## Buildings (C & M) Circle, P.W.D Madurai SCHEDULE - A

## Name of Work: Construction of Prefabricated Structure workshop building (Technology centre) in Government ITI at Dindigul in Dindigul District

| Sl.<br>No | Quantity  | Description  | TNBP<br>No. | Ra | ate | Unit                               | Amount |
|-----------|---|--|-------------|----|-----|------------------------------------|--------|
| 1         | 2   | 3  | 4           |    | 5   | 6                                  | 7      |
| 1         | 523.00 cu.m (Five hundred and twenty three cubic metres only) | 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., complete complying with standard specification. |             |    |     | 1 M <sup>3</sup> (One cubic metre) |        |
| 2         | 53.00 cu.m (Fifty three cubic metres only)                    | Earth work open excavation in all soils and sub-soils and to full depth as may be directed except in rock requiring blasting inclusive of shoring shuttering, bailing out water wherever necessary and depositing the excavated earth with a lead of 10 mts. within the compound in places shown by the departmental officers and clearing and levelling the site, etc., complete complying with standard specification.   |             |    |     | 1 M <sup>3</sup> (One cubic metre) |        |

| 1 | 2   | 3  | 4 | 5 | 6                                  | 7 |
|---|---|--|---|---|------------------------------------|---|
| 3 | 433.50 cu.m (Four hundred and thirty three point five zero cubic metres only) | Supplying and filling in foundation, basement with quarry rubbish including loading, unloading and conveyance charges and all other incidental charges in layers of not more than 15cm thick well rammed watered and consolidated complying with standard specifications.  |   |   | 1 M <sup>3</sup> (One cubic metre) |   |
| 4 | 492.00 cu.m (Four hundred and ninety two cubic metres only)                   | Supplying and filling in foundation, basement, etc with filling M sand in layers of not more than 15 cm thick well watered, rammed and consolidated etc. complete complying with standard specification and as directed by the departmental officers.  |   |   | 1 M <sup>3</sup> (One cubic metre) |   |
| 5 | 152.00 cu.m (One hundred and fifty two cubic metres only)                     | Cement Concrete 1:5:10 (One Cement, Five sand and Ten hard broken stone jelly) using 40 mm gauge hard broken granite stone jelly for foundation 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 <sup>3</sup> (One cubic metre) |   |

| 1 | 2   | 3  | 4 | 5 | 6                                  | 7 |
|---|---|--|---|---|------------------------------------|---|
| 6 | 494.00 sq.m (Four hundred and ninety four square metres only) | Supplying and erecting steel centering including necessary supports for plane surfaces for Reinforced Cement Concrete works such as column footings, column pedestals, plinth beams, grade beams, staircase steps, etc. which require only nominal strutting using mild steel sheets of size 90cm x 60cm and 10 BG stiffened with welded mild steel angles of size 25mm x 25mm x 3 mm for boarding, laid over silver oak joists of size 10cm x 6.5cm spaced at about 75cm centre to centre or at suitable intervals etc. complete in all floors complying with standard specification. (Payment for centering shall be given after the concrete is laid)     |   |   | 1m <sup>2</sup> (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 | 306.00 sq.m<br>(Three hundred and six square<br>metres only)        | For plane surfaces such as RCC floor slab, roof slab, beams, lintels, bed blocks, landing slab, waist slab, portico slabs and beams, etc.  |   |   | 1m <sup>2</sup> (One square metre) |   |
| b | 468.00 sq.m<br>(Four hundred and sixty eight<br>square metres only) | For plane surfaces such as rectangular or square RCC columns, sunshades, top and bottom slab of RCC boxing, etc.   |   |   | 1m <sup>2</sup> (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/ms and maximum water cement ratio of 0.55, including admixture (plasticiser / super plasticiser) in recommended proportions as per IS:9103 to accelerate, reta?d 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

