed by the departmental | | | | |
| | | officers. | | | | |
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Contractor:

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|---|---|---|---|------------------------------------|---|
| 35 | 1175.00 sq.m (One thousand one hundred and seventy five square metres only) | Supply & Fixing of Continuous sandwich PUF panels 50 mm thick either as single piece, prefabricated, modular, factory made units which consist of an insulating layer of rigid polyurethane foam between two layers of metal sheets, comprises of PUF bonded between two sheets of Pre-coated GI sheets of 0.5 mm thick to produce straight-to-finish panels with all necessary fixtures to complete the work in all respect. The rate is inclusive of design ,shop drawing preparation, submission for approval etc., and also inclusive of any other incidental charges such as lifting using cranes, labour charges for erection, cost of all materials involved and as directed by the departmental officers. | | | 1m ² (One square metre) | |
| 36 | 110.00 Rm (One hundred and ten running metres only) | Supply and fixing of Ridge made out of 0.50mm thick colour coated galvanized steel sheet (JSW sheet brand or equivalent brand). The both sides will be of 275mm,center angle will be of 120mm and both end drop will be of 30mm. This sheet will be fixed with self-drilling screws. The rate is inclusive of design ,shop drawing preparation, submission for approval etc., and also inclusive of any other incidental charges such as lifting using cranes, labour charges for erection, cost of all materials involved and as directed by the departmental officers. All the materials used on work should be got approved by the executive engineer before use on works. | | | 1 RM. (One running metre) | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|--|---|---|---|------------------------------------|---|
| 37 | 1.30 cu.m (One point three zero cubic metres only) | Plain Cement Concrete 1:2:4 (one cement, two sand and four hard broken stone jelly) using 20mm jelly for wearing coat including laying, compacting, finishing and curing, etc., complete as per standard specificatins and as directed by the departmental officers. | | | 1 M ³ (One cubic metre) | |
| 38 | 12.00 Rm (Twelve running metres only) | Supplying and fixing in position best quality PVC soil / waste pipes of various dia having 6 kg / sq.cm. pressure BIS mark and providing leak proof joints using PVC adhesives including fixing to the wall with special PVC / MS clamp, teak wood plugs, brass screws, etc., and making connection to all sanitary fittings, dismantling masonry / RCC works wherever found necessary and making the good dismantled portion to the original condition, including testing for any leakages, etc., complete complying with standard specifications. (The PVC pipes should be got approved by the Executive Engineer before use on works). The rate for earth work excavation will be measured and paid separately in the cases where the pipe lines are proposed to laid below ground level | | | 1 M ³ (One cubic metre) | |

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|----|------------------------------|--|---|---|----------------------|---|
| 39 | 4.00 Nos (Four numbers only) | Supplying and fixing in position Indian water colour closet of size 580 X 440mm, white glazed earthen ware of approved quality with 'P' trap or 'S' trap confirming to IS:2556 Part XII with sand cushion and forming flooring alroundthe closet using 40mm broken brick jelly in lime concrete 1:2:5 (one part of lime, two parts of sand and five parts of brick jelly) 100mm thick and finishing the top to required slope and including giving necessary connection to cast iron soil pipes/ PVC pipes by dismandling brick masonry, reinforced cement concrete roof/floor slab and making good the disturbed portion to original condition without quality with 'P' trap or 'S' trap confirming to IS:2556 - leakage etc., complete complying with standard spcifications. | | | 1 No (One Number) | |
| 40 | | Supplying and fixing in position white / colour glazed European Water Closet of best quality and approved make with 100 mm "P" or "S" trap connecting with CI pipe of 100mm dia / PVC pipe of 110mm dia, double flapped rigid PVC black seat and seat cover with CP brass hinges including cost of white cement, cement for packing, spun yarn, teak wood plugs, brass screws, etc., including supplying and fixing 10 litres capacity PVC / 12.5 litres capacity porcelin low level flushing tank with a pair of CI brackets, etc., complete with all fittings such as 15mm brass ball valve with polythene float with brass handle, union, coupling connected by means of 40mm white PVC flush hand using Indian adopter joint including all internal fittings | | | | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | l |
|---|--------------------|---|---|---|--------------|---|---|
| a | 2.00 Nos | White glazed European Water Closet with 10 litre capacity | | | 1 No | | |
| | (Two numbers only) | PVC flushing tank fixed with CI brackets | | | (One Number) | | |

41 4.00 Nos (Four numbers only)

Supply and fixing in position of best Indian make white / colour glazed earthernware lipped mouth flat back urinal of best quality and approved make of size 430mm x 260mm x 350mm with GI pipe, 32mm dia bell mouth PVC connection and waste pipe, 15mm dia GI pipe of required length, 15mm dia GM wheel valve, 15mm dia brass nipple 2 Nos., and fixing the urinals in position with necessary TW plugs, clamps, screws, etc., including dismantling masnory and re-doing the same to the original condition, etc., including painting the pipe with two coats of best quality approved synthetic enamel paint over one coat of red oxide primer and checked without any leakage etc. complete complying with standard specifications and as directed by the departmental officers. (The urinal should be got approved by the Executive Engineer before use on works.)