| 1 | 2   | 3  | 4 | 5 | 6                                  | 7 |
|---|---|--|---|---|------------------------------------|---|
|   |   | crushed stone jelly and with about (4.79 cu'm') 7670 kg. of sand, but excluding cost of reinforcement grill and fabricating charges, centering and shuttering and also including laying, vibrating with mechanical vibrators, finishing, curing, etc. and providing fixtures like fan clamps in the RCC floor/ roof slabs wherever necessary without claiming extra, etc., complete complying with standard specification and as directed by the departmental officers. The coarse and fine aggregates to be used should comply with the requirements of IS standards. (No separate payment will be made by the Department for the excess usage of materials). |   |   |                                    |   |
| a | 334.20 cu.m<br>(Three hundred and thirty four<br>point two zero cubic metres<br>only) | foundation and basement  |   |   | 1 M <sup>3</sup> (One cubic metre) |   |
| b | 61.00 cu.m (Sixty one cubic metres only)  | Ground floor   |   |   | 1 M <sup>3</sup> (One cubic metre) |   |

| 1  | 2  | 3   | 4 | 5 |   | 6                                  | 7 |
|----|--|---|---|---|---|------------------------------------|---|
| 9  | 468.00 Qtl.  | Supplying, fabricating and placing in position Mild Steel   |   |   |   | 1 Qtl.                             |   |
|    | (Four hundred and sixty eight quintals only)                       | / 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) |   |   | ( | (One quintal)                      |   |
| 10 |  | Brick work in 1:6 Cement Mortar 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 specifiction.  |   |   |   |                                    |   |
| a  | 138.00 cu.m<br>(One hundred and thirty eight<br>cubic metres only) | foundation and basement   |   |   |   | 1 M <sup>3</sup> (One cubic metre) |   |

| 1  | 2                            | 3   | 4 | 5 | 6               | 7 |
|----|------------------------------|---|---|---|-----------------|---|
| b  | 108.00 cu.m                  | Ground floor  |   |   | $1 \text{ M}^3$ | _ |
|    | (One hundred and eight cubic |   |   |   | (One cubic      |   |
|    | metres only)                 |   |   |   | metre)          |   |
|    |                              |   |   |   |                 |   |
|    |                              |   |   |   |                 |   |
|    |                              |   |   |   |                 |   |
|    |                              |   |   |   |                 |   |
| 11 |                              | Brick work in 1:3 Cement Mortar 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 specifiction.  |   |   |                 |   |
|    |                              | 1 17 5  |   |   |                 |   |
|    |                              |   |   |   |                 |   |
|    |                              |   |   |   | 2               |   |
| a  | 14.00 cu.m                   | foundation and basement   |   |   | $1 \text{ M}^3$ |   |
|    | (Fourteen cubic metres only) |   |   |   | (One cubic      |   |
|    |                              |   |   |   | metre)          |   |

| 1  | 2  | 3  | 4 | 5 | 6                                  | 7 |
|----|--|--|---|---|------------------------------------|---|
| 12 | 225.00 sq.m<br>(Two hundred and twenty five<br>square metres only) | Special ceiling plastering and finishing the exposed surface of all RCC items of work such as slabs, beams, sunshades, facia, canopy slab, staircase waist slab, landing slab etc., 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 |   |   | 1m <sup>2</sup> (One square metre) |   |
| 13 | ·  | Plastering with Cement Mortar 1:5 (One cement and Five sand), 12mm thick in all floors including curing etc. complete complying with standard specification and as directed by the departmental officers.  |   |   | 1m <sup>2</sup> (One square metre) |   |
| 14 | 145.00 sq.m<br>(One hundred and forty five<br>square metres only)  | Plastering the surface of walls with Cement Mortar 1:3 (One cement and Three sand), 12mm thick in all floors including curing etc., complete complying with standard specification and as directed by the departmental officers.   |   |   | 1m <sup>2</sup> (One square metre) |   |

| 1  | 2   | 3  | 4 | 5 | 6                          | 7 |
|----|---|--|---|---|----------------------------|---|
| 15 | 65.00 sq.m  | Plastering the surface of walls with Cement Mortar 1:3   |   |   | $1m^2$                     |   |
|    | (Sixty five square metres only)                             | (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.  |   |   | (One square metre)         |   |
| 16 | 2070.00 kg<br>(Two thousand and seventy kilo<br>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<br>(One Kilo<br>gram) |   |