1 No (One Number)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|----------------------------------|---|---|-------|----------------------|---|
| 42 | 4.00 Nos (Four numbers only) | Supplying and fixing position CI Nahani Trap / Floor Trap of the following sizes with best stainless steel gratings of approved brand and quality, fixed over a bed of brick jelly lime concrete 1:2:5 (One part of lime, two part of sand and five part of 40mm gauge brick jelly) and finished with Cement Mortar 1:3 (One Cement, Three sand) including dismantling masonry works wherever found necessary and making good the dismantled portions to the original condition and giving connection to the CI / PVC pipes, etc., complete complying with standard specification. (The Nahani Trap should be got approved by the Executive Engineer before use on works) | | | 1 No (One Number) | |
| 43 | 3.00 Nos (Three numbers only) | Supplying and fixing in position best quality and approved make Indian made white / colour glazed earthernware wash hand basin of size 550 x 400mm (with pedestal) with a pair of cast iron brackets, including cost 15mm dia brass CP pillar tap, 32mm dia "B" class GI waste pipe with rubber plug and chain, 15mm dia GM wheel valve, 15mm brass nipple, 15mm dia nylone connection, 32mm dia CP brass waste coupling including fixing of wash basin using CI brackets on to the wall in position with TW plugs and screws, rubber washers, white lead and giving necessary water supply connection and painting the brackets with two coat of painting over a priming coat of anti-corrosive paint including testing for leakages etc., complete complying with standard specification and as directed by the departmental officers. (The wash hand basin and specials should be got approved by the Executive Engineer before use on works). | | | 1 No (One Number) | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|----------------------------------|--|---|---|----------------------|---|
| 44 | 10.00 Nos (Ten numbers only) | Supplying and fixing in position 15mm dia brass CP screw down tap / Pillar tap (heavy duty) of approved make conforming to BIS specifications and quality including cost of shellac, thread, etc., complete complying with standard specification and including cutting and threading wherever necessary. (Taps should be got approved by the Executive Engineer before use on the works) | | | 1 No (One Number) | |
| 45 | | Supplying and fixing in position PVC specials of the following dia and types of approved quality confirming to BIS and providing leak proof joints including fixing to the walls and giving connection to the PVC soil stacks, dismantling the masonry or RCC works and re-doing the dismantled portion to original condition etc., complete complying with standard specifications. (The PVC specials should be got approved by the Executive Engineer before use | | | | |
| a | 8.00 Nos (Eight numbers only) | 110 mm PVC plain bend | | | 1 No (One Number) | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|---|--|---|---|------------------------------------|---|
| 46 | 5.00 sq.m (Five square metres only) | Manufacturing, supplying and fixing Precast Reinforced Cement Concrete slabs of following thickness in RCC 1:2:4 (one cement, two sand and four aggregates), using following HBGS jelly excluding cost of reinforcement steel in position but including cost of moulding charges, casting of slab, finishing, curing and fixing in position in all floors etc., complete complying with standard specification and as directed. 50mm thick slab (using 20mm HBGS Jelly) | | | 1m ² (One square metre) | |
| 47 | 2.00 Nos (Two numbers only) | Supplying and fixing in position CI manhole covers with CI frames (Heavy duty) of size 60cm x 60cm of best approved quality as per standard specification etc., complete compying with standard specifications | | | 1 No (One Number) | |
| 48 | | Supplying, laying and jointing UPVC pipes (having working pressure 10 kg. / sq.cm) of approved quality and best variety conforming to BIS of the following dia including cutting, threading and fixing UPVC specials using UPVC adhesives (but excluding cost of such specials) and fixing into wall with teak wood plugs, UPVC clamps and screws making holes on the wall (or) drilling holes in the roof and making good the dismantled portion to original condition with necessary brick work / cement concrete and plastering neatly wherever necessary with necessary scaffolding charges, etc., complete complying with standard specifications. The UPVC pipes shall be got approved by Executive Engineer before use on works.` | | | | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|--|--------------------|---|---|----------------------|---|
| a | 50.00 Nos | 32mm dia UPVC Pipe | | - | 1 No | |
| | (Fifty numbers only) | | | | (One Number) | |
| b | 81.60 Nos (Eighty one point six zero numbers only) | 25mm dia UPVC Pipe | | | 1 No (One Number) | |
| с | 9.00 Nos (Nine numbers only) | 20mm dia UPVC PIPE | | | 1 No (One Number) | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|---------------------|---|---|---|--------------|---|
| 49 | | Supplying, laying and jointing UPVC specialsof approved | | | | |
| | | quality and best variety conforming to BIS of the following | | | | |
| | | dia including cutting, threading and fixing UPVC specials | | | | |
| | | using UPVC adhesives drilling holes in the roof and | | | | |
| | | making good the dismantled portion to original condition | | | | |
| | | with necessary brick work / cement concrete and plastering | | | | |
| | | neatly wherever necessary with necessary scaffolding | | | | |
| | | charges, etc., complete complying with standard | | | | |
| | | specifications. The UPVC Specials shall be got approved | | | | |
| | | by Executive Engineer before use on works. | | | | |
| | | by Executive Engineer before use on works. | | | | |
| a | | UPVC Elbow | | | | |
| • | 5.00 Nos | 32mm dia | | | 1 No | |
| | (Five numbers only) | Szimii did | | | (One Number) | |
| | (Tive numbers only) | | | | (One Number) | |
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| | 5.00 Nos | 25mm dia | | | 1 No | |
| | (Five numbers only) | | | | (One Number) | |
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| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
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b