5 2 3 4 6 7 267.00 sq.m Supplying, rabricating and placing in position of  $1m^2$ Aluminium Fixed Partition, top half glazed with (Two hundred and sixty seven (One square 5.50mm thick plain glass and bottom half with square metres only) metre) medium density fibre board of 12mm thick with Powder Coating of any colours both side pre-laminated for cubical and the outer frame of the aluminium section of size 101.60 x 44.45 x 3.18mm at 2.319 kg./m at internal vertical 2 Nos. and horizontal 1 No, mullion of aluminium section of size 62 x 38 x 2mm at 1.174 kg./m with necessary aluminium clips of size 79.15 x 17.27 x 1.50mm at 0.176 kg./m with necessary rubbor beading.'L' including dismantling and re-doing masonry and concrete wherever necessary etc., complete, complying with standard specifications. The aluminium sections are to be anodised with matt finish under electrically controlled condition in accordance with ISI 1868/1962 specification for an average anodie film thickness of not less than 15 microns. All aluminium sections are should be got approved by Executive Engineer before use on

works.

| 1    | 2  | 3  | 4 | 5 | 6                        | 7 |
|------|--|--|---|---|--------------------------|---|
| 1 18 | 2 250.00 sq.m (Two hundred and fifty square metres only) | Providing and fixing 8 mm thick fully designed perforated calcium silicate board 2'x2' panel tiled false ceiling (Hilux) including supplying and fixing true horizontal level false ceiling with 24mm prelude grid system Using hot dipped galvanised steel section exposed surface chemically cleaned 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 |   | 5 | 6 1m² (One square metre) | 7 |
|      |  | 1200x24mm to interlocked between mainrunner at $600mm$ c/c(max) to form a grid of size $1200x600mm$ . $600mm$ long cross tee of size $600x24mm$ is inserted to form a grid of $600x600mm$ and finally laying classic lite regular edge tiles of size $600x600x15mm$  |   |   |                          |   |

| 1  | 2  | 3  | 4 | 5 | 6                                  | 7 |
|----|--|--|---|---|------------------------------------|---|
| 19 | 250.00 sq.m<br>(Two hundred and fifty square<br>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 <sup>2</sup> (One square metre) |   |
| 20 | 42.00 sq.m (Forty two square metres only)                    | Flooring with Anti skid Self Designed Colour Ceramic Tiles of size 305 x 305 x 6mmceramic tiles 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 <sup>2</sup> (One square metre) |   |

| 1  | 2   | 3   | 4 | 5 | 6                                  | 7 |
|----|---|---|---|---|------------------------------------|---|
| 21 | 145.00 sq.m (One hundred and forty five square metres only) | Dadooing walls with colour designed digital printed ceramic tiles of size 300mm x 450mm x 8mm and above in best approved quality tiles 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 (Non branded) and as directed by the departmental officers.  |   |   | 1m <sup>2</sup> (One square metre) |   |
| 22 | 70.00 sq.m (Seventy square metres only)                     | Supplying, fabricating and fixing in position UPVC(Un plasticised polyvinyl chloride) windows made of casement/openable windows made of uPVC Profile section of size 74mmx60mm as outer frame having outer wall thickness of 2.30mm(+/- 0.2mm) and 3 box multi-chamber hollow construction. The shutter of openable window shall be made of size 74mmx50mm having outer wall thickness of 2.30mm(+/- 0.2mm)with fixed mullion of size 72mmx60mm having outer wall thickness of 2.30mm(+/- 0.2mm). All sections of frame, sash, and mullion shall be reinforced, wherever required, at the hardware fixing locations with galvanised mild steel section 1.2mm thick. All the corner/mullion joints of the frame & sash shall be mitred cut & fusion welded without any mechanical joining. All welded joints are to be neatly trimmed & feature grooved nib finise so as to make the finised products free from all sharp edges. The window frame shall have water drainage holes to drain the water with cap. |   |   | 1m <sup>2</sup> (One square metre) |   |

| 1  | 2  | 3  | 4 | 5 | 6                                  | 7 |
|----|--|--|---|---|------------------------------------|---|
| 23 | 7.00 sq.m (Seven square metres only)       | Supplying and fixing UPVC (Un-Plasticized Polyvinyl Chloride) Louvered Ventilators of from the profile the size of outer frame 60mm x 58mm and shutter profile size of 60 x 78mm both profiles are reinforced with GI/1mm 125GSM and 100% corrosion free, the profile are multi chambered sections with wall thick of 2mm. The EPDM rubber (black colour) covered with all over the edges of frame and shutter. The corners and joints should be welded and cleaned. Radiations pin headed glass 4mm thick should be provided in the louvers. The window should be fixed to the wall with 100% packing with screws and silicon packing all round the frames. The ventilator should be got approved from the Executive Engineer before use on work  |   |   | 1m <sup>2</sup> (One square metre) |   |
| 24 | 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 <sup>2</sup> (One square metre) |   |

Contractor:

1 2 3 4 5 6 7
25 15.00 sq.m Supplying and fabricating and fixing in position Aluminium

1 m<sup>2</sup>

15.00 sq.m (Fifteen square metres only)

Supplying and fabricating and fixing in position Aluminium Door with powder coating with any colours with Shutter Partly Top 2/3 Glazed and Partly Bottom 1/3 Panelled and Frame made out of box section 101.60 x 44.45 x 3.18mm thick at 2.319 kg.\m door shutter made out of box section 47.10 x 44.45 x 2.50mm at 1.202 kg.\m for vertical style and top, lock rail sections of size 50 x 44.45 x 2.50mm at 1.292 kg.\m and bottom section 100.40 x 44.45 x 2.50mm at 1.974 kg.\m using clips of size 17.15 x 17.27 x 1.5mm at 0.176 kg.\m with rubber beading, strike plate type handle of size 100 x 30 x 1.60mm at 0.988 kg.\m on both sides,

tower bolts, lock and top 2/3 portion with 5.50mm thick plain glass and bottom 1/3 portion with both side pre-laminated board (MDF) 12mm thick for panel portion with one floor springs including cost of all materials, labour, power consumption required for fabrication, drilling holes in RCC columns, floor slabs, masonry wall wherever necessary with power drills to the required extent and make the same to original condition after fixing and as directed. All the aluminium sections are to be anodised with matt finish under electrically controlled condition in accordance with IS 1868-1962 for an average anodic flim thickness of 15 microns etc., complete. The materials should be got approved by the Executive Engineer before use on works. The rate shall be inclusive of all materials, labour for fixing, transportation, loading, unloading and all other incidential charges. (Single Leaf Door)

1m<sup>2</sup>
(One square metre)

| 1  | 2   | 3   | 4 | 5 | 6                                  | 7 |
|----|---|---|---|---|------------------------------------|---|
| 26 | 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 <sup>2</sup> (One square metre) |   |
| 27 | 67.00 sq.m (Sixty seven 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 <sup>2</sup> (One square metre) |   |
| 28 | 8.70 sq.m<br>(Eight point seven zero square<br>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 <sup>2</sup> (One square metre) |   |