UPVC TEE

3.00 Nos 32 mm dia (Three numbers only)

3.00 Nos 25mm dia (Three numbers only)

3.00 Nos 20mm dia (Three numbers only)

c UPVC Reducer GI

4.00 Nos 32x25 mm dia (Four numbers only)

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5.00 Nos (Five numbers only)

d UPVC Reducer Elbow

25 x 20 mm dia

4.00 Nos 32x25 mm dia (Four numbers only)

4.00 Nos 25 x 20 mm dia (Four numbers only)

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|-----|------------|------------|---|---|---|---|
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| | <i>j</i> . | 1 3 | 4 | | h | , |
| 1 1 | _ | J | 7 | 3 | U | , |
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e

UPVC Reducer Tee

32x25 mm dia

4.00 Nos (Four numbers only)

4.00 Nos 25 x 20 mm dia (Four numbers only)

50

Supplying and fixing in position first quality and approved variety of Gun metal Gate Valve / Wheel Valve with BIS make of the following dia including cost of shellac, thread balls, etc., complete complying with standard specifications (for both internal and external water supply arrangements). The valves to be used on work shall be got approved by the Executive Engineer before use on work.

No.of corrections: No.of over writtings:

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|--------------------------------|--|---|---|----------------------|---|
| a | 1.00 Nos (One numbers only) | Fixing Gun Metal Gate Valve of dia 32mm | | | 1 No (One Number) | |
| b | 2.00 Nos (Two numbers only) | Fixing Gun Metal Gate Valve of dia 25mm | | | 1 No (One Number) | |
| 51 | 2.00 Nos (Two numbers only) | Supply and providing 1000 litres capacity Priming Tank made up of PVC. Make: SINTEX/EQUIVALENT. | | | 1 No (One Number) | |
| 52 | | Supplying and Fixing of Best approved quality Brass Letters for following sizes as directed by departmental officers | | | | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|----------------------------------|---|---|---|----------------------|---|
| a | 8.00 Nos (Eight numbers only) | English | | | 1 No (One Number) | |
| b | 6.00 Nos (Six numbers only) | Tamil | | | 1 No (One Number) | |
| 53 | 6.00 Nos (Six numbers only) | Manufacturing supplying and fixing of steel record racks of size 1200 x 450 x 2100mm with the following specifications each rack is provided with legs of 2100mm height made of 50x50x6mm M.S.angles. The angles are cut to proper size straigthenend and edges grooved properly for smoothness. The bottom of the leg angle is welded with a flat bottom portion for stability. Holes of 6mm are made propertly to to accomadate the fastners and 40x40x3mm angles in the periphere. 6 panels are provoided each rack and they can be pieced at different height in the rack as per convenience user department. A system of angle is tooping. However bolts and nuts of 6mm is used as fastners to fix up the stiffned pannels to the legs. The record racks is given two coats of godrej green over a coat transport errection assembling taxces etc, complete | | | 1 No (One Number) | |

Contractor:

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|--|--|---|---|------------------------------------|---|
| 54 | 728.20 sq.m (Seven hundred and twenty eight point two zero square metres only) | Vacuum Dewatering | | | sq.m | |
| 55 | 18.80 sq.m (Eighteen point eight zero square metres only) | Supply and Installation of Ceramic writing Board made on steel core the long lasting porcelain is fused at temperatures up to 800 c. with this process a scratch and stain resistant surface is created and becomes smooth and erasing free of "Ghost lines" virtually maintenance free, this chalk board never acquires. "chalking in" and total cleaning is accomplished with clear water the writing surface will not crack peel even when solvents are use to remove crayon, paint or other foreign substances highly versatile, the entire writing area can become a display board with the help of magnetic buttons. The boards are made of 0.4mm ceramic on steel writing surface 9mm MDF, 0.2mm, GI sheet. The above three materials sandwiched with rubber based. | | | 1m ² (One square metre) | |
| 56 | 5.00 Nos (Five numbers only) | Supply and fixing of stored pressure ABC (Mono Ammonium Phospate) Powder Type Fire Extinguisher of 6 kg. capacity as per IS 15683 with pressure gauge, discharge hose & control nozzie, wall mounting bracket, safety clip etc., ncluding conveyance, all incidental charges, necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary etc complete as per standard specification and as directed by the Departmental Officers. Make: EXCELLENT/ SAFETY FIRST? EQUIVALENT. | | | 1 No (One Number) | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|---|---|---|---|---------------------------------|---|
| 57 | 62.00 Nos (Sixty two numbers only) | Supply and Fixing of 110mm dia G.I Pipe for Vertical Post with Base Plate fixed using necessary fixtures such as bolts & nuts etc. incl Priming cost with redoxide, Labour charges and excluding GST etc. complete as per standard specification and as directed by the Departmental Officers. | | | 1 No (One Number) | |
| 58 | 275.00 Rm (Two hundred and seventy five numbers metres only) | DRILLING the 6" (160mm dia) vertical bore well in all soils & hard rock to any reqiored depth as directed by the departmental officer including labour charges, for assembling of cashing pipe inseting in the drillied hole including welding the joints if necessary groting the cashing pipes etc., rig and supporting vehicle from one place to another | | | 1 RM. (One running metre) | |
| 59 | 18.00 Rm (Eighteen running metres only) | Supply of 160mm PVC Casing pipe to with stand vertical pressure of 6 Kg/cm2 without slot etc., complete. | | | 1 RM. (One running metre) | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|---|---|---|---|---------------------------------|---|
| 60 | 18.00 Rm | Labour charges for inserting 160mm dia PVC casing | | | 1 RM. | |
| | (Eighteen running | Pipes (with slot or without slots) in the drilled hole | | | (One running | |
| | metres only) | including jointing the pipes etc., complete | | | metre) | |
| 61 | 245.00 Rm (Two hundred and forty five running metres only) | Supply of CPVC Pipe of approved quality and best variety comforming to ISI mark of the following dia size for suction pipe for compressor motor as directed by the departmental officers. 32 mm dia | | | 1 RM. (One running metre) | |
| 62 | 265.00 Rm (Two hundred and forty five running metres only) | Supplying, erecting and connection of 4.00 sqm Sub Cable having good quality with nylon coir etc., complete. | | | 1 RM. (One running metre) | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|------------------------------|--|---|-------|----------------------|---|
| 63 | 1.00 No (One number only) | Supplying and Joining borewell 160mm dia PVC End cap for Borewell of approved quality and best variety conforming to ISS mark, including pasting and fixing etc., complete. | | | 1 No (One Number) | |
| 64 | 1.00 No (One number only) | Supplying and fixing of 5.00 HP Submersible pump set Motor of approved quality confirming to ISI transporting charges to site etc., complete complying with standard specification and as directed by the departmental officers. (The submersible pump set motor got approved by the Executive Engineer before use on work). | | | 1 No (One Number) | |
| 65 | 1.00 No (One number only) | Supply and fixing of Three phase panel board with two level guard and auto start confirming to ISI394 and IEC947 suitable KW rating for operation in AC/Single phase/50HZ (+ 5%) and 230 V(+10%) including Ammeter, voltmeter, Thermal overload relay, 16 Amps 2 pole Magnetic Contactor with under voltage protection, indication lamp, starting capacitor, running capacitor an On/Off Push button switches, 5 way connector, wiring with 1 sq.mm/1.5 sq.mm copper PVC insulated cable powder coated vermin proof box including the capacitor (the cost of capacitor is to be taken separately) etc., completer complying with standard specification. | | | 1 No (One Number) | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | ı |
|--------|------------------------|--|---|---|--------------|---|---|
| 66 | 250.00 Rm | Supplying and fixing Nylon Rope best approved quality | | | 1 RM. | | |
| | (Two hundred and fifty | and good variety etc., completer complying with standard | | | (One running | | |
| | running metres only) | specification. | | | metre) | | |

Total Item No: (66 items only)

Sub Total GST 12%

Total Rs.