5 2 3 1 4 6 7 27.00 MT

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Supply, Fabrication, Erection, alignment and levels as (Twenty seven metric tone only) 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 |
|----|---|--|---|---|-----------------------------|---|
| 30 |   | 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<br>(One metric<br>tone) |   |

| 1 | 2                                | 3       | 4 | 5 | 6           | 7 |
|---|----------------------------------|---------|---|---|-------------|---|
| b | 2.50 MT                          | Sag rod |   |   | 1Mt         |   |
|   | (Two point five zero metric tone |         |   |   | (One metric |   |
|   | only)                            |         |   |   | tone)       |   |

31

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.

| 1  | 2   | 3   | 4 | 5 | 6                                  | 7 |
|----|---|---|---|---|------------------------------------|---|
| a  | 100.00 Rm<br>(One hundred running metres<br>only)                     | 200 mm Dia PVC Pipe (6k/cm2)  |   |   | 1 RM.<br>(One running<br>metre)    |   |
| 32 | 95.00 Rm<br>(Ninety five running metres<br>only)                      | Supply and Fixing of UPVC Rain water Gutter of approved design and drawing including clamping and all others works required to complete the job. 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.   |   |   | 1 RM. (One running metre)          |   |
| 33 | 1180.00 sq.m (One thousand one hundred and eighty 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 <sup>2</sup> (One square metre) |   |

| 1  | 2                            | 3   | 4 | 5 | 6            | 7 |
|----|------------------------------|---|---|---|--------------|---|
| 34 | 110.00 Rm                    | Supply and fixing of Ridge made out of 0.50mm thick                   |   |   | 1 RM.        | _ |
|    | (One hundred and ten running | colour coated galvanized steel sheet (JSW sheet brand or              |   |   | (One running |   |
|    | metres only)                 | equivalent brand). The both sides will be of                          |   |   | metre)       |   |
|    |                              | 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. |   |   |              |   |
|    |                              | use on works.   |   |   |              |   |
|    |                              |   |   |   |              |   |
|    |                              |   |   |   |              |   |
| 35 |                              | 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  | 2  | 3  | 4 | 5 | 6                                  | 7 |
|----|--|--|---|---|------------------------------------|---|
| a  | 1.30 cu.m (One point three zero running metres only)           | .Foundation and Basement   |   |   | 1 M <sup>3</sup> (One cubic metre) |   |
| 36 | 590.00 sq.m<br>(Five hundred and ninety square<br>metres only) | Painting two coats of newly plastered wall surface with ready mixed interior plastic emulsion paint of first class quality and of approved colour over a priming coat including thorough scrapping, clean removal of dirt etc., complete complying with standard specification.  |   |   | 1m <sup>2</sup> (One square metre) |   |
| 37 | 825.00 sq.m (Eight hundred and twenty five 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 <sup>2</sup> (One square metre) |   |

| 1  | 2   | 3   | 4 | 5 | 6                                  | 7 |
|----|---|---|---|---|------------------------------------|---|
| 38 | 121.00 sq.m (One hundred and twenty one 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 <sup>2</sup> (One square metre) |   |
| 39 | 40.00 Rm (Forty 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 RM. (One running metre)          |   |

| 1  | 2                               | 3  | 4 | 5 | 6                    | 7 |
|----|---------------------------------|--|---|---|----------------------|---|
| 40 | 4.00 Nos<br>(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<br>(One Number) |   |
| 41 |                                 | 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                 |   |   |                      |   |

Contractor:

| 1  | 2                              | 3   | 4 | 5 | 6                    | 7 |
|----|--------------------------------|---|---|---|----------------------|---|
| a  | 2.00 Nos<br>(Two numbers only) | White glazed European Water Closet with 10 litre capacity PVC flushing tank fixed with CI brackets  |   |   | 1 No<br>(One Number) |   |
| 42 | 3.00 Nos (Three 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<br>(One Number) |   |

| 1  | 2  | 3   | 4 | 5 | 6                                  | 7 |
|----|--|---|---|---|------------------------------------|---|
| 43 | 1.50 sq.m (One point five zero square metres only) | Supplying and fixing in position Urinal partition with White Marble slab (Adanga) 18 mm to 20 mm thick of 4'0" x 2'0"size and above of best quality including dismantling masonry, if necessary and re-doing the same to original condition, etc., complete complying with standard specification. (The Marble slab should be got approved by the Executive Engineer before use on works).  |   |   | 1m <sup>2</sup> (One square metre) |   |
| 44 | 4.00 sq.m (Four square metres 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) |   |   | 1m <sup>2</sup> (One square metre) |   |

5 2 3 4 6 7 3.00 Nos Supplying and fixing in position best quality and 1 No 45 approved make Indian made white / colour glazed (One Number) (Three numbers only) earthernware wash hand basin of size 550 x 400mm (without pedestal) with a pair of cast iron brackets, including cost 15mm dia brass CP pillar tap, 32mm dia "B" class GI waste pipe with rubber plug and chain, 15mm dia GM wheel valve, 15mm brass nipple, 15mm dia 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  | 2                                | 3   | 4 | 5 | 6                    | 7 |
|----|----------------------------------|---|---|---|----------------------|---|
| 46 | 10.00 Nos<br>(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<br>(One Number) |   |
| 47 |                                  | Supplying and fixing in position PVC specials of the following dia and types of approved quality confirming to BIS and providing leak proof joints including fixing to the walls and giving connection to the PVC soil stacks, dismantling the masonry or RCC works and re-doing the dismantled portion to original condition etc., complete complying with standard specifications. (The PVC specials should be got approved by the Executive Engineer before use on works). |   |   |                      |   |
| a  | 8.00 Nos<br>(Eight numbers only) | 110 mm PVC Door bend  |   |   | 1 No<br>(One Number) |   |

| 1  | 2   | 3  | 4 | 5 | 6                                  | 7 |
|----|---|--|---|---|------------------------------------|---|
| 48 | 5.00 sq.m<br>(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 <sup>2</sup> (One square metre) |   |
| 49 | 119.00 sq.m (One hundred and nineteen square metres only) | Manufacturing, supplying and fixing in position Plain Cement Concrete Precast Pavement slabs of size 450x450x50mm thick in CC 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 by the departmental officers |   |   | 1m <sup>2</sup> (One square metre) |   |

| 1  | 2  | 3  | 4 | 5 | 6                                  | 7 |
|----|--|--|---|---|------------------------------------|---|
| 50 | 2.00 Nos   | Supplying and fixing in position CI manhole covers with  |   |   | 1 No                               |   |
|    | (Two square metres only)                                 | CI frames (Heavy duty) of size 60cm x 60cm of best approved quality as per standard specification etc., complete compying with standard specifications |   |   | (One Number)                       |   |
| 51 | 1.80 cu.m<br>(One point eight zero cubic<br>metres only) | Supply and filling 20MM HBGS Jelly   |   |   | 1 M <sup>3</sup> (One cubic metre) |   |
| 52 | 1.80 cu.m<br>(One point eight zero cubic<br>metres only) | Supply and filling 40MM HBGS Jelly   |   |   | 1 M <sup>3</sup> (One cubic metre) |   |

| 1  | 2                    | 3  | 4 | 5    | 6            | 7 |
|----|----------------------|--|---|------|--------------|---|
| 53 |                      | Supplying, laying and jointing CPVC pipes (having        |   | <br> |              |   |
|    |                      | 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    |   |      |              |   |
|    |                      | usingU PVC 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.                            |   |      |              |   |
|    |                      |  |   |      |              |   |
| a  | 50.00 Nos            | 32mm dia CPVC Pipe                                       |   |      | 1 No         |   |
|    | (Fifty numbers only) | 2-mm 3.8 0. 1 0 1 pc                                     |   |      | (One Number) |   |

| 1  | 2  | 3   | 4 | 5 | 6                    | 7 |
|----|--|---|---|---|----------------------|---|
| b  | 81.60 Nos (Eighty one point six zero numbers only) | 25mm dia CPVC Pipe  |   |   | 1 No<br>(One Number) |   |
| c  | 9.00 Nos<br>(Nine numbers only)                    | 20mm dia CPVC PIPE  |   |   | 1 No<br>(One Number) |   |
| 54 |  | Supplying CPVC Specials (with working pressure 10 kg. / sq.cm.) in water supply arrangements (both in internal and external water supply arrangements |   |   |                      |   |
| I  |  | CPVC Elbow  |   |   |                      |   |
| a  | 5.00 Nos (Five numbers only)                       | 32mm dia  |   |   | 1 No<br>(One Number) |   |

| 2                    | 3   | 4   |   | 5   | 6   | 7   |
|----------------------|---|---|---|---|---|---|
|                      | 25mm dia  |   |   |   | 1 No  |   |
| (Five numbers only)  |   |   |   |   | (One Number)  |   |
|                      |   |   |   |   |   |   |
|                      |   |   |   |   |   |   |
|                      |   |   |   |   |   |   |
|                      |   |   |   |   |   |   |
|                      | CPVC TEE  |   |   |   |   |   |
| 3.00 Nos             | 32 mm dia   |   |   |   | 1 No  |   |
| (Three numbers only) |   |   |   |   | (One Number)  |   |
|                      |   |   |   |   |   |   |
|                      |   |   |   |   |   |   |
|                      |   |   |   |   |   |   |
|                      |   |   |   |   |   |   |
| 3.00 Nos             | 25mm dia  |   |   |   | 1 No  |   |
| (Three numbers only) |   |   |   |   | (One Number)  |   |
|                      | 5.00 Nos (Five numbers only)  3.00 Nos (Three numbers only) | 5.00 Nos (Five numbers only)  CPVC TEE  3.00 Nos 32 mm dia  (Three numbers only)  3.00 Nos 25mm dia | 5.00 Nos (Five numbers only)  CPVC TEE  3.00 Nos 32 mm dia  (Three numbers only)  3.00 Nos 25mm dia | 5.00 Nos (Five numbers only)  CPVC TEE  3.00 Nos 32 mm dia  (Three numbers only)  3.00 Nos 25mm dia | 5.00 Nos (Five numbers only)  CPVC TEE  3.00 Nos 32 mm dia  (Three numbers only)  3.00 Nos 25mm dia | S.00 Nos (Five numbers only)  CPVC TEE  3.00 Nos 32 mm dia 1 No (One Number)  (Three numbers only)  3.00 Nos 25mm dia 1 No (One Number) |

| 1   | 2                    | 3               | 4 | 5 | 6            | 7 |
|-----|----------------------|-----------------|---|---|--------------|---|
| С   | 3.00 Nos             | 20mm dia        |   |   | 1 No         |   |
|     | (Three numbers only) |                 |   |   | (One Number) |   |
|     |                      |                 |   |   |              |   |
|     |                      |                 |   |   |              |   |
|     |                      |                 |   |   |              |   |
| 111 |                      | CDVC D. I. CI   |   |   |              |   |
| III |                      | CPVC Reducer GI |   |   |              |   |
| a   | 4.00 Nos             | 32x25 mm dia    |   |   | 1 No         |   |
|     | (Four numbers only)  |                 |   |   | (One Number) |   |
|     |                      |                 |   |   |              |   |
|     |                      |                 |   |   |              |   |
|     |                      |                 |   |   |              |   |
| b   | 5.00 Nos             | 25 x 20 mm dia  |   |   | 1 No         |   |
| U   |                      | 23 x 20 mm dia  |   |   | (One Number) |   |
|     | (Five numbers only)  |                 |   |   | (2301,000)   |   |

| 1  | 2                   | 3                  | 4 | 5 | 6            | 7 |
|----|---------------------|--------------------|---|---|--------------|---|
| IV |                     | CPVC Reducer Elbow |   |   |              |   |
| a  | 4.00 Nos            | 32x25 mm dia       |   |   | 1 No         |   |
|    | (Four numbers only) |                    |   |   | (One Number) |   |
|    |                     |                    |   |   |              |   |
| b  | 4.00 Nos            | 25 x 20 mm dia     |   |   | 1 No         |   |
|    | (Four numbers only) |                    |   |   | (One Number) |   |
| V  |                     | CPVC Reducer Tee   |   |   |              |   |
| a  | 4.00 Nos            | 32x25 mm dia       |   |   | 1 No         |   |
|    | (Four numbers only) |                    |   |   | (One Number) |   |
| b  | 4.00 Nos            | 25 x 20 mm dia     |   |   | 1 No         |   |
|    | (Four numbers only) |                    |   |   | (One Number) |   |
|    |                     |                    |   |   |              |   |

Contractor:

No.of corrections: No.of over writtings:

| 1  | 2                           | 3   | 4 | 5 | 6                    | 7 |
|----|-----------------------------|---|---|---|----------------------|---|
| 55 |                             | Supplying and fixing in position first quality and approved variety of Gun metal Gate Valve / Wheel Valve with BIS make of the following dia including cost of shellac, thread balls, etc., complete complying with standard specifications (for both internal and external water supply arrangements). The valves to be used on work shall be got approved by the Executive Engineer before use on work. |   |   |                      |   |
| a  | 1.00 Nos (One \number only) | Fixing Gun Metal Gate Valve of dia 32mm   |   |   | 1 No<br>(One Number) |   |
| b  | 2.00 Nos (Two numbers only) | Fixing Gun Metal Gate Valve of dia 25mm   |   |   | 1 No<br>(One Number) |   |

| 1  | 2                                   | 3  | 4 | 5 | 6                    | 7 |
|----|-------------------------------------|--|---|---|----------------------|---|
| 56 | 2.00 Nos                            | Supply and providing 1000 litres capacity Water Tank   |   |   | 1 No                 | _ |
|    | (Two numbers only)                  | made up of PVC. Make: SINTEX/EQUIVALENT.   |   |   | (One Number)         |   |
| 57 |                                     | Supplying and fixing best approved quality Aluminium dyecast letters of 9" size including cost of casting and conveance charges etc., complete as directed by the departmental officers. |   |   |                      |   |
| a  | 16.00 Nos<br>(Sixteen numbers only) | English  |   |   | 1 No<br>(One Number) |   |

| 1 | 2                     | 3     | 4 | 5 | 6            | 7 |
|---|-----------------------|-------|---|---|--------------|---|
| b | 12.00 Nos             | Tamil |   |   | 1 No         | _ |
|   | (Twelve numbers only) |       |   |   | (One Number) |   |

58 6.00 Nos (Six 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 nozzle, wall mounting bracket, safety clip etc., including conveyance, all incidental charges, neccessary scaffolding and re-doing the dismantled portions to its original condition wherever found neccessary etc, complete as per standard specification and as directed by the Departmental Officers. Make: EXCELLENT / SAFETY FIRST / EQUIVALENT

1 No (One Number)

| 1  | 2                               | 3  | 4 | 5 | 6            | 7 |
|----|---------------------------------|--|---|---|--------------|---|
| 59 | 62.00 Rm                        | Supply and Fixing of 110mm dia G.I Pipe for Vertical     |   |   | 1 RM.        | _ |
|    | (Sixty two running metres only) | Post with Base Plate fixed using necessary fixtures such |   |   | (One running |   |
|    |                                 | as bolts & nuts etc. incl Priming cost with redoxide ,   |   |   | metre)       |   |
|    |                                 | Labour charges and excluding GST etc. complete as per    |   |   |              |   |
|    |                                 | standard specification and as directed by the            |   |   |              |   |
|    |                                 | Departmental Officers.                                   |   |   |              |   |

**Total Item No: (59 items only)** 

Sub Total GST 12% Total Rs